

## RECORD OF PROCEEDINGS

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### MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE FOREST VIEW ACRES WATER DISTRICT AND THE BOARD OF DIRECTORS OF THE WATER ACTIVITY ENTERPRISE HELD MARCH 22, 2012

A regular meeting of the Board of Directors of the Forest View Acres Water District and the Board of Directors of the Water Activity Enterprise (referred to hereafter as "Board") was held on Thursday, March 22, 2012, at 6:00 p.m., at the Monument Sanitation District, 130 2<sup>nd</sup> Street, Monument, Colorado. This meeting was open to the public.

#### ATTENDANCE

In attendance were Directors:  
Eckehart Zimmermann  
Gene Ashe  
Steven Keefer  
Karla Thompson

Absent was Anne Bevis whose absence was excused.

Also in attendance were:  
Joel Meggers; Community Resource Services ("CRS")  
Gabrielle Begeman; ORC, LLC Water Company

#### ADMINISTRATIVE MATTERS

Director Zimmermann called the meeting to order at 6:03p.m., Mr. Meggers distributed for the Board's approval the proposed agenda. Following discussion, upon motion duly made by Director Thompson and seconded by Director Ashe, vote was taken and the agenda was approved as presented.

MINUTES - The Board reviewed the minutes of the January 26, 2012 regular board meeting. Director Ashe moved the minutes be approved as presented. Upon a second by Director Thompson, vote was taken and motion carried unanimously.

The Board reviewed the minutes of the February 23, 2012 regular board meeting. Director Ashe moved the minutes be approved as presented. Upon a second by Director Thompson, vote was taken and motion carried unanimously.

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Spring Election and Timeline – Mr. Meggers presented the election timeline and announced to the Board that there were 4 candidates running for 2 board seats.

Public Comments – none

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### CAPITAL ITEMS

0% Green Loan- Mr. Meggers explained to the Board that the District could save close to \$30,000 in interest if they pursued early redemption of the existing bonds and additional expenses related to legal work. He recommended that the District payoff its existing debt to save interest and legal expenses. Director Thompson moved the bonds be paid off as presented. Upon a second by Director Ashe, vote was taken and motion carried unanimously.

Mr. Meggers presented the draft loan resolution to the Board. He informed the Board that the District's general counsel and bond attorney plan to have the resolution in final form for their consideration for approval at next month's board meeting.

SWTP Improvements –Mr. Meggers reported to the Board that all parties involved have signed copies of the final contract for the SWTP improvements and that Applied Ingenuity will begin the process of ordering all of the parts per the specifications.

RFP Master Plan of Distribution System – Mr. Meggers reported that final comments for the RFP should be sent to him by the beginning of next week. He added that he plans by the end of next week to notify potential bidders regarding the RFP and distribute the final version of the RFP to engineering companies that are interested.

Warranty Work for the Tank Relining Project – Mr. Meggers and Ms. Begeman reported that Norvell has started the warranty work for the tank. Mr. Meggers also informed the Board that the Superintendent for Norvell, Craig Ashcroft, informed him that Norvell will pay for all of the work preformed and that the District will not be responsible for any of the expenses.

### OPERATIONS & MAINTENANCE

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Operations Report– Ms. Begeman presented the February/March operations report for the Board’s review, a copy of which is attached to these minutes and incorporated herein. Ms. Begeman presented various cost options for GIS Mapping. The board directed staff to wait until improvements to the distribution system were either in progress or completed to consider purchasing a new GIS Mapping system.

Sanitary Survey Conducted by the Engineering Section of the Water Quality Control Division of February 21, 2012 – Ms. Begeman presented the report for the Board’s review, a copy of which is attached to these minutes and incorporated herein.

### FINANCIAL MATTERS

#### Payment of Claims

Mr. Meggers requested that the Board consider payment of the claims represented by check numbers 02944 – 02964 totaling \$43,123.67. Check number 2944 was void due to Director Bevis’ absence. Director Ashe moved that the Board approve the payment of claims as presented. Upon second by Director Thompson, vote was taken and motion carried unanimously.

#### Monthly Cash Position and Unaudited Financial Statements

The Board reviewed the monthly cash position and unaudited financial statements.

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### OTHER BUSINESS

#### Public Comments – None

Look-Ahead Report – Mr. Meggers distributed the draft look-ahead report. Director Zimmermann requested that the intake project be added to the report to be started and completed in the fall of this year.

