
RECORD OF PROCEEDINGS

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT HELD MARCH 3, 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, March 3, 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
Brian K. Rogers
Jeffrey Polliard

Following discussion, upon motion duly made by Director Fleck, seconded by Director Rogers and, upon vote, unanimously carried, the absence of Dave Lozano was excused.

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 (via speakerphone)

Parker Burgess, resident, 16531 Timber Cove Street

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. Attorney Tanaka confirmed that disclosures of conflicts of interest were filed with the Secretary of State's Office and the Board at least 72 hours prior to the meeting for those Directors with potential conflicts of interest. The Board reviewed the Agenda for the meeting, following which, Directors Rogers, Polliard, Fleck 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 Rogers and, upon vote, unanimously carried, the Agenda was approved.

Board of Directors' Report: Director Wyckoff reported that he will ask the District's landscape maintenance provider to not provide winter watering services for the next two months and in turn will ask them to replace two dead trees at the facilities.

Director Wyckoff also reported that he would like to research the possibility of installing solar panels on all facilities as a cost savings measure. The Board was in favor of Director Wyckoff conducting the research and presenting his findings at a future Board meeting.

Manager's Report: Ms. Johnson presented and the Board reviewed the March 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 from the February 3, 2015 regular meeting.
- Ratify approval of payment of claims through the period ending February 23, 2015, as follows:

General Fund	\$ 57,789.21
Debt Service Fund	\$ 200.00
Capital Projects Fund	\$ 6,072.80
Total Claims:	<u>\$ 64,062.01</u>

- Accept cash position schedule and unaudited financial statements through the period ending December 31, 2014 and January 31, 2015.
- Review operations and maintenance update and monthly work orders.
- Review monthly water quality report.
- Accept 11-month warranty inspection letter for the Box Elder Creek Pump Station Improvements Project.

RECORD OF PROCEEDINGS

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

Update on Acquisition of Renewable Water Rights: Ms. Johnson reported that Mr. Sanchez continues to pursue options to acquire renewable water rights.

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:

Pure Water Solutions, Inc. Proposal for inspection of Reverse Osmosis Unit and Components: Mr. Simons presented a proposal from Pure Water Solutions, Inc. for inspection of reverse osmosis unit and components 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 proposal from Pure Water Solutions, Inc. for inspection of reverse osmosis unit and components for an amount not to exceed \$1,000 and directed Attorney Tanaka to draft an independent contractor agreement.

Greatrock North Pump Station Project: Mr. Simons reported that geotechnical services have been completed. He will review the report and finalize a preliminary design plan and present to Directors Wyckoff and Fleck and Ms. Johnson at the mid-month meeting.

OTHER BUSINESS

Other Business: Mr. Simons noted that the rate increase notification received from TZA Water Engineers was sent in error. There will not be a rate increase from TZA Water Engineers in 2015.

COMMUNITY COMMENTS

Community Comments: Parker Burgess, resident at 16531 Timber Cove Street, addressed the Board with general questions regarding the District's water rights and operations and maintenance. He is fairly new to the community and wanted to understand more about his domestic water service.

EXECUTIVE SESSION

EXECUTIVE SESSION: Pursuant to Sections 24-6-402(4)(b) and (e), C.R.S., upon motion duly made by Director Rogers, seconded by Director Polliard and, upon an affirmative vote of at least two-thirds of the quorum present, the Board

RECORD OF PROCEEDINGS

convened in executive session at 6:27 p.m. for the purpose of discussing negotiations with third parties and receiving legal advice, as authorized by Sections 24-6-402(4)(b) and (e), C.R.S.

Pursuant to Section 24-6-402(2)(d.5) (II)(B), C.R.S., no record will be kept of the remaining portion of the executive session that, in the opinion of the Board's attorney, constitutes privileged attorney-client communication pursuant to Section 24-6-402(4)(b), C.R.S.

