RECORD OF PROCEEDINGS

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT HELD AUGUST 4, 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, August 4, 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
John D. Wyckoff
Jeffrey Polliard
Dave Lozano
Brian K. Rogers

Also In Attendance Were:
Lisa A. Johnson; Special District Management Services, Inc.

Brad Simons, TZA Water Engineers

Matthew J. Bruff and Steven Cummings; 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 Lozano, Polliard, Fleck, 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 Polliard, seconded by Director Rogers and, upon vote, unanimously carried, the Agenda was approved.

Board of Directors' Report: Director Wyckoff reported that Elite Industries will replace a dying tree at the Rocking Horse Farms Facility. Discussion ensued regarding the chemical used to spray for weeds at the ponds. Mr. Simons suggested that Director Wyckoff request a MSDS sheet on the product that Elite Industries uses to determine if a change in chemical is needed.

Director Lozano reported that he has left messages with the Box Elder Creek Ranch ("BECR") Homeowner's Association to determine if information is given to new homeowners in BECR regarding the different water sources that serve the property.

Manager's Report: Ms. Johnson presented and the Board reviewed the August 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 July 7, 2015 regular meeting and work session/special meeting.

- Ratify approval of payment of claims through the period ending July 10, 2015, as follows:

General Fund	$ 70,741.81
Debt Service Fund	$ -0-
Capital Projects Fund	$ -0-
Total Claims:	**$ 70,741.81**

- Review operations and maintenance update and monthly work orders.

- Review monthly water quality report.

- Approve Second Addendum to the Independent Contractor Agreement with Lamp Rynearson & Associates, Inc. d/b/a TZA Water Engineers, Inc. to provide alluvial well totalizing flow meter calibration and verification and prepare a report to the Division of Water Resources regarding same for a not to exceed amount of $1,000

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

FINANCIAL MATTERS

June 30, 2015 Financial Statements: Ms. Johnson presented and the Board reviewed the June 30, 2015 unaudited financial statements and schedule of cash position.

Following discussion, upon motion duly made by Director Wyckoff, seconded by Director Lozano and, upon vote, unanimously carried, the Board accepted the cash position schedule and unaudited financial statements through the period ending June 30, 2015.

Budget Committee: The Board appointed Directors Wyckoff and Polliard to serve on the 2016 budget committee along with staff. Ms. Johnson will schedule the first budget committee meeting for late August or early September.

WATER MATTERS

Pending Water Court Cases: There was nothing new to report.

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.

Concentrate Management:

Altela System: Mr. Bruff and Mr. Cummings addressed the Board regarding their proposal and questions posed related to the AltelaRain Reverse Osmosis Wastewater Concentrate Circuit ("AROWCC"). The Board discussed the information in detail and determined to move forward with this option. Mr. Bruff asked that the Board consider drafting a letter of intent as the next step in the process. Mr. Bruff offered to send an example of a letter of intent that has been used by other clients. Once a letter of intent is approved, Altela will schedule its technical team to meet with District representatives at the plant to inspect the facility and provide an estimate of costs. Ms. Johnson will also contact Mr. Matlosz with George K. Baum to advise him of the potential to issue new debt to fund this project as well as an overall look at the current debt structure to determine if a beneficial restructure is possible.

Following discussion, upon motion duly made by Director Rogers, seconded by Director Polliard and, upon vote, unanimously carried, the Board directed staff to draft a letter of intent to purchase and install the AROWCC if certain conditions are met and financing is successful.

The Board also directed staff to begin scheduling meetings with the different grant funding sources to discuss the potential to receive grants monies to fund this project.

Mr. Bruff and Mr. Cummings left the meeting at this time.

Acquisition of Lot 29 to expand District facilities: Director Wyckoff updated the Board on his efforts to contact Mr. Dave Rye to discuss options for purchase of Lot 29. Director Wyckoff has left messages for Mr. Rye but has not yet been able to connect with him.

Greatrock North Pump Station Project: Mr. Simons is working with a new structural engineer and should have design plans complete in the next 7 to 10 days.

OPERATONS/ MAINTENANCE MATTERS

Status of Curb Stop Project Greatrock North: The Board discussed a proposal from Redman Pothole Services, LLC to inspect and exercise curb stops located outside of the meter pit in Greatrock North. Mr. Redman will charge $65 per hour for inspection services and $250 per curb stop to exercise the curb stop.

