

***SHEEP CREEK WATER COMPANY  
REGULAR BOARD OF DIRECTORS MEETING  
August 13, 2020 ~ 6:30 PM  
SHEEP CREEK WATER COMPANY – via Zoom  
4200 Sunnyslope Rd., Phelan, CA 92371***

Due to the Covid-19 pandemic and required Social Distancing, The Sheep Creek Water Company Regular Board of Directors Meeting will be held via Zoom Meeting for Shareholder participation. Shareholders may access the meeting remotely with the following options.

**Remote Participation Information:**

**Zoom** <https://us02web.zoom.us/j/85124871180?pwd=UTYvQzllM2ZwNVByYVVBdmRNVetZQT09>  
Meeting ID: 851 2487 1180  
Password: 900873

**One tap mobile**  
16699006833,, 85124871180#

**Dial-In**  
(669) 900-6833  
Meeting ID: 851 2487 1180  
Password: 900873

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***AGENDA***

- 1) **Open Meeting- 6:30 PM**
  - a. Flag Salute
  - b. Invocation
- 2) **Consent Motions**
  - a. Minutes:
    - i. *Regular Board of Directors Meeting- July 16, 2020*
  - b. Bills:
    - i. *July 16, 2020 through August 13, 2020*
  - c. Managers' Report: Included in Board Packet
- 3) **Open Forum/Public Comment-** Under this item any member of the Board or Public may address the Board on any item relating to the company not listed on this agenda. However, the Board is prohibited under AB 240 from taking any action on an item not appearing on the agenda. Board president will call on each participant and at that time you have three (3) minutes to speak.
- 4) **Old Business**
  - a. System Update
  - b. Source Capacity Project Update

c. SWRCB Updated Compliance Order NO.05-13-18R-002A1

5) **New Business**

a. Asset Management Plan

6) **Next Scheduled Meeting**

a. September 17, 2020 via Zoom

7) **Closed Session**

a. Employee Evaluation

8) **Adjournment**

***SHEEP CREEK WATER COMPANY***  
***Regular Board of Directors Meeting***  
***July 16, 2020 ~ 6:30pm***  
***Sheep Creek Water Company ~ Board Room via Zoom***  
***4200 Sunnyslope Road, Phelan, CA 92371***

The Regular Board of Directors Meeting of July 16, 2020, was called to order by Board President Andy Zody. Chris Cummings led in the Pledge of Allegiance. The Invocation was led by Vice President Bob Howard. Mr. Zody reminded everyone that the meeting was being recorded for the accuracy of the meeting minutes.

***Directors Present:*** President Andy Zody, Vice President Bob Howard and Director Luanne Uhl were present with Secretary/Treasurer Kellie Williams, and Director David Nilsen present via Zoom Meeting.

***Staff Present:*** General Manager Chris Cummings

***Guests Present:*** Michael Palecki of the Mountaineer Progress, George Cardenas of the Phelan Pinon Hills Community Service District, and property owner Gary Van Dam, & Shareholder Diane Hayball and Kathy Everhart were present at tonight's meeting.

***Consent Motions:***

Minutes: *Regular Board of Directors Meeting ~ July 16, 2020*

Bills: *June 18, 2020 through July 16, 2020*

Manager's Report: Included in Directors Packets

Bob Howard made a motion to accept the Consent Motions as presented. David Nilsen seconded the motion. Motion carried.

***Open Forum/Public:***

*Under this item any member of the Board of Public may address the Board on any item relating to the company that is not listed on this agenda. However, the Board is prohibited under AV240 from taking any action on an item not appearing on the agenda. The Board President will call on each participant and at that time they will have three (3) minutes to speak.*

Mr. Zody asked everyone present at tonight's meeting if they had anything they needed to bring to the Board. No questions or concerns were brought up at this time.

***Old Business***

a.) ***System Update:*** Static water levels have had an average decrease of 0-5 feet. The water levels compared to 1 year ago are an average of 9-14 feet higher than last year. Well 5 & 8 are running daily, averaging 12 hours a day. Well 11 is averaging 10 hours per day. SCADA controls were added to well 11 allowing for remote operations of the well. Water usage is averaging 800,000 thousand gallons per day. The tunnel has slightly increased, averaging 134 GPM.

b.) ***Source Capacity Project Update:*** San Bernardino County circulated the Notice of Availability/Notice of Intent to adopt a Draft Initial Study/Mitigated Negative Declaration for the 30 day review period on July 2, 2020. Following the 30 day review period, the mitigation process will begin.

The line of credit has been completed and the funds are available for the Source Capacity Project. Along with the line of credit, the Shareholder Loans have been refinanced at an interest rate of 2.4% with a 4 year term.

c.) ***SWRCB Updated Compliance) Order No. 05-13-18R-002A1***

**Directive 2.a- Financial Review-** SCWC is working with Matt Miller of Silva & Silva CPA to complete a financial review of the system as required by the Updated Compliance Order. The

engagement letter should be sent by the end of the week and the financial review will begin. At this time the estimated proposal is \$5,000.

**Directive 2.b- Asset Management Plan-** Proposal to have the asset management plan (AMP) is on New Business.

**Directive 2.c-** A Financial Assessment Questionnaire was completed this week and will be submitted to the CPA and the engineer for assistance as directed by the SWRCB.

**d.) *Request for PPHCSD Water Service to APN# 3066-251-05 & 06***

Property owner Mr. Gary Van Dam is requesting water service from Phelan Pinon Hills CSD for two parcels he owns. Mr. Van Dam is working with the PPHCSD for easement on his properties for the Civic Center Project Park Expansion. With CSD moving forward on the Civic Center, traffic is expected to increase in the area and frontage and road improvements will also be completed. CSD is requesting easements from Mr. Van Dam due to moving the road access and turnaround areas for the park and maintain access to the elementary school. With having the road access on Sheep Creek Rd, Sahara Rd will be vacated which would run through the center of the proposed park. Moving this road will eliminate possible safety issues in the proposed park location. Mr. Van Dam is requesting a Water Letter that can be provided to the county. At this time, Sheep Creek Water Company is unable to fulfill this request due to the SWRCB Moratorium on new service connections and will serve letters. Per the last meeting, concerns regarding issues with LAFCO were expressed and George with PPHCSD requested information from LAFCO regarding these concerns. The response from LAFCO stated, "There would be no issues or LAFCO involvement since Sheep Creek is within the CSD's boundaries." There is a current agreement between districts in place.

It is recommended at this time the Board of Directors consider Mr. Van Dam's request to have permission to allow PPHCSD to service the two parcels in question. By the time Mr. Van Dam is ready for water service, the moratorium may be lifted and Sheep Creek will be able to supply water service at that time.

Dave Nilsen made a motion to approve Mr. Van Dam's request as presented to go along with the Phelan Pinon Hills Civic Center Project, only if the contract with Sheep Creek Water is agreed and signed. Kellie Williams seconded the motion. Motion carried

**e.) *Annual Meeting:*** Two ideas were presented to hold the Annual Shareholders Meeting. David Nilsen moved to postpone the 2020 Annual Shareholders Meeting until further notice due to Covid-19. He suggested writing a letter to the Shareholders, to update Sheep Creek's current situation and will notify when the restrictions have been lifted. Luanne Uhl seconded the motion. Motion carried.

***New Business:***

**a.) *Asset Management Plan:*** The SWRCB Updated Compliance Order, requires Sheep Creek to complete an asset management plan. The AMP must include an inventory of the System's infrastructure components. It should include a description of the components' condition, age, service history, and useful life, criteria to determine when to repair, rehabilitate or replace assets. Along with a prioritization of critical assets, long term funding strategies, and a timeline delineating the schedule for the System's asset management plan. Chris has contacted a couple of engineering firms. Availability has been limited due to Covid-19. Due to the large amount of time needed to complete this complex of a plan, a proposal has been received from Engineering Resources of Southern California in the amount, not to exceed \$123,000. The engineer has given a timeline of 6 months to have the plan completed.

Chris has recommended the Board to approve the proposal from ERSC for the completion of the Asset Management Plan not to exceed \$123,000. The 2020 Operating and Holding Budget has \$25,000 available for engineering and the remainder will come out of the Capital Improvement Account.

Kellie agreed that we needed more than one bid. Chris said that he may have another bid coming in a couple of days. Kellie asked if we could go forward with our project, and in the meantime, ask for an extension of time for the Asset Management Plan. The second bid may be coming in this week. Kellie asked if we could postpone until we have heard all bids.

David Nilsen agreed that we need an extension of time until we get the other bid to compare with the current bid. This issue will be tabled now. An emergency meeting may be called after the second bid.

***Next Scheduled Meeting:***

*August 13, 2020*

***Adjournment:*** Andy Zody move to adjourn the meeting. Luanne Uhl seconded the motion. Motion carried. The Regular Board of Directors Meeting of July 16, 2020 adjourned at 7:00 PM

***Respectfully Submitted,***

***Kellie Williams***

***Secretary/Treasurer Board of Directors  
Sheep Creek Water Company***

**Sheep Creek Water Company**  
**4200 Sunnyslope Rd.**  
**P.O. Box 291820**  
**Phelan, CA 92329-1820**  
*Office (760) 868-3755/Fax (760) 868-2174*  
*Email [sheepcreek@verizon.net](mailto:sheepcreek@verizon.net) / [www.sheepcreekwater.com](http://www.sheepcreekwater.com)*

Regular Board of Directors Meeting – Managers Report

August 13, 2020

**PRODUCTION**

- July Production- 72.422 AF- 20% increase from 2019 & 39% decrease from 2013
- July Usage- 57.894 AF sold- 4% increase from 2019 & 44% decrease from 2013

**Well soundings & production for the past month:**

- Static Water Levels at this time have had a minimal change.
  - Well 2A** Compared to 1 year ago, static level is the up 13.86 feet- 344 gpm
  - Well 3A** Compared to 1 year ago, static level is up 9.24 feet- 311 gpm
  - Well 4A** Compared to 1 year ago, static level is up 4.62 feet- 372 gpm
  - Well 5** Compared to 1 year ago, static level is up 13.86 feet- 311 gpm
  - Well 8** Compared to 1 year ago, static level is up 9.24 feet- 348 gpm
  - Tunnel** the Tunnel flow is currently averaging 133 gpm
- Well 2A & 4A are running an average of 12 hours
- Total Pumping capacity as of July 7, 2020 is 2,070 gpm.
- Current usage is averaging 800,000 gpd
- **Allotment Tier 1 – First share on account remain 750 CF/Share and Remaining shares 150 CF/Share. \$0.50 per hcf**
- **Allotment Tier 2 – 150 CF/Share all shares after Tier 1 \$3.46 per hcf**
- **Tier 3 Overage- No Allotment \$6.32 per hcf**

**Work Completed or in Progress**

- Work orders as office requests
- Well Soundings- By-weekly
- System Weed Abatement
- Wells & Control Room pipework painting & maintenance- Completed
- Concrete pads around fire hydrants- 7 completed- Project ongoing
- 10 Meter Upgrades/ 2- Service Lines Replaced
- 2 Mainline Leaks/ 1- Service Leak
- Compliance notification sent to the SWRCB- updated compliance order received
  - Directive 2a- Financial Review by CPA- In progress
  - Directive 2b- Asset Management Plan- Proposal to be approved
  - Directive 2c- Well 11 Operational Cost- In Progress
  - Directive 2d- Financial Assessment Questionnaire- Completed
- Source Capacity Project-
  - CEQA Notice of Availability/Notice of Intent to adopt a Draft Initial Study/Mitigated Negative Declaration was circulated for the 30 day review period on July 2, 2020- Closed
  - Preparing MMRP, NOD
  - Project Line of Credit- Completed and Available
  - Shareholder Loans Refinanced- Completed- Interest Rate of 2.40%
  - Prepare drilling plan- In progress

# SILVA & SILVA

CERTIFIED PUBLIC ACCOUNTANTS

Rudolph F. Silva, CPA  
Lisa D. Silva, CPA

7/29/2020

Sheep Creek Water  
Company  
P.O. Box 291820  
Phelan, CA 92329-  
1820

Dear Board of Directors:

We are pleased to confirm our understanding of the nature and limitations of the services we are to provide for Sheep Creek Water Company located in Phelan, California.

We will apply the agreed-upon procedures which the State Water Board Directives 2A (dated March 17, 2020) requires information related to Sheep Creek Water Company's financial capacity or overall evaluation of the financial health, listed in the attached Exhibit A, to the Sheep Creek Water Company financial report ("report") of the Sheep Creek Water Company as of December 31, 2019 through 2015. This engagement is solely to assist the State Water Board in monitoring the financial condition of the Sheep Creek Water Company in accordance with the State Water Board Directives 2A. Our engagement to apply agreed-upon procedures will be conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the Sheep Creek Water Company. Consequently, we make no representation regarding the sufficiency of the procedures described in Exhibit A either for the purpose for which this report has been requested or for any other purpose. If, for any reason, we are unable to complete the procedures, we will describe any restrictions on the performance of the procedures in our report or will not issue a report as a result of this engagement.

Because the agreed-upon procedures listed in Exhibit A do not constitute an audit as defined under Generally Accepted Accounting Principles, we will not express an opinion on the Sheep Creek Water Company financial report or any elements, accounts, or items thereof. In addition, we have no obligation to perform any procedures beyond those listed in Exhibit A.