The Board reconvened in regular session at 7:06 p.m.

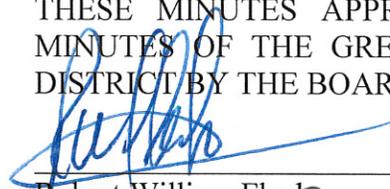
ADJOURNMENT

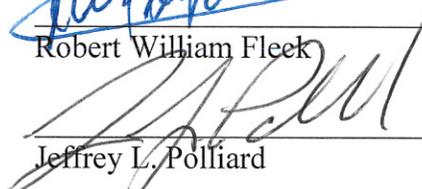
There being no further business to come before the Board at this time, upon motion duly made, seconded and, upon vote, unanimously carried, the meeting was adjourned.

Respectfully submitted,

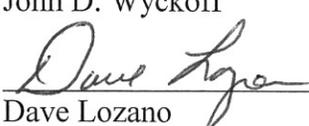
By 
Secretary for the Meeting

THESE MINUTES APPROVED AS THE OFFICIAL MARCH 3, 2015 MINUTES OF THE GREATROCK NORTH WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:


Robert William Fleck


Jeffrey L. Polliard

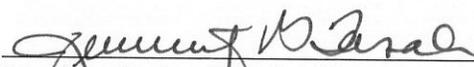
Brian K. Rogers

John D. Wyckoff

Dave Lozano

RECORD OF PROCEEDINGS

Attorney Statement Regarding Privileged Attorney-Client Communication

Pursuant to §24-6-402(2)(d.5)(II)(B), C.R.S., I attest that, in my capacity as the attorney representing the Greatrock North Water and Sanitation District, I attended the executive session on March 3, 2015, for the sole purpose of discussing matters subject to negotiation with third parties and for receiving legal advice, as authorized by §§24-6-402(4)(b) and (e), C.R.S. I further attest that it is my opinion that a portion of the executive session discussion constituted attorney-client privileged communication as provided by §24-6-402(4)(b), C.R.S., and, based on that opinion, no further record, written or electronic, was kept or required by be kept pursuant to §24-6-402(2)(d.5)(II)(B), C.R.S.



Jennifer Gruber Tanaka, Esq.
General Counsel
Greatrock North Water and Sanitation District

GREATROCK NORTH WATER & SANITATION DISTRICT

March 3, 2015 BOARD MEETING

Please print your name, address and phone number, and the issue(s) you are interested in addressing at this meeting.

NAME	ADDRESS (Postal and Email)	TELEPHONE	ISSUES TO BE ADDRESSED
<i>Parker Briggs</i>	<i>14531 Timber Cove</i>	<i>303 502-0155</i>	



Date: February 24, 2015
To: Greatrock North Water and Sanitation District, Board of Directors
From: Lisa A. Johnson, District Manager
Re: March 3, 2015 Manager's Report

Agenda Action Items

II.A. Consent Agenda

1. February 3, 2015 regular meeting minutes.
2. February 2015 claims
3. December 31, 2014 Revised and January 31, 2015 Financial Statements
4. Operations and Maintenance Update and monthly work orders
5. Water quality Report
6. 11-month Warranty Inspection letter – Box Elder Creek Ranch Pump Station

I recommend approval of the consent agenda items.

Review of monthly Water Resumes and Other Water Related Matters

Attorney Poznanovic reviewed the December resume, and found one case that he recommends the District oppose. Information sent to the BOD under separate cover.

Summary of mid-month meeting with Directors Fleck and Wyckoff

Director Fleck and Wyckoff, Mr. Simons and I met on February 18, 2015. Topics discussed were as follows:

- Reviewed options for concentrate management – additional evaporation pond or seasonal discharge permit.

- Status of discussions with CDPHE on discharge permit.