Following discussion, upon motion duly made by Director Rogers, seconded by Director Lozano and, upon vote, unanimously carried, the Board approved the proposal from Redman Pothole Services, LLC and directed staff to draft an agreement.

Field Maintenance Job Description: The Board deferred action and discussion on the field maintenance job description to a future meeting. Director Wyckoff will provide revisions to the draft to Ms. Johnson.

LEGAL MATTERS

Unauthorized Tampering with District Facilities Penalty Assessed to 16381 Timber Cove Street: The Board discussed the letter and associated penalty assessed to the property owner at 16381 Timber Cove Street for unauthorized tampering with District facilities. The property owner submitted a letter of apology along with the amount of water used from the fire hydrant and committed to pay any fees associated with this violation of the Rules and Regulations.

Following discussion, upon motion duly made by Director Polliard, seconded by Director Rogers and, upon vote, with Directors Fleck, Rogers, Lozano and Polliard voting yes and Director Wyckoff voting no, the Board reduced the fine from $2,000 to $500, determined to bill the customer at $10 per thousand gallons of water used (13,000 gallons *$10 = $130) per the Rules and Regulations for use of a hydrant, to bill the customer the attorney's fees associated with the matter

and to preserve the right to charge the customer for any repairs needed to the hydrant from his unauthorized use. The Board directed legal counsel to notify the resident of this decision.

OTHER BUSINESS

Other Business: There was no other business to discuss.

COMMUNITY COMMENTS

Community Comments: There were no community comments.

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

THESE MINUTES APPROVED AS THE OFFICIAL AUGUST 4, 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: July 21, 2015

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

From: Lisa A. Johnson, District Manager

Re: August 4, 2015 Manager's Report

Agenda Action Items

II.A. Consent Agenda

1. July 7, 2015 regular and work session/special meeting minutes
2. July 10, 2015 Payment of Claims
3. June 30, 2015 Unaudited Financial Statements
4. Operations and Maintenance Update and monthly work orders
5. Water quality Report
6. Second Addendum to the ICA with TZW Water Engineers, Inc. to provide alluvial well totalizing flow meter calibration and verification and prepare a report to the Division of Water Resources.

I recommend approval of the consent agenda items.

III.A. June 30, 2015 Financial Statements

I will present the second quarter unaudited financial statements to the Board at the meeting.

I recommend acceptance of the June 30, 2015 unaudited financial statements.

III.B. 2016 Budget Committee

It is time to begin the preparation of the 2016 budget. Last year, Directors Wyckoff and Rogers along with staff members served on the budget committee. The committee will meet 2-3 times prior to the October and November board meetings to prepare the draft budget. In the past, the meetings

have been scheduled for mid-morning and held at SDMS. We try and limit Board participation to no more than two board members. Please determine your interest in serving on this committee and com prepared to discuss the process for this year.

IV.B. Amended and Restated Water Lease Option Agreement

Attorney Poznanovic, Attorney Tanaka, Mr. Sanchez and I have worked closely with the attorneys for the Box Elder Creek Ranch Water Company ("BECRWC") on the Amended and Restated Water Lease Option Agreement. Directors Wyckoff and Polliard reviewed, provided comments and approved the draft agreement prior to transmitting it to the BECRWC. The attorneys continue to work through the issues and the goal is to have a final draft document for review and approval at the July meeting.

VI.A. Curb Stop Project

I will provide an update to the Board of the status of the curb stop and GPS project in GRN at the meeting.

VI. C. Field Maintenance Technician Job Description

We will continue our discussions of the Field Maintenance Technician job description and discuss next steps at the meeting.

VIII.A. SDA Conference

The annual SDA conference with be held in Keystone, Colorado on September 23, 24 and 25, 2015. Directors Wyckoff, Polliard and Lozano have indicated they would like to attend. Director Fleck will attend with his employer. Director Rogers is checking his availability to attend.

Review of monthly Water Resumes and Other Water Related Matters

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

Summary of mid-month meeting with Directors Fleck and Wyckoff

A group of us met on July 16, 2015 after the Altela presentation. Topics discussed were as follows:

- Continued discussions on concentrate management efforts.
- Altela system
- Discussed briefly the Field Maintenance Technician job description
- Discussed the tampering with District facilities penalty

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
July 1st – July 17th

7/1/15: Regular checks and readings.

7/3/15: Regular checks and readings.

7/6/15: Regular checks and readings.