### LEGAL ITEMS

1985 Agreement and 2004 Amendment – This item was deferred to the next board meeting.

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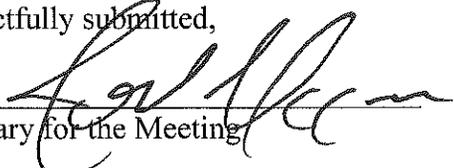
### ADJOURNMENT

There being no further business to come before the Board, upon motion duly made by Director Thompson, seconded by Director Ashe, the meeting was adjourned at 7:05 p.m.

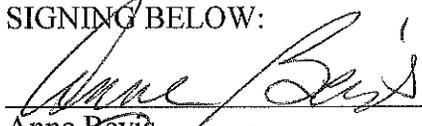
RECORD OF PROCEEDINGS

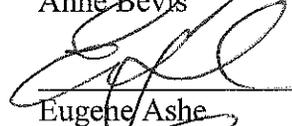
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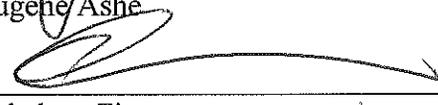
Respectfully submitted,

  
Secretary for the Meeting

THESE MINUTES ARE APPROVED AS THE OFFICIAL  
MARCH 22, 2012 MINUTES OF THE FOREST VIEW ACRES  
WATER DISTRICT BY THE BOARD OF DIRECTORS  
SIGNING BELOW:

  
Anne Bevis

  
Eugene Ashe

  
Eckehart Zimmermann

  
Steven Keefer

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Karla Thompson

## **Forest View Acres Water District**

Operations Report –February 2012

Prepared by Gabrielle Begeman

ORC LLC

### **Treatment Plants:**

The routine State inspection went well with no significant or minor violations at the facility. Please see the attached report.

#### **Arapahoe Water Plant:**

- We have been successful in pumping water from the AWP and through the booster station in February.

#### **Surface Water Plant:**

- We have made a seasonal improvement to the SWTP where a secondary polymer pump will automatically kick on when the finished turbidity spikes, allowing the plant to maintain treatment during periods of runoff. We hope to keep the surface plant running throughout the spring.

### **Distribution system**

#### **Storage Tank**

- Norvell has been provided with the necessary steps and vendor information to begin planning and recoating the tank

### **Capital Improvement Projects**

#### **GIS Mapping**

- There are many different products on the market for mapping. Accuracy is dependant on price. Accuracy ranges are 5m-10cm (\$900-8000). Software will also need to be purchased for \$295-2000 dependant on the type. I am in communication with representatives from Trimble who will recommend a unit for our application. See the attached comparison sheets if you want more information. I should have a solid recommendation (and price) by the meeting.

# STATE OF COLORADO

John W. Hickenlooper, Governor  
Christopher E. Urbina, MD, MPH  
Executive Director and Chief Medical Officer



Colorado Department  
of Public Health  
and Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

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SOUTHERN FIELD ENGINEERING UNIT  
4718 North Elizabeth Street, Suite B  
Pueblo, Colorado 81008-2054  
Phone (719) 545-4650 FAX (719) 543-8441

March 12, 2012

Joel Meggars  
Community Resource Services  
3855 N Lewiston St. Ste. 140  
Aurora, CO 80011

Subject: Sanitary Survey of Forest View Acres Water District  
Public Water System Identification (PWSID) No. CO0121250  
El Paso County

Dear Mr. Meggars:

This letter serves to report the findings of the sanitary survey conducted by the Engineering Section of the Water Quality Control Division (the Division) at Forest View Acres Water District (the System) on February 21, 2012. The assistance that was provided was very helpful and is greatly appreciated. Table 1 identifies the parties present during the sanitary survey.

**Table 1: Parties Present**

Name	Organization
Gabby Begeman	Forest View Acres Water District
Joseph C. Talbott, Jr., P.E.	CDPHE

This letter is the System's notification of any significant deficiencies and/or alleged violations of the Colorado Primary Drinking Water Regulations (CPDWR) that were identified during the sanitary survey. Table 2 summarizes the number of findings and the required written response and resolution dates.

**Table 2: Sanitary Survey Findings**

Severity Category	Number Identified	Written Response Due (within 45 days of date of letter):	Resolution Due (within 120 days of date of letter):
Significant Deficiencies or Major Violations	0	N/A	N/A
Other Violations	0	N/A	N/A
Observations-Recommendations	11	N/A	N/A

A list of the findings under each category referenced above in Table 2 can be found following the **Description of Severity** section immediately below.

