

ENGINEERING COMMITTEE MEETING AGENDA

April 13, 2022

Phelan Community Center
4128 Warbler Road, Phelan, CA 92371
& Via Conference Call (see below)

THIS MEETING WILL BE CONDUCTED PURSUANT TO THE PROVISIONS OF AB361, WHICH EFFECTIVE OCTOBER 1, 2021, MODIFIED CERTAIN REQUIREMENTS OF THE RALPH M. BROWN ACT WITH RESPECT TO REMOTE TELECONFERENCE BOARD MEETINGS DURING PERIODS OF STATE-DECLARED EMERGENCIES.

Pursuant to AB361, and as a precaution to our Board of Directors, District staff, and general public as a result of the ongoing COVID-19 pandemic, the Phelan Piñon Hills Community Services District will hold this meeting of its Board of Directors both in-person at the above location and via teleconference or video conference. Members of the public may watch and participate in the meeting by physical attendance or by Zoom or telephone conference via the remote instructions below.

REMOTE PARTICIPATION INFORMATION:

Dial-in

(720) 707-2699
Meeting ID: 831 9028 0972
Passcode: 306783

Zoom

<https://us06web.zoom.us/j/83190280972?pwd=WklJKONvMjdESTFwdURFcTRxMnBldz09>
Meeting ID: 831 9028 0972
Passcode: 306783

One-Tap Mobile

+17207072699,,83190280972#

Remote Comment Procedure:

- You will be muted until you are called on during the public comment period.
- You will be recognized by the last 4 digits of your phone number or Zoom ID and asked if you have a comment.
 - If you do not have a comment, state "no comment."
 - If you do have a comment, please state your name, where you live, and limit your comment to 5 minutes. After 5 minutes you may be muted so that others can comment.
- You may also email your public comment to the Board Secretary at kward@pphcsd.org by 4:00 p.m. on April 13, 2022. Your comment will be read into the record by the Board Secretary.

Please check the District website for updates on this meeting. We encourage you to sign up for our email notifications by emailing kward@pphcsd.org or by visiting our website and completing the signup form at www.pphcsd.org under the "Agendas and Minutes" tab.



Mission Statement:

The Mission of the Phelan Piñon Hills Community Services District is to efficiently provide authorized services and maximize resources for the benefit of the community.

Authorized Services:

- *Water*
- *Parks & Recreation*
- *Street Lighting*
- *Solid Waste & Recycling*

ENGINEERING COMMITTEE MEETING – 4:00 P.M.

Call to Order – Pledge of Allegiance

Roll Call1) **Approval of Agenda**

2) **Public Comment** – Under this item, any member of the public wishing to directly address the Board on any item of interest that may or may not be within the subject matter jurisdiction of the Board, but not listed on the agenda, may do so at this time. However, the Board is prohibited by law from taking any action on any item not appearing on the agenda unless the action is otherwise authorized by the Brown Act. Any member of the public wishing to directly address the Board on any item listed on the agenda may do so when the item is being considered by the Board. *If you wish to address the Board, please do so by the method listed on the first page of this agenda.* Speakers are requested to be brief in their remarks. The Chair may limit each speaker to a comment period of five (5) minutes.

3) **Approval of Minutes**4) **Oeste Recharge Study Project**5) **Discussion Regarding Water System**

- Pumps and Wells Services Agreement
- 10-Year Tank Rehabilitation & Maintenance Service
- Water Quality
- Service Line Replacement Program Update
- Other Repairs/Replacements/Updates/Maintenance

6) **Smithson Springs Update**7) **State Regulations Update**8) **Review of Current Projects**

- Pressure Zone 6
- New Well No. 15

9) **Staff Reports**10) **Review of Action Items**

- a) **Prior Meeting**
- b) **Current Meeting**

11) **Set Agenda for Next Meeting** – May 11, 202212) **Adjournment**

Pursuant to Government Code Section 54954.2(a), any request for a disability-related modification or accommodation, including auxiliary aids or services, that is sought in order to participate in the above-agendized public meeting should be directed to the District's General Manager at (760) 868-1212 at least 24 hours prior to said meeting.