Status of issues identified at 2015 Operations Meeting and 1st Quarter Operational Review Meeting

Updated actions items are listed below:

Jeff

1. Order pressure logger and install at Director Wyckoff's house for a period of time to gather pressure data. - Complete
2. Order equipment to aide in locating water service lines.
3. Contact locate service providers to understand what equipment is used to locate service lines.
4. Determine cost to purchase metal detector – Complete,
5. Identify valves at each location and indicate how they are used- document in map and post to each facility.
6. Contact vendor to confirm information/quote is accurate for 2" meter @ GRN – LFH- Complete.
7. Ensure inspections of new service lines are done per specifications – adequate amount of squeegee – noted.
8. Order flood lights for use during emergency services- Complete.
9. Obtain bid to repair/replace couplers on permeate line at RO Plant- Complete.
10. Order valve box inserts for all yard valves. Indicate valve # and normal open or normal close and include in valve box insert.
11. Order curb stop keys and store at each facility- Complete
12. Order and install safety covers on vent covers outside each facility.
13. Obtain quote to inspect Cla-Valve PRV at RO Facility and add pressure gauge to outlet side of globe style valve.
14. Replace wafer style tank check valve in RO Facility.
15. -Once items 14 and 15 above are complete, remove spool from original by-pass line. Fabricate 90 degree elbow and point downward.
16. Shut-off ALV-2 – use only ALV-1 to reduce TDS– complete 1/26/15.
17. Link all photos taken to Allmax software- noted.
18. Review daily reports to determine formatting issues and communicate to TLECC- Complete.
19. Schedule 11 month warranty inspection for BECR pump station improvements project- Complete.
20. Continue to follow-up with Dan LaCoe to ensure curb stop is cut down at address on 167th Ave.

Brad

1. Controls Consultant – discuss service issues with TLECC.
2. Confirm curb stop specifications and communicate to the group- complete
3. Contact Pure Water Solutions to request quote to calibrate Thornton display and RO probes, etc. - complete

Lisa/Dan

1. Obtain meter and water service line parts for emergency repairs such as meters and accessories and yolks. Store in plastic tubs and identify contents. (Dan Cordova to work with Jeff if he is unable to order correct yolks) - two proposals have been received. Dan will order by end of February.
2. Record pictures for any new meter and curb stop for all new services- noted.
3. Research photos sent by Director Wyckoff regarding original installation of GRN tank- complete.
4. Dan to contact Jeff to schedule back-flow inspections needed at facilities- scheduled for early Spring.
5. Dan to send Jeff contact information for Diversified Locating Services - complete
6. Dan to ensure plastic frost lids are being installed in all new meter pits - complete
7. Schedule quarterly operational review meetings - complete
8. After Brad confirms curb stop specifications, order curb stop boxes and curb stops for inventory- two proposals have been received. Dan will order by end of February.

All

1. Debrief after every project, emergency call, etc. – short meeting to discuss successes and areas of improvement – noted.
2. Provide maintenance items to Lisa by 2nd Wednesday of each month. Lisa to prepare list of items and transmit to Jeff by 2nd Friday of each month. Jeff to schedule work the 3rd week of each month. Jeff to include status of work in monthly operations report.

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

Concentrate Disposal and Discharger Specific Variance

TZA Water Engineers, Lisa Johnson, and Director John Wyckoff met with the Water Quality Control Division to discuss our concept for a Discharger Specific Variance (DSV). The Division's Standards Unit Manager, Sarah Johnson, and staff, although intrigued by the District's predicament, indicated the DSV process is only for existing permitted dischargers. The Division did suggest a couple of options to research. I have contacted the Division's Permits Section Manager and the Town of Castle Rock's Water Resources Manager for additional information.

Parallel to the discharge permit efforts, TZA has met with Director Wyckoff and Director Rob Fleck to discuss alternatives to a discharge permit. These alternatives will be discussed at the March Board meeting.

Curb Stops

The two form letters previously drafted will be issued, pending the District Manager's assessment of the water meter locations in Box Elder Creek Ranch in relation to the platted utility easements and the Board's direction.