We will submit a report listing the procedures performed and our findings. This report is intended solely for the use of the Diocese and the Sheep Creek Water Company and should not be used by anyone other than these specified parties. Our report will contain a paragraph indicating that had we performed additional procedures under Generally Accepted Accounting Principles, other matters might have come to our attention that would have been reported to you.

You are responsible for the presentation of the Sheep Creek Water Company financial report in accordance with the Sheep Creek Water Company Financial Reporting Requirements; and for selecting the criteria and determining that such criteria are appropriate for your purposes. You are also responsible for making all management decisions and performing all management functions; for designating an individual with suitable skill, knowledge, and/or experience to oversee the services we provide; and for evaluating the adequacy and results of those services and accepting responsibility for them.

We plan to begin our procedures on approximately July 14, 2020 and, unless unforeseeable problems are encountered, the engagement should be completed by August 15, 2020. At the conclusion of our engagement, we will require a representation letter from the Sheep Creek Water Company) that, among other things, will confirm the Sheep Creek Water Company management's responsibility for the presentation of the AUP Sheep Creek Water Company Financial Report.

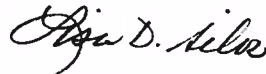
Engagement Letter

Agreed-Upon Procedures 2020  
Page Two

We estimate that our fees for these services will be \$ 3,800. The fee estimate is based on anticipated cooperation from your personnel and the assumption that unexpected circumstances will not be encountered during the engagement. If significant additional time is necessary, we will discuss it with you and arrive at a new fee estimate before we incur the additional costs. Our fee will be billed upon delivery of our report.

We appreciate the opportunity to assist you and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know. If you agree with the terms of our engagement as described in this letter, please have the responsible officer sign below and return this letter to us. If the need for additional procedures arises, our agreement with you will need to be revised. It is customary for us to enumerate these revisions in an addendum to this letter. If additional specified parties of the report are added, we will require that they acknowledge in writing their responsibility for the sufficiency of procedures.

Sincerely,



Silva and Silva CPA's

This letter correctly sets forth the understanding of the Sheep Creek Water Company.

	<u>for Sheep Creek</u>	<u>8-3-2020</u>
Signature	Water Company	Date

Chris Cummings - General Manager



**SAMPLE  
AGREED-UPON PROCEDURES TO BE PERFORMED**

We will perform the following procedures, as applicable

:

1. Overall evaluation of the financial health of the system using the past 5 years Accountant's Compilation Report Balance Sheet and Statement of Income and Expenses.
2. Evaluation of management and outstanding debt along with impending debt because of the order.
3. Evaluation of financed documentation and demonstration of how funding (new assessments) with be obtained throughout the loan terms for repayment.
4. Review calculations for expected increase in operational expenses for additional wells outlined in the order.
5. Evaluation of management and status of the System's reserve funds
6. Provide a summarized conclusion on the overall current and anticipated financial health

## **Financial Assessment Questionnaire for Disadvantaged Medium/Large CWS**

### **Asset Management**

- 1) Do you have as-built drawings and maps of all water system facilities showing the locations of each water source, treatment facilities, pumping plant(s), storage tanks, water mains, isolation valves, etc.? **Most facilities have drawings.** When were the schematic drawings and maps last updated? **Drawings are typically updated when facilities are installed. Some facilities do not have drawings.**
- 2) Do you have an asset inventory? **Inventory available for most of the assets.**
- 3) Do you evaluate assets for their condition and/or criticality of repair, rehabilitation, or replacement? **No detailed evaluation.** What is the date of the last evaluation? **No Date**
- 4) Do you have an asset management plan? **Not at this time, in process.** What is the date of the plan? **No Date**

### **Strategic Plans - Master Plan / Capital Improvement Plan / Facility Replacement and Refurbishment Plan**

- 5) Do you have a Master Plan (MP), Capital Improvement Plan (CIP), or another strategic plan? **Master Plan.** What is the date of the last update? **2006**
- 6) What percent of your annual budget is allocated to CIP reserve? **Capital Improvement Funds are determined by a portion of Tier 3 water sales.** How often is the CIP Reserve funded? **Monthly.** Is the annual amount funded to the CIP reserve equal to or greater than the amount of depreciation of system assets? **Less.**

### **Reserves Management**

- 7) Do you maintain separate reserve funds? **Yes** If so, do you have the following types of reserve funds:
  - a. Debt Choose an item. What percent of your budget is deposited annually? Choose an item.
  - b. Operations Choose an item. What percent of your budget is deposited annually? Choose an item.
  - c. Emergency Choose an item. What percent of your budget is deposited annually? Choose an item.
  - d. Capital Choose an item. What percent of your budget is deposited annually? Choose an item.
  - e. **4 reserve accounts are dedicated for improvements and maintenance.**
    - **System Upgrade Account- \$3,750 per month transferred from monthly service charge for the use of maintenance and upgrades to the system such as but not limited to new or replacement fire hydrants, gate valves and regulator stations.**

- Well Account- \$0.25 per HCF of water sold transferred monthly. Well Account is used for well maintenance and well rehabilitation. Replacement water funds for Mojave Watermaster are transferred into the Well Account. Replacement water is due to wells within the Mojave Water Adjudication that do not have water rights. Currently funds are low in this account due to being a new reserve account. Account was previously used for well loan repayments.
- Capital Improvement Account- \$2 per HCF of water sold in Tier 3 is transferred monthly into the Capital Improvement Account.
- Assessment Account- \$1.13 per HCF of water sold in Tier 3 is transferred monthly into the Assessment Account. The Assessment Account is used for large capital improvement projects (New Wells, New Tanks etc.). The Assessment Account is currently being used for the CoBank Loan for the Source Capacity Project.

8) Are there specific deposit and withdrawal policies or guidelines for the reserve accounts? Monthly Transfers are based on the water usage for the month.

9) Do you have mutual aid arrangements in place? Yes

a. Do you have a funding mechanism in place to support mutual aid requests? No

### **Debt Management**

10) Do you have any outstanding private, State, or Federal loans related to the water system?

Yes. If so, what is the date of final debt payout? 2 private loans currently being refinanced.

Is the water system delinquent or in default on any debt(s)? No

11) Are all the necessary debt reserve requirements met? In process to meet reserve requirements for Source Capacity Project Loan

12) Is the water system utilizing long-term debt to finance operations? No, long term debt has been used to rehabilitate wells and line replacements.

### **Financial Budgeting**

13) Is your drinking water system budget maintained separately from other utility or service budgets? There is one budget for the Company

14) Does your drinking water system prepare an annual budget document for the upcoming year's operating plan, clearly identifying the projected revenue? Budget is prepared annually to include operating expenses and projected income with projected water sales. Is this budget adopted before the beginning of the fiscal year? Budget is adopted in November/December to begin for January.

### **Financial Planning**

15) Have revenues been sufficient to cover expenses for the past three years? Yes

a. Are total revenues sufficient to cover total expenses (including the debt payment, CIP upgrades, and the costs of emergency maintenance)? At this time, current revenue will not cover newly acquired line of credit for Source Capacity Project.

b. Are rates high enough to meet short term and long-term needs? Yes for short term, long term will need to be evaluated at a later date.

- c. Is there a formal growth-pays-for-growth policy and is it reflected in the rate structure? **No**
  - d. When was the last rate increase? **January 2019**
  - e. When were water rates last evaluated? **September 2018**
- 16) What percentage of customers do not pay their bill? Choose an item. Is non-payment absorbed into the budget? **No payment arraignments are made with customers to pay their bills.** Are there reserves maintained to make-up for customer non-payment? **No unpaid accounts can be attached to the Shareholders share and will be collected when a share is sold.**

### **Financial Accounting**

- 17) Does the water system have formal accounting systems and written procedures for financial records? **SCWC uses Quickbooks with additional booking completed by outside CPA who also completes tax returns, quarterly payroll returns and year end financial report.**
- 18) Who records financial transactions? **Accounts Payable Secretary (April Chaplin) / outside CPA** Who approves financial transactions? **General Manager (Chris Cummings)**
- 19) How often are bank statements reconciled against the water system's accounting records? **Monthly** Who performs the reconciliation? **Accounts Payable Secretary (April Chaplin) / outside CPA**

### **Financial Reporting**

- 20) Are financial reports/standard financial statements prepared for review by the governing board/auditor? **SCWC CPA** How often? **Annually.** Are these reports and standards routinely made available to system customers? **Yes, Uploaded to SCWC Website and mailed to Shareholders with Annual Meeting Packet.**

### **Board Memhers Training**

- 21) Have board members received training on financial budgeting and obligations, if applicable? **Board has received AB54 and AB 240 required training.**

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**SHEEP CREEK WATER COMPANY  
MEMORANDUM**

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**TO:** BOARD OF DIRECTORS  
**FROM:** CHRIS CUMMINGS  
**SUBJECT:** ASSET MANAGEMENT PLAN  
**DATE:** AUGUST 7, 2020

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Dear Board of Directors

The updated SWRCB Compliance Order NO. 05-13-18R-002A1 included additional directives along with the needed wells for source capacity compliance. Directive 2.b of the updated compliance order requested an Asset Management Plan be completed by the system. The AMP must include an inventory of the System's infrastructure components, a description of the components' condition, age, service history, and useful life, criteria to determine when to repair, rehabilitate or replace assets, a prioritization of critical assets, long term funding strategies, and a timeline delineating the schedule for the System's asset management plan. Included will be engineering cost for replacement alongside the cost of using Sheep Creek resources. The scope of work will be rather large due to limited reports, maps/drawings, and records that are available and needed to complete the plan. Once the plan is complete, this will be an excellent resource for Sheep Creek moving forward with needed maintenance and replacement in the future.

Proposals have been received from two engineering firms to complete an asset management plan. The time frame to complete the AMP is between 5 – 6 months. The proposals are as follows:

- 1.) Engineering Resources of Southern California- amount not to exceed \$102,225 and will be billed on a "Time and Material". ERSC has given a timeline of 6 months to have the plan completed.
- 2.) Infrastructure Engineering Corporation- amount not to exceed \$49,700 and will be billed on a "Time and Material". IEC has given a timeline of 5 months to have the plan completed.

It is recommended that the Board approve the proposal from IEC for the completion of the Asset Management Plan. The 2020 SCWC Operating Budget has \$25,000 available for engineering and the remainder will come out of the Capital Improvement Account.

Thank you,



Chris Cummings  
General Manager  
Sheep Creek Water Company



## **Proposal to Provide an Asset Management Plan**

Submitted: August 4, 2020





August 4, 2020

Chris Cummings  
General Manager  
Sheep Creek Water Company  
4200 Sunnyslope Rd.  
Phelan CA, 92329

## **Re: Asset Management Plan**

Dear Mr. Cummings,

[Engineering Resources of Southern California, Inc. \(ERSC\)](#) is pleased to offer the following proposal for professional engineering services related to the development of an asset management plan for the Water Company. The content of this proposal is based on recent conversations with the Water Company staff and research conduct by [ERSC's](#) team members.

### **Project Understanding**

Sheep Creek Water Company received a compliance order No. 05\_13\_18R\_002A1 on March 17, 2020 for source capacity violation. The systems highest 10-year maximum daily demand (MDD) is 1,970,000 gallons per day and currently the system can only produce a combined source flow of 1,080,000 gallons per day resulting in a potential shortage of 890,000 gallons per day. On January 14, 2019 a feasibility report was prepared addressing the water source capacity issues which included an assessment of consolidation with a nearby public water system. The water company can either maintain the system as an independent water purveyor by drilling and operating additional water supply wells or have the system consolidated with Phelan Pinon Hills Community Services District. The Water Company's General Manager and board of directors would prefer to maintain the system as an independent water purveyor by drilling and operating additional water supply wells to meet MDD requirements. To ensure that the water supplied by the System is at all times reliable and adequate the State Water Resources Control Board Division of Drinking Water (Division) has directed the Water Company to prepare an asset management plan showing the financial health of the system and operational costs.

[ERSC](#) will provide the engineering-related tasks and team with NBS to provide the financial components for preparing the asset management plan. The financial component of this asset management plan will be a "financial" analysis, as opposed to an "economic" analysis and, therefore, cost projections will include inflation and costs will be stated in inflation-adjusted dollars. The intent is to have planning-level costs of  $\pm 30$ -percent accuracy. Also, costs will be presented under two alternatives: (1) costs with Company-provided labor and supervision, and (2) costs with contracted (outside) work.

### **Scope of Work/Study Tasks**

Based on our current understanding, ERSC anticipates providing the following services.

**Task 1 – Data Collection and Asset Inventory:** Collect and evaluate asset-related data necessary to categorize and tabulate asset information to obtain an inventory of the Water Company's assets. ERSC will review all information provided by the Water Company, tabulate the information, and then determine what additional information needs to be collected.

- As needed telephone conference with the Water Company to discuss system operation, types of assets, known condition of assets, current obstacles, system failures or deficiencies, system goals, and finances.
- Receive, organize, and tabulate information received from the Water Company to Prepare Asset

Inventory Lists for the Water Company's infrastructure and Physical assets, such as:

- Asset Classes/Types: Pumps, Wells, Water Tanks, Pipelines, Valves, Facilities, Generators, Equipment, Vehicles, Other Buildings, Heavy Equipment, and Misc. Administrative Office Equipment (not addressing financial related assets).
- Original Construction Date expected useful lives, accumulated depreciation, rehabilitation or replacement costs.
- Identify gaps in data.
- Recommend a strategy to obtain missing information.
- Work with Water Company personnel to determine optimal method(s) to add any missing asset subcategories .
- Recommend how asset inventory is to be reported out and tailor to Water Company needs and expectations.