7/8/15: Regular checks and readings.

7/10/15: Regular checks and readings. Collected and delivered TDS and hardness samples. Checked all generators.

7/13/15: Regular checks and readings. Collected and delivered monthly total coliform samples.

7/14/15: Regular checks and readings. Delivered and assembled shelving. Pumped alluvial 1 meter vault.

7/17/15: Regular checks and readings. Mixed RO antiscalent. Completed a water line inspection at 31485 E 162nd Ave and 31539 E 164th Ave.

Operations Maintenance issues:

- **Status of valve box inserts and markers project –** *still in progress*
- **RHF leaking radiator –** *looking for additional direction from Lisa.*

June 29th – July 17th

RO Run Time Hrs	114.40 hrs
RO Concentrate Flow – 1 pond (North)	226,512 gallons

6/10/15 *(**July samples collected on 7/14 – results available next report)*

Monthly Testing	TDS(mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness(mg/L)
BE	369	28.6	5.0	92.0
RHF	350	24.4	4.1	78.0
GRN	341	25.2	4.2	80.1

Completed Work Order List Report

Completed	Equipment Number	Task	Priority	WO#	Type
7/13/2015	North Concentrate Pond	EDOP Sampling	1	515.01	Scheduled
7/13/2015	South Concentrate Pond	EDOP Sampling	1	516.01	Scheduled
7/13/2015	Water Sampling	Bacti Bacti Sampling(069)	1	528.01	Scheduled
7/10/2015	BOX BP1 VFD	Clean Eqp Clean Equipment	5	522.01	Scheduled
7/10/2015	BOX BP2 VFD	Clean Eqp Clean Equipment	5	523.01	Scheduled
7/10/2015	BOX BP3 VFD	Clean Eqp Clean Equipment	5	524.01	Scheduled
7/10/2015	BOX Generator	Ck Fuel Check Fuel Level	5	525.01	Scheduled
7/10/2015	Boxelder Pump Buildi	TDS and Hardness	1	520.01	Scheduled
7/10/2015	GN Generator	Ck Fuel Check Fuel Level	5	526.01	Scheduled
7/10/2015	GRN Pump Building	TDS and Hardness	1	520.03	Scheduled
7/10/2015	RHF Building	TDS and Hardness	1	520.02	Scheduled
7/10/2015	RHF Generator	Ck Fuel Check Fuel Level	5	527.01	Scheduled
7/6/2015	Pond Aerator	Clean Clean	4	517.01	Scheduled
6/29/2015	Boxelder Outside Val	Exercise Exercise Valves	2	503.01	Scheduled
6/29/2015	Boxelder Pump Buildi	Exercise Exercise Valves	2	504.01	Scheduled
6/29/2015	Boxelder RO Building	Exercise Exercise Valves	2	505.01	Scheduled
6/29/2015	RHF FH1	FH Flush Fire Hydrant Flush	2	508.01	Scheduled
6/19/2015	RH Farms Tank Valves	Exercise Exercise Valves	2	518.01	Scheduled
6/19/2015	Rocking Horse Farms	Exercise Exercise Valves	5	519.01	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
JULY 21, 2015

Concentrate Management Options

As noted at the April Board meeting, we have shifted our attention from concentrate disposal to concentrate management and are looking at several options. The GridBee mixing equipment to enhance evaporation has been tabled due to questionable case history and additional cost considerations. The beneficial reuse applications by Industrial Water Permitting and Recycling have been placed on hold in light of limited use of any State approvals.

The Board recently reviewed the Altela technology that was piloted at the East Cherry Creek Valley water treatment plant. Following the Board's July 7 Board meeting, Director Wyckoff and I met with Steve Cummings, of Altela, at the Box Elder Creek Ranch RO Water Treatment Plant and discussed the District's water treatment operations. I have provided Mr. Cummings with the water quality results of Pure Water Solutions' November 2014 sampling, as well as our current electricity and natural gas costs based upon the most recent billings from United Power and Xcel Energy. Altela is expected to present a proposal to the Board for discussion at the August Board meeting.

