GREATROCK NORTH WATER AND SANITATION DISTRICT

141 Union Boulevard, Suite 150
Lakewood, Colorado 80228-1898
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Fax: 303-987-2032
www.colorado.gov/greatrocknorthwsd

Mission: To provide the highest quality of water at the most affordable price for current customers and to provide for the expansion of the District as growth occurs.

NOTICE OF A REGULAR MEETING AND AGENDA

Board of Directors:	Office:	Term/Expiration:
Robert William Fleck	President	2016/May 2016
John D. Wyckoff	Vice-President	2018/May 2018
Jeffrey Polliard	Treasurer	2018/May 2018
Brian K. Rogers	Secretary	2016/May 2016
Dave Lozano	Asst. Secretary	2018/May 2018

Consultants:	
Lisa A. Johnson	District Manager
Jennifer Gruber Tanaka, Esq.	District General Counsel
Bradley A. Simons, PE	District Engineer

DATE: January 5, 2016
TIME: 5:30 P.M.
PLACE: United Power
500 Cooperative Way
Brighton, Colorado 80603

I. ADMINISTRATIVE MATTERS (Action Items Status Matrix – enclosure - 002)

A. Present Disclosures of Potential Conflicts of Interest.

B. Approve Agenda.

C. Board of Director's Report.

D. Manager's Report (enclosure - 003).

II. CONSENT AGENDA

A. These items are considered to be routine and will be approved by one motion. There will be no separate discussion of these items unless requested; in which event, the item will be removed from the Consent Agenda and considered in the Regular Agenda.

1. Review and approve the Minutes of the December 1, 2015 regular meeting (enclosure – 004).

2. Consider ratifying approval of payment of claims through the period ending December 8, 2015 (enclosure - 005).

General Fund	$	80,996.45
Debt Service Fund	$	-0-
Capital Projects Fund	$	-0-
Total Claims:	**$**	**80,996.45**

3. Acceptance of cash position schedule and unaudited financial statements through the period ending November 30, 2015 (enclosure – 006).

4. Operations and Maintenance update and monthly work orders (enclosures – 007 and 008).

5. Review monthly water quality report (enclosure – 009).

6. Review monthly water meter installations (enclosure - 010).

7. Resolution 2016-01-01 Designating Posting Locations (enclosure – 011).

REGULAR AGENDA

III. FINANCIAL MATTERS

A. _____

IV. WATER MATTERS (ADJOURN TO EXECUTIVE SESSION PURSUANT TO §§24-6-402(4)(b) and (e), C.R.S., IF NECESSARY)

A. Discuss pending water court cases.

_____

V. ENGINEER'S REPORT (enclosure - 012)

A. Concentrate Management.

_____

VI. OPERATIONS/MAINTENANCE MATTERS

A. Discuss status of options for GIS mapping services**.**

_____

VII. LEGAL MATTERS

A. _____

VIII. OTHER BUSINESS

A. _____

IX. COMMUNITY COMMENTS (ITEMS NOT ON THE AGENDA ONLY. COMMENTS LIMITED TO 3 MINUTES PER PERSON AND TAKEN IN ORDER LISTED ON SIGN UP SHEET).

A. _____

X. ADJOURNMENT **THE NEXT MEETING IS SCHEDULED FOR TUESDAY, FEBRUARY 2, 2016 AT 5:30 P.M.**

Greatrock North Water and Sanitation District Action Items Status Matrix—2015

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
GRN Pump Station Improvements Project (**2016 Capital Project**)	5/6/14	Brad	5/31/16	3		X				Project to be started and completed in 2016. Refer to previous action items for history of project prior to 2016. 12/9/15: Brad has engineers getting caught up on project and design.
Rules and Regulations	8/27/14	Jennifer Lisa Brad Jeff	5/31/16	3		X				Board to consider reissuance of rules and regulations to update. Add final inspection of meters/pits with issuance of letter of acceptance by District. Must have in place going forward. Any failure to keep pit visible and accessible is violation of rules and regulations and may be subject to fees and/or fines. Copper piping v. blue pipe. 5/5/15: Address outdoor use of water in BECR based upon Matt Poznanovic's determination of permitted uses in decrees. 6/17/15: Also address set up and location of curb stops in BECR to avoid issues going forward. Brad to look at current R&R to see how this is addressed and whether an option is provided. 6/25/15: Chad Weaver (TZA) provided information on the curb stop boxes to Lisa Johnson on June 17. The Rules & Regulations should specify 6500 Series Screw Type curb boxes, as manufactured by Castings Inc. (970-243-2032), having a minimum internal diameter of 2.25 inches, or an approved equal. The part number is "C.I. 95-E" and includes a 30" top section and a 39" bottom section allowing for a bury depth of 41 inches to 64 inches. For deeper installations, Castings Inc. offers extensions in 9" (Item 151), 16" (Item 152), 28" (Item 153), and 30" (Item 154) heights. 10/21/15: Budgeted as 2016 project. 12/9/15: Brad and Jennifer to discuss how to address properties adding a second building to water tap.
Water Rights Acquisition	10/30/13	Lisa Chris Brad Jennifer	12/31/16	1		X	X			Updates to be provided in Executive Session or under separate cover.
Public Trust Resources Ballot Initiative #4	10/7/14	Jennifer	12/31/16	4		X				Review initiative for Board consideration of resolution in support or opposition of initiative. Measure is for 2016 ballot.

As of December 9, 2015

Greatrock North Water and Sanitation District Action Items Status Matrix—2015

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
Valve Box Inserts	4/22/15	Jeff Brad	12/31/15	3					X	Purchased one to see how it would work and works well. Order remaining inserts. 5/26/15: Valve box inserts on order. 6/17/15: Inserts should arrive any day. 8/19/15: Jeff has inserts in his office. Brad and Jeff to strategize approach for work. 9/16/15: Jeff has inserts and to schedule time to install. 10/21/15: Jeff confirmed these will be completed by 12/31/15. 12/9/15: Complete.
SOPs for RO Operations	6/2/15	Jeff	9/30/15	3		X				Determine how to document our SOPs for operations going forward. 6/17/15: Brad to discuss with Jeff at lunch meeting. 6/25/15: Brad and Jeff will discuss the SOPs during 6/30 meeting. 7/21/15: Jeff is developing SOPs for the RO operations as a part of the overall operating plan in light of recent state-wide WQCD activities related to Regulation No. 100 (operator certification). 8/19/15: Jeff working on this. 9/16/15: In process. 10/21/15: In process. 12/9/15: In process.
New Disinfection Rules	7/7/15	Brad Jeff	12/31/15	3		X				Received letter regarding requirements and compliance. Determine requirements, timing and cost for disinfection for incorporation into 2016 budget. 7/21/15: Jeff to tell us if maintaining a 0.2 mg/l residual throughout the distribution system may be an issue based upon REC's historical sampling and analysis on Greatrock system. 8/19/15: Jeff believes District meeting requirements. Jeff adding a column onto each sheet to track residual to monitor going forward to confirm. 9/16/15: Brad and Jeff to review and discuss reports in November to ensure still meeting requirements. Deadline to request extension is end of December. 11/18/15: Monitoring residuals and maintaining proper limit. Don't believe we will need an extension at this time.

Greatrock North Water and Sanitation District Action Items Status Matrix—2015

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
Greatrock North Curb Stops	7/7/15	Jeff Lisa	12/31/15	3		X				Jeff to confirm location of all curb stops within GRN. Jeff to talk with Rob Fleck before starting to have GPS coordinates taken at the same time. If all curb stops located within meter pits, will not exercise. 7/21/15: Jeff does not want to perform without waiver of liability from District. Lisa to talk with Cary Redman about work. 8/4/15: Redman Potholing to perform work. Jennifer to draft agreement for same. 8/14/15: Agreement to Lisa for execution. 8/19/15: Agreement sent to Redman for execution. 9/1/15: Project complete. 132 total; one house does not have one at all. Jeff to determine which 6 homes are affected by the home without the curb stop and note for the future in case it goes down. Plan to fix all at that time and have plan for notification of same. 9/16/15: John to provide list of homes with curb stops to Lisa. Once have, Jeff to develop plan. 10/21/15: Lisa has list of homes with curb stops. Only 1 home doesn't have curb stop located at all. Rest of subdivision curb stops are located within the meter pit. Not located in meter pit like others. Plan is to freeze line if need to repair to put as few homes out of water as possible. Jeff to include plan in SOPs for emergency water leaks. Lisa to communicate plan to John. 11/18/15: Jeff included plan in SOP. Lisa to review plan and meet with John regarding same. 12/9/15: Lisa emailed to John and will follow up to determine if any concerns or wants anything more.

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
GIS Services	7/7/15	Jeff P. Brad Dave L.	10/31/15	2		X				John and Rob to discuss services that St. Vrain can provide to the District and whether an IGA will be needed. 7/15/15: Rob provided initial comments regarding the use of St. Vrain equipment and personnel. Lisa to discuss in more detail with John and Rob and mid-month meeting. 8/4/15: Brad sent and Rob received historical GIS digital data. Rob will lend the District GIS equipment to capture data and he will then incorporate data into a map and provide updates as requested. District will be responsible if equipment is lost/stolen or broken during use. Add to September agenda for further discussion by the BOD as to who should capture the data (BOD volunteers or consultants). 8/19/15: John talked with GIS person for BECRWC. John to request proposal from company. Board to discuss options at September meeting. 9/1/15: Jeff P to obtain proposals for services. 9/16/15: Jeff found group that can provide services. Lisa and Brad to review information. 10/6/15: Jeff P reviewed options and software options with Board. Brad to develop GIS proposal for consideration at November meeting. Include development and maintenance of GIS data. 10/21/15: Brad preparing proposal and discussing with other companies to obtain proposals. Request NTE if possible. Jennifer not to prepare agreement until after Board approves. Board to consider at November meeting. 11/3/15: Brad to obtain proposal for Board consideration. 11/18/15: Brad met with Tamarack Consulting and received preliminary proposal. Brad to provide additional information of what the District has to determine if it would lower the costs. Consider additional options. Board to discuss at December meeting. 12/4/15: First proposal from Tamarack expensive. Brad to look at other options which are more cost effective. Dave to check to see who they use as well.
Altela System	8/4/15	Brad Altela Lisa Jennifer	12/31/16	1		X				12/9/15: ON HOLD pending resolution of license matter. Refer to prior action items for history of matter prior to 2016.

Greatrock North Water and Sanitation District Action Items Status Matrix—2015

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
MSDS Sheets on Chemicals to Control Weeds at Ponds	8/4/15	John Brad	12/31/15	3		X				John Wyckoff will request the sheets from Elite Industries and Brad will review and comment on whether we should restrict use at the ponds, change product, etc. 8/19/15: Lisa to follow up with John on status. 9/16/15: John provided MSDS sheets. Brad to review sheets to provide answer to Lisa's questions on whether it's ok to use chemicals near District's sites. 10/21/15: Brad doesn't see issue with using them on the ponds. Brad to send email summarizing findings. 12/9/15: Brad completing today.
2016 Budget	8/4/15	Lisa Committ ee	12/31/15	2		X				Consists of John, Jeff Polliard, Jeff Rabas, Jennifer, Brad, Divena and Lisa. Lisa to schedule meetings. 8/7/15: Lisa scheduled first committee meeting for 8/31/15. 8/31/15: Committee met. Next meeting scheduled for 9/21/15. 9/21/15: Committee met. Divena to revise budget accordingly for Board discussion at October meeting. 10/6/15: Divena to update budget for hearing. Lisa to publish notice of hearing. 10/21/15: Publication sent. Divena updated budget. 11/3/15: Board adopted budget. Lisa to certify mill levy and file with DLG by statutory deadlines.
Emergency Response for Water Outages	8/31/15	Jeff	3/31/16	3		X				Jeff to develop emergency response plan for water outages to add to SOPs. Intended to deal with issue of one tank going down, how water will get to that subdivision, what improvements are needed, what the costs are and the time to get them back up.
SCADA Reports	8/31/15	Jeff Brad	12/31/15	2		X				Jeff to review reports to look at erratic levels and determine what issues are. Brad to follow up with Jeff on same. 9/16/15: Jeff to meet with Brad to review. 10/21/15: Reviewed on Monday. Jeff to provide proposal for new meter. 11/18/15: Brad to review reports to determine whether erratic behavior has settled down. 12/9/15: Brad to collect additional data in review of reports due to recent changes. Jeff to take picture of readings as well.