**Task 2 – Condition Assessment:** ERSC will perform an external field evaluation of the Water Company's infrastructure to obtain information not received in Task 1 and evaluate the condition of the existing assets to determine the remaining life.

- Review existing Water Company collected condition assessment data and reports.
- Determine asset assessment methodology for each System.
- Develop a plan for obtaining necessary condition assessment data for the implementation of this project.
  - Prioritize areas for condition rating as a part of this project.
  - Recommend schedule for obtaining field determined condition assessment for the remaining areas in the System.
  - Assign condition assessment for remaining areas of the System.
  - Provide guidance, evaluation criteria, and integration strategy to assess asset failure risk, rehabilitation life cycle, and replacement as part of the overall asset management plan.
- Perform a visual exterior inspection and photograph the Water Company company's above grade accessible assets, including but not limited to, storage tanks, wells, pump houses, hydrants, valves, PRV's, buildings, equipment, rolling stock, and general/misc.
- If determined necessary, Assist the Water Company with procurement of contractor or engineering firms for specialized inspection/evaluations.
- Assess and estimate land use needs from adopted zonings based upon San Bernardino County General Plan.

**Task 3 – Determine Target Levels of Service for Asset System:** Based on the field evaluations and data received from the Water Company, ERSC will evaluate what the system is actually producing verses what the system is capable of producing and compare to the State and Federal Regulatory Requirements. If there are any short falls determine what is required to make up the difference.

- Evaluate the required Levels of Service per all State and Federal Regulatory requirements.
- Perform Gap Analysis between target Level of Service and current system performance.
- Compare with current Water Supply Assessments and past predictions.

**Task 4 – Determine Criticality of System's Assets (Risk of Failure):** Determine the rating of how critical each asset is to the water service the Company provides. ERSC will evaluate the system as a whole and work with the Water Company to determine the consequences if areas of the system were to fail, how the failure would affect the rest of the system, how quickly the system could be repaired, and



the costs to repair the system.

- Establish criteria for determining probability and consequence of failure.
- Determine probability for failure for each asset.
- Determine the consequence of failure for each asset.
- Calculate critical rating for each asset.
- Prepare recommendations for operations methodology and monitoring.

**Task 5 – Projection of Replacement/Rehabilitation Costs:** Asset data and costs will be used to project the future asset replacement and/or rehabilitation costs. These estimates will categorize assets by type and costs, along with the priority (or critically) placed on each asset as determined in Task 4. ERSC will document the industry standards used as the basis of remaining life of assets.

- Review and analyze all available historic financial data regarding life cycle costs of System's assets, including the normal expected replacement date based on industry standards and an assumed replacement criteria. For example, a "run until failure" may be assumed for some assets because of their low criticality to the rest of the system, while other assets with higher criticality factors may be planned for rehabilitation or replacements at 80% of their useful life.
- Analyze data gathered in condition assessment as it relates to projected fiscal needs for the Water Company.
- Prepare cost estimates for the current assets and additional assets required to meet MDD. This may include scheduled replacement/rehabilitation of critical assets (pumps, wells, storage) that will play an essential role in meeting future MDD.
- Summarizes of asset costs by type/category. These will be Excel-based tables of assets by type, date, costs, expected replacement dates, etc.
- Projected annual costs assuming normal replacement/rehabilitation cycles.
- Perform gap analysis between projected revenue system needs. The gap analysis shows the relationship between the planned expenditures and available reserves and identifies projected shortfalls so that appropriate plans for additional revenues can be developed.
- Based on those projections, determine the optimal mix of spending on prioritization of operations and preventative maintenance, repair, refurbishment, replacement, and system expansion projects.

**Task 6 – Evaluate Rehabilitation/Replacement Plans and Alternatives:** The goal is to develop a master maintenance plan for the system by prioritizing each asset along with the cost so the Water Company can plan for the future repairs/replacements. This incorporates the findings of Task 4 and Task 5, and documents industry standards used as the basis of remaining life of assets.

Prepare projected annual costs under a base-case scenario and two additional alternatives. The purpose of these alternatives will be to address:

- A timing of and a priority plan for completing the most critical assets first.
- Various combinations of asset rehabilitation/replacement schedules that delay various projects based on rated criticality, annual costs, and available funding. This will reflect the funding gaps developed in Task 5; if significant funding gaps exist, one alternative might place a greater priority for minimizing the need to increase revenues (rate increases) by delaying non-critical replacements/rehabilitation projects.
- The two additional alternatives may also reflect, a percentage of the funding identified in the base case, such as a 75% of base case and 50% of base case.

**Task 7 – Prepare Funding Analysis for Alternatives:** Prepare funding plans for the base case and two alternatives developed in Task 6. This analysis of funding options differs from an attempt to actually

secure funding or apply for grants/loans, etc. That is, it would primarily evaluate the feasibility of, and identify the most favorable funding mechanisms, that the Water Company should pursue. We note that some smaller agencies feel that pursuing State and Federal grants or loans, like the State Revolving Fund (SRF) loans are too time-consuming compared to the benefits they offer. Other agencies are willing to endure the long application process and waiting period to get this type of funding. The decision is usually based on the Board's assessment of the cost-benefits of government program funding.

- Utilizing a combination of funding sources identified by the Water Company to prepare funding for the base case and each alternative identified in Task 6. Potential sources of additional/future funding may include increases in:
  - Water rates
  - Assessments
  - Base charges
  - Private debt
  - Revenue from new connections
- We will rely on the Company to establish their priorities for each funding source based on the total annual funding needed. In other words, NBS will provide the total annual costs by alternative and the Company will assist in prioritizing the percent of funding from each funding source.

#### **Task 8 – Generate Asset Management Report**

- Synthesize all of the material in the previous tasks into a comprehensive Asset Management Plan .
  - The plan will include a concise executive summary that tells the story in a way that is understandable to the community, board, and decision makers.
- The plan will include creation of Standard Operating Procedures for each asset that are readily understandable to personnel who implement the procedures.
  - Procedure will include:
    - Ongoing operations and maintenance protocols.
    - Ongoing update criticality ratings.
    - Ongoing data management and collection.
    - Ongoing CIP programing.
    - Ongoing Financial analyses.

**Task 9 – Meetings:** We proposed a series of conference calls with the Water Company and ERSC's team to review initial results and findings, solicit input, and prepare final work products. At the Company's discretion, an optional public meeting could be added to present the findings at a public meeting. ERSC's team will attend up to five (5) conference call meetings to provide overview of this analysis and answer questions. Additional meetings can be provided if requested but are not included in the proposed study budget.

#### **Task 10 – Formalize Optimal Operations and Maintenance (O&M) Program (Optional)**

- Assemble, review, and document existing O&M procedures used for the system.
- Recommend revisions and additions to the existing procedures to maximize the life of the System's assets, and contribute to achieving the desired Level of Effort.
  - Recommendations will include alternative methods for maintenance.
  - Recommendations will address optimal methods for field data capture.
- Set up decision making trees to determine whether to maintain and repair, refurbish, or replace each asset.
- Perform Gap analysis between existing resources (including equipment, staffing, and materials) and

those necessary for optimizing O&M.

- Develop an overall O&M Program that strives for the lowest average life-cycle cost.

**Task 11 – Asset Management Software selection and Implementation (Optional)**

- Research and recommend software compatible with the Water Company's system.
  - Preferable software to work with other City Management efforts.
  - Software with capabilities to readily create Water Company desired reports.
  - Decision making capabilities to assist in Gap Analyses throughout the project.
  - Decision making capability for balancing system recommendations and available resources.
  - Capable of assisting in long-term financial planning.
- ERSC will purchase City-approved software.
  - A lump sum of \$100,000 for software (purchase only) is included in the cost proposal.
- ERSC will utilize the software throughout the project.
- ERSC will transfer the license and fully-loaded data vehicle to the Water Company upon completion of the project.
- Training of Water Company Staff (up to 8 staff) for software use and maintenance is included.

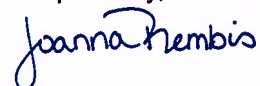
**Project Schedule:** ERSC would like to begin this analysis expeditiously as demonstrated in the attached project schedule. Our initial estimate for a timeline is roughly six months to complete this asset management plan. The timeline will depend on the accuracy of the information provided and if additional specialty research will be required gather information. The following is the estimate fees for the project and does not include additional special studies that may be required for condition assessment, soil testing or multiple revision of the analysis if the information needs to be updated after the initial analysis.

**Estimated Fees:** In general, the nature of work outlined above lends itself to work on a time and materials basis. Based on the limited information provided the hours estimated for this project are based on a worst-case scenario basis. If the Water Company has staff resources to handle some of the above noted tasks, ERSC can reduce their hours accordingly. The Water Company would assume liability for the data and work product they produce. The fee schedule is broken down into the level of effort anticipated by each classification for each task identified above. ERSC will bill monthly only for the hours used for each task item and ERSC will not exceed the maximum hours indicated in each task without prior written authorization from the Water Company.

Miles will be charged when the Engineers make field visit to determine the condition of the Water Company's assets and for attending meetings in person with the Water Company. The mileage will begin at ERSC's Redlands office. A Schedule of Hourly Rates has been attached that will provide the basis for time and materials work and the fees and charges associated with items of work assigned on a task-by-task basis.

Thank you of the opportunity to serve the Water Company. ERSC proposal and pricing will be valid for 180 days from the date received. If you have any questions regarding this proposal, please contact us at (909) 890-1255.

Respectfully,

A handwritten signature in blue ink that reads "Joanna Rembis".

Joanna Rembis, PE  
Principal Engineer

A handwritten signature in blue ink that appears to read "John M. Brudin".

John M. Brudin, PE  
President



### Erik Howard, PE | Sr. Principal Engineer

Erik Howard has 29 years of complex project surveying, engineering and management experience in water, wastewater, and civil engineering including below ground waterlines, welded steel reservoirs, well and booster pumping plants, groundwater recharge facilities, and street improvements including records searches, surveying, utility verification, design, review, preparation of contract documents (construction drawings and specifications), and construction observation (inspection).

His civil engineering portfolio includes site design and access roadway design for various water, wastewater, and civil projects including site selection and evaluation, hydrology studies, determination of grading requirements, piping layout, utility relocation, and cost estimates. His professional surveying portfolio includes preparation of records-of-survey, legal descriptions, conveyance documents, topographic surveying, construction staking, boundary surveying, and monumentation. He has also performed contract administration and construction management for various projects, as well as provided expert witness services, legal testimony, and assisted in forensic studies on an as-needed basis.

His most recent projects include serving as program manager, project manager, surveyor and engineer for portions of the County of San Bernardino – Special Districts Department Lake Gregory Dam Rehabilitation Project, San Geronio Pass Water Agency Groundwater Recharge Facilities (State Aqueduct Turnouts and Pipelines), Eastern Municipal Water District Quail Valley Sewer Conversion Project, and County of San Bernardino Regional Parks Department Horseshoe Lake Restoration and Levee Repair Project.

### Joanna Rembis, PE | Principal Engineer

Ms. Rembis has more than 20 years' experience in the field of Project Engineering/Project Management, Field Inspection and Customer Support - 12 of which she spent as a Project Manager. Her experience includes preparing specifications, plans, and bid packages for rehabilitation and design of new tank projects. Ms. Rembis can also assist in generating and editing technical reports and photo surveys and provides quality control inspection and construction management services for various projects including water tanks, pipelines, and cathodic protection.

She developed the specifications and plans for the rehabilitation of over 500 welded steel, bolted steel, and concrete reservoirs and for the construction of 20 plus new welded steel and bolted steel tanks. Technical specifications have included earthwork, masonry, concrete, rebar, tank construction, Cal/OSHA safety, coatings, piping, valves, cathodic protection, electrical, and roofing.

She prepared and provided cost estimates to clients for new projects. Conducted QA/QC for the projects and reviewed all major deliverables before delivered to clients. Maintained regular communication with clients to ensure compliance with the established project goals and execution.

### Robert Righetti | Principal Engineer

Over the past 45 years, Mr. Righetti has provided municipal engineering and survey/mapping/easement and plan check and development review services to a number of cities in Southern California. During that time, he spent a combined 35 years as a Development Services Engineer for the Department of Public Works and Engineering for the City of Huntington Beach, as well as personally working on a contract basis with the cities of Garden Grove, Tustin, Yorba Linda, Moreno Valley, San Bernardino, Rancho Mirage, La Mirada, La Quinta, Palm Desert, Palm Springs, Indio and Eastern Municipal Water District. Mr. Righetti's typical duties have included, but were not limited to, the following:

- Directed project teams in providing review and impact mitigation conditioning of all land development cases.
- Handled capital project administration and project management.

