

# **ITEM #1**

*Presentation and Report by Jeff Nelson*



# Del Paso Manor Water District

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**REPORT TO THE BOARD OF DIRECTORS  
REGULAR BOARD MEETING OF 28 JULY 2020  
AGENDA ITEM NO. 1**

**AGENDA  
SECTION:**

**STAFF REPORTS**

**SUBJECT:** System Improvement Prioritization Presentation

**PREPARED BY:** Jeff Nelson, Engineering Management Consultant

**APPROVED BY:** Jeff Nelson, Engineering Management Consultant

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I have been performing an evaluation of the Del Paso Manor Water District's (District) water supply system, focusing on the condition of the water supply wells. I have prepared the attached PowerPoint presentation that summarizes my findings to date to provide an overview to the Board of Directors. This PowerPoint presentation is intended to compliment a written Water Supply System Assessment and Prioritization report that I am in the final stages for completing. I wish to thank Sacramento Suburban Water District for their support in helping me complete this assessment.

This assessment is based on site inspections, interviews with staff, review of data and files provided by staff, and the following documents:

- 2019 Compliance Inspection of the Del Paso Manor County Water District Public Water System (PWS No. 341007) report by the State Water Resources Control Board dated January 28<sup>th</sup>, 2020.
- Del Paso Manor Water District Master Plan report by Kennedy Jenks dated July 24<sup>th</sup>, 2009.
- JPIA Recommendations Report by Thor Benzing, date of visit: March 11, 2020.
- Pressure Tank inspection reports prepared by ARISE, dated July 17, 18 and 29, 2014.
- DPMWD Groundwater Facility Assessment Findings and Ranking report, DPMWD Well JPIA Inspection Safety Findings and Ranking report, Summary of Environmental Compliance Concerns report all by Sacramento Suburban Water District (SSWD) staff and delivered to the District in May 2020.
- Information provided by Forsgren and Associates.

1817 Maryal Drive, Suite 300, Sacramento, CA 95864