Greatrock North Water and Sanitation District Action Items Status Matrix—2015

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
Box Elder RO Plant Flow Meter	8/31/15	Jeff Brad	12/31/15	3		X				11/18/15: Jeff believes meter is failing and needs to be replaced. Jeff to obtain additional information for complete proposal. Lisa and Brad to review and place order. 12/9/15: Brad discussed with Chris. Model code different from literature. Working to determine correct and approved model for ordering.
Control Valve Evaluation	9/1/15	Jeff	12/31/15	2		X				Brad to develop plan for control valve evaluation. Brad and Jeff to update valve inventory in Allmax software system and work with Lisa and budget committee to prioritize efforts for 2016 and beyond. 9/16/15: Brad started compiling list of valves. Brad and Jeff to walk facilities. Brad to begin on Thursday with BECR. 9/23/15: Check valve on BECR fire pump completed. 10/21/15: Brad started inventory sheet and sent to Jeff with photos. Jeff to complete rest of facilities by end of year.
Part Time Operator	9/21/15	John Jeff P	N/A	4		X				Develop job description for possible part time operator. To include matters such as meter reading and locates.
Operator Services	10/6/15	Lisa Brad John Brian	12/31/15	2		X				Review scope of services and expectations for 2016. 10/21/15: Meeting scheduled for 10/30/15 to review. 11/3/15: John, Jeff, Lisa and Brad met to discuss items. Lisa requested meeting with REC to discuss same. 11/18/15: 12/9 meeting to review scope of services for 2016.
2010 Arbitrage Analysis	10/6/15	Divena Lisa	12/31/16	3		X				2010 Analysis to be completed.
Tar on Valve Covers in BECR	11/18/15	Jeff Lisa	1/31/16	2		X				93 valve covers in BECR but can only access about 30 due to being covered by tar with road crack sealing performed by County. Jeff placed call to Lydia Stegall at County requesting County scrape tar off so we can access. 12/9/15: Jeff and Lisa to follow up with County.
Fire Hydrant in BECR at Hudson Road and 166th	11/18/15	Jeff	12/31/15	1					X	Leak inside hydrant. Still leaking. Jeff to investigate matter. 12/9/15: Complete.
WATER RIGHTS CASES										
13CW3108 Box Elder Creek Ranch Properties Water Court Application (District's Opposition)	12/3/13	W&J	N/A	1		X				White & Jankowski to provide updates on status of case as available and necessary. Updates to be provided under separate cover.

As of December 9, 2015

Greatrock North Water and Sanitation District Action Items Status Matrix—2015

Action Items	Date of Meeting	Assigned To	Deadline	Priority	Not Started	In Process	Reoccurring	Follow up Required	Complete	Notes
Prosper Farms Water Court Application 13CW3143	2/5/14	Matt Lisa Chris	N/A	1		X				Updates to be provided under separate cover and discussed in executive session. 9/1/15: Trial scheduled for 10/31-11/4/2016.
14CV3174 District's Water Court Case to Secure Junior Water Rights	11/4/14	Lisa Matt Chris	N/A	1		X				Updates to be provided in Executive Session or under separate cover.
15CW3010 Box Elder Creek Ranch Properties Application for Augmentation Rights Water Court Case (District's Opposition)	3/3/15	W&J	N/A	1		X				Updates to be provided in Executive Session or under separate cover.
14CW3166 Cooper Surface and Storage Rights Water Court Application (District's Opposition)	3/3/15	Matt	N/A	1		X				Updates to be provided in Executive Session or under separate cover.

As of December 9, 2015

GREATROCK NORTH
WATER & SANITATION DISTRICT

Date: December 18, 2015

To: Greatrock North Water and Sanitation District, Board of Directors

From: Lisa A. Johnson, District Manager

Re: January 5, 2016 Manager's Report

Agenda Action Items

II.A. Consent Agenda

1. Review and approve the Minutes of the December 1, 2015 regular meeting
2. Consider ratifying approval of payment of claims through the period ending December 8, 2015
3. Consider acceptance of unaudited financial statements and statement of cash position for the period ending November 30, 2015
4. Operations and Maintenance update and monthly work orders
5. Review monthly water quality report
6. Review monthly water meter installations
7. Consider adoption of Resolution No. 2016-01-01 Designating Posting Locations

I recommend approval of the consent agenda items.

Review of monthly Water Resumes and Other Water Related Matters

Attorney Poznanovic reviewed the October resume, and did not find any cases that he thinks the District would have an interest in opposing.

RECORD OF PROCEEDINGS

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT HELD DECEMBER 1, 2015

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, December 1, 2015 at 5:30 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 (for a portion of the meeting)
John D. Wyckoff
Jeffrey Polliard
Brian K. Rogers
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; TZA Water Engineers

Matt Bruff; CEO- Altela, Inc. (for a portion of the meeting)

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Disclosures of Potential Conflicts of Interest: Ms. Johnson advised the Board that, pursuant to Colorado law, certain disclosures may be required prior to taking official action at the meeting. Ms. Johnson 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, Polliard, Lozano, Rogers and Wyckoff each confirmed that they had no additional conflicts of interest in connection with any of the matters listed on the Agenda.

RECORD OF PROCEEDINGS

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 Wyckoff, seconded by Director Polliard and, upon vote, unanimously carried, the Agenda was approved.

Board of Directors' Report: There was nothing new to report.

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

COMMUNITY COMMENTS

Community Comments: There were no community comments.

CONSENT AGENDA

Consent Agenda: The Board considered the following actions:

- Approve Minutes of the November 3, 2015 regular meeting.
- Ratify approval of payment of claims through the period ending November 12, 2015, as follows:

General Fund	$ 48,679.66
Debt Service Fund	$ 302,485.00
Capital Projects Fund	$ -0-
Total Claims:	**$ 351.164.66**

- Accept cash position schedule and unaudited financial statements through the period ending October 31, 2015.
- Review operations and maintenance update and monthly work orders.
- Review monthly water quality report.
- Monthly water meter installations
- Approval of Third Addendum to the Independent Contractor Agreement with Lamp Rynearson d/b/a TZA Water Engineers regarding increase in hourly fees
- Approval of Continued Engagement Letter with Petrock & Fendel, P.C.

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

WATER MATTERS

Pending Water Court Cases: Ms. Johnson gave a brief update on the District's pending water court cases.

ENGINEER'S REPORT

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

Altela Project: Mr. Bruff addressed the Board. He informed them that, due to a dispute with Arizona State University regarding an intellectual property issue, Altela will not be able to proceed with the research and potential sale of the Altela Rain System to the district until the dispute has been resolved.

The Board asked additional questions and then Mr. Bruff left the meeting.

OPERATONS/ MAINTENANCE MATTERS

GIS Mapping: Mr. Simons and staff will continue to research options for GIS mapping services.

LEGAL MATTERS

Legal Matters: There were no legal matters presented.

OTHER BUSINESS

Colorado Water Plan: Director Polliard reported that he recently asked Attorney Poznanovic to provide a summary of the Colorado Water Plan and what affect, if any, it might have on the District. Attorney Poznanovic provided an explanation of the plan and informed Director Polliard that it is too early in the planning process to determine what effect the plan would have on the district.

ADJOURNMENT

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

Respectfully submitted,

By _____

Secretary for the Meeting

RECORD OF PROCEEDINGS

THESE MINUTES APPROVED AS THE OFFICIAL DECEMBER 1, 2015 MINUTES OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:

_____
Robert William Fleck

_____
Jeffrey L. Polliard

_____
Brian K. Rogers

_____
John D. Wyckoff

_____
Dave Lozano

GREATROCK NORTH
WATER & SANITATION DISTRICT

Date: November 23, 2015

To: Greatrock North Water and Sanitation District, Board of Directors

From: Lisa A. Johnson, District Manager

Re: December 1, 2015 Manager's Report

Agenda Action Items

II.A. Consent Agenda

1. Review and approve the Minutes of the November 3, 2015 regular meeting
2. Consider ratifying approval of payment of claims through the period ending November 12, 2015
3. Consider acceptance of unaudited financial statements and statement of cash position for the period ending October 31,2015
4. Operations and Maintenance update and monthly work orders
5. Review monthly water quality report
6. Review monthly water meter installations
7. Review and consider approval of Third Addendum to the Independent Contractor Agreement with Lamp Rynearson & Associates, Inc. regarding hourly rate increase
8. Review and consider approval of a continued engagement letter with Petrock & Fendel P.C. regarding hourly rate increase

I recommend approval of the consent agenda items.

Review of monthly Water Resumes and Other Water Related Matters

Attorney Poznanovic reviewed the September resume, and did not find any cases that he thinks the District would have an interest in opposing.

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
www.RECinc.net

Greatrock North W & S District
Monthly Activities
October 28th - November 13th

10/28/15: Regular checks and readings. Worth Hydro onsite to replace the RO system.

10/29/15: Additional site visit while Worth Hydro was on site working on RO system.

10/30/15: Regular checks and readings. Pulled the aerator from the pond. Hauled old membranes offsite. Completed a locate at: 29950 E 167th Pl.

11/2/15: Regular checks and readings.

11/4/15: Regular checks and readings.

11/6/15: Regular checks and readings.

11/9/15: Regular checks and readings. Assisted Brad and John install fittings to the concentration line. Collected and delivered samples. Additional Operator on site for the annual exercising of valves and flushing of hydrants.

11/10/15: Additional Operator on site exercising valves and flushing hydrants. We unable to exercise roughly 60 valves due to being covered with tar from the crack sealing. Called into Adams County but am awaiting a response back. Will continue to call until we get this resolved.

11/11/15: Regular checks and readings. Installed fittings and hose on RO. Checked the transformer at Rocking Horse Farms. Tightened the connections on Rocking Horse Farms RTU. Completed locates at: 16245 Queensview and 16580 Umpire St.

11/13/15: Regular checks and readings.

Status of valve box inserts and markers project – *still in progress*

October 26th - November 13th

RO Run Time Hrs	109.70 hrs
RO Concentrate Flow – 1 pond (North)	190,878 gallons

11/9/15 *(results not complete as of 11/16/15 – will be available next report)*

Monthly Testing	TDS(mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness(mg/L)
BE				
RHF				
GRN				

Completed Work Order List Report

Completed	Equipment Number	Task	Priority	WO#	Type
11/9/2015	Boxelder Pump Buildi	TDS and Hardness	1	577.01	Scheduled
11/9/2015	GRN Pump Building	TDS and Hardness	1	577.03	Scheduled
11/9/2015	RHF Building	TDS and Hardness	1	577.02	Scheduled
11/9/2015	Water Sampling	Bacti Bacti Sampling(069)	1	578.01	Scheduled
10/30/2015	Pond Aerator	Clean Clean	4	557.01	Scheduled
10/26/2015	North Concentrate Pond	EDOP Sampling	1	555.01	Scheduled
10/26/2015	South Concentrate Pond	EDOP Sampling	1	556.01	Scheduled

TZA Water Engineers
a Lamp Rynearson Company

12596 W. Bayaud Ave., Ste. 330
Lakewood, Colorado 80228
303-971-0030
tza4water.com

GREATROCK NORTH WATER AND SANITATION DISTRICT
ENGINEER'S REPORT
NOVEMBER 23, 2015

Concentrate Management Options

Discussion regarding the Altela technology and the Reverse Osmosis Asset Recovery Facility will occur under its own agenda item for the Board meeting.