## Project Team - ERSC

- Managed and prepared the documentation and processing of right-of-way and specialized easements for the construction of public infrastructure
- Conducted traffic study review and approval.
- Prepared staff reports to the Planning Commission and City Council.
- Prepared departmental budget projections, capital improvement program plans, development agreements, inter-agency memorandums of understanding, grant applications, and contract bid packages.
- Handled public agency liaison, citizen complaints and community coordination.
- Directed teams for plan check processing and construction field review.
- Performed on-call plan check, constructability review and project management for all cities he has worked in.
- Reviewed maps, legal descriptions and plats for technical accuracy and conformance with the Subdivision Map Act for many of the cities where he has worked.
- Prepared department policy documents, practice manuals, design standards, checklists and handouts for the public counter of the City's Engineering and Public Works Department including checklists and criteria for Water Quality Management Plans and Storm Water Pollution Prevention Plans (SWPPP's).
- Provided City services to assist with plan review, design of public works projects, review of specific plans and related environmental documents, management of Capital Improvement Programs (CIP), review of traffic plans and studies, and review and inspection of landscape drawings.
- Provided Constructability review, value engineering and construction management services for numerous cities in southern California.
- Worked as a key member of the Project Development Team for a number of alignment and re-alignment planning and construction packages in Riverside, Orange, Los Angeles and San Bernardino County.
- Provided peer review and project administration for Community Facilities Districts and other types of special districts and funding plans in many of the cities for which he has worked.

### John G. Egan, PE | Sr. Principal Engineer

In a lengthy career of over 50 years, Mr. Egan has been extensively engaged in the execution and/or project management for the planning and design of municipal and utility/special district service facilities. Completed projects include water and wastewater master plans, rate analyses, transportation, drainage, and pedestrian access features, and water supply and wastewater management facilities. Representative are street, sidewalk and pavement rehabilitation projects for the Cities of Highland, San Bernardino, Loma Linda, Jurupa Valley and Cathedral City. Completed design for water supply features include well construction and equipping, booster pumping stations, pipelines, storage and treatment for the 29 Palms, Apple Valley Heights, Arrowbear Park, Eastern Municipal, Idyllwild, Pine Cove and Hi-Desert Water Districts, and for the Western Heights and Riverside Highland Water Companies.

## Project Team - NBS

### Greg Clumpner | NBS Team Leader

Greg Clumpner joined NBS nine years ago as the director of NBS' Utility Rate Practice. His 35-year professional career has focused on cost-of-service rate studies for municipal water, sewer, and solid waste agencies. He has given many technical presentations at industry conferences and published a number of utility rate-related articles in the Journal of AWWA. Greg's experience also includes preparing bond feasibility studies, valuations, and litigation support. Prior to joining NBS, he created and managed Foresight Consulting for six years, where his practice focused on water, sewer and solid waste rate analyses. He has completed 400+ similar studies during his career and, because of his work with Prop 218 legal experts on an on-going basis, he knows when to solicit legal advice to ensure rates meet legal requirements.

### Jordan Taylor | Consultant

Jordan has a Bachelor of Science degree in Chemistry and a Master's Degree in Business Administration with an emphasis in Finance and offers more than 10 years of accounting experience along with extensive knowledge of financial analysis and budget planning.

### Alice Bou | Consultant

Alice has a Bachelor of Art degree in Literature and 20 years of financial, accounting, and risk management experience in private industry.



## Firm Experience

### VARIOUS ASSIGNMENTS, RIVERSIDE HIGHLAND WATER COMPANY

ERSC staff has completed a number of assignments for the Riverside Highland Water Company (RHWC) concerning financial strategies, facility assessments, planning and design. RHWC service area includes the City of Grand Terrace, a small portion of the City of Colton and portions of San Bernardino and neighboring Riverside County, approximately 4,000 customers.



Don Hough, General Manager  
(909) 825-4128  
dhough@rhwco.com

Work completed by ERSC, most in recent years, includes:

- Review of probable development, needed capital project asset additions and recommendations for adjustment in capacity charge connection fees.
- Blending evaluation, involving determination of asset expansion and/or use reallocation for mixing of low-nitrate water sources with higher-nitrate sources, as an alternative to treatment plant installation.
- Review and analysis of planned/budgeted operational, treatment, SWP water purchases, and capital project expenditures for impact upon proposed rate increase for five-year forecast.
- Analysis of proposed rate surcharge increase to provide financial resources for required asset additions.
- Wells discharge and routing strategy analysis to effect lower nitrate concentration of blended water.
- Review/analysis of proposed stock sale.
- Water Supply Assessment for proposed development project-The Gateway Project.
- Research/review of easements for Company pipelines and access.
- Design of numerous pipeline projects, 8" to 24" in diameter, including crossing of Interstate 215 at Barton Road.

### DISTRICT ENGINEER, PINE COVE WATER DISTRICT, PINE COVE, CA

ERSC, Inc. has served for the past 15 years under a contract with the District to perform on-call engineering consultation services. Services have included Master Planning, infrastructure modeling, civil engineering design for water mains, above ground reservoirs and tanks, water supply assessment and more. Work has also included working with District staff to develop asset management reports for the District Board to evaluate current and future needs, cost-benefit analysis and service life evaluations.



Jerry Holldber, General Manager  
(951) 659-2675

### GENERAL ENGINEERING, WATER ENGINEERING, DEVELOPMENT PLAN CHECK AND CONSTRUCTION SERVICES, CITY OF GARDEN GROVE

Under a broad municipal services contract with the City of Garden Grove since 2005, ERSC provides a broad range of engineering services for the City of Garden Grove Engineering Division, Water Division and Community Development Division on an on-call basis. ERSC provides temporary staffing and support for land use and private/public infrastructure improvements, including planning, plan check services, construction management, and inspection services and other duties as requested. The City of Garden Grove operates and owns its own water and sewer city-wide system.



William E. Murray, Public Works Director  
(714) 741-5379  
wem@ci.garden-grove.ca.us

Services have included assisting city staff to augment resources for all City infrastructure projects, including but not limited to:



## Firm Experience

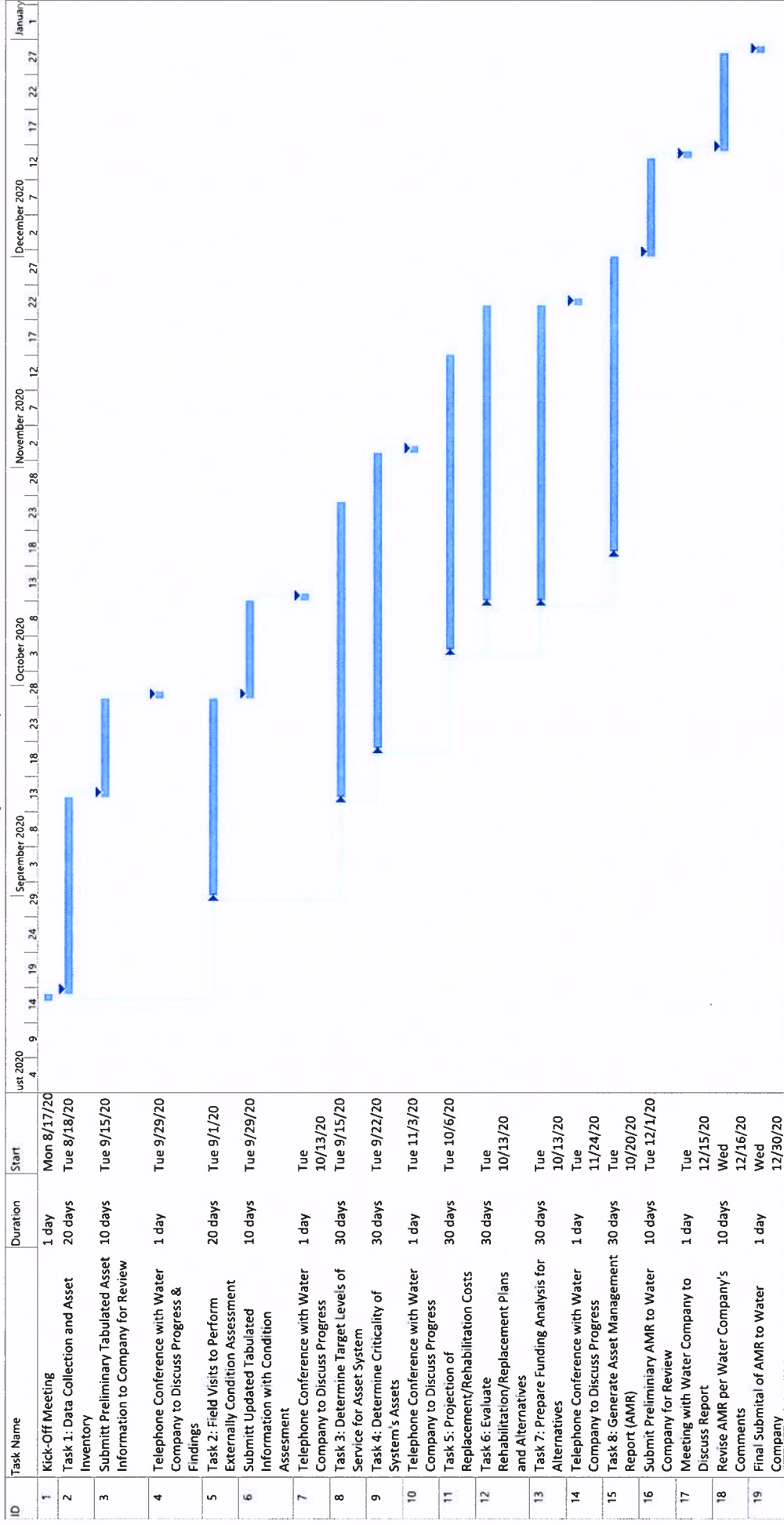
- Master Planning analysis/Asset analysis, management review and reporting
- Model review evaluation and review for public infrastructure
- Tract and Parcel Maps review
- WQMP and Water Quality Assessment and review
- Street and public infrastructure Improvements inspection and review
- Right-of-Way analysis and acquisition
- Review of Environmental Documentation for CEQA/NEPA
- CC&R Review
- Hydrology and Water masterplan review
- Storm Drain masterplan review

Construction management and inspection services include coordination of CIP projects awarded to contractors for compliance with plans and specifications; review of monthly progress pay estimates for compliance with specifications and provide monthly payment recommendations; monitor contractor's progress to ensure project schedules are met; assist and advise District staff with post-construction activities; review, assess and manage claims submitted by contractors.

Additional services have also included grant application preparation, engineering reports for grants, the management of projects that require special reporting to state or federal agencies to assure compliance with loan or grant conditions.



Sheep Creek Water Company  
Asset Management Plan Project Schedule





## Engineering Resources of Southern California, Inc. | Schedule of Rates 2020

### Professional Staff

President .....	\$240.00
Vice President .....	\$215.00
Sr. Principal Engineer .....	\$205.00
Principal Engineer .....	\$195.00
Assistant Principal Engineer .....	\$165.00
Engineer V .....	\$150.00
Engineer IV .....	\$135.00
Engineer III .....	\$120.00
Engineer II .....	\$105.00
Engineer I .....	\$95.00

### Engineering Staff

Principal Engineering Associate .....	\$185.00
Senior Engineering Associate .....	\$160.00
Engineering Associate V .....	\$130.00
Engineering Associate IV .....	\$115.00
Engineering Associate III .....	\$105.00
Engineering Associate II .....	\$95.00
Engineering Associate I .....	\$85.00
Engineering Aide II .....	\$45.00
Engineering Aide I .....	\$40.00

### Survey Staff and Services

Principal Surveyor .....	\$185.00
Senior Surveyor .....	\$150.00
2-Man Survey Crew (Std Equipment/Truck) .....	\$290.00
1-Man Survey Crew (Std Equipment/Truck) .....	\$220.00
3rd Man on Survey Crew .....	\$120.00

### Construction Support Staff

Construction Manager .....	\$160.00
Resident Engineer .....	\$150.00
Owner's Representative .....	\$160.00
Sr. Construction Inspector .....	\$120.00
Construction Inspector .....	\$115.00
Inspector Overtime (Hours 8-12) .....	\$156.00
Inspector Overtime (Hours 12+) .....	\$194.00

### Administrative Staff

Operations Specialist .....	\$75.00
Administrative Assistant I .....	\$60.00
Administrative Assistant II .....	\$67.00

### Other Direct Expenses

Vehicle Mileage .....	\$0.70/Mile
Subconsultant .....	Cost + 20%
Reimbursable Expenses/Charges .....	Cost + 15%
Forensic Analysis .....	Standard Rate X 2
Expert Witness .....	Standard Rate X 3

NOTE: All rates are subject to change to reflect annual inflation and cost of living adjustments. Prevailing Wage Rates are dictated by the California Department of Industrial Relations (CADIR). All above classifications which are subject to Prevailing Wage Rates will be adjusted as revised rates are published by the CADIR.

Unless otherwise established by contractual agreement, payment is due any payable upon receipt. Payment is considered delinquent if not paid within 30 days of invoice date. If payment is not completed within agreed terms, Client agrees to pay a service charge on the amount past due at the rate of 11/2% per month (18% per annum).





Infrastructure Engineering Corporation

August 7, 2020

Chris Cummings, General Manager  
Sheep Creek Water Company  
4200 Sunnyslope Rd  
Phelan, CA 92371

**Subject: Proposal to Provide Sheep Creek Water Company (SCWC)  
Engineering Services to Develop an Asset Management Plan**

Dear Mr. Cummings:

Infrastructure Engineering Corporation (IEC) is pleased to submit our proposal to provide services to prepare an Asset Management Plan for the Sheep Creek Water Company (SCWC). This request comes in response to a request by the State Water Resources Control Board (SWRCB), dated March 17, 2020 for the development of an Asset Management Plan (AMP).

Our scope of work is attached as Exhibit "A" describing Tasks 1 through 4 and deliverables. Our scope includes items required by the SWRCB and educating the SCWC Board of Directors and staff towards implementation and acceptance.