Greatrock North Pump Station Improvements

High Plains Engineering & Design has conducted the geotechnical investigation of the pump station site. TZA is awaiting the foundation recommendations from High Plains. PWSI, Inc. has conducted the topographic survey of the existing improvements on Tract A and provided a CAD file with the survey. TZA has reviewed the CAD file and presented a few questions to PWSI. TZA Water Engineers has developed preliminary plans for the new pump station, and will present the updated plan and profile views at the March Board meeting.

Reverse Osmosis Condition Assessment

Pure Water Solutions has presented a proposal to inspect the RO unit in greater detail and attempt to calibrate the unit's parameter sensors, including inlet conductivity, permeate conductivity, permeate temperature, inlet pH, inlet oxidation reduction potential (ORP), permeate flow, and concentrate flow. Other items to be discussed with Pure Water while on-site include anti-scalent and dosing procedures, membrane replacement options, change in pre-filters, and back-washable multi-media filtration addition.

LAMP RYNEARSON COMPANIES



Engineer's Report
February 23, 2015
Page Two

Well, Pump, and Motor Replacements

The District has recently 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 is working 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.

Other Activities

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

The total dissolved solids tabulated below show improved water quality as a result of reduced outdoor water usage and the ratio of reverse osmosis permeate to unfiltered water. The current ratios are approximately:

- 48% reverse osmosis permeate
- 42% unfiltered Upper Arapahoe well water
- 10% unfiltered alluvial well water (Alluvial Well No. 1)

Total Dissolved Solids (TDS)			
Date	BEER Tanks	RHF Tank	GN Tank
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
February 23, 2015
Page Three

The total hardness results tabulated below also show improved water quality as a result of reduced outdoor water usage and the ratio of reverse osmosis permeate to unfiltered water.

Total Hardness (as CaCO ₃)			
Date	BECR Tanks	RHF Tank	GN Tank
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, the hardness values are generally classified as:

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

Utility Billings and Energy Costs – TZA Water Engineers continue to track the United Power utility bills and associated water operations. For 2014, the District used 48% of the electricity and reduced its costs by 62% over the last two years.

Energy usage (kWH)				
	2012 YTD	2013 YTD	2014 YTD	2015 YTD
Alluvial Wells	2,970	2,136	2,341	2,185
RO WTP and BECR Pump Station	13,520	13,680	15,360	15,160
GN Pump Station	4,200	5,400	5,440	6,160
RHF Pump Station	3,960	17,520	2,400	2,200
Totals	24,650	38,736	25,541	25,705

Billing Amounts				
	2012 YTD	2013 YTD	2014 YTD	2015 YTD
Alluvial Wells	\$547.88	\$358.98	\$277.72	\$260.28
RO WTP and BECR Pump Station	\$1,651.60	\$1,725.12	\$1,108.54	\$1,197.57
GN Pump Station	\$467.45	\$670.70	\$435.45	\$516.66
RHF Pump Station	\$372.28	\$1,596.64	\$226.87	\$213.20
Totals	\$3,039.21	\$4,351.44	\$2,048.58	\$2,187.71

Engineer's Report
February 23, 2015
Page Four

Water Operations (\$/1000 gallons)		
	2014 YTD	2015 YTD
Alluvial Wells	\$0.1614	\$0.1595
RO WTP and BECR Pump Station	\$0.5170	\$0.5435
GN Pump Station	\$0.8028	\$0.6640
RHF Pump Station	\$0.5114	\$0.4454

Draft Storage Tank Rule – The Water Quality Control Division has drafted a Storage Tank Rule (<https://docs.google.com/file/d/0B0tmPQ67k3NVUzAyd2dEekt5Tnc/edit>) that will be considered by the Water Quality Control Commission in January of 2015 and will become effective January of 2016. In addition to quarterly periodic (visual) inspections, this rule will require comprehensive inspections to be scheduled at least every five years.