As for the evaporation ponds, I will present information on the pond levels at the December Board meeting.

Greatrock North Pump Station Improvements

The design of the Greatrock North Pump Station Improvements has been put on temporary hold and may be combined for bidding purposes with the new water treatment facility being contemplated.

Other Activities

Water Quality and Hardness – TZA is tracking the water production data and water quality results from a series of sampling events. Below are tables summarizing the water production data, water quality results, and water treatment plant observations.

Month	RO Permeate	Unfiltered UKA Water	Unfiltered ALV Wells
November (11/21/15)	52%	38%	10%
October (10/25/15)	25%	36%	39%
September (09/20/15)	17%	34%	49%
August (08/24/15)	10%	33%	57%
July (07/19/15)	17%	35%	48%
June (06/28/15)	23%	37%	40%
May (05/25/15)	39%	42%	19%
April (04/27/15)	37%	39%	24%
March (03/22/15)	41%	40%	19%

Engineer's Report
November 23, 2015
Page Two

Total Dissolved Solids (TDS)			
Date	**BECR Tanks**	**RHF Tank**	**GN Tank**
11/09/15	275 mg/l	346mg/l	320 mg/l
10/14/15	414 mg/l	406 mg/l	385 mg/l
09/09/15	470 mg/l	471 mg/l	495 mg/l
08/19/15	469 mg/l	500 mg/l	482 mg/l
07/10/15	417 mg/l	449 mg/l	468 mg/l
06/11/15	369 mg/l	350 mg/l	341 mg/l
05/11/15	401 mg/l	347 mg/l	366 mg/l
04/13/15	386 mg/l	326 mg/l	322 mg/l
March 2015	274 mg/l	324 mg/l	302 mg/l
02/02/15	350 mg/l	394 mg/l	383 mg/l
01/14/15	350 mg/l	394 mg/l	417 mg/l
12/03/14	417 mg/l	552 mg/l	511 mg/l
10/01/14	538 mg/l	603 mg/l	594 mg/l
07/11/14	565 mg/l	597 mg/l	599 mg/l
03/05/14	586 mg/l	543 mg/l	566 mg/l
01/08/14	553 mg/l	559 mg/l	575 mg/l
10/28/13	677 mg/l	643 mg/l	594 mg/l

The total hardness results tabulated below reflect a moderately hard to hard water:

Total Hardness (as CaCO3)			
Date	**BECR Tanks**	**RHF Tank**	**GN Tank**
11/09/15	63.5 mg/l	103.3 mg/l	82.0 mg/l
10/14/15	134.1 mg/l	117.2 mg/l	118.7 mg/l
09/09/15	152.6 mg/l	164.3 mg/l	158.4 mg/l
08/19/15	159.1 mg/l	175.6 mg/l	173.1 mg/l
07/10/15	136.2 mg/l	158.8 mg/l	156.5 mg/l
06/11/15	92.0 mg/l	78.0 mg/l	80.1 mg/l
05/11/15	84.8 mg/l	72.6 mg/l	73.9 mg/l
04/13/15	99.6 mg/l	67.7 mg/l	68.6 mg/l
March 2015	53.7 mg/l	68.3 mg/l	59.1 mg/l
02/02/15	83.4 mg/l	113.8 mg/l	104.6 mg/l
01/14/15	105.2 mg/l	123.0 mg/l	111.7 mg/l
12/03/14	115.3 mg/l	194.5 mg/l	169.8 mg/l
10/01/14	188.8 mg/l	231.7 mg/l	225.6 mg/l
07/11/14	221.5 mg/l	222.7 mg/l	220.4 mg/l
05/16/14	165.2 mg/l	209.6 mg/l	198.1 mg/l

Engineer's Report
November 23, 2015
Page Three

For comparison, hardness values are generally classified as:

Classification	Mg/l
Soft	0 – 60
Moderately hard	61 – 120
Hard	121 – 180
Very hard	GTE 181

Storage Tank Rule – The Water Quality Control Division has adopted a new version of the Colorado Primary Drinking Water Regulations (Regulation 11). Effective April 1, 2016, the District will be required to have a written plan for finished water storage tank inspections. In addition to quarterly periodic (visual) inspections, the District will need comprehensive inspections to be scheduled at least every five years. Jeff Rabas has been securing proposals for the comprehensive inspections.

New Chlorine Residual Requirements – The Water Quality Control Division has adopted a new version of the Colorado Primary Drinking Water Regulations (Regulation 11). Effective April 1, 2016, the District will be required to maintain a minimum of 0.20 milligrams per liter chlorine residual throughout the distribution system. Ramey Environmental Compliance will record chlorine residuals at the extents of the distribution system for each subdivision on a periodic basis throughout the remainder of 2015, and Jeff Rabas and I will review the data in November of this year.

Warranty Inspections – Ramey Environmental Compliance is tracking the 11-month warranty inspections for the following projects:

- Rocking Horse Farms Pump Station – The warranty inspection was conducted by Jeff Rabas on July 18, 2014.
- Box Elder Creek Ranch Pump Station – The warranty inspection was conducted by Brad Simons on January 26, 2015.
- Rocking Horse Farms Tank Repainting – The improvements were inspected and accepted on June 11, 2014. A preliminary warranty inspection was conducted by Ramey Environmental Compliance on April 24, 2015 and Coblaco addressed some minor surface rust and some isolated coating repairs on August 5, 2015.

Engineer's Report
November 23, 2015
Page Four

Utility Billings and Energy Costs – TZA is tracking the United Power utility bills and associated water operations on a monthly basis. Below are the monthly comparisons for October each year, as well as a summary of the ten-month periods for 2014 and 2015.

	October 2014 Billings				October 2015 Billings			
	On Peak	Off Peak	Total KWH	Billing	On Peak	Off Peak	Total KWH	Billing
Alluvial	3,789		3,789	$439.61	4,141		4,141	$478.96
BECR	1,280	10,000	11,280	$809.45	2,040	12,760	14,800	$1,092.04
GN	1,000	5,600	6,600	$518.32	1,680	8,000	9,680	$766.18
RHF	640	1,840	2,480	$229.61	840	2,440	3,280	$296.58
Totals			**24,149**	**$1,996.99**			**31,901**	**$2,663.76**

	YTD 2014 Billings (10 months)				YTD 2015 Billings (10 months)			
	On Peak	Off Peak	Total KWH	Billing	On Peak	Off Peak	Total KWH	Billing
Alluvial	34,311		34,311	$3,995.96	34,455		34,455	$4,012.06
BECR	25,240	116,480	141,720	$10,752.18	32,120	142,880	175,000	$13,680.20
GN	14,960	61,840	76,800	$6,229.47	15,800	64,880	80,680	$6,619.70
RHF	11,560	30,840	42,400	$3,830.97	7,440	20,920	28,360	$2,609.17
Totals			**295,231**	**$24,808.58**			**318,495**	**$26,921.13**

Well, Pump, and Motor Replacements – The District has initiated efforts to better understand its well infrastructure and the potential need for replacement of pumps and motors, as well as the well structures themselves. As a part of that effort, TZA Water Engineers will need to work with Bishop-Brogden Associates to compile the historical aspects of the wells constructed, the pumps installed, and any other improvements (i.e. water level measuring devices) integrated at each site. This information will be used to evaluate the benefits of a pump, motor, and well maintenance program to detect changes in well performance. Early detection of deterioration in well performance will allow less expensive repairs, rehabilitation, or treatment procedures in order to maximize production capacity. This preventative maintenance program will be discussed with the District's Manager, and a formal proposal will be brought to the Board if deemed appropriate.

Engineer's Report
November 23, 2015
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Control Valves Evaluation – During the 3rd Quarter Operational Review Meeting, conducted on August 17, 2015, it was determined the District should develop a control valve evaluation plan. As the Board may recall, the District contracted with iSiWest in 2014 (July 14-15 and September 19), to inspect and service five (5) control valves, including one (1) at the Box Elder Creek Ranch Pump Station, one (1) at Rocking Horse Farms Pump Station, and three (3) at the Greatrock North Pump Station. On March 6, 2015, the District contracted with Ramey Environmental Compliance's Equipment Services Division to service one (1) pressure relief valve at the Box Elder Creek Ranch Water Treatment Plant. Since the District has an assortment of valves in a variety of locations throughout the District, REC will update the valve inventory in the Allmax software and work with Lisa Johnson, TZA, and the budget committee to prioritize the efforts for 2016 and beyond. A sample of the valves that could be addressed in the Box Elder Creek Ranch Pump Station are tabulated below.

Valve Location	Valve Type	Valve Size
UKA-3 Check	Cla-Val Hytrol	2"
UKA-3 Air/Vacuum	Val-Matic	1/2"
UKA-3 CRL	Cla-Val Pressure Relief	1/2"
LFH-3 Check	Cla-Val Hytrol	3"
LFH-3 Pressure Relief	Cla-Val Series 50	1-1/2"
LFH-3 CRL	Cla-Val Pressure Relief	1/2"
LFH-3 Air/Vacuum	Cla-Val Series 35	1/2"
Alluvial Wells Air/Vacuum	Cla-Val Series 35	2"

Check No and Date	Payee	Invoice No	GL Account Title	GL Acct	Amount	Total	Manual
11655							
12/08/2015	Bishop-Brogden Associa	38894	Water Rights Dev - Eng.	1-618	125.00	125.00	
Total 11655:						125.00	
11656							
12/08/2015	Colorado Special District	16W48085-805	Prepaid Expense	1-150	194.00	194.00	
12/08/2015	Colorado Special District	29C48085-204	Prepaid Expense	1-150	17,064.97	17,064.97	
Total 11656:						17,258.97	
11657							
12/08/2015	Dan's Custom Constructi	253	Distribution Sys Mntc	1-825	2,352.00	2,352.00	
Total 11657:						2,352.00	
11658							
12/08/2015	Elite Industries, Inc	2000	Facility Maintenance & R	1-851	710.00	710.00	
12/08/2015	Elite Industries, Inc	896	Facility Maintenance & R	1-851	250.00	250.00	
Total 11658:						960.00	
11659							
12/08/2015	HD Supply Waterworks, L	E376569	Distribution Sys Mntc	1-825	195.48	195.48	
12/08/2015	HD Supply Waterworks, L	E447644	Distribution Sys Mntc	1-825	134.40	134.40	
12/08/2015	HD Supply Waterworks, L	E504734	Distribution Sys Mntc	1-825	70.14	70.14	
12/08/2015	HD Supply Waterworks, L	E754354	Distribution Sys Mntc	1-825	105.66	105.66	
Total 11659:						505.68	
11660							
12/08/2015	Lozano, Dave	REIMBURSE	Miscellaneous Expense	1-685	115.00	115.00	
Total 11660:						115.00	
11661							
12/08/2015	Mail Services, LLC	1528887	Utility Billing	1-630	303.31	303.31	
Total 11661:						303.31	
11662							
12/08/2015	Metrowest Newspapers	000MK69	Legal Publication/Electio	1-680	18.92	18.92	
Total 11662:						18.92	
11663							
12/08/2015	Petrock & Fendel, PC	26073	Water Rights Dev-Legal	1-617	2,315.00	2,315.00	
Total 11663:						2,315.00	
11664							
12/08/2015	Ramey Environmental	11699	Operator Services	1-840	4,742.47	4,742.47	
12/08/2015	Ramey Environmental	11699	Testing and Reporting	1-802	522.36	522.36	
12/08/2015	Ramey Environmental	11699	Distribution Sys Mntc	1-825	9,138.75	9,138.75	
12/08/2015	Ramey Environmental	11699	Locates	1-876	52.50	52.50	