Our schedule is attached as Exhibit "B" and considers review time for both SCWC and DDW to ensure acceptance of the final AMP. We anticipate completing the AMP within 5 months.

A tabular summary of the proposed work tasks, level of effort, and fee is shown below. We propose to complete the work on a time and materials, not-to-exceed (NTE) basis with monthly progress invoices.

Task Number	Staff Title	Principal QA/QC	Project Manager	Engineer II	Engineering Intern	Word Processor	Subtask Labor-Hours	Subtask Labor Cost	Direct Cost	Subtotal Cost
	Rate	\$260.00	\$225.00	\$150.00	\$85.00	\$100.00				
Task 1		4	12	24		1	41	\$7,400		\$7,400
Task 2		4	36	48	24	1	113	\$18,500	\$200	\$18,700
Task 3		4	36	48	24	1	113	\$18,500	\$200	\$18,700
Task 4		8	12			1	21	\$4,900		\$4,900
Task Subtotal - Hours		20	96	120	48	4	288			
Task Subtotal - Costs		\$5,200	\$21,600	\$18,000	\$4,080	\$400		\$49,300	\$400	\$49,700

We sincerely appreciate the opportunity to provide these services. If you have any questions, please don't hesitate to contact me at (661) 529-2190 extension 101.

Sincerely,

Dolores Salgado, PE  
Senior Project Manager



**EXHIBIT "A"**  
**SHEEP CREEK WATER COMPANY**  
**ASSET MANAGEMENT PLAN**  
**SCOPE OF WORK**

**TASK 1 - Information Gathering**

IEC will hold a kick-off meeting with SCWC to establish the goals, needs, and desires of the Asset Management Implementation Plan, confirm project objectives, discuss approach and criteria, establish lines of communication, and discuss data availability. In addition, we will decide on a mutually agreeable digital deliverable format for ease of use throughout this project. IEC will prepare meeting agendas and minutes for all meetings.

A review will be conducted of previous reports by the SCWC, California Rural Water Association and/or consultants related to their water infrastructure. In addition to the kick-off meeting, IEC will meet with SCWC two (2) additional times to review existing information and procedures that are in place that are necessary to support the development of the Asset Management Plan. IEC will determine how information is collected and stored to help determine the current baseline to support development of the asset management program. IEC evaluation will include, but may not be limited to, the following:

- GIS data
- Water quality monitoring and testing results
- Maintenance and Operations records
- Work Orders and Repair History
- Production and Billing Records
- Supervisory Control and Data Acquisition (SCADA) system
- Previously developed CIP programs

IEC does not anticipate performing a detailed analysis of the information available under this task, but rather just determine what procedures and information is currently available and in what format to support developing an implementation approach.

A data/document inventory will be maintained that lists the data/documents received from the SCWC, the date received, and if the data needs to be returned to the SCWC. This inventory will be updated as new information is received and supplied to the SCWC at status meetings.

**DELIVERABLES:**

- ✓ Data/Document Inventory
- ✓ Agenda and Minutes for kick-off meeting and two (2) additional information gathering meetings

**TASK 2 - Asset Management Vision/Philosophy**

After reviewing all available data sources and formats, IEC will hold a workshop with SCWC to determine the ultimate goals and outcomes desired from the Asset management Program. In this workshop, IEC will provide examples from other water companies to show the range of approaches that are being implemented by similar sized utilities. In order to facilitate discussion, IEC will prepare a set of preliminary, customized goals and outcomes for the SCWC prior to the workshop, which will include, but may not be limited to:

- Development of a predictive failure model for infrastructure

- Levels of Service (LOS) required for the water systems
- Regulatory Compliance
- Budget/Financial Goals/Long-term Funding Strategies
- Life-cycle of the Asset Management Plan
- Facility Monitoring Goals and Objectives
- Rehabilitation versus Replacement Objectives

From this workshop, IEC will develop an overall philosophy and approach, which will become the basis for implementing an Asset Management program. IEC will prepare the draft Asset Management Philosophy and Approach Technical Memorandum and submit an electronic copy to the SCWC for review and comment. Once the SCWC has accepted the philosophy and approach presented in the draft Asset Management Philosophy and Approach Technical Memorandum, IEC will develop specific strategies and options for an asset management program at the SCWC. The specific approach will include a gap analysis which includes the availability and format of each data source, and clearly indicates that the proposed data sources have already been collected by the SCWC.

IEC shall prepare a power point presentation summarizing the specific strategies and approach and schedule a workshop with the SCWC to facilitate review. IEC will incorporate SCWC comments and shall, within two (2) weeks of receipt, submit a final electronic copy of the Asset Management Philosophy and Approach Technical Memorandum to the SCWC.

**DELIVERABLES:**

- ✓ Asset Management Philosophy and Approach Technical Memorandum
- ✓ Agenda and Minutes for two (2) Philosophy and Approach workshops

**TASK 3 - Implementation Plan and Board Presentation**

Once the Asset Management Philosophy and Approach Technical Memorandum has been finalized, IEC will assist the SCWC in developing an overall Asset Management implementation plan, including a schedule and estimated probable costs. Estimates of probable capital costs provided will represent Order of Magnitude level costs as established by the American Association of Cost Engineers (AACE) and represent an accuracy of +50% to -30%.

The plan will help the SCWC identify how existing staff could be used to help support the effort along with outside expertise and help prioritize current data management/development efforts. IEC will prioritize the activities and provide a fully defined, sequential plan that will allow the SCWC to implement the proposed asset management program for managing its water infrastructure, based on resource and budget constraints and information that will be readily available. At a minimum, the Asset Management Plan will provide an approach for the SCWC to be able to estimate future infrastructure replacement and monitoring costs.

IEC shall prepare a power point presentation summarizing the implementation plan and schedule a workshop with the SCWC to facilitate review. IEC will incorporate SCWC comments from the workshop, and submit a draft electronic copy of the Asset Management Implementation Plan to the SCWC for review and comment. IEC will incorporate SCWC comments and shall, within two (2) weeks of receipt, submit five (5) final hard copies and one (1) final electronic copy of the Asset Management Implementation Plan to the SCWC.

IEC will prepare a presentation for the Board of Directors to outline the implementation plan and overall benefits to the SCWC.

**DELIVERABLES:**

- ✓ Asset Management Implementation Plan
- ✓ Agenda and Minutes for Asset Management Implementation Plan workshop
- ✓ Asset Management Implementation Plan Presentation for Board of Directors

**TASK 4 - Project Management and Administration**

IEC will include the use of management control tools and emphasize client communication. Prior to the implementation of the project, IEC will develop an initial project management and control plan. This plan will include: project instructions, which establish the project goals, schedule, task assignments and communication protocol; project work plan, which merges the scope of services with project milestones and individual task assignments for schedule and budget; and a project cost control program which establishes the benchmark and reporting methodology for the ongoing assessment of project completion and budget.

Client communication will be maintained by the Project Manager, Dolores Salgado. The Project Manager will coordinate all project activities within the project team and will be responsible for the development of progress submittals, will attend project coordination meetings with the SCWC, and will be responsible for the development of all interim and final deliverables.

The Project Manager shall provide monthly invoice statements, that includes progress to date addressing all scope of work tasks. In the event that the schedule is delayed at any point during the project, the Project Manager will identify the cause for the delay, as well as recommendations to bring the project "back on track."

**DELIVERABLES:**

- ✓ Monthly Invoices and Updated Schedules



Sheep Creek Water Company  
Project Timeline  
EXHIBIT "B"

ID	Task Name	Duration	Start	Finish	Jun '20 7 14 21 28	Jul '20 5 12 19 26	Aug '20 2 9 16 23 30	Sep '20 6 13 20 27	Oct '20 4 11 18 25	Nov '20 1 8 15 22 29	Dec '20 6 13 20 27	Jan '21 3 10 17 24 31
1	Project	101 days	Mon 8/24/20	Thu 1/21/21								
2	Task 1 - Information Gathering	25 days	Mon 8/24/20	Mon 9/28/20								
3	Kick-Off Meeting	0 days	Mon 8/24/20	Mon 8/24/20								
4	Information Gathering	10 days	Mon 8/24/20	Fri 9/4/20								
5	Meeting with SCWC	0 days	Fri 9/4/20	Fri 9/4/20								
6	Information Gathering	10 days	Tue 9/8/20	Mon 9/21/20								
7	Meeting with SCWC	0 days	Mon 9/21/20	Mon 9/21/20								
8	Information Gathering	5 days	Tue 9/22/20	Mon 9/28/20								
9	Task 2 - Asset Management Vision/Philosophy	35 days	Tue 9/29/20	Tue 11/17/20								
10	Preliminary Philosophy and Approach Preparation	10 days	Tue 9/29/20	Mon 10/12/20								
11	Asset Management Philosophy Workshop	0 days	Mon 10/12/20	Mon 10/12/20								
12	TM Preparation and Workshop	10 days	Tue 10/13/20	Mon 10/26/20								
13	SCWC Review of Draft Technical Memorandum	10 days	Tue 10/27/20	Mon 11/9/20								
14	Finalize Technical Memorandum	5 days	Tue 11/10/20	Tue 11/17/20								
15	Task 3 - Implementation Plan and Board Presentation	35 days	Wed 11/18/20	Wed 1/13/21								
16	TM Preparation and Workshop	15 days	Wed 11/18/20	Thu 12/10/20								
17	SCWC Review of Draft Implementation Plan	10 days	Fri 12/11/20	Mon 12/28/20								
18	Finalize Implementation Plan	10 days	Tue 12/29/20	Wed 1/13/21								
19	Board Presentation	0 days	Wed 1/13/21	Wed 1/13/21								
20	Task 4 - Project Management and Administration	101 days	Mon 8/24/20	Thu 1/21/21								

## CONSUMPTION 10-YEAR

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2020													
	-3%	3%	11%	-21%	16%	18%	4%	-100%	-100%	-100%	-100%	-100%	
Cons'n HCF	-33%	-27%	-43%	-58%	-46%	-40%	-44%	-100%	-100%	-100%	-100%	-100%	
Cons'n GPM	12,108	11,353	11,457	13,003	19,970	23,014	25,219	0	0	0	0	0	116,123
Cons'n A.F.	203	211	192	225	335	398	423	0	0	0	0	0	166
Ave GPDPP	27,795	26,062	26,302	29,850	45,846	52,833	57,894	0.000	0.000	0.000	0.000	0.000	286,583
	86,927,391	81,502,788	82,252,117	93,349,131	143,369,615	165,219,833	181,048,444	0	0	0	0	0	69,472
2019													
	-19%	-24%	-19%	-10%	-22%	-21%	-10%	-7%	-2%	5%	-15%	-1%	
Cons'n HCF	-31%	-30%	-49%	-47%	-53%	-49%	-46%	-43%	-40%	-36%	-28%	-20%	
Cons'n GPM	12,481	10,980	10,327	16,381	17,288	19,469	24,323	24,572	21,868	19,744	13,907	12,940	204,279
Cons'n A.F.	28,652	25,207	23,707	37,606	39,688	44,695	55,838	56,409	50,203	45,325	31,926	29,706	468,960
Ave GPDPP	89,599,906	78,826,483	74,137,008	117,601,886	124,112,268	139,770,334	174,617,811	176,403,437	156,995,886	141,741,713	99,840,565	92,896,918	1,221,212
2018													
	-15%	-7%	-37%	-41%	-40%	-35%	-40%	-39%	-39%	-39%	-16%	-18%	-30%
Cons'n HCF	15,360	14,461	12,701	18,206	22,082	24,730	27,000	26,417	22,364	18,762	16,399	13,123	231,605
Cons'n GPM	257	268	213	315	370	428	452	443	387	314	284	220	329
Cons'n A.F.	35,262	33,198	29,157	41,796	50,692	56,772	61,983	60,846	51,341	43,072	37,647	30,126	531,693
Ave GPDPP	110,271,041	110,978,826	118,204,411	130,705,448	158,525,588	183,455,592	193,834,049	189,652,181	165,907,748	134,696,719	121,656,341	97,352,463	1,406,885
2017													
	-18%	-41%	-27%	-33%	-17%	-39%	-27%	-15%	-16%	11%	2%	19%	-15%
Cons'n HCF	11,121	10,088	15,275	20,758	24,151	25,786	26,112	30,311	22,165	21,963	19,912	15,588	243,231
Cons'n GPM	186	187	256	359	405	446	438	508	384	368	345	261	345
Cons'n A.F.	25,531	23,159	35,066	47,653	55,443	59,196	59,945	69,585	50,885	50,420	45,713	35,785	558,381
Ave GPDPP	79,840,039	72,426,339	109,660,311	149,021,655	173,384,185	185,119,933	187,460,688	217,608,669	159,127,777	157,674,933	142,953,421	111,907,021	1,455,515
2016													
	-25%	10%	3%	-26%	-21%	11%	-21%	-17%	-28%	-35%	0%	-19%	-16%
Cons'n HCF	13,498	17,144	20,915	22,752	29,188	42,373	35,594	35,657	26,381	19,859	19,429	13,103	295,892
Cons'n GPM	226	318	350	394	489	734	596	597	457	333	336	220	421
Cons'n A.F.	30,986	39,356	48,014	52,232	67,007	97,274	81,712	81,857	60,561	45,589	44,604	30,081	679,274
Ave GPDPP	96,901,074	123,075,811	150,152,077	163,340,219	209,545,033	304,197,961	255,531,169	255,986,061	189,389,142	142,567,712	139,485,911	94,070,633	1,777,020
2015													
	-4%	-27%	-20%	-33%	-27%	-20%	-33%	-31%	-9%	-18%	-8%	-15%	-10%
Cons'n HCF	15,686	15,711	20,472	29,631	26,759	30,807	30,067	31,370	33,365	25,346	18,042	17,975	295,231
Cons'n GPM	263	291	343	448	533	504	526	526	578	425	312	301	420
Cons'n A.F.	36,010	36,068	46,997	68,023	61,430	70,723	69,025	72,015	76,596	58,187	41,418	41,266	677,757
Ave GPDPP	112,610,219	112,794,422	146,969,572	212,723,352	192,106,151	221,167,241	215,857,778	225,206,511	239,532,311	181,962,438	129,522,336	129,048,111	1,766,625
2014													
	17,899	18,812	18,885	30,747	35,306	39,612	46,285	35,211	38,411	33,592	20,749	19,044	354,552
Cons'n HCF	300	349	316	532	592	686	776	590	665	563	359	319	504
Cons'n GPM	41,091	43,187	43,353	70,585	81,051	90,937	106,256	80,833	88,180	77,117	47,632	43,719	813,941
Cons'n A.F.													
2013													
	17,965	15,582	20,215	30,811	36,733	38,221	44,989	43,058	36,655	30,752	19,423	16,096	350,501
Cons'n HCF	301	289	339	533	616	662	754	721	635	515	336	270	498
Cons'n GPM	41,242	35,771	46,408	70,732	84,327	87,743	103,281	98,848	84,149	70,598	44,588	36,952	805
Cons'n A.F.													46,763,566
2012													
	15,541	16,894	20,272	19,552	39,647	36,242	44,216	41,956	31,268	28,645	20,721	15,028	329,982
Cons'n HCF	260	313	340	339	664	628	741	703	541	480	359	252	468
Cons'n GPM													758
Cons'n A.F.													
2011													
	15,076	13,553	17,061	20,126	28,968	36,990	35,866	42,149	34,486	28,970	22,109	14,483	309,836
Cons'n HCF	253	251	286	348	485	640	601	706	597	485	383	243	440
Cons'n GPM													711
Cons'n A.F.													