#### **Description of Severity**

- **Significant Deficiencies and Major Violations:** These items will be followed-up by the Division inspector who performed the sanitary survey. The System's written response to this letter must include all items listed in this category. See the Significant Deficiencies and Major Violations list below.
- **Other Violations:** The System may be contacted by a compliance specialist from the Division's Compliance Assurance Section for additional follow-up on these violations. The System must resolve these violations prior to the subsequent sanitary survey, which will be verified by the Division inspector at that time. See the Other Violations list below.
- **Observations/Recommendations:** While the Division will not directly follow-up on these items, it is highly recommended that the System address these items. See the Observations/Recommendation list below.

#### **Significant Deficiencies and/or Major Violations of the CPDWR**

No Significant Deficiencies/Major Violations were identified.

#### **Other Violations**

No Other Violations were identified.

#### **Observations//Recommendations**

1. F991 - Finished Water Storage: STORAGE TANK (SDWIS ID: 008)  
OTHER STORAGE OBSERVATIONS: Inspector identified storage observation.

The tank was inaccessible for inspection due to the weather conditions; the condition of the tank was discussed. It was noted that in 2010, the tank was sandblasted, cleaned and recoated. In 2011 the tank was inspected professionally, and the tank is now on a 5-year schedule for professional inspection.

2. D420 - Distribution: DISTRIBUTION SYSTEM (SDWIS ID: DS001)  
HYDRANT FLUSHING PROGRAM: System lacked an adequate hydrant flushing program or the program can be improved.

The District should develop a written routine hydrant flushing program. Hydrant leads can be a source of water quality deterioration. The water can become stagnant, consuming chlorine, causing odor and taste problems, and increasing bacteriological counts. Annual flushing can prevent this problem. The District currently flushes hydrants on an as needed basis.

3. D410 - Distribution: DISTRIBUTION SYSTEM (SDWIS ID: DS001)  
VALVE INSPECTION AND EXERCISE PROGRAM: System lacked an adequate valve inspection and exercising program or the program can be improved.

The Division recommends that the system develop a valve exercising program. Every valve in a system should be inspected and exercised annually. This should include completely closing, opening, and re-closing until the valve seats properly. Leaking or damaged valves should be scheduled for repair. A record of valve maintenance and operation, including the number and direction of turns to closure, should be kept.

4. D400 - Distribution: DISTRIBUTION SYSTEM (SDWIS ID: DS001)  
LINE FLUSHING PROGRAM: System lacked an adequate line flushing program or the flushing program can be improved.

During the inspection, the Division learned that although the water system flushes its lines, it does not currently employ a unidirectional flushing method. The Division recommends that the system implement a line flushing program that incorporates the AWWA Standard G200-04 Distribution System Operation and Maintenance procedures. AWWA Standard G200-04 Distribution System Operation and Maintenance recommends a systematic flushing program that meets the needs of the utility, taking into consideration the condition of the system, hydraulic capacity, treatment, water quality, and other site specific criteria. The flushing should incorporate the following items: 1. A preventive approach to distribution system flushing, including occasional spot flushing to address localized problems or customer concerns and routine flushing to avoid water quality problems. 2. System flushing at the velocity appropriate to address water quality concerns. 3. Written procedures addressing all activities associated with system flushing, water quality, monitoring, frequency, locations, and duration, as well as adherence to all regulatory requirements. The Division recommends developing a written, unidirectional line flushing program that can be incorporated into the system's O&M practices. Please refer to the American Water Works Association's publications and guidance material for more information. Additionally, records of flushing activities should be maintained.

5. D320 - Distribution: DISTRIBUTION SYSTEM (SDWIS ID: DS001)  
DISTRIBUTION CONSTRUCTION STANDARDS: System lacked distribution system construction standards. Colorado Design Criteria for Potable Water Systems (DCPWS), Section 1.2.11

The materials used during the construction of the distribution system do not meet AWWA standards for the pressures experienced in a drinking water distribution system. The frequent line breaks experienced by the District may be a result of using sub-standard equipment. The Division is aware that the District is actively engaged in replacing problematic parts of the distribution system and encourages the District to continue on this project.

6. D270 - Distribution: DISTRIBUTION SYSTEM (SDWIS ID: DS001)  
FREQUENCY OF MAIN BREAKS: System indicated they do not have documented protocols for handling pressure loss or main breaks including proper disinfection procedures. Colorado Design Criteria for Potable Water Systems (DCPWS), Appendix I, Section 2.5

The District has experienced multiple line breaks as noted in item #5 in this letter.

7. D250 - Distribution: DISTRIBUTION SYSTEM (SDWIS ID: DS001)  
HIGH LEAKAGE RATES: System usage data indicated that high leakage rates pose a risk of backsiphonage.