Check No and Date	Payee	Invoice No	GL Account Title	GL Acct	Amount	Total	Manual
Total 11664:						14,456.08	
11665							
12/08/2015	Special Dist Management	994931	District Management	1-614	3,204.10	3,204.10	
12/08/2015	Special Dist Management	994931	Accounting	1-612	1,508.00	1,508.00	
12/08/2015	Special Dist Management	994931	Locates	1-876	359.00	359.00	
12/08/2015	Special Dist Management	994931	Utility Billing	1-630	649.00	649.00	
12/08/2015	Special Dist Management	994931	Meter Reading	1-853	598.50	598.50	
12/08/2015	Special Dist Management	994931	Website Dev & Maintenan	1-650	42.50	42.50	
12/08/2015	Special Dist Management	994931	Meter Reading	1-853	227.15	227.15	
12/08/2015	Special Dist Management	994931	Miscellaneous Expense	1-685	266.31	266.31	
Total 11665:						6,854.56	
11666							
12/08/2015	Timber Line Electric & Co	18799	Facility Maintenance & R	1-851	846.00	846.00	
Total 11666:						846.00	
11667							
12/08/2015	Treatment Technology	170567	Plant Supplies	1-798	364.20	364.20	
Total 11667:						364.20	
11668							
12/08/2015	TZA Water Engineers, Inc	0414018.01-000014	Engineering-Administrati	1-616	2,680.64	2,680.64	
12/08/2015	TZA Water Engineers, Inc	0414018.01-000014	Engineering-Operations	1-784	3,577.80	3,577.80	
12/08/2015	TZA Water Engineers, Inc	0414018.01-000014	Concentrate Disposal	1-872	4,110.70	4,110.70	
Total 11668:						10,369.14	
11669							
12/08/2015	United Site Services	114-3484574	Facility Maintenance & R	1-851	115.09	115.09	
Total 11669:						115.09	
11670							
12/08/2015	USA Blue Book	795316	Facility Maintenance & R	1-851	403.60	403.60	
Total 11670:						403.60	
11671							
12/08/2015	Utility Notification Center	21511404	Locates	1-876	20.02	20.02	
Total 11671:						20.02	
11672							
12/08/2015	White & Jankowski LLP	13078	Water Rights Dev-Legal	1-617	270.00	270.00	
Total 11672:						270.00	
11673							
12/08/2015	White Bear Ankele Tanak	69432	Legal	1-675	4,727.50	4,727.50	
12/08/2015	White Bear Ankele Tanak	69432	Miscellaneous Expense	1-685	311.29	311.29	

Check No and Date	Payee	Invoice No	GL Account Title	GL Acct	Amount	Total	Manual
Total 11673:						5,038.79	
11674							
12/08/2015	Worth Hydrochem of Okl	3036INV	Facility Maintenance & R	1-851	15,718.08	15,718.08	
Total 11674:						15,718.08	
13129							
12/08/2015	Century Link	12/2015	Utilities	1-794	57.81	57.81	M
12/08/2015	Century Link	12/2015	Utilities	1-794	103.26	103.26	M
Total 13129:						161.07	
13130							
12/08/2015	United Power	12/2015	Utilities	1-794	419.65	419.65	M
12/08/2015	United Power	12/2015	Utilities	1-794	253.39	253.39	M
12/08/2015	United Power	12/2015	Utilities	1-794	939.73	939.73	M
12/08/2015	United Power	12/2015	Utilities	1-794	263.08	263.08	M
Total 13130:						1,875.85	
13131							
12/08/2015	Xcel Energy	12/2015	Utilities	1-794	46.78	46.78	M
12/08/2015	Xcel Energy	12/2015	Utilities	1-794	41.56	41.56	M
Total 13131:						88.34	
Grand Totals:						80,534.70	

Check Issue Date	Check Number	Payee	Amount
12/08/2015	91148	Fleck, Robert	92.35
12/08/2015	91149	Lozano, Dave	92.35
12/08/2015	91150	Polliard, Jeffrey	92.35
12/08/2015	91151	Rogers, Brian	92.35
12/08/2015	91152	Wyckoff, John	92.35
Grand Totals:			
	5		461.75

Greatrock North Water and Sanitation District

December-15

	General	Debt	Capital	Totals
Disbursements	$ 80,534.70	$ -	$ -	$ 80,534.70
Payroll	$ 461.75	$ -	$ -	$ 461.75
				$ -
Total Disbursements from Checking Acct	$ 80,996.45	$ -	$ -	$ 80,996.45

GREATROCK NORTH WATER AND SANITATION DISTRICT
Schedule of Cash Position
November 30, 2015

	Rate	Operating	Debt Service	Capital Projects	Total
Checking:					
FirstBank		$ 47,193.93	$ -	$ -	$ 47,193.93
Investments:					
FirstBank Lockbox	0.10%	320,695.50	2,332.10	322,072.01	645,099.61
Colotrust - Plus	0.24%	822,796.78	5,143.98	-	827,940.76
Colotrust - Bond Fund	0.24%	-	0.14	-	0.14
Colotrust - Project Fund	0.24%	-	-	0.07	0.07
Total Funds		$ 1,190,686.21	$ 7,476.22	$ 322,072.08	$ 1,520,234.51

2015 Mill Levy Information:

Certified General Fund Mill Levy	28.340
Certified Debt Service Fund Mill Levy	18.500
Total Certified Mill Levy	46.840

Debt Service Mill Levy Cap per Bond Indenture: unlimited

Board of Directors:

John Wyckoff	*
Jeffrey Polliard	*
Brian Rogers	*
Dave Lozano	*
Robert Fleck	*
Lisa Johnson	**

* Board member is an authorized signer on the checking account.
** District Manager is an authorized signer on the checking account.

GREATROCK NORTH WATER AND SANITATION DISTRICT

FINANCIAL STATEMENTS

November 30, 2015

GREATROCK NORTH WATER AND SANITATION DISTRICT
COMBINED BALANCE SHEET - ALL FUND TYPES AND ACCOUNT GROUPS
November 30, 2015

ASSETS AND OTHER DEBITS	GENERAL	DEBT SERVICE	CAPITAL PROJECTS	FIXED ASSETS	LONG-TERM DEBT	TOTAL MEMO ONLY
Assets						
FirstBank Checking Account	$ 47,193.93	$ -	$ -	$ -	$ -	$ 47,193.93
First Bank Lockbox	320,695.50	2,332.10	322,072.01	-	-	645,099.61
Cash in Bank-ColoTrust	822,796.78	5,143.98	-	-	-	827,940.76
ColoTrust - Bond Fund	-	0.14	-	-	-	0.14
ColoTrust-Capital	-	-	0.07	-	-	0.07
Accounts Receivable-Other	40,419.22	-	-	-	-	40,419.22
Property Taxes Receivable	118.80	78.16	-	-	-	196.96
						-
Total Current Assets	1,231,224.23	7,554.38	322,072.08	-	-	1,560,850.69
Other Debits						
Amount in Debt Service Fund	-	-	-	-	7,476.22	7,476.22
Bond Issue Costs, Net					248,510.77	248,510.77
Amount to be Provided for Debt	-	-	-	-	5,084,236.16	5,084,236.16
Total Other Debits	-	-	-	-	5,340,223.15	5,340,223.15
Capital Assets						
Water Distribution System	-	-	-	8,843,642.96	-	8,843,642.96
Land	-	-	-	94,243.05	-	94,243.05
Water Rights	-	-	-	980,105.19	-	980,105.19
Easements	-	-	-	152,989.42	-	152,989.42
Construction in Progress	-	-	-	4,207.50	-	4,207.50
Accumulated Depreciation	-	-	-	(2,119,840.99)	-	(2,119,840.99)
Total Capital Assets	-	-	-	7,955,347.13	-	7,955,347.13
Total Assets	$ 1,231,224.23	$ 7,554.38	$ 322,072.08	$ 7,955,347.13	$ 5,340,223.15	$ 14,856,420.97
Liabilities						
Accounts Payable	$ -	$ -	$ -	$ -	$ -	$ -
Payroll Taxes Payable	76.50	-	-	-	-	76.50
Retainage Payable	-	-	-	-	-	-
Due to Other Funds	-	-	-	-	-	-
Deposit-Refundable Water Meter	850.00	-	-	-	-	850.00
Accrued interest payable	-	-	-	-	20,877.18	20,877.18
Bond Premium	-	-	-	-	87,778.24	87,778.24
Bonds Payable-Series 2007	-	-	-	-	3,230,000.00	3,230,000.00
Bonds Payable-Series 2010	-	-	-	-	2,180,000.00	2,180,000.00
Discount, Net	-	-	-	-	(7,653.68)	(7,653.68)
Deferred Loss, Refunding	-	-	-	-	(170,778.59)	(170,778.59)
Total Liabilities	926.50	-	-	-	5,340,223.15	5,341,149.65
Deferred Inflows of Resources						
Due to Developer	-	-	-	-	-	-
Deferred Property Taxes	118.80	78.16	-	-	-	196.96
Total Deferred Inflows of Resources	118.80	78.16	-	-	-	196.96
Fund Balance						
Investment in Fixed Assets	-	-	-	7,955,347.13	-	7,955,347.13
Fund Balance	1,148,011.77	16,569.58	341,850.89	-	-	1,506,432.24
Current Year Earnings	82,167.16	(9,093.36)	(19,778.81)	-	-	53,294.99
Total fund balances	1,230,178.93	7,476.22	322,072.08	-	-	9,515,074.36
Total Liabilities, Deferred Inflows of Resources and Fund Balance	$ 1,231,224.23	$ 7,554.38	$ 322,072.08	$ 7,955,347.13	$ 5,340,223.15	$ 14,856,420.97

GREATROCK NORTH WATER AND SANITATION DISTRICT
Statement of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
General Fund
For the 11 Months Ending,
November 30, 2015