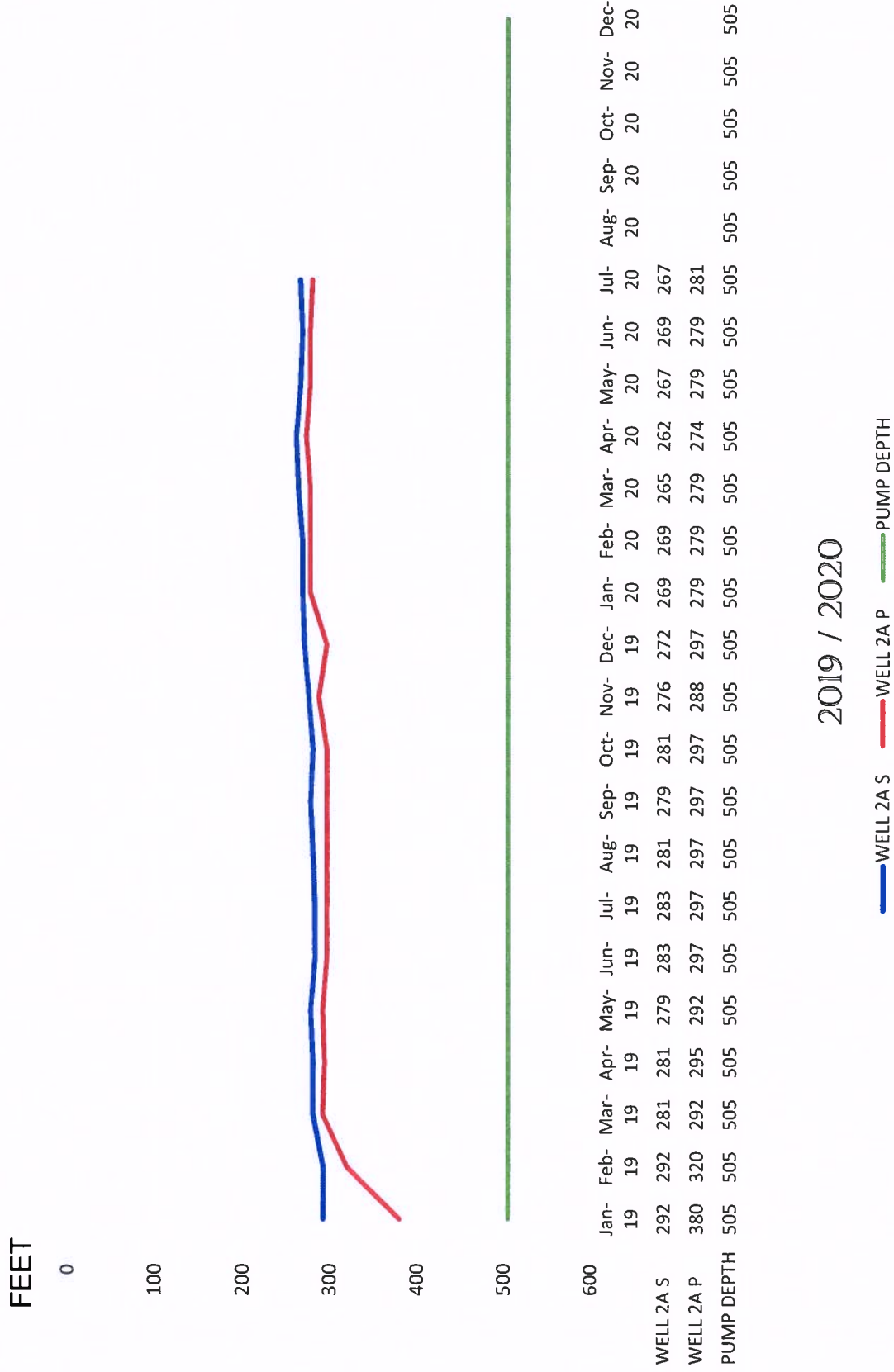


**AVERAGE GALLONS PER MINUTE**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
<b>2020</b>	26%	43%	40%	56%	51%	53%	62%	-100%	-100%	-100%	-100%	-100%	Compare 2019
Tunnel	123	122	122	123	127	131	133						
Well # 2A	250	279	262	306	286	292	344						
Well # 3A	0	312	324	327	318	311	311						
Well # 4A	272	292	250	319	292	302	372						
Well # 5	305	309	327	314	319	307	311						
Well # 8	270	284	295	367	367	367	348						
Well # 11	251	251	251	251	251	251	251						
<b>TOTAL G</b>	<b>1,471</b>	<b>1,849</b>	<b>1,831</b>	<b>2,007</b>	<b>1,960</b>	<b>1,961</b>	<b>2,070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	Compare 2018
<b>2019</b>	26%	-2%	0%	3%	13%	61%	155%	166%	155%	154%	70%	83%	
Tunnel	107	109	112	119	124	119	123	128	128	126	125	124	
Well # 2A	150	208	207	170	179	189	184	158	172	204	186	229	
Well # 3A	148	186	194	186	186	167	162	167	0	0	0	0	
Well # 4A	174	179	185	189	194	167	179	194	207	207	207	312	Pump Pulled 9-19
Well # 5	155	168	170	173	165	197	196	231	270	283	290	299	
Well # 8	181	193	193	198	198	192	195	258	259	242	285	263	
Well # 11	251	251	251	251	251	251	251	251	251	251	251	251	
<b>TOTAL G</b>	<b>1,166</b>	<b>1,294</b>	<b>1,312</b>	<b>1,286</b>	<b>1,297</b>	<b>1,282</b>	<b>1,278</b>	<b>1,372</b>	<b>1,287</b>	<b>1,313</b>	<b>1,344</b>	<b>1,478</b>	Compare 2017
<b>2018</b>	-40%	-27%	-16%	-12%	-19%	-42%	-57%	-49%	-48%	-48%	-17%	-21%	
Tunnel	131	129	127	125	125	124	122	121	119	118	118	116	
Well # 2A	0	150	175	135	125	55	30	30	25	25	30	30	
Well # 3A	115	211	122	195	167	33	25	25	25	25	25	25	
Well # 4A	199	194	251	194	168	99	60	60	60	60	60	60	
Well # 5	286	289	297	279	274	278	124	119	124	128	138	147	
Well # 8	320	325	337	317	284	205	141	161	152	161	167	179	
Well # 11	0	0	0	0	0	0	0	0	0	0	251	251	
<b>TOTAL G</b>	<b>1,051</b>	<b>1,317</b>	<b>1,309</b>	<b>1,245</b>	<b>1,143</b>	<b>794</b>	<b>502</b>	<b>516</b>	<b>505</b>	<b>517</b>	<b>789</b>	<b>808</b>	
<b>2017</b>	-35%	-40%	-43%	-48%	-45%	-11%	66%	58%	17%	6%	-28%	-37%	
Tunnel	147	145	147	148	147	147	143	140	137	136	136	134	
Well # 2A	214	274	0	0	0	50	50	50	50	107	107	0	
Well # 3A	330	330	345	295	301	280	180	143	115	115	115	115	
Well # 4A	370	333	333	333	253	200	200	144	130	154	154	184	Pump Pulled 11-17
Well # 5	353	372	372	355	353	353	280	257	238	244	258	275	
Well # 8	333	361	367	358	360	342	310	278	256	266	288	308	
<b>TOTAL G</b>	<b>1,747</b>	<b>1,815</b>	<b>1,564</b>	<b>1,409</b>	<b>1,404</b>	<b>1,372</b>	<b>1,163</b>	<b>1,012</b>	<b>968</b>	<b>998</b>	<b>951</b>	<b>1,016</b>	
<b>2016</b>													
Tunnel	184	182	177	176	170	168	165	162	159	157	154	150	
Well # 2A	381	500	559	534	468	213	44	38	38	45	111	167	
Well # 3A	537	646	530	635	610	225	28	31	90	114	183	286	
Well # 4A	659	729	556	478	439	193	94	52	132	157	267	333	
Well # 5	461	468	463	471	438	381	120	163	192	218	305	353	
Well # 8	458	476	438	433	444	365	248	194	217	254	297	326	
<b>TOTAL G</b>	<b>2,680</b>	<b>3,001</b>	<b>2,723</b>	<b>2,727</b>	<b>2,569</b>	<b>1,545</b>	<b>699</b>	<b>640</b>	<b>828</b>	<b>945</b>	<b>1,317</b>	<b>1,615</b>	
<b>2015</b>													
Tunnel	256	253	248	203	203	214	210	204	201	196	193	189	
Well # 2A	0	749	625	573	533	537	524	491	418	417	439	479	
Well # 3A	693	680	678	705	652	641	631	613	586	591	583	583	
Well # 4A	883	905	818	759	881	697	697	625	625	625	625	875	
Well # 5	551	551	547	537	513	497	488	471	451	452	459	460	
Well # 8	463	454	465	460	444	467	467	333	361	361	333	405	
<b>TOTAL G</b>	<b>2,846</b>	<b>3,592</b>	<b>3,381</b>	<b>3,237</b>	<b>3,226</b>	<b>3,053</b>	<b>3,017</b>	<b>2,751</b>	<b>2,647</b>	<b>2,637</b>	<b>2,643</b>	<b>2,991</b>	
<b>2014</b>													
Tunnel	303	299	294	291	287	283	279	276	273	268	265	260	
Well # 2A	1,156	1,156	1,156	1,148	1,015	985	886	733	688	630	0	0	Nov- Pump Pulled
Well # 3A	617	617	617	641	706	685	664	652	619	637	657	679	
Well # 4A	883	883	888	919	882	851	772	903	667	667	760	760	
Well # 5	317	317	326	326	259	259	258	310	301	306	0	0	Oct- Pump Pulled
Well # 8	505	506	499	496	485	471	450	463	406	459	438	438	
<b>TOTAL G</b>	<b>3,781</b>	<b>3,778</b>	<b>3,790</b>	<b>3,821</b>	<b>3,634</b>	<b>3,534</b>	<b>3,309</b>	<b>3,337</b>	<b>2,954</b>	<b>2,967</b>	<b>2,120</b>	<b>2,137</b>	