Agenda materials can be viewed online at <http://www.pphcsd.org>

ENGINEERING COMMITTEE MEETING MINUTES

March 9, 2022 – 4:00 p.m.
Phelan Community Center
4128 Warbler Road, Phelan, CA 92371
& Remotely Via Zoom or Conference Call

Board Members Present: Mark Roberts, Director (Chair)
Kathy Hoffman, Director

Board Members Absent: None

Staff Present: George Cardenas, Engineering Manager
Sean Wright, Water Operations Manager
Kim Ward, HR Manager/Executive Secretary
Jennifer Oakes, Executive Management Analyst
Tony De La Rosa, Engineering Technician
Aimee Williams, Administrative Technician II

Guests/Public: None

Call to Order

Director Roberts called the meeting to order at 4:00 p.m.

Roll Call

All Committee Members were present at Roll Call.

- 1) **Approval of Agenda**
Director Hoffman moved to approve the Agenda. Director Roberts seconded the motion. Motion passed unanimously.
- 2) **Public Comment** – None
- 3) **Approval of Minutes**
Director Hoffman moved to approve the Minutes. Director Roberts seconded the motion. Motion passed unanimously.
- 4) **Oeste Recharge Study Project**
Mr. Wright reported that MWA is moving ahead with the project. A contract for CEQA was executed by the MWA Board. Two monitoring wells have been drilled and their geologist reported that the geology looks incredible. Approximately 95 Joshua trees will need to be relocated as part of the project.
- 5) **Discussion Regarding Water System**
 - **Pumps and Wells Services Agreement**
 - **10-Year Tank Rehabilitation & Maintenance Service**

- **Water Quality**
- **Service Line Replacement Program Update**
- **Other Repairs/Replacements/Updates/Maintenance**

Mr. Wright provided an update on pump and motor rehabilitation at booster stations. The air-vac maintenance and flushing program is 21% completed. The water meter replacement program is in the second phase and the whole project is approximately 37% completed. The new generators have been field tested and are ready to use.

6) **Smithson Springs Update**

The site is clean. Flow is 3.5gpm at the upper weir and 3gpm at the lower weir.

7) **State Regulations Update**

Ms. Oakes reported that per SB 606, the Annual Water Shortage Assessment is due in July. MWA is currently completing this assessment for the whole region and the District is waiting to see if we are able to use this report to meet the requirements. A 20% water conservation mandate is anticipated in the near future.

Mr. Wright stated there is no update on Chromium-6 yet.

8) **Review of Current Projects**

- **Pressure Zone 6**

Nothing new to report.

- **New Well No. 15**

Mr. Cardenas reported that the CEQA document was submitted to the state clearinghouse and will be brought to the Board in April for adoption.

Mr. Wright discussed an analysis that was completed on current pipeline prices and sizes.

9) **Staff Reports**

Mr. Wright gave an update on some items that will go to the Board at the next meeting.

10) **Review of Action Items**

a) **Prior Meeting** – None

b) **Current Meeting** – A report on Oeste data was requested.

11) **Set Agenda for Next Meeting** – April 13, 2022

12) **Adjournment**

With no further business before the Committee, the meeting adjourned at 4:28 p.m.

Agenda materials can be viewed online at <https://www.pphcsd.org>





A. 4176 Warbler Road
 P.O. Box 294049
 Phelan, CA 92329
 P. (760) 868-1212
 F. (760) 868-2323
 W. www.pphcsd.org

Water Operations Manager's Report March 2022

Introduction

The Phelan Piñon Hills Community Services District (District) maintains a large water distribution system that includes over three hundred & forty miles of water lines. The following are District statistics and information related to the operations of this distribution system and the quality of the water supplied to District customers.

Summary

The District's water distribution system is in compliance with the State Water Resources Control Board- Division of Drinking Water, The Environmental Protection Agency, Safe Drinking Water Act, Cal OSHA, and all other governing agencies.

Current chlorine demand has remained low and steady due to routine maintenance and flushing. Chlorine demand is found by subtracting the chlorine residual from the total chlorine added to the water system. A low chlorine demand indicates water-free or nearly free of pathogenic microorganisms.

Water Quality Samples

The following is a summary of all water quality samples collected this month and any pertinent information related to said samples.