As for the evaporation ponds, the south pond elevation was at 4.66 feet on May 11, 2015 – an estimated 6 inches from overtopping the pond. The valve between the ponds was opened on May 12 to transfer water from south pond to north pond. The south pond was isolated on May 20 with water elevation of 3.86 feet and the concentrate flows were directed to the north pond. The elevations in the south pond are tabulated below:

Date	Depth (from daily SCADA report)
May 25, 2015	3.83
June 29, 2015	3.48
July 20, 2015	3.28

Jeff Rabas is providing the north pond elevations from visual observations of a temporary staff gauge:

Date	Measurement (from top of gauge)
May 20, 2015	18"(+)
June 3, 2015	17"
June 8, 2015	16.5"
June 15, 2015	14"
July 10, 2015	14"

Engineer's Report
July 21, 2015
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Greatrock North Pump Station Improvements

I have contracted with a new structural engineer who is working through the structural design issues and have received information from Wayne Cass on the proposed distribution pumps, motors, and drives.

Reverse Osmosis Condition Assessment

Pure Water Solutions conducted a condition assessment on May 27, 2015 and presented its findings and recommendations to the District on June 12. Those recommendations were discussed at the July Board meeting and my recommendation was that we delay any action on their recommendations pending receipt of additional information from Pure Water Solutions. In response to my request for additional information, Pure Water Solutions indicated the following:

- The sensors are the windows into the system and the replacements are a suggestion. However, maintaining the sensor calibrations helps document the overall RO unit operation.
- They do not have confidence in the current anti-scale chemical and dosing system.
- New membranes will make all the difference in the world.
- Accurate process readings, along with correct chemical and dosing, will helps improve on over-all recovery, but the exact percentages are to-be-determined.
- Lead times on membranes vary from in-stock to 8-10 weeks.

Other Activities

Water Quality and Hardness – Below are tables of water production data and water quality results from a series of sampling events:

Month	RO Permeate	Unfiltered UKA Water	Unfiltered ALV Wells
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%

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Total Dissolved Solids (TDS)			
Date	BECR Tanks	RHF Tank	GN Tank
July 14, 2015	RESULTS PENDING		
06/10/15	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

Total Hardness (as CaCO3)			
Date	BECR Tanks	RHF Tank	GN Tank
July 14, 2015	RESULTS PENDING		
06/10/15	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

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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 develop 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.

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.

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 I have met with Coblaco to address some minor surface rust. Coblaco has a new Manager of Coating Projects (Greg Smith – 303-868-7145) who attempted to schedule the work the week of July 6, but I was out of town and could not facilitate the effort. I am attempting to reschedule the work with Coblaco.

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

	June 2014 Billings				June 2015 Billings			
	On Peak	Off Peak	KWH	Billing	On Peak	Off Peak	KWH	Billing
Alluvial	4240		4240	$490.03	4073		4073	$471.36
BECR	1360	10120	11480	$829.21	2080	12680	14760	$1,093.72
GN	1520	7520	9040	$713.52	1280	6000	7280	$585.38
RHF	760	2400	3160	$281.51	760	2040	2800	$260.42
		Totals	27920	$2,314.27		Totals	28913	$2,410.88

Engineer's Report
July 21, 2015
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The 2015 billings for June are 104% of the 2014 billings for the similar period. The difference can be attributed to the increase in energy consumption at the Box Elder Creek Ranch facilities, likely a result of the District's growth in 2015.

	YTD 2014 Billings (6 months)				YTD 2015 Billings (6 months)			
	On Peak	Off Peak	KWH	Billing	On Peak	Off Peak	KWH	Billing
Alluvial	16249		16249	$1,912.63	15304		15304	$1,806.99
BECR	12720	60040	72760	$5,373.99	14560	68800	83360	$6,466.80
GN	6800	27760	24560	$2,810.12	6880	28840	35720	$2,968.31
RHF	8280	20320	28600	$2,612.86	4000	10200	14200	$1,353.90
		Totals	152169	$12,709.60		Totals	148584	$12,596.00

The 2015 year-to-date billings are 99% of the 2014 billings for the similar period. Although our year-to-date energy consumption is lower in 2015, our higher costs have been influenced by the increase in the CTD2 rate from $0.049 per KWH to $0.05858 per KWH (120% increase).

Curb Stop Box Specification – The recent issues with curb stop boxes witnessed by Director Wyckoff resulted in a review of the District's Rules and Regulations and the boxes specified. TZA's previous recommendations for a screw-style Buffalo-style box having an arch pattern base and an inside diameter of 2.5 inches has been further reinforced with the recommendation the pending revisions to the Rules and Regulations specify a 6500 Series Screw Type curb box, as manufactured by Castings, Inc. (970-243-3032), 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.

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.