# SHEEP CREEK WATER COMPANY

## WELL #2A Monthly Water Levels / 2 years



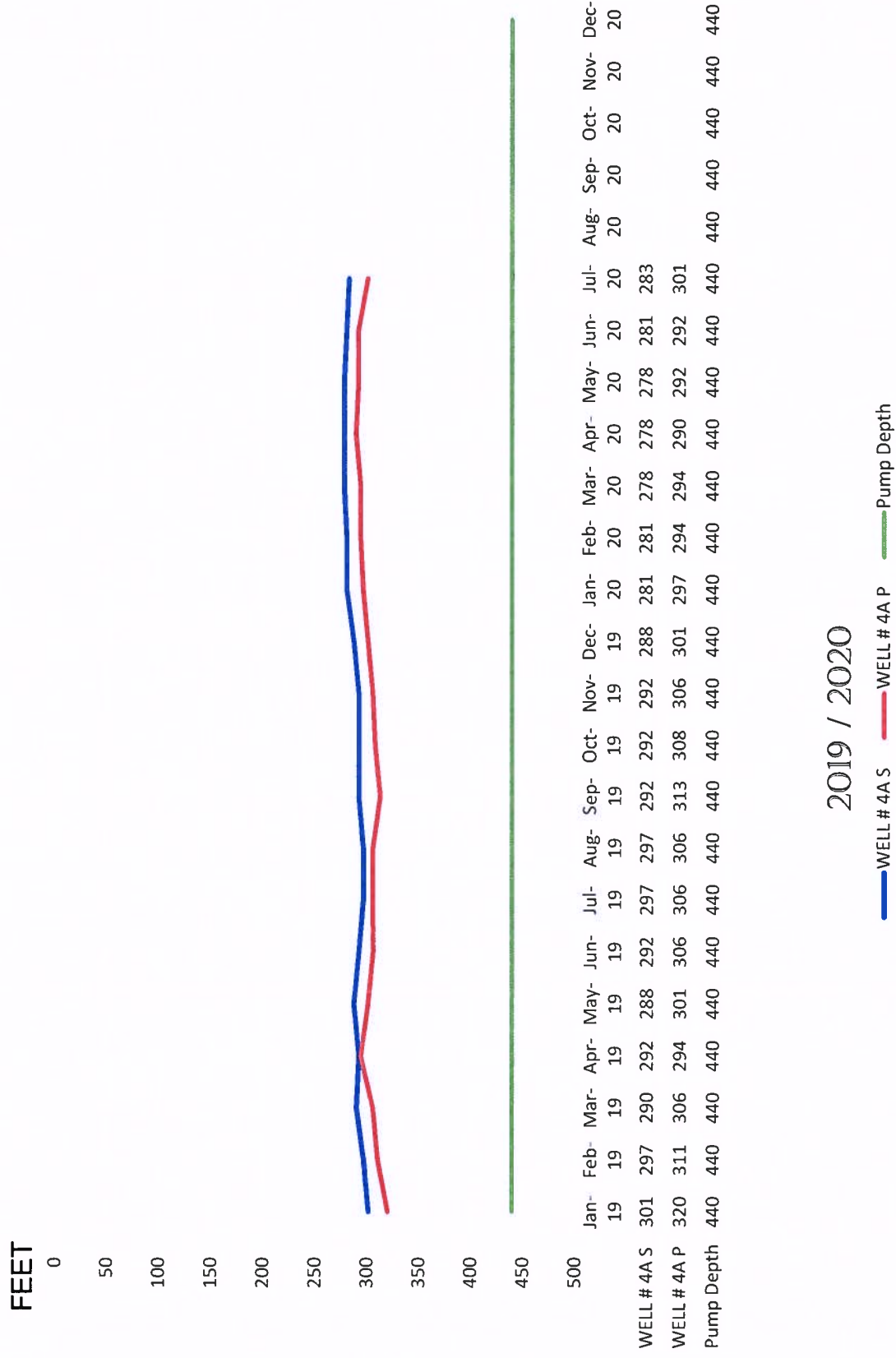
2019 / 2020

## WELL #3A Monthly Water Levels / 2 years



# SHEEP CREEK WATER COMPANY

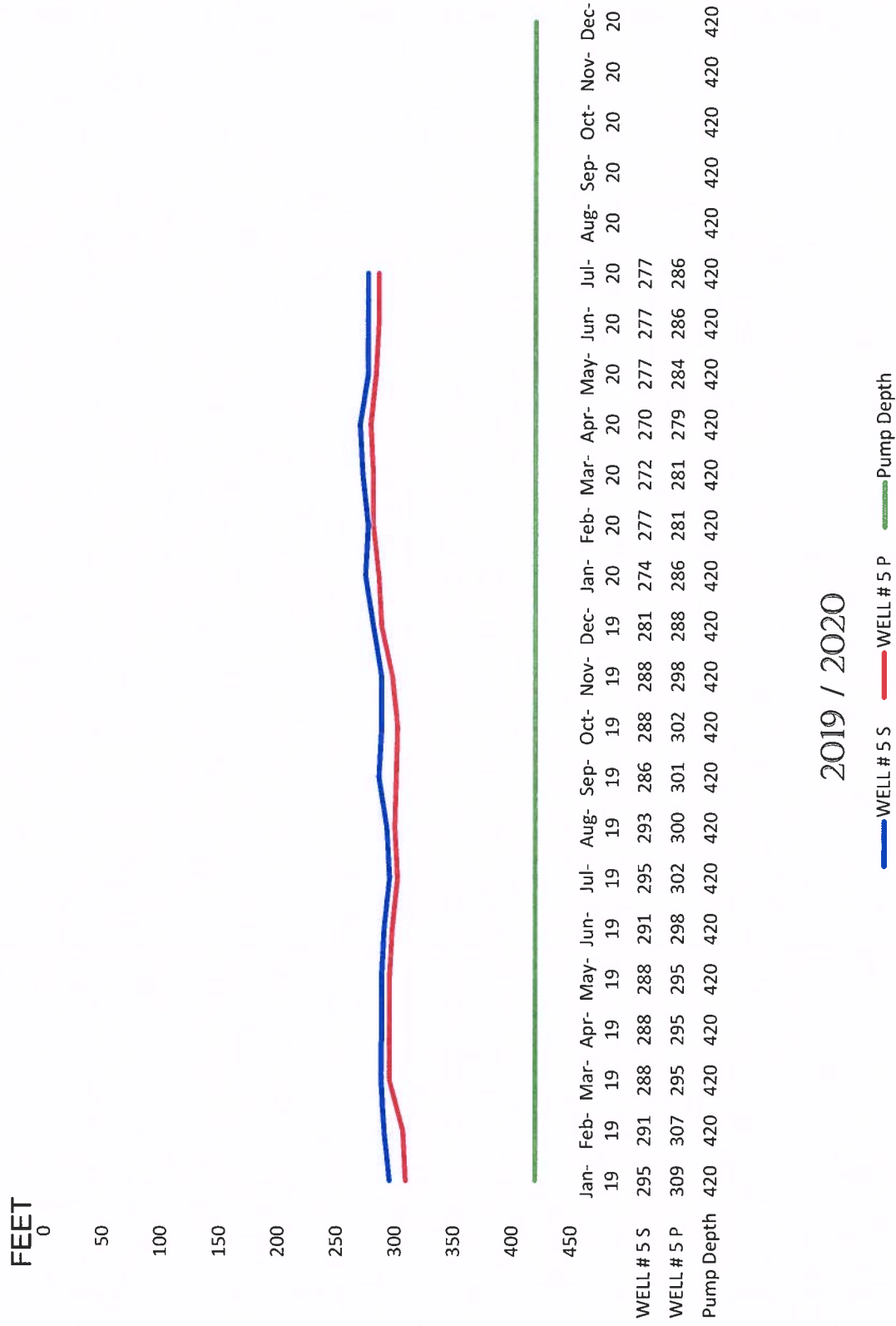
## WELL #4A Monthly Water Levels / 2 years