TEST TYPE	NO. OF COLLECTIONS THIS MONTH	TESTING SCHEDULE	NOTES
Raw water and Bac-t samples	47 samples	Monthly	All in compliance, Sampled Weekly
General physical samples	6 samples	Monthly	All in compliance, Sampled Weekly
TTHM/HAA5	0 samples sets	Quarterly	All in compliance.
UCMR 4	0 sample sets	TBD	All in Compliance.
Inorganics	0 samples	Yearly	All in compliance.
Radiological (Gross Alpha)	0 samples	Every 3 Years	All in compliance.
Trichloropropane 1,2,3-TCP	0 samples	Quarterly	All in compliance.
Regulated SOC	0 samples	As needed	All in compliance.
Nitrate as N	2 samples	As needed	All in Compliance.
Chromium 6	0 samples	Quarterly	All in Compliance.
Secondary GP'S	0 samples	As needed	All in Compliance.
Uranium	0 samples	As needed	All in Compliance

Production and Service Order Report

The following is a summary of the District's water production and service orders for the current month.

Total Monthly Production	199.84 A. F. 1 % more than 2013
2013 Monthly Production	213.91 A. F.
USA's Marked	277
Service Orders Completed	533 service orders completed
Main/Service Line Leaks	18 service line leaks repaired. 0 Main line leak/ breaks repaired
Hydrant Repairs/Replacements	1 hydrant repaired/1 replaced
Residential Meters Sold	12
Commercial Meters Sold	0
YTD Total Meters Sold (Calendar)	21 (95 in 2021)
Construction Meters Out	7
Service Lines Replaced	34

Job Code Summary

Job Code	Total Completed
C-Lock - Lock	50
C-Read & Unlock-Open - Read & Unlock - Opening	3
C-Read & Unloc-OC-DM - Read & Unlock - Opening-OC-DM	19
D-Closing Read & Lck - Closing Read & Lock DO NOT USE	5
D-Closing Read-OC-DM - Closing Read & Lock-OC-DM DO NOT USE	2
M- Investigate Lock - Verify Meter Still Locked	41
M- Verify Acct Class - Verify Account Class	1
M- Water Audit - Audit Water Usage	1
M-Backflow - Backflow Information	0
M-Cost Estimate Req - Cost Estimate Request	0
M-Data - Data Log	5
M-Bees- Bees	0
M-Investigate Leak - Investigate Leak	0
M-Investigate No Wtr - Investigate No Water	1
M-Lock No N/O Info - Meter Locked No New Owner Info	27
M-Low/No Consumption - Investigate Low/No Consumption	5
M-Meter Leaking - Meter Leaking	0
M-Meter UTL - Buried - Meter UTL - Buried	1
M-Pressure Ck Hi-Low - Pressure Check Hi-Low	5
M-R/R Angle Stop - Repair/ Replace Angle Stop	1
M-R/R Gate Valve - Repair/ Replace Gate Valve	2
M-Read - Read (do not update Read)	1
M-Repair Svc Line - Repair Service Line	18
M-Repair/Install Box - Meter Box	1
M-Replace Serv Line - Replace Service Line	34

M-Stake Meter Loc - Stake Meter Location	2
M-Status - Status	6
M-Turn off-Cust Req - Turn off - Customer Request	3
M-UNLOCK – UNLOCK	39
M-Verify Leak Repair - Verify Leak Repaired	5
M-Water Loss Leak - Door Hanger Water Loss Leak	1
M-Water Quality Tast - Water Quality - Taste	1
S- Replace Register - Register Not Sending Signal	0
S- Meter Downsize - Meter Downsizing	0
Service Change - Service Status Change	0
S-Replace Mtr & Reg - Replace Entire Meter Max Life Usage	15
S-Replace Reg Hotrod - Replace Register Hotrod Died	70
S-Replace Register - Replace Register Mueller	0
S-Replace Mtr- Replace Entire Meter Bottom Seal Leaking	19
Grand Totals	533

Summary of Current Projects

The following is a brief summary of all current and completed projects for the reported period

- Well Soundings at all wells are being done monthly
- Smithson Springs last cleaned December 2021- Current flows 3.5 GPM Upper Weir, 3 GPM Lower Weir
- Well 14 Production for December 0.13 AF, YTD 0.99 AF
- Valves and Hydrants Maintenance: 37 hydrants flushed and painted YTD Total-37
- Service line replacement program on target to meet current established goals. 83 Replaced Calendar Year To Date, 117 Replaced Fiscal Year To Date
- Air-Vac maintenance & flushing program-0 Flushed & Maintenance YTD-70 of 336 Total Project 21% Complete
- Cla-Val automatic controls valves being systematically rebuilt as a water conservation measure- 7 Complete YTD Water savings from this project is 9.5 GPM and counting @ 5MG
- Water Meter Replacement Project- 2713 of 7050 Replaced – 38.5 % Complete
- Tank 1A-3 Interior coating sand, blast, re-coat- 75% Complete
- Diving cleaning of Zone G Reservoir- 10% Complete
- Wilson Ranch Road Pipeline Protection Project- Drone images of before & after to follow- 15% Complete