Acct No	Account Description	Period Actual	YTD Actual	Budget	Under/(Over) Budget	% of Budget
	Revenues					
1510	Property Tax Revenue	-	309,385.20	309,504.00	118.80	100.0%
1515	Specific Ownership Taxes	2,233.76	22,448.64	18,570.00	(3,878.64)	120.9%
1525	Service Charges-Greatrock	17,182.93	147,369.07	146,509.00	(860.07)	100.6%
1526	Service Charges-Rocking Horse	11,128.18	105,677.69	107,399.00	1,721.31	98.4%
1527	Service Charges-Box Elder	14,270.29	141,657.22	146,074.00	4,416.78	97.0%
1530	Inspection Fees	608.50	5,626.50	-	(5,626.50)	0.0%
1560	Interest Income	179.87	1,868.62	1,500.00	(368.62)	124.6%
1580	Other Income	-	6,022.85	-	(6,022.85)	0.0%
1581	Box Elder-Wtr Lease Irrigation	-	7,500.00	7,500.00	-	100.0%
	Total Revenues	45,603.53	747,555.79	737,056.00	-10,499.79	101.4%
	Expenditures					
	Administration					
1612	Accounting	1,807.00	15,717.00	22,880.00	7,163.00	68.7%
1614	District Management	5,882.50	47,909.00	64,480.00	16,571.00	74.3%
1617	Water Rights Dev-Legal	894.50	42,903.24	70,000.00	27,096.76	61.3%
1618	Water Rights Dev - Eng.	797.50	40,926.50	27,500.00	(13,426.50)	148.8%
1616	Engineering-Administration	4,142.70	14,014.34	21,150.00	7,135.66	66.3%
1615	Audit	-	6,642.50	8,500.00	1,857.50	78.1%
1620	Director's Fees	500.00	4,400.00	6,500.00	2,100.00	67.7%
1630	Utility Billing	1,871.50	12,556.69	15,000.00	2,443.31	83.7%
1650	Website Dev & Maintenance	-	580.50	1,000.00	419.50	58.1%
1670	Insurance/SDA	-	16,322.82	17,100.00	777.18	95.5%
1675	Legal	5,115.00	37,971.30	65,900.00	27,928.70	57.6%
1685	Miscellaneous Expense	633.60	7,542.67	14,300.00	6,757.33	52.7%
1693	Payroll Taxes	38.25	336.60	497.00	160.40	67.7%
1700	Treasurer's Fees	-	4,642.67	4,643.00	0.33	100.0%
	Subtotal Administration	21,682.55	252,465.83	339,450.00	86,984.17	74.4%
	Operations					
1755	Rules and Regulations	-	-	3,000.00	3,000.00	0.0%
1780	Project Mgmt/Oper Admin	610.19	2,299.45	7,840.00	5,540.55	29.3%
1784	Engineering-Operations	5,111.73	21,734.51	24,090.00	2,355.49	90.2%
1794	Utilities	2,934.04	29,700.40	35,000.00	5,299.60	84.9%
1798	Plant Supplies	2,404.20	4,739.40	5,000.00	260.60	94.8%
1802	Testing and Reporting	172.44	5,010.88	4,500.00	(510.88)	111.4%
1825	Distribution Sys Mntc	-	42,082.48	36,802.00	(5,280.48)	114.3%
1835	Equipment and Tools	-	3,296.47	1,000.00	(2,296.47)	329.6%
1840	Operator Services	3,924.90	40,140.28	54,977.00	14,836.72	73.0%
1850	Water Meters	-	4,021.24	2,000.00	(2,021.24)	201.1%
1851	Facility Maintenance & Repair	3,001.45	31,823.23	49,720.00	17,896.77	64.0%
1853	Meter Reading	1,215.01	7,315.86	8,362.00	1,046.14	87.5%
1854	Generator Preventative Mntc	-	3,743.49	4,000.00	256.51	93.6%
1872	Concentrate Disposal	6,944.10	12,835.60	5,000.00	(7,835.60)	256.7%
1876	Locates	294.64	6,502.49	2,000.00	(4,502.49)	325.1%
1898	Capital Repair & Replacement	-	7,631.91	265,149.00	257,517.09	2.9%
	Subtotal Operations	26,612.70	222,877.69	508,440.00	285,562.31	43.8%
	Total Expenditures	48,295.25	475,343.52	847,890.00	372,546.48	56.1%
	Excess (Deficiency) of Revenues Over Expenditures	(2,691.72)	272,212.27	(110,834.00)	(383,046.27)	-245.6%

GREATROCK NORTH WATER AND SANITATION DISTRICT
Statement of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
General Fund
For the 11 Months Ending,
November 30, 2015

Acct No	Account Description	Period Actual	YTD Actual	Budget	Under/(Over) Budget	% of Budget
	Transfers and Other Sources (Uses)					
1890	Transfer to Debt Service	-	(190,045.11)	(200,000.00)	(9,954.89)	95.0%
1895	Emergency Reserves	-	-	(56,351.00)	(56,351.00)	0.0%
	Total Transfers and Other Sources (Uses)	-	(190,045.11)	(256,351.00)	(66,305.89)	74.1%
	Change in Fund Balance	(2,691.72)	82,167.16	(367,185.00)	(449,352.16)	-22.4%
1501	Beginning Fund Balance	-	1,148,011.77	1,141,299.00	(6,712.77)	100.6%
	Ending Fund Balance	(2,691.72)	1,230,178.93	774,114.00	(456,064.93)	158.9%

GREATROCK NORTH WATER AND SANITATION DISTRICT
Statement of Revenues, Expenditures and Changes in Fund Balance - Budget and Actua
Debt Service Fund
For the 11 Months Ending,
November 30, 2015

Acct No	Account Description	Period Actual	YTD Actual	Budget	Under/(Over) Budget	% of Budget
	Revenues					
2510	Property Tax Revenue	-	201,962.84	202,041.00	78.16	100.0%
2515	Specific Ownership Taxes	1,458.17	14,654.16	12,122.00	(2,532.16)	120.9%
2518	Available of Service Fees	1,265.00	13,715.00	14,700.00	985.00	93.3%
2560	Interest Income	56.88	230.22	25.00	(205.22)	920.9%
	Total Revenues	2,780.05	230,562.22	228,888.00	(1,674.22)	100.7%
	Expenditures					
2607	Bond Principal-2007 GO	125,000.00	125,000.00	125,000.00	-	100.0%
2608	Bond Interest-2007 GO	70,703.75	141,407.50	141,408.00	0.50	100.0%
2610	Bonds Principal-2010 GO	55,000.00	55,000.00	55,000.00	-	100.0%
2611	Bond Interest-2010 GO	51,781.25	103,562.50	103,562.00	(0.50)	100.0%
2668	Paying Agent Fees	-	200.00	500.00	300.00	40.0%
2675	Legal	-	-	500.00	500.00	0.0%
2676	Arbitrage compliance	-	1,500.00	4,500.00	3,000.00	33.3%
2700	Treasurer's Fees	-	3,030.69	3,031.00	0.31	100.0%
2899	Contingency	-	-	500.00	500.00	0.0%
	Total Expenditures	302,485.00	429,700.69	434,001.00	4,300.31	99.0%
	Excess (Deficiency) of Revenues Over Expenditures	(299,704.95)	(199,138.47)	(205,113.00)	(5,974.53)	97.1%
	Transfers and Other Sources (Uses)					
2587	Transfer from General Fund	-	190,045.11	200,000.00	9,954.89	95.0%
	Total Transfers and Other Sources (Uses)	-	190,045.11	200,000.00	9,954.89	95.0%
	Change in Fund Balance	(299,704.95)	(9,093.36)	(5,113.00)	3,980.36	177.8%
2501	Beginning Fund Balance	-	16,569.58	7,432.00	(9,137.58)	222.9%
	Ending Fund Balance	(299,704.95)	7,476.22	2,319.00	(5,157.22)	322.4%

GREATROCK NORTH WATER AND SANITATION DISTRICT
Statement of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
Capital Projects Fund
For the 11 Months Ending,
November 30, 2015

Acct No	Account Description	Period Actual	YTD Actual	Budget	Under/(Over) Budget	% of Budget
	Revenues					
3560	Interest Income	27.25	336.39	500.00	163.61	67.3%
	Total Revenues	27.25	336.39	500.00	163.61	67.3%
	Expenditures					
3675	Legal	-	1,085.00	500.00	(585.00)	217.0%
3853	Greatrock North Pump Station	-	19,030.20	207,000.00	187,969.80	9.2%
3880	Acquisition Costs	-	-	139,043.00	139,043.00	0.0%
	Total Expenditures	-	20,115.20	346,543.00	326,427.80	5.8%
	Excess (Deficiency) of Revenues Over Expenditures	27.25	(19,778.81)	(346,043.00)	(326,264.19)	5.7%
3501	Beginning Fund Balance	-	341,850.89	346,043.00	4,192.11	98.8%
	Ending Fund Balance	27.25	322,072.08	-	(322,072.08)	0.0%

Great Rock North Water and Sanitation District

Series 2010 General Obligation Refunding and Improvement Bonds
Series 2007 General Obligation Refunding and Improvement Bonds

Bonds Principal and Interest Maturing in the Year(s) Ending December 31,	Totals		
	Principal	Interest	Total
2015	180,000	244,970	424,970
2016	190,000	238,207	428,207
2017	195,000	230,337	425,337
2018	215,000	222,808	437,808
2019	235,000	214,193	449,193
2020-2024	1,385,000	906,295	2,291,295
2025-2029	1,900,000	535,853	2,435,853
2030-2033	1,110,000	110,205	1,220,205
Total	5,410,000	2,702,868	8,112,868

GREATROCK NORTH WATER AND SANITATION DISTRICT

Property Tax Collection Schedule

2015

Month	1-510 Property Taxes General	2-510 Property Taxes Debt Service	1-510 Abated property taxes General	2-510 Abated property taxes Debt Service	1-560 Interest General	1-560 Interest Debt Service	1-510 Delinquent Taxes General	2-510 Delinquent Taxes Debt Service	1-515 Specific Ownership General	2-515 Specific Ownership Debt Service	1-700 Treasurer Fees General	2-700 Treasurer Fees Debt Service	ColoTrust Net Received
Adams County													
January	1,651.83	1,078.30	-	-	-	-	-	-	2,332.76	1,522.79	24.78	16.17	6,544.73
February	130,611.36	85,261.48	-	-	-	-	-	-	2,253.72	1,471.20	1,959.17	1,278.92	216,359.67
March	17,742.26	11,581.92	-	-	3.08	2.01	-	-	2,026.21	1,322.68	266.19	173.76	32,238.21
April	18,375.79	11,995.49	-	-	13.92	9.08	-	-	2,200.68	1,436.58	350.29	228.67	33,452.58
Snr Exp	4,962.88	3,239.71	-	-	-	-	-	-	-	-	-	-	8,202.59
May	42,082.34	27,470.83	-	-	12.57	8.21	-	-	1,952.26	1,274.41	631.42	412.19	71,757.01
June	91,651.59	59,829.02	-	-	3.62	2.36	-	-	2,219.17	1,448.64	1,374.83	897.48	152,882.09
July	1,159.10	756.65	-	-	38.22	24.95	-	-	2,497.13	1,630.09	17.96	11.73	6,076.45
August	-	-	-	-	-	-	-	-	2,419.75	1,579.58	-	-	3,999.33
September	1,148.05	749.44	-	-	54.07	35.29	-	-	2,313.20	1,510.02	18.03	11.77	5,780.27
October	-	-	-	-	-	-	-	-	2,233.76	1,458.17	-	-	3,691.93
November	-	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-
	309,385.20	201,962.84	0.00	0.00	125.48	81.90	0.00	0.00	22,448.64	14,654.16	4,642.67	3,030.69	540,984.86

	Assessed Valuation		Mill Levy		Property Tax Receipts			Specific Ownership Tax Receipts			
	Assessed Valuation	% Change in AV	General	Debt Service	Taxes Levied	Taxes Received	% of Levied	Taxes Budgeted	Taxes Received	% of Budget	
2008	$ 11,899,290	-	24.000	11.000	416,475	416,475	100.00%	41,647	34,862	83.7%	8.37%
2009	$ 12,061,080	1.4%	24.000	11.000	422,138	398,952	94.51%	37,175	30,609	82.3%	7.67%
2010	$ 12,326,250	2.2%	24.000	11.000	431,419	431,509	100.02%	34,513	28,376	82.2%	
2011	$ 12,050,510	-2.2%	24.000	18.500	512,147	513,327	100.23%	32,958	32,788	99.5%	
2012	$ 11,231,320	-6.8%	27.000	18.500	511,025	512,045	100.20%	30,662	34,981	114.1%	
2013	$ 11,217,880	-0.1%	27.000	18.500	510,414	509,865	99.89%	30,625	37,829	123.5%	
2014	$ 10,900,660	-2.8%	28.340	18.500	510,587	510,587	100.00%	30,636	40,479	132.1%	
2015	$ 10,921,110	0.2%	28.340	18.500	511,545	511,348	99.96%	30,636	37,103	121.1%	

	2014 Prior Year Collections			2015 Current Year Collections		
	Taxes Received	Current & Delinquent MTD	YTD	Taxes Received	Current & Delinquent MTD	YTD
January	$ 3,947.91	0.8%	0.8%	$ 2,730.13	0.5%	0.5%
February	$ 220,343.59	43.2%	43.9%	$ 215,872.84	42.2%	42.7%
March	$ 17,199.89	3.4%	47.3%	$ 29,324.18	5.7%	48.5%
April	$ 37,707.31	7.4%	54.7%	$ 30,371.28	5.9%	54.4%
May	$ 7,084.06	1.4%	56.1%	$ 8,202.59	1.6%	56.0%
June	$ 88,675.15	17.4%	73.4%	$ 69,553.17	13.6%	69.6%
July	$ 134,094.03	26.3%	99.7%	$ 151,480.61	29.6%	99.2%
August	$ 1,535.18	0.3%	100.0%	$ 1,915.75	0.4%	99.6%
September	$ -	0.0%	100.0%	$ -	0.0%	99.59%
October	$ -	0.0%	100.0%	$ 1,897.49	0.4%	99.96%
November	$ -	0.0%	100.0%	$ -	0.0%	99.96%
December	$ -	0.0%	100.0%	$ -	0.0%	99.96%
	$ 510,587.12	100.0%	100.0%	$ 511,348.04	99.96%	99.96%

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Greatrock North W & S District
Monthly Activities
November 16th – December 11th

11/16/15: Regular checks and readings. Concentrate tank conductivity = 4446; pH = 8.19.