2019 / 2020

# SHEEP CREEK WATER COMPANY

## WELL #5 Monthly Water Levels / 2 years



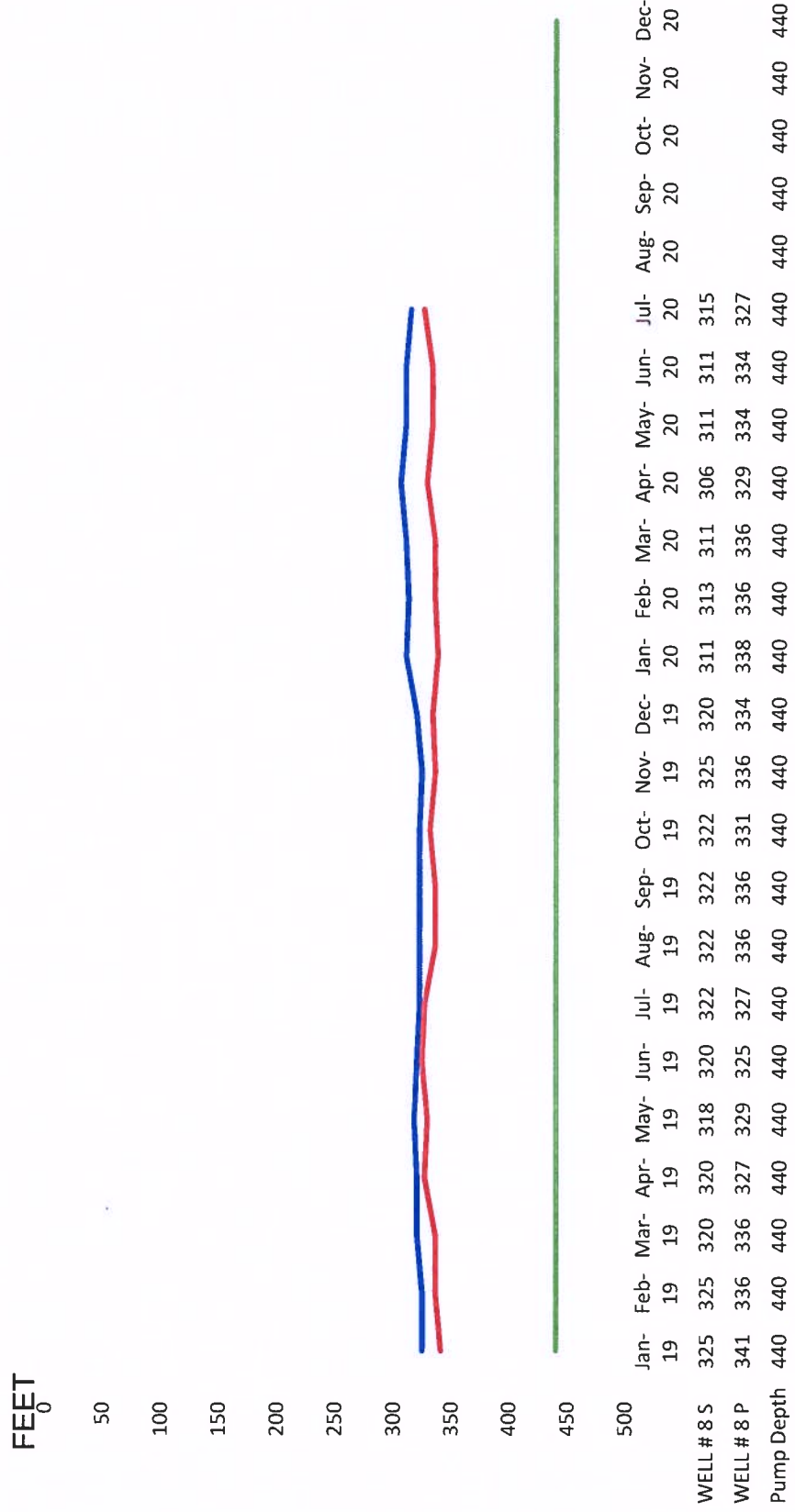
2019 / 2020

— WELL #5 S — WELL #5 P — Pump Depth



# SHEEP CREEK WATER COMPANY

## WELL #8 Monthly Water Levels / 2 years

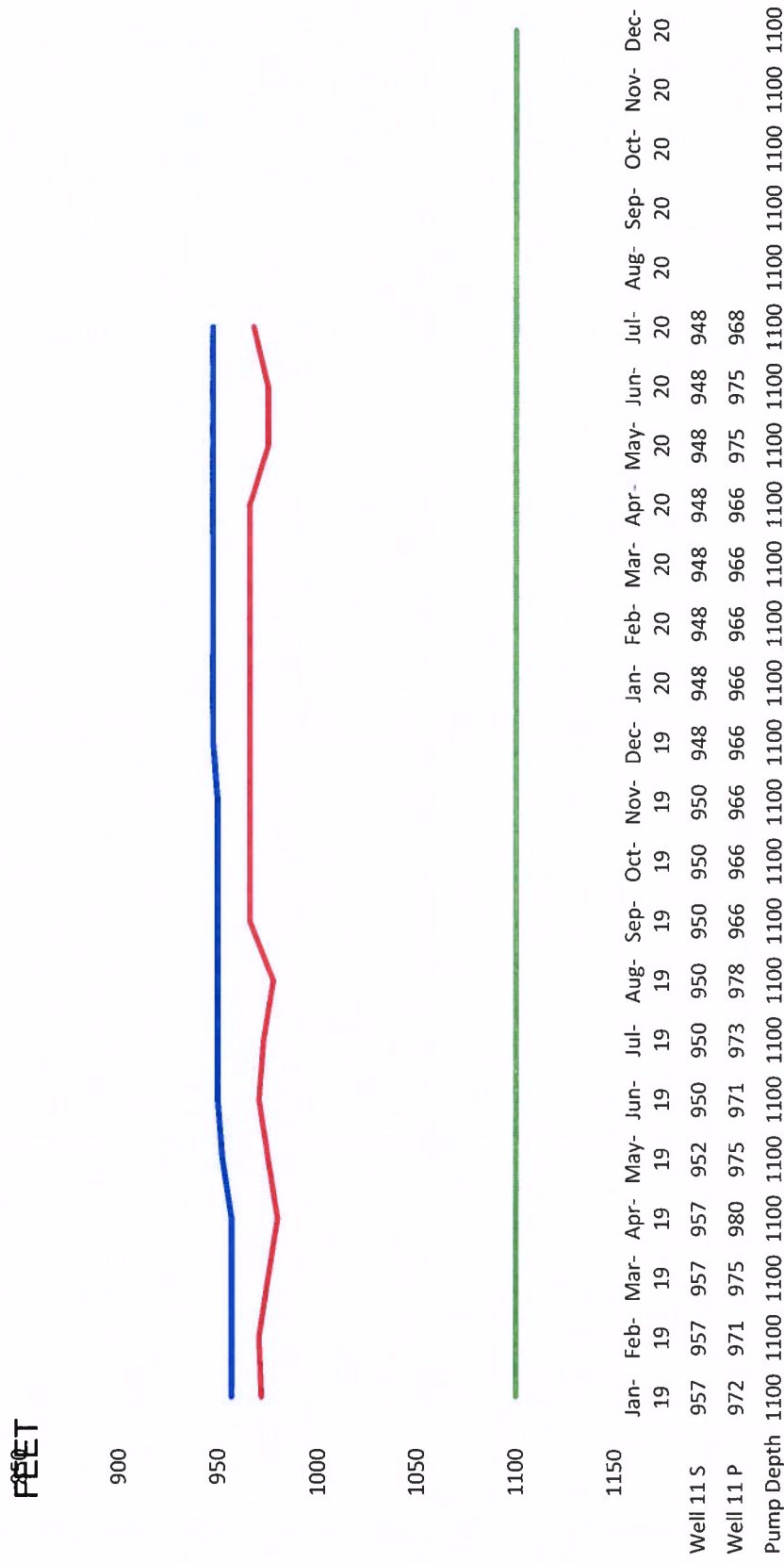


2019 / 2020

WELL # 8 S    WELL # 8 P    Pump Depth

# SHEEP CREEK WATER COMPANY

## WELL #11 Monthly Water Levels / 2 years

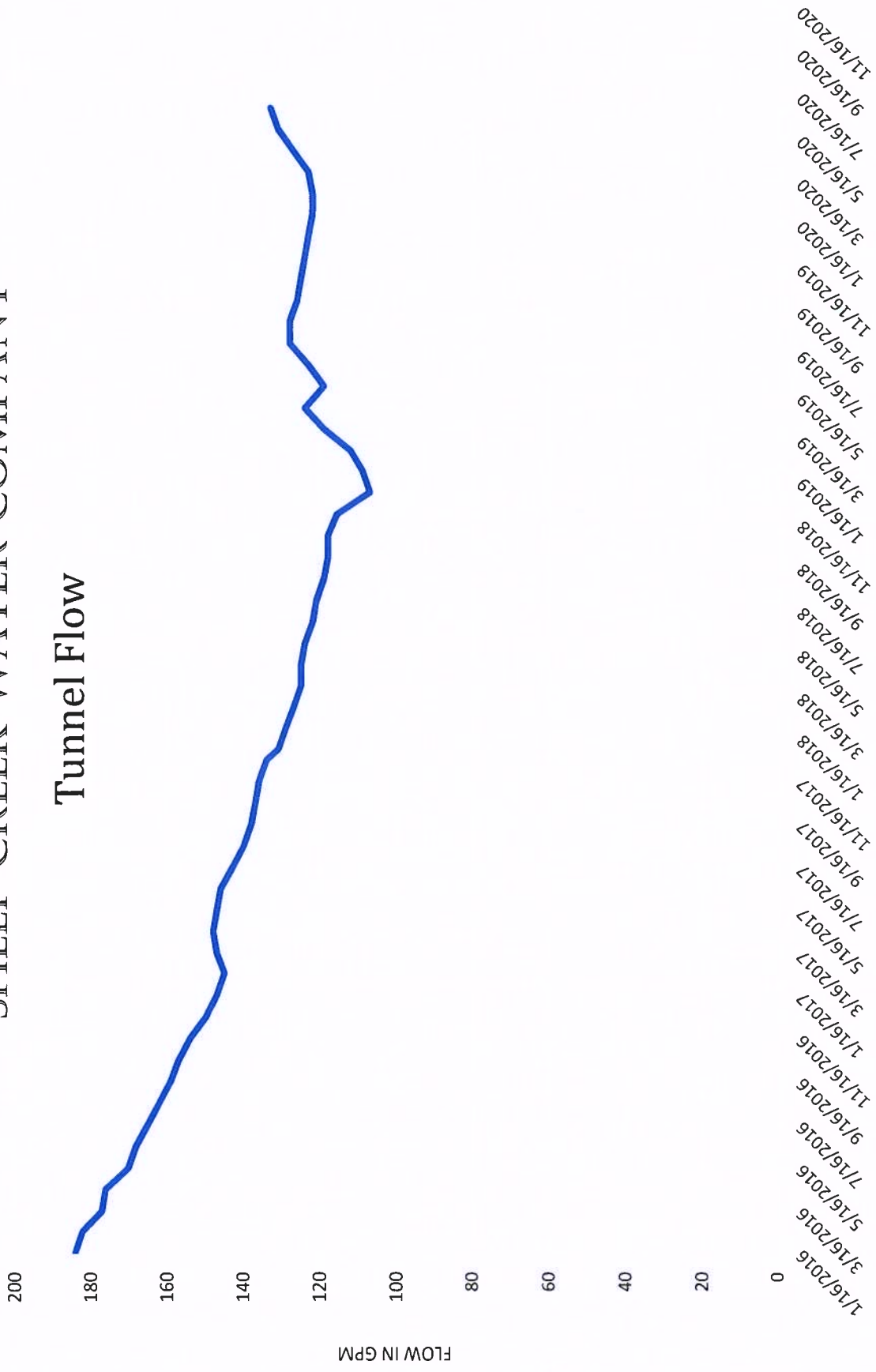


2019 / 2020

Well 11 S Well 11 P Pump Depth

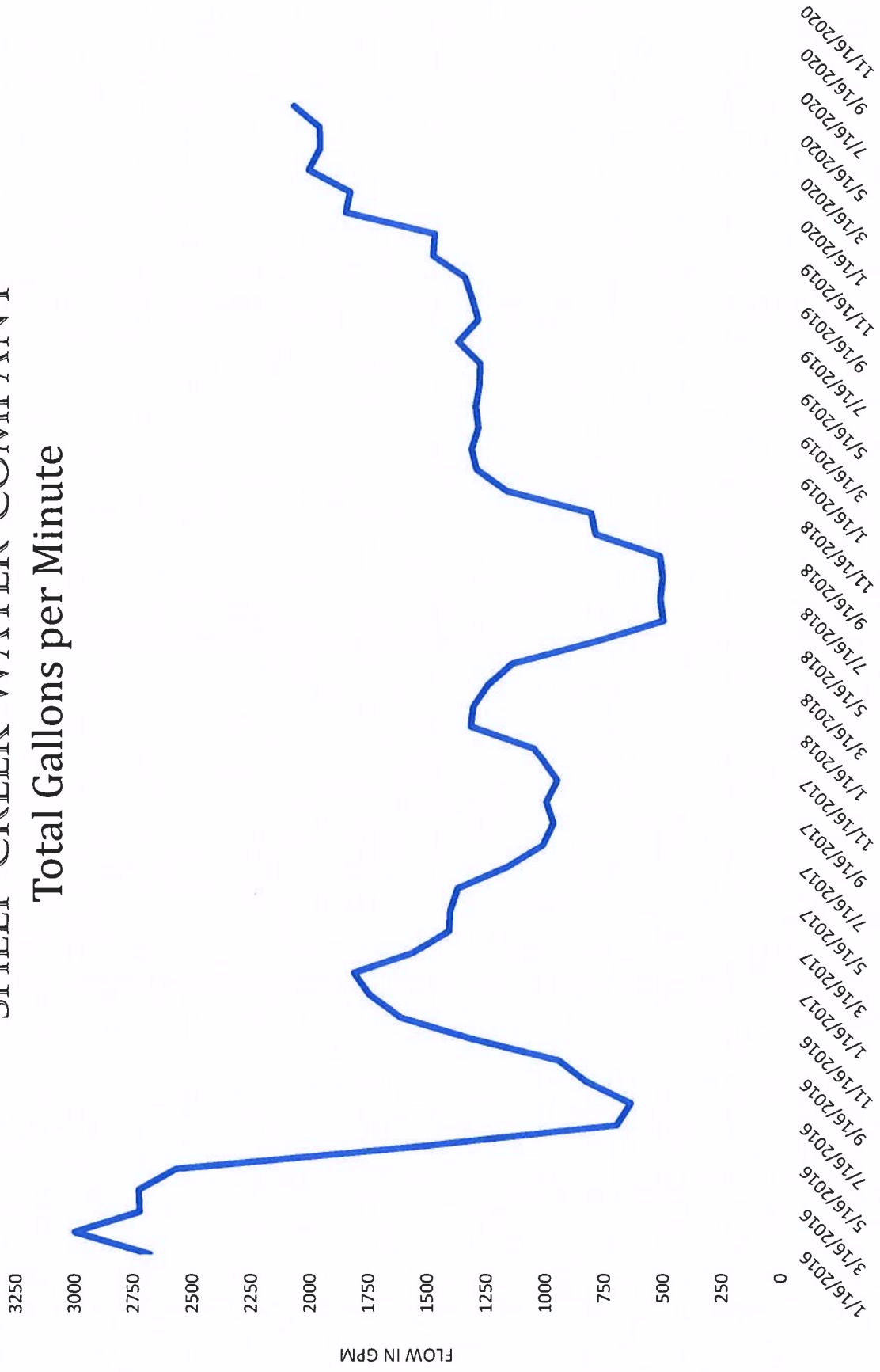
# SHEEP CREEK WATER COMPANY

## Tunnel Flow



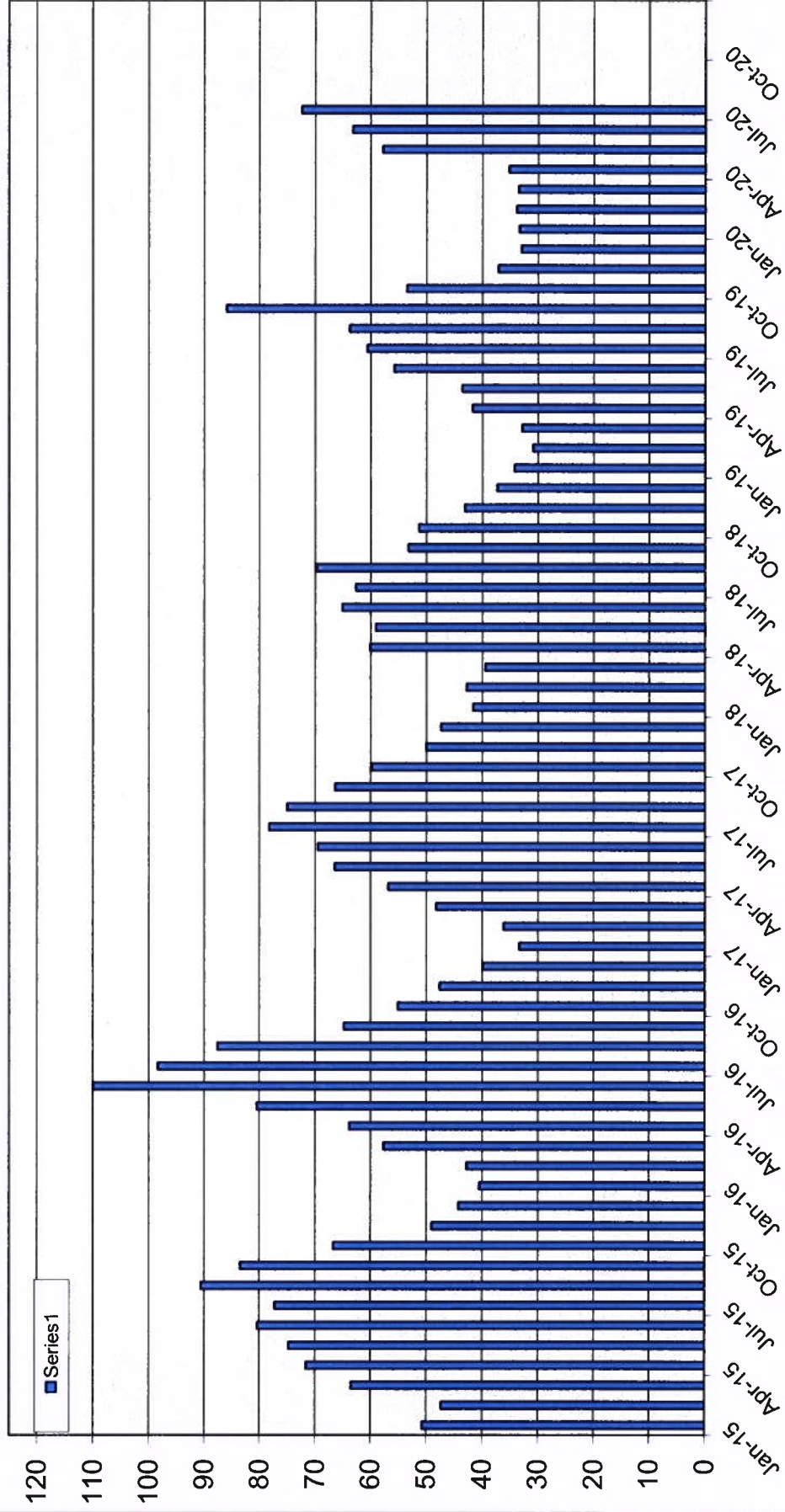
# SHEEP CREEK WATER COMPANY

## Total Gallons per Minute



# SHEEP CREEK WATER COMPANY

## WATER PRODUCTION ACRE FEET



2015- 2020