Projects Completed

- Rehabilitation of pump and motor at 3B Booster A- 100% Complete
- Rehabilitation of pump and motor at 4B Booster A- 100% Complete
- Rehabilitation of pump and motor at 5B Booster A- 100% Complete
- Rehabilitation of pump and motor at 7B Booster A-100% Complete
- Replacement of Booster B at Station 12- 100% Complete
- Re-wiring of site 5A Boosters A, B, C and control wiring-100% Complete
- Well Meter and inter-tie Meter annual accuracy program FY 21/22- 100 % Complete
- Electrical Efficiency test performed @ every booster and well within the District- 100% Complete with summaries of notable replacements attached
- Oil Changes and greasing at all district wells 100% Complete Boosters 100 % Complete
- 43 Valves Turned this month as part of district Valve Exercising Program, 63 Year To Date Turned of 4291
- 317 Dead ends flushed of 317 = every year no matter what < No goal, this is mandatory
- 1936 hydrants = 0 flushed this Year To Date 37 Painted Goal is 968 annually, this is done Bi-Annual
- Tank washouts of 1B-2,1B-1,3B,3C,1C-1,5A,1A-3, Well 2-1, 4A Complete



PUMP CHECK

PUMPING SYSTEMS ANALYSIS • RIVERSIDE CA, SINCE 1958

P.O. Box 5646

Riverside, CA 92517

(951) 684-9801

Fax (951) 653-1950

February 9, 2022

Sean Wright
Phelan Pinon Hills CSD
4176 Warbler Road
Phelan, CA 92371

Dear Sean:

Congratulations! The pump work performed at **Well #6A** has resulted in a reduction of 6,233.2 kWh's per acre foot water pumped. Based on the acre feet water pumped last year by Well #6A, **the annual savings will be 386,458 kWh's.**

This is enough energy saved (kWh's) to power 36.8 average household for one year.

(National average for electricity consumed per household 10,500 kWh's per year.

Source: U.S. Department of Energy, Table 1.5 Energy Consumption, Expenditures and Emissions Indicators, 2012, www.energy.gov).

And

Reduce Green House CO2 gases by 357.5 tons annually.

(National average emissions factor for electricity is 1.85 pounds CO2 per kilowatt-hour.

Source: Energy Information Administration. Electric Generator Report 2013, Table 8.2, www.eia.doe.gov).

Continued regular pump testing keeps you aware of the water table and pump operating conditions. This also provides current information for pump redesign when necessary. By tracking pump wear and potential saving from pump replacement, you can determine the most cost effective time to replace a pump. Pumping cost reduction is a major benefit of regular pump testing.

Please call me at (951) 684-9801 if you have any questions.

Sincerely,

Jon Lee

13.7¢ per kW

savings of \$ 52, 795 per year



PUMP CHECK

PUMPING SYSTEMS ANALYSIS • RIVERSIDE CA, SINCE 1958

P.O. Box 5646

Riverside, CA 92517

(951) 684-9801

Fax (951) 653-1950

March 3, 2022

Sean Wright
Phelan Pinon Hills CSD
4176 Warbler Road
Phelan, CA 92371

Dear Sean:

Congratulations! The pump work performed at **Station 2B Booster B** has resulted in a reduction of 64.9 kWh's per acre foot water pumped. Based on the acre feet water pumped last year by Station 2B Booster C, **the annual savings will be 29,328 kWh's.**

This is enough energy saved (kWh's) to power 2.8 average household for one year.
(National average for electricity consumed per household 10,500 kWh's per year.

Source: U.S. Department of Energy, Table 1.5 Energy Consumption, Expenditures and Emissions Indicators, 2012, www.energy.gov).

And

Reduce Green House CO2 gases by 27.1 tons annually.

*(National average emissions factor for electricity is 1.85 pounds CO2 per kilowatt-hour.
Source: Energy Information Administration. Electric Generator Report 2013, Table 8.2, www.eia.doe.gov).*

Continued regular pump testing keeps you aware of the pump operating conditions. This also provides current information for pump redesign when necessary. By tracking pump wear and potential saving from pump replacement, you can determine the most cost effective time to replace a pump. Pumping cost reduction is a major benefit of regular pump testing.