11/17/15: Responded several times to alarms and power issues from the snow storm.

11/18/15: Regular checks and readings. Concentrate tank conductivity = 4437; pH = 8.24. Completed locates at: 29750 E 167th Ave, 31425 E 162nd Ave and 16655 Stroilway St.

11/20/15: Regular checks and readings. Checked the oil and fuel levels in all of the generators. Completed locates at: 28285 E 160th Ave and 166th Ave & Hudson Rd.

11/21/15: Operator responded to power issues at RHF's pump station. Power issue had solved itself and pumps were running normal.

11/23/15: Regular checks and readings.

11/25/15: Regular checks and readings. Completed a locate at 16530 Umpire Ct.

11/27/15: Regular checks and readings.

11/30/15: Regular checks and readings. Replaced a leaking chlorine fitting at 16480 Umpire St.

12/2/15: Regular checks and readings. Completed locates at: 29500 E 160th Ct and 28660 E 163rd Pl. Changed the valving to send RO concentrate to the south pond.

12/3/15: Mike and Randy onsite to install valve covers at pump stations. Completed all of Greatrock North. Rocky Horse Farms is complete other than unable to locate the bypass or insulation valve upstream of the treated water meter vault. All of Boxelder complete other than the 8 valves behind the RO building. Assume 6 of the valves may be abandoned.

12/7/15: Regular checks and readings.

12/9/15: Regular checks and readings. Collected and delivered samples from Alluvial wells #1 and #2. Provided pictures of the screen and process control to Brad and Earl, with Worth Hydro.

12/11/15: Regular checks and readings. Completed a locate at 16380 Queensview.

Status of valve box inserts and markers project – *Completed*

November 13th – December 11th

RO Run Time Hrs	113.30 hrs
RO Concentrate Flow – 1 pond (North)	197,142 gallons

11/9/15

Monthly Testing	TDS(mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness(mg/L)
BE	275	19.8	3.4	63.5
RHF	346	32.0	5.7	103.3
GRN	320	25.5	4.4	82.0

Completed Work Order List Report

12/14/2015

Completed	Equipment Number	Task	Priority	WO#	Type
12/9/2015	ALV-1 Well	EDOP Sampling	1	553.01	Scheduled
12/9/2015	ALV-2 Well	EDOP Sampling	1	554.01	Scheduled
12/4/2015	BOX Generator	Ck Fuel Check Fuel Level	5	586.01	Scheduled
12/4/2015	GN Generator	Ck Fuel Check Fuel Level	5	587.01	Scheduled
12/4/2015	RHF Generator	Ck Fuel Check Fuel Level	5	589.01	Scheduled
12/2/2015	BOX Generator	Ck Fuel Check Fuel Level	5	571.01	Scheduled
11/30/2015	BOX BP1 VFD	Clean Eqp Clean Equipment	5	568.01	Scheduled
11/30/2015	BOX BP2 VFD	Clean Eqp Clean Equipment	5	569.01	Scheduled
11/30/2015	BOX BP3 VFD	Clean Eqp Clean Equipment	5	570.01	Scheduled
11/20/2015	BOX Generator	Ck Oil Check Oil Level(069)	5	572.01	Scheduled
11/20/2015	GN Generator	Ck Oil Check Oil Level(069)	5	574.01	Scheduled
11/20/2015	GN Generator	Ck Fuel Check Fuel Level	5	573.01	Scheduled
11/20/2015	RHF Generator	Ck Oil Check Oil Level(069)	5	576.01	Scheduled
11/20/2015	RHF Generator	Ck Fuel Check Fuel Level	5	575.01	Scheduled

Greatrock North WSD
Water Quality Calls 2010 - 2012

	Date	Complaint	Name	Address	Phone	Subd	Action Taken	Notes
1	02/08/10	Fluoride	Greer, Sherry	16385 Jalna Ct	303-637-9200	RHF	Discussion and forward lab results	
2	03/22/10	Brown water	Lloyd	16588 Joppa Ct.		RHF	Flush on 3/22	
3	04/02/10	Bad Hot Water Tank		16460 Tree Haven		BOX	Discussed with Rob Fleck	
4	04/26/10	Gray water turning whites gray, smelly	Roppo, Mary	16715 Shadowwood Ct	303-659-4688	BOX	Discussed with homeowner; flush on 4/28	
5	05/07/10	Brown water	Randall	16481 Tree Haven St.	303-667-7222	BOX	Asked him to run water for a few minutes to see if it would clear	
6	05/12/10	Brown water	Arnold, Brian	16530 Treehaven	303-655-8121	BOX	Flush on 5/12	
7	05/18/10	Brown water	Lovato	31305 E. 166th Ave.	303-659-2616	BOX	Flush on 5/18	
8	05/29/10	Murky water; musky smell	Paustian, Corinne	16555 Umpire Ct	303-655-1954	BOX	Asked her to run water for a few minutes to see if it would clear	
9	06/04/10	Brown water	Dahlin	16181 Rayburn St.	303-655-1289	BOX	Flush on 6/4	
10	06/04/10	Brown water	Obrechet, Ted	16651 Treehaven	303-659-1914	BOX	Flush on 6/4	
11	07/10/10	Brown water	Montoya, Jeff	31450 E 167th Ave	303-655-0606	BOX	Flush on 7/12	
12	07/15/10	Brown water	Cheserinick	32285 E. 166th Ct.	303-637-0079	BOX	Flush on 7/16	
13	07/23/10	Brown water	Frank	16261 Timber Cove St.		BOX	Flush on 7/26	
14	08/03/10	Brown water	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF	Flush on 8/3	
15	08/03/10	Brown water	Zaiss, Brian	31351 E 167th	303-710-0193	BOX	Flush on 8/3	
16	08/10/10	Brown water	Fleck, Rob	16460 Tree Haven St	via email	BOX	Flush on 8/10	Also 2 neighbors
17	08/12/10	Milky then brown water	Watt	29365 E. 160th Ct.	303-6551757	GN	Flush on 8/12	Caused by system losing pressure
18	08/13/10	Brown water	Campbell, Robert	28355 E. 160th Ave.	303-655-0148	GN	Flush on 8/13	Caused by system losing pressure
19	8/17/10	Brown water	Fleck, Rob	16460 Tree Haven St	via email	BOX	Waiting for controlled flush with Olsson	Also 1 neighbor
20	9/14/10						FLUSH ALL OF BOX ELDER CREEK SUBD.	
21	9/15/10	Brown water	Gerry	16290 Greatrock Way	303-325-6894	GN	Called customer	Water was not brown anymore
22	9/20/10	Brown water	Moore, Ken	16480 Timber Cove	720-685-7167	BOX	flush lines and met with customer	
23	10/4/10	Tea colored	Moore, Ken	16480 Timber Cove	303-906-1355	BOX	Flush on 10/4	
24	10/12/10	Reddish Brown	Moore, Denise	16480 Timber Cove		BOX	Inspection by Brad Simons - see Olsson memo 16480 timbercove 10-12-10.xls	
25	10/21/10	particles in water	Dahlberg, Julie	16600 Umpire Ct.	303-498-0419	BOX	flush on 10/21/10	
26	11/5/10	bad taste	Jimison, Robert	16580 Umpire St.	Stopped Katie reading meters	BOX	explained RO just went back online	Wanted to bring a jug to the District and make us drink it. Asked when are we getting our good water back? Didn't notice brown water
27	11/5/10	bad taste	Howes, Angie	16141 Rayburn St.	Stopped Katie reading meters	BOX	explained RO just went back online	Katie tasted seemed fine. Also asked when they were getting their good water back? Didn't notice brown water
28	12/8/10	Water filter turns brown very quickly	Curl, Jo Ann	29430 E 160th Ct	303-654-0132	GN	Discussed status of water looping project and present blending of RO and well water	Recent fire flows could have stirred up main lines
29	1/5/11	Update	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF		Katie saw Travis while reading the meters. Travis said "Thanks, the water has been good lately"
30	2/17/11	Update	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF	Flushed this date; water was clear	
31	2/19/11	Update	Williams, Ken	32505 E 167 Dr	303-637-0708	BOX		While responding to a call about a leak; Ken said the water has been good, no more "blue water"
32	2/21/11	Brown water	Moore, Ken	16480 Timber Cove	303-906-1355	BOX	Flush fire hydrants one South of address and one North of address on 2/22/11	Says filters are still plugging every month; if he bypasses it plugs the refrig filter
33	2/21/11	Lt Brown Water	Allain, Kimberly	16321 Timber Cove	303-637-9886	BOX	Flush Timber Cove & Umpire St. fire hydrant and the Timber Cove cul-de-sac blowoff on 2/22/11	Still slight yellow color in water; not as bad as before; mostly from hot water; told her she might want to drain the hot water tank
34	2/21/11	Brown water	Ross, Don	29957 E 166th Place	720-685-0905	RHF	Flush on 2/22/11	Water still brown, hasn't seen much improvement
35	2/22/11	Light brown water	Dahlin, Mathew	16181 Rayburn St.	303-655-1289	BOX	Flush on 2/22/11	Water has been good since last flush on 6/4/10
36	2/23/11	Blue staining in cup	Fleck, Rob	16460 Tree Haven St	via email	BOX	Langelier Index sample to lab on 2/23/11	Began adding Calciquest (Re: blue water) on 3/10/11
37	2/23/11	Much better, running clear	Ross, Don	29957 E 166th Place	720-685-0905	RHF	Flush on 2/22/11	Don called back to thank us; said the water was clear this AM
38	3/12/11	Lt Brown Water	Tario, Alma	16655 Stroilway St	303-637-0121	BOX	Flushed on 3/14/11	FH at Stroilway and 168th ran cloudy for 62 minutes at around 300 gpm
39	3/14/11	Brown water	Eberle, Doug	16640 Stroilway St	303-659-3733	BOX	Flushed on 3/14/11	The water used to be great; now it's getting worse and worse; not happy. Never seen it this bad
40	3/15/11	Brown water	Best, Dan	16785 Red Lane	303-748-1800	BOX	Flushed on 3/15/11	It's been bad all week
41	5/9/11	Horrible Taste	Fleck, Rob	16460 Tree Haven St	via Brad	BOX	No Action	
42	8/5/11	Ruining his evaporative coolers	Whitley, William	31451 E 167th Ave	303-961-8859	BOX	Discussed changes in blending and % of RO water	
43	8/5/11	Pleased with water quality	Leonard, Travis	16720 Kenuil Ct.	303-655-3744	RHF		Email to T. Krayenhagen
44	11/7/11	Water smells musty when first turned on	Snider, Bev	16675 Stroilway	303-467-5882	Box	Checking with Engineer	Flushed Fire Hydrant near house; smelled like chlorine; called Bev to let her know we had flushed to see if that helped
45	11/25/11	Brown water	Moore, Ken	16480 Timber Cove	720-685-7167	BOX	Sent email to Terry K.	