The District has worked to reduce the number of water leaks and has reduced the unaccounted for water losses from 50-60% to 15-20%. The Division encourages the District to continue identifying line leaks and repairing them.

8. T995 - Treatment: CHLORINATION FOR ARAPAHOE WELL (SDWIS ID: 003)  
OTHER TREATMENT OBSERVATIONS: Inspector identified treatment observation.

The District is currently backwashing the manganese greensand filters for iron removal with raw groundwater. This is not an ideal operating situation as, the filters are being preloaded with water that contains iron and therefore the filters are never completely cleaned. The District should investigate a means of using treated water to backwash the filters. Using treated water for backwashing the filters might increase filter runtimes and could possibly lower operating costs.

9. T995 - Treatment: LIMBAUGH SWTP01 (SDWIS ID: 001)  
OTHER TREATMENT OBSERVATIONS: Inspector identified treatment observation.

The horizontal pressure filters that the District has been using at the Surface Water Treatment Plant do not meet the Colorado Design Criteria for Potable Water Systems (CDCPWS Section 5.0.2) which states that "The use of horizontal rapid rate pressure filters will not be approved by this Department". The Division's records state that the plant is capable of 130 gallons per minute (gpm), but it is presently being run at 35 gpm in order to optimize treatment and backwashing frequency. The Division encourages the operations staff to continue operating the plant at the current flowrate, as it appears from the operational and performance records that this is the optimal capacity of the filters given the circumstances. It would be in the best interests of the District to plan to replace the horizontal pressure filters in the next 5 to 10 years with a more modern technology. It was noted during the inspection that the observation portal artificial glass can shatter under the pressures sustained by the filters. This hampers proper cleaning of the filters. Removing and replacing the glass can weaken the mounting holes and cause failure, which could endanger operations staff with flying debris.

**Field Verification/Sampling**

While performing the sanitary survey, the inspector verified operator certification requirements and performed water quality sampling for chlorine residual, pressure, and turbidity. Table 3 indicates the operator certification verification for Forest View Acres Water District. Table 4 indicates the results of the water quality sampling performed onsite.

**Table 3: Operator Certification Verification**

Category	Required Certification Level	Name of Operator in Responsible Charge	Certification Level Held	Certification No. and Expiration Date
Treatment	B	Gabby Begeman	A	No. 20762 exp. 5/22/2012
Distribution	I	Gabby Begeman	III	No. 23682 Exp. 6/15/2014

**Table 4: Sampling Results**

Parameter	Sample Location	Value	Units	Notes
Disinfectant Residual	Entry Point (EP)	0.97	mg/L	
Disinfectant Residual	Distribution (18852 Rockbrook, end of the system)	0.59	mg/L	
Turbidity	Treatment plant effluent	0.037	NTU	

**Reminders**

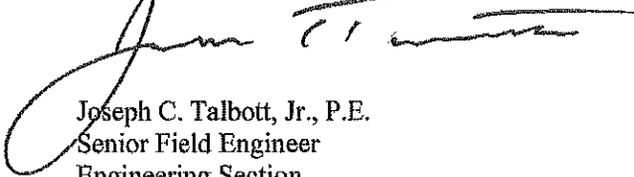
- Article 1.11.2 (Prior Approval Required) requires the Department's approval prior to commencement of construction of any improvements, treatment process modifications, or the addition of new water sources.
- Most regulations, guidance documents, and forms are available via Internet on the Department's website. Please link to [www.cdphe.state.co.us/wq](http://www.cdphe.state.co.us/wq) for further information. You can link directly to the Engineering Section's WebPages at <http://www.cdphe.state.co.us/wq/engineering/techhom.html> and to the Drinking Water Program WebPages at <http://www.cdphe.state.co.us/wq/drinkingwater/index.html>.

Joel Meggars  
Forest View Acres Water District

March 12, 2012  
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If you have any questions, please contact me by phone at 719-545-4650 ext. 101 or via e-mail at [joseph.talbott@state.co.us](mailto:joseph.talbott@state.co.us). Thank you for your time and cooperation.

Sincerely,



Joseph C. Talbott, Jr., P.E.  
Senior Field Engineer  
Engineering Section  
Water Quality Control Division  
Colorado Department of Public Health and Environment

cc: Mike McCarthy, El Paso County Public Health Department  
Drinking Water File, PWSID No. CO0121250

Gabrielle Begeman, ORC, LLC Water Specialists, [gbegeman@orclic.com](mailto:gbegeman@orclic.com)