Please call me at (951) 684-9801 if you have any questions.

Sincerely,


Jon Lee

Savings of \$4,018 per year.



PUMP CHECK

PUMPING SYSTEMS ANALYSIS • RIVERSIDE CA, SINCE 1958

P.O. Box 5646

Riverside, CA 92517

(951) 684-9801

Fax (951) 653-1950

March 3, 2022

Sean Wright
Phelan Pinon Hills CSD
4176 Warbler Road
Phelan, CA 92371

Dear Sean:

Congratulations! The pump work performed at **Site 1A Booster B** has resulted in a reduction of 22.3 kWh's per acre foot water pumped. Based on the acre feet water pumped last year by Site 1A Booster B, **the annual savings will be 1,989 kWh's.**

This is enough energy saved (kWh's) to power 0.2 average household for one year.

(National average for electricity consumed per household 10,500 kWh's per year.

Source: U.S. Department of Energy, Table 1.5 Energy Consumption, Expenditures and Emissions Indicators, 2012, www.energy.gov).

And

Reduce Green House CO2 gases by 1.8 tons annually.

(National average emissions factor for electricity is 1.85 pounds CO2 per kilowatt-hour.

Source: Energy Information Administration. Electric Generator Report 2013, Table 8.2, www.eia.doe.gov).

Continued regular pump testing keeps you aware of the pump operating conditions. This also provides current information for pump redesign when necessary. By tracking pump wear and potential saving from pump replacement, you can determine the most cost effective time to replace a pump. Pumping cost reduction is a major benefit of regular pump testing.

Please call me at (951) 684-9801 if you have any questions.

Sincerely,

Jon Lee

Savings of \$ 273 per year.



PUMP CHECK

PUMPING SYSTEMS ANALYSIS • RIVERSIDE CA, SINCE 1958

P.O. Box 5646

Riverside, CA 92517

(951) 684-9801

Fax (951) 653-1950

March 3, 2022

Sean Wright
Phelan Pinon Hills CSD
4176 Warbler Road
Phelan, CA 92371

Dear Sean:

Congratulations! The pump work performed at **Station 3B Booster A** has resulted in a reduction of 16.2 kWh's per acre foot water pumped. Based on the acre feet water pumped last year by Station 3B Booster A, **the annual savings will be 1,025 kWh's.**

This is enough energy saved (kWh's) to power 0.1 average household for one year.
(National average for electricity consumed per household 10,500 kWh's per year.

Source: U.S. Department of Energy, Table 1.5 Energy Consumption, Expenditures and Emissions Indicators, 2012, www.energy.gov).

And

Reduce Green House CO2 gases by 0.9 tons annually.

*(National average emissions factor for electricity is 1.85 pounds CO2 per kilowatt-hour.
Source: Energy Information Administration. Electric Generator Report 2013, Table 8.2, www.eia.doe.gov).*

Continued regular pump testing keeps you aware of the pump operating conditions. This also provides current information for pump redesign when necessary. By tracking pump wear and potential saving from pump replacement, you can determine the most cost effective time to replace a pump. Pumping cost reduction is a major benefit of regular pump testing.

Please call me at (951) 684-9801 if you have any questions.

Sincerely,


Jon Lee

Savings of \$141 per year



PUMP CHECK

PUMPING SYSTEMS ANALYSIS • RIVERSIDE CA, SINCE 1958

P.O. Box 5646

Riverside, CA 92517

(951) 684-9801

Fax (951) 653-1950

March 3, 2022

Sean Wright
Phelan Pinon Hills CSD
4176 Warbler Road
Phelan, CA 92371

Dear Sean:

Enclosed are the results of the pump and meter tests we recently conducted for you.

Congratulations! The pump and motor work performed at **Station 3C Booster C** has resulted in a reduction of 1.0% or 3.7 kWh's per acre foot water pumped.

Continued regular pump testing keeps you aware of the pump operating conditions. This also provides current information for pump redesign when necessary. By tracking pump wear and potential saving from pump replacement, you can determine the most cost effective time to replace a pump. Pumping cost reduction is a major benefit of regular pump testing.

If you do replace any pumps please call us for a pump retest. This ensures that your new pump is operating as expected.

Please call me at (951) 684-9801 if you have any questions.

Sincerely,

Jon Lee