46	2/21/12	high water usage	Neff, Linda	28580 E. 160th Pl	303-654-9860	GN	asked Mike to verify meter pit isn't full of water	2/21/12: Mike went onsite and confirmed the meter pit was dry..
47	3/26/12	Flushed All Hydrants	REC,Inc.	All three subdivisions		BOX,GN.RHF	Will provide Separate Memo	
48	06/20/12	Low PSI and yucky water in filters	Greer, Sherry	16385 Jalna Ct	303-637-9200	RHF	Increased pressure at Rocking Horse Farms Pump station from 60 to 65 psi.	
49	07/20/12	Brown Water	Keith	16685 Keniul Ct	303-915-0918	RHF	Flushed Hydrant next to house	
50	09/15/12	Brown Water	Ted Obrecht	16460 Tree Haven St	303-659-1914	BOX	Flushed Hydrant next to house	
51	01/24/13	Brown Water/odor	Terry Snyder	16675 Stroilway	303-655-1292	BOX	previous day had a water leak/	
52	04/08/13	Low Water Pressure	Debra Brown	16685 Keniul Ct	303-915-0918	RHF	Operator checked outside facuet with pressure gauge and it was showing 70 psi. Opeartor called and left homeowner a message of his findings.	
53	04/18/13	Low Water Pressure/Brown Water	Several Customers			GRN	Large Fire in the area and Fire Department was pulling water from hydrants creating low and high pressure spikes along with brown water from stirring up the lines. Operator checked out and found no issues upon arrival	
54	05/29/13	Low Water Pressure	Tony	30265 E. 166th Ave	720-352-0290	RHF	Spoke with the Tony and advised him I would increase the pressure at the pump station a couple pounds. Also advised him to double check his pressure reducing valve setpoint.	
55	06/11/13	Low Water Pressure	John and several others	30061 East 163rd Ave.	303-655-8614	RHF	Spoke with the John and advised him we were looking into the issue.	
56	June 19-23	Low Water Pressure	several residents	Rocking Horse Farms		RHF	Working with Timberline on low pressure issues	
57	06/25/13	Brown/smelly Water	Greg Mott	16770 Kenosha Ct		RHF	Flushed Hydrant next to house	
58	07/24/13	Blue/Pink Water	Joe Martinez	16450 Timber Cove St.	303-591-5726	BE	Blue marks are due to leaking facuet and toliet that he has repaired and will keep an eye on	
59	July 25 - August 12	Low Water Pressure	several residents	Rocking Horse Farms		RHF	Working with Timberline on low pressure issues	
60	8/19/2013	Low Water Pressure	Buck Benke	30002 E. 163rd Place		RHF	Mr. Benke is experiencing low water pressure issues. Brad, John, Lisa and Dan met with him and inititally determined that he is experiencing a flow issue. Staff continues to reseach the issue.	
61	8/22/2013	Cloudy water/grit in bowls	Mary Houston	28820 E. 160th Place	303-659-0668	GRN	cloudy dishes, dirt or grit in sinks and toilet bowls, ice leaves white floaty things in drinks. REC staff flushed hyrdants in the area on 8/23/13.	
62	9/23/2013	White Spots on canning jars	Karen	28540 E. 162nd Ct	303-558-0063	GRN	Had white spots on canning jars after boiling. Sent Operator over to investigate.	
63	10/10/2013	Spots on dishes	Denise	16480 Timber Cove	720-685-7167	GRN	Had spots on canning jars after boiling. Sent Operator over to speak with owner and flush two hydrants	
64	10/10/2013	Bad tasting water and low pressure	Sharon	16385 Jalna Ct		RHF	Spoke to Shraon and listened to her concerns. Flushed two hydrants near her house.	
65	10/10/2013	Bad tasting water and low pressure	Susan	29145 East 16th Ct	303-659-7857	GRN	Spoke to Susan and listened to her concerns and explained how the RO works and why the water is harder now than in the past.	
66	10/23/2013	Bad tasting water and Water Spots	Kathy	28455 East 162nd Ave	303-655-0061	GRN	Spoke to Kathy and listened to her concerns and explained how the RO works and why the water is harder now than in the past.	
67	12/21/2013	Brown Water	Richard & Kelly	16531 Timber Cove	303-637-7537	BE	Spoke to Kelly who had concerns with some brown water, notified Kelly someone would be out to flush a couple hydrants near her home. This was in the same area as the leak that was repaired 12/20/13. Two hydrants were flushed near home.	
68	12/30/2013	Blue Water Stains	Shela	29000 East 160th	303-637-7537	GRN	Spoke to Kelly who was seeing blue spots on her dishes and tolites. Explaind to Shela about how the water is treated and why the water is harder now than in the past. Also gave her the name of a dishwater cleaner called "Limi Shine" that one other resident stated worked very well to remove these stains.	
69	5/6/2014	Change in Water Quality	Ken Kirwin	28565 E. 162nd Ave		GRN	He has lived in the District for 14 years. In the past year or two he has noticed a significant change in the water quality. He has found much more mineral deposits on his faucets and valves. He has replaced four faucets and six valves in his home in that period of time. The Board explained the history and reason for looping the system and the struggles the District has faced with management of the brine concentrate. Mr. Kirwin thanked the Board for their time and the Board thanked him for sharing his comments. Mr. Kirwin left the meeting at this time.	
70	6/2/2014	Brown Water	John Wycoff	30061 East 163rd Ave.		RHF	Brown water in tub, Operator flushe hydrants in the area on 6/4/14.	
71	6/2/2014	Low Water Pressure	Laura	28410 E. 163rd	303-709-4895	GRN	Customer complained of low water pressure. Operator checked VFD at pump station and also made contact with owner and found preesure was fine and no issues were observed.	
72	7/24/2014	Brown Stuff on filters	Pat McMann	16195 Bently	303-637-0078	GRN	Explained Brown debris on his filters and Lisa explained the RO run time issues.	
73	7/25/2014	Noise from Water Line	Shela	29000 East 160th	303-637-7537	GRN	Hearing a noise coming from her water pipes at 4:00 a.m. Discussed what this could be and to try and pinpoint the noise in the house and call me on Monday to discuss further.	
74	11/13/2014	Mineral Build up and once in awhile brown water out of tub that is not used often	Matt	16181 Rayburn St.	303-489-4876	BE	Has a lot of mineral build up on facuets and once in ahwile has brown water out of a tub that's not used much. Explained to Matt about how the water is treated and the history and manegement of the RO brine. I also suggested matt flush his hot water heater and if he could obtain a sample of the brwon water next time tus is used we would be happy to come and look at the sample. Matt was interested in a treatment system for his house so I suggested he look up John Wycoff's number from the news letter and discuss what John put in his house. Matt also complained about the watr rates and I explained he would need to addres that with the District board.	
75	2/10/2015	Sent letter to Board about changes in water over the years	Albert and Linda Johnson	28320 East 163rd Place	303-659-1321	BE	2/10/15 - Left message at 7:40 p.m. Left another message on 2/13. Linda returned my call on 2/13. Explained the situation with not being able to run the RO as much as we would like. Also gave Linda John Wycoff's phone Number to ask about the problem and his whole house filter.	

76	2/23/2015	Water Quality from one end of GRN to the other.	Harvey Houston	16250 Delray Ct.	303-944-7044	GRN	Says the water quality has went down hill the last few years and wanted to know why the water quality is different at his house than his parents on the other end of the neighborhood. He states it's not only his parents but there neighbors as well. Was the water tested at his house and also at his paretns house to see the differences. Harvey also wants to know what the District is goning to do about the valves in the road and the pavement sinking around them? I explained the RO situation to Mr. Houston like I have done to the others. I told him I could not sample the water as he requested without out discussing with the District Manager first and that goes the same with the valves in the road.	
77	3/6/2015	Sulfide Smell in Water	John Wycoff	30061 East 163rd Ave.		RHF	John stated his wife could smell something in the water similar to rotten eggs. Mike Atwood responded right away and could not duplicate the smell.	
78	8/4/2015	Low Water Pressure	David Stevens	28425 E. 162nd Qt	720-296-5362	BE	Customer complained of low water pressure to SDMS who passed message on to Ramey. Jeff called and left two messages and never received a call back.	
79	10/19/2015	Smelly/Brown Water	Bill & Gayla Dempsey	30164 E 165th Ave.		RHF	Customer complained to John that the water was smelly and brown. John contacted Mike Atwood and they visited the house. Nothing unusual was found but a sample was taken at the request of John and taken to the lab for a water quality test.	
80	12/1/2015	Chlorine Smell	Rob Fleck	16460 Tree Haven St		BE	Customer stated the chlorine was more notciable now then in past. Explained to customer chlroine has been normal in system.	

Greatrock Meter Install/Replacements

Address	Date	Reason why meter was replaced
31485 E. 162nd Ave	10/29/15	new install
16355 Queensview Street	11/04/15	new install
16290 Queensview Street	11/24/15	new install
16580 Timber Cove Street	12/10/15	faulty transmitter
31310 E. 164th Avenue	12/11/15	new install

Resolution No. 2016-01-01

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

DESIGNATING THE DISTRICT'S 24-HOUR POSTING LOCATION

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), C.R.S., notice of the time and place for meetings of the Board of Directors of the District (the "Board") is required to be posted in three (3) public locations within the boundaries of the District at least seventy-two (72) hours before any regular or special meeting; and

WHEREAS, § 24-6-402(2)(c), C.R.S., provides that, in addition to any other means of full and timely notice, a local public body shall be deemed to have given full and timely notice if the notice of the meeting is posted in a designated public place within the boundaries of the local public body no less than twenty-four (24) hours prior to the holding of the meeting; and

WHEREAS, pursuant to § 24-6-402(2)(c), C.R.S., the public place or places for posting such notice shall be designated annually at the local public body's first regular meeting of each calendar year; and

WHEREAS, the Board has determined to designate one of the three posting locations used for meeting notices in satisfaction of § 32-1-903(2), C.R.S. as its designated posting location for notices under § 24-6-402(2)(c), C.R.S.

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 the following location for the posting of its twenty-four (24) hour meeting notices:

At the water tank at 16373 Rayburn Street, Hudson, Colorado.

ADOPTED this 5th day of January, 2016.

GREATROCK NORTH WATER AND SANITATION DISTRICT

_____
Officer of the District

ATTEST:

_____

APPROVED AS TO FORM:

WHITE BEAR ANKELE TANAKA & WALDRON
Attorneys at Law

_____
General Counsel to the District

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

TZA Water Engineers
a Lamp Rynearson Company

12596 W. Bayaud Ave., Ste. 330
Lakewood, Colorado 80228
303-971-0030
tza4water.com

GREATROCK NORTH WATER AND SANITATION DISTRICT
ENGINEER'S REPORT
DECEMBER 15, 2015

Concentrate Management

On December 2, 2015, Ramey Environmental Compliance closed the valve to the north concentrate pond and opened the valve to the south concentrate pond. The valve between the two ponds remains closed. At the time the valves were changed, the north pond had approximately six inches to eight inches of freeboard and the south pond had a pond level recording of 2.23 feet. Since the valves were changed, the south pond has risen to a level recording of 2.43 feet as of December 15, 2015. This is an average increase of approximately 0.015 feet per day. During this period, the average daily RO run time was approximately 301 minutes. If extrapolated to an average daily RO run time of 480 minutes, the average pond level increase would be approximately 0.025 feet per day. At that rate, the south pond level would increase an estimated 2.25 feet over the next 90 days and would be approaching an elevation of concern for the south pond. If you recall, the south pond was at 4.64 feet on May 12, 2015 when we changed the valve positions and began diverting concentrate into the north pond. I will bring updated information to the January Board meeting.

As for concentrate management options, I have recently contacted two vendors who may offer alternatives to the AltelaRain. The Preliminary Effluent Limits were issued by the Water Quality Control Division on December 3, 2015.

Greatrock North Pump Station Improvements

The design of the Greatrock North Pump Station Improvements will be re-initiated in January of 2016.