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.

Greatrock North Flow Meter – TZA Water Engineers is supporting Ramey Environmental Compliance with the procurement of a magnetic flow meters to replace the suspect and/or failed meters at the Greatrock North water facilities.

Quarterly Operations Review – TZA Water Engineers will continue to participate in the Quarterly Operations Reviews at the request of the District Manager. Action items from the January 26, 2015 meeting are highlighted below:

- 1) Discuss service matters with Timber Line Electric and Control Corporation since Anthony's departure.
- 2) Confirm curb stop specifications and communicate to the group. Recommendations communicated to District Manager via e-mail on January 27, 2015.
- 3) Contact Pure Water Solutions to request quote to calibrate Thornton display and RO probes, etc. Pure Water Solutions presented a proposal to the District on February 20, 2015 which was forwarded to the District Manager via e-mail on the same date.



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
 Jan 26 – Feb 20th**

1/26/15: Regular checks and readings. Flushed the fire hydrant on Kenuil Ct. Jeff completed quarterly operations review with John, Lisa and Brad.

1/28/15: Regular checks and readings.

1/30/15: Regular checks and readings. Mixed anti-scalent. CIP RO.

2/2/15: Regular checks and readings. Collected and delivered TDS samples.

2/4/15: Regular checks and readings.

2/6/15: Regular checks and readings. Completed a locate at 29150 E 160th Ct for water line relocation. Completed a locate at 16540 Iredell St for a new septic system.

2/9/15: Regular checks and readings. Collected and delivered monthly bacti samples.

2/11/15: Regular checks and readings. Collected and delivered concentration pond samples.

2/13/15: Regular checks and readings. Repaired leaking line to valve at Greatrock North pump house.

2/16/15: Regular checks and readings. Picked up and delivered metal detector and portable light.

2/18/15: Regular checks and readings. Cleaned up pump at Boxelder. Jeff joined monthly consultant conference call with Jennifer, Lisa and Brad.

2/20/15: Regular checks and readings.

Jan 23rd to Feb 18th

RO Run Time Hrs	140.10 hrs
RO Concentrate Flow – 1 pond	277,398 gallons

2/2/15

Monthly Testing	TDS(mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Total Hardness(mg/L)
BE	350	25.6	4.7	83.4
RHF	394	34.9	6.5	113.8
GRN	383	32.0	6.0	104.6

Completed Work Order List Report

2/23/2015

Page 1 of 1

Completed	Equipment Number	Task	Priority	WO#	Type
2/11/2015	North Concentrate Pond	EDOP Sampling	1	419.01	Scheduled
2/11/2015	South Concentrate Pond	EDOP Sampling	1	420.01	Scheduled
2/9/2015	Water Sampling	Bacti Bacti Sampling(069)	1	440.01	Scheduled
2/5/2015	BOX Generator	Ck Fuel Check Fuel Level	5	433.01	Scheduled
2/2/2015	BOX Generator	Ck Oil Check Oil Level(069)	5	434.01	Scheduled
2/2/2015	Boxelder Pump Buildi	TDS and Hardness	1	441.01	Scheduled
2/2/2015	GN Generator	Ck Oil Check Oil Level(069)	5	436.01	Scheduled
2/2/2015	GN Generator	Ck Fuel Check Fuel Level	5	435.01	Scheduled
2/2/2015	GRN Pump Building	TDS and Hardness	1	441.03	Scheduled
2/2/2015	RHF Building	TDS and Hardness	1	441.02	Scheduled
2/2/2015	RHF Generator	Ck Oil Check Oil Level(069)	5	439.01	Scheduled
2/2/2015	RHF Generator	Ck Fuel Check Fuel Level	5	438.01	Scheduled
1/26/2015	RHF FH1	FH Flush Fire Hydrant Flush	2	402.01	Scheduled