Reverse Osmosis Water Treatment Plant Monitoring

TZA will be monitoring the performance of the Osmonics reverse osmosis unit following Worth Hydrochem's service call in October of this year. The new membranes were installed on October 28, 2015.

Date	Rejection (%)	Diff. Pressure (psi)	Feed Water Temp. (F)	Recovery (%)	RO Pump Hours
10/29/2015	99.4	31	58.9	79.3	1293.1
12/09/2015	99.3	32	53.6	78.6	1506.8

Engineer's Report
December 15, 2015

Other Activities

Altela, Inc. – No update since the November Board meeting.

Water Quality and Hardness – TZA is tracking the water production data and water quality results from a series of sampling events. Below are tables summarizing the water production data, water quality results, and water treatment plant observations.

Month	RO Permeate	Unfiltered UKA Water	Unfiltered ALV Wells
December (12/14/15)	51%	38%	11%
November (11/21/15)	52%	38%	10%
October (10/25/15)	25%	36%	39%
September (09/20/15)	17%	34%	49%
August (08/24/15)	10%	33%	57%
July (07/19/15)	17%	35%	48%
June (06/28/15)	23%	37%	40%
May (05/25/15)	39%	42%	19%
April (04/27/15)	37%	39%	24%
March (03/22/15)	41%	40%	19%

Total Dissolved Solids (TDS)			
Date	**BECR Tanks**	**RHF Tank**	**GN Tank**
December 2015	RESULTS PENDING		
11/09/15	275 mg/l	346mg/l	320 mg/l
10/14/15	414 mg/l	406 mg/l	385 mg/l
09/09/15	470 mg/l	471 mg/l	495 mg/l
08/19/15	469 mg/l	500 mg/l	482 mg/l
07/10/15	417 mg/l	449 mg/l	468 mg/l
06/11/15	369 mg/l	350 mg/l	341 mg/l
05/11/15	401 mg/l	347 mg/l	366 mg/l
04/13/15	386 mg/l	326 mg/l	322 mg/l
March 2015	274 mg/l	324 mg/l	302 mg/l
02/02/15	350 mg/l	394 mg/l	383 mg/l
01/14/15	350 mg/l	394 mg/l	417 mg/l
12/03/14	417 mg/l	552 mg/l	511 mg/l
10/01/14	538 mg/l	603 mg/l	594 mg/l
07/11/14	565 mg/l	597 mg/l	599 mg/l
03/05/14	586 mg/l	543 mg/l	566 mg/l
01/08/14	553 mg/l	559 mg/l	575 mg/l
10/28/13	677 mg/l	643 mg/l	594 mg/l

Engineer's Report
December 15, 2015

The total hardness results tabulated below reflect a moderately hard to hard water:

Total Hardness (as CaCO3)			
Date	**BECR Tanks**	**RHF Tank**	**GN Tank**
December 2015	RESULTS PENDING		
11/09/15	63.5 mg/l	103.3 mg/l	82.0 mg/l
10/14/15	134.1 mg/l	117.2 mg/l	118.7 mg/l
09/09/15	152.6 mg/l	164.3 mg/l	158.4 mg/l
08/19/15	159.1 mg/l	175.6 mg/l	173.1 mg/l
07/10/15	136.2 mg/l	158.8 mg/l	156.5 mg/l
06/11/15	92.0 mg/l	78.0 mg/l	80.1 mg/l
05/11/15	84.8 mg/l	72.6 mg/l	73.9 mg/l
04/13/15	99.6 mg/l	67.7 mg/l	68.6 mg/l
March 2015	53.7 mg/l	68.3 mg/l	59.1 mg/l
02/02/15	83.4 mg/l	113.8 mg/l	104.6 mg/l
01/14/15	105.2 mg/l	123.0 mg/l	111.7 mg/l
12/03/14	115.3 mg/l	194.5 mg/l	169.8 mg/l
10/01/14	188.8 mg/l	231.7 mg/l	225.6 mg/l
07/11/14	221.5 mg/l	222.7 mg/l	220.4 mg/l
05/16/14	165.2 mg/l	209.6 mg/l	198.1 mg/l

For comparison, hardness values are generally classified as:

Classification	Mg/l
Soft	0 – 60
Moderately hard	61 – 120
Hard	121 – 180
Very hard	GTE 181

New Disinfection Rules – Ramey Environmental Compliance has been monitoring the chlorine residuals in each of the subdivisions and indicates we will be compliant with the new rules that will go into effect April 1, 2016. Effective April 1, 2016, the District will be required to maintain a minimum of 0.2 milligrams per liter chlorine residual throughout the distribution system.

MSDS Sheets – I have reviewed the product and MSDS sheets for "Buccaneer Plus", the herbicide used by Elite Industries to control the weeds around the concentrate evaporation ponds, and find the product to be acceptable for the application as long as the applicators use caution and do not apply in a manner that will allow it to directly contaminate nearby surface waters (i.e. Box Elder Creek). I have provided the product and MSDS sheets to Jeff Rabas and recommended he keep the information on file as it relates to the operation and maintenance of the ponds.

Engineer's Report
December 15, 2015

SCADA Reports – TZA's recent hire, Jonathan Bisulca, is being trained to monitor and interpret the daily SCADA reports and has been recording the daily RO run times for comparison and evaluation. Below is a summary of information from the daily SCADA reports and RO run times.

Date	~RO Run Time (minutes)	Water to BECR Tanks (gallons)
12/01/15	247	49,959
12/02/15	215	45,799
12/03/15	320	64,273
12/04/15	337	67,527
12/05/15 (Saturday)	224	42,836
12/06/15 (Sunday)	422	84,698
12/07/15	274	55,990
12/08/15	263	54,061
12/09/15	343	72,029
12/10/15	245	49,533
12/11/15	317	64,116
12/12/15 (Saturday)	297	60,889
12/13/15 (Sunday)	224	43,109
12/14/15	435	88,397

Utility Billings and Energy Costs – TZA is tracking the United Power utility bills and associated water operations on a monthly basis. Below are the monthly comparisons for November each year, as well as a summary of the 11-month periods for 2014 and 2015.

	November 2014 Billings				**November 2015 Billings**			
	On Peak	**Off Peak**	**Total KWH**	**Billing**	**On Peak**	**Off Peak**	**Total KWH**	**Billing**
Alluvial	2,529		2,529	$298.74	2,210		2,210	$263.08
BECR	1,640	5,240	6,880	$587.88	2,040	10,160	12,200	$939.73
GN	1,000	4,160	5,160	$433.96	960	4,040	5,000	$419.65
RHF	600	1,520	2,120	$204.50	760	1,920	2,680	$253.39
Totals			**16,689**	**$1,525.08**			**22,090**	**$1,875.85**

	YTD 2014 Billings (11 months)				**YTD 2015 Billings (11 months)**			
	On Peak	**Off Peak**	**Total KWH**	**Billing**	**On Peak**	**Off Peak**	**Total KWH**	**Billing**
Alluvial	36,840		36,840	$4,294.70	36,665		36,665	$4,275.14
BECR	26,880	121,720	148,600	$11,340.06	34,160	153,040	187,200	$14,619.93
GN	15,960	66,000	81,960	$6,663.43	16,760	68,920	85,680	$7,039.35
RHF	12,160	32,360	44,520	$4,035.47	8,200	22,840	31,040	$2,862.56
Totals			**311,920**	**$26,333.66**			**340,585**	**$28,796.98**

Engineer's Report
December 15, 2015

Flow Meter at Box Elder Creek Ranch Water Treatment Plant – At the 4th quarter operational meeting, conducted on October 19, 2015, staff determined the magnetic flow meter measuring flows to the two Box Elder Creek Ranch water storage tanks was operating erratically. I have worked with Ramey Environmental Compliance's Equipment Services Division to properly identify an NSF-approved Rosemount flow meter to replace the ABB meter installed in approximately 2009.

Water Rights (Case No. 14CW3174) – I participated in a conference call with Lisa Johnson, Matt Poznanovic, and others on December 10, 2015 to discuss Henrylyn Irrigation District's recent comments on proposed alluvial well siting and existing infrastructure matters.

Valve Box Inserts – Ramey Environmental Compliance has installed valve box inserts in the yard piping boxes at all pump station sites. Jeff Rabas has requested some additional information to be recorded on the valve boxes at the Box Elder Creek Ranch site that he and I will review during our next visit to the property.

Well, Pump, and Motor Replacements – The District has initiated efforts to better understand its well infrastructure and the potential need for replacement of pumps and motors, as well as the well structures themselves. As a part of that effort, TZA Water Engineers will need to work with Bishop-Brogden Associates to compile the historical aspects of the wells constructed, the pumps installed, and any other improvements (i.e. water level measuring devices) integrated at each site. This information will be used to evaluate the benefits of a pump, motor, and well maintenance program to detect changes in well performance. Early detection of deterioration in well performance will allow less expensive repairs, rehabilitation, or treatment procedures in order to maximize production capacity. This preventative maintenance program will be discussed with the District's Manager, and a formal proposal will be brought to the Board if deemed appropriate.

Storage Tank Rule – The Water Quality Control Division has adopted a new version of the Colorado Primary Drinking Water Regulations (Regulation 11). Effective April 1, 2016, the District will be required to have a written plan for finished water storage tank inspections. In addition to quarterly periodic (visual) inspections, the District will need comprehensive inspections to be scheduled at least every five years. Jeff Rabas has been securing proposals for the comprehensive inspections.

Warranty Inspections – Ramey Environmental Compliance is tracking the 11-month warranty inspections for the following projects:

- Rocking Horse Farms Pump Station – The warranty inspection was conducted by Jeff Rabas on July 18, 2014.
- Box Elder Creek Ranch Pump Station – The warranty inspection was conducted by Brad Simons on January 26, 2015.
- Rocking Horse Farms Tank Repainting – The improvements were inspected and accepted on June 11, 2014. A preliminary warranty inspection was conducted by Ramey Environmental Compliance on April 24, 2015 and Coblaco addressed some minor surface rust and some isolated coating repairs on August 5, 2015.

Engineer's Report
December 15, 2015

Control Valves Evaluation – During the 3rd Quarter Operational Review Meeting, conducted on August 17, 2015, it was determined the District should develop a control valve evaluation plan. As the Board may recall, the District contracted with iSiWest in 2014 (July 14-15 and September 19), to inspect and service five (5) control valves, including one (1) at the Box Elder Creek Ranch Pump Station, one (1) at Rocking Horse Farms Pump Station, and three (3) at the Greatrock North Pump Station. On March 6, 2015, the District contracted with Ramey Environmental Compliance's Equipment Services Division to service one (1) pressure relief valve at the Box Elder Creek Ranch Water Treatment Plant. Since the District has an assortment of valves in a variety of locations throughout the District, REC will update the valve inventory in the Allmax software and work with Lisa Johnson, TZA, and the budget committee to prioritize the efforts for 2016 and beyond. A sample of the valves that could be addressed in the Box Elder Creek Ranch Pump Station are tabulated below.

Valve Location	Valve Type	Valve Size
UKA-3 Check	Cla-Val Hytrol	2"
UKA-3 Air/Vacuum	Val-Matic	1/2"
UKA-3 CRL	Cla-Val Pressure Relief	1/2"
LFH-3 Check	Cla-Val Hytrol	3"
LFH-3 Pressure Relief	Cla-Val Series 50	1-1/2"
LFH-3 CRL	Cla-Val Pressure Relief	1/2"
LFH-3 Air/Vacuum	Cla-Val Series 35	1/2"
Alluvial Wells Air/Vacuum	Cla-Val Series 35	2"

GIS Services – I have been contacted by Tamarack Consulting LLC as a follow-up to my previous discussions with them about supporting the District's GIS needs. I have also been provided contact information for GeoLens and will be meeting with them on January 4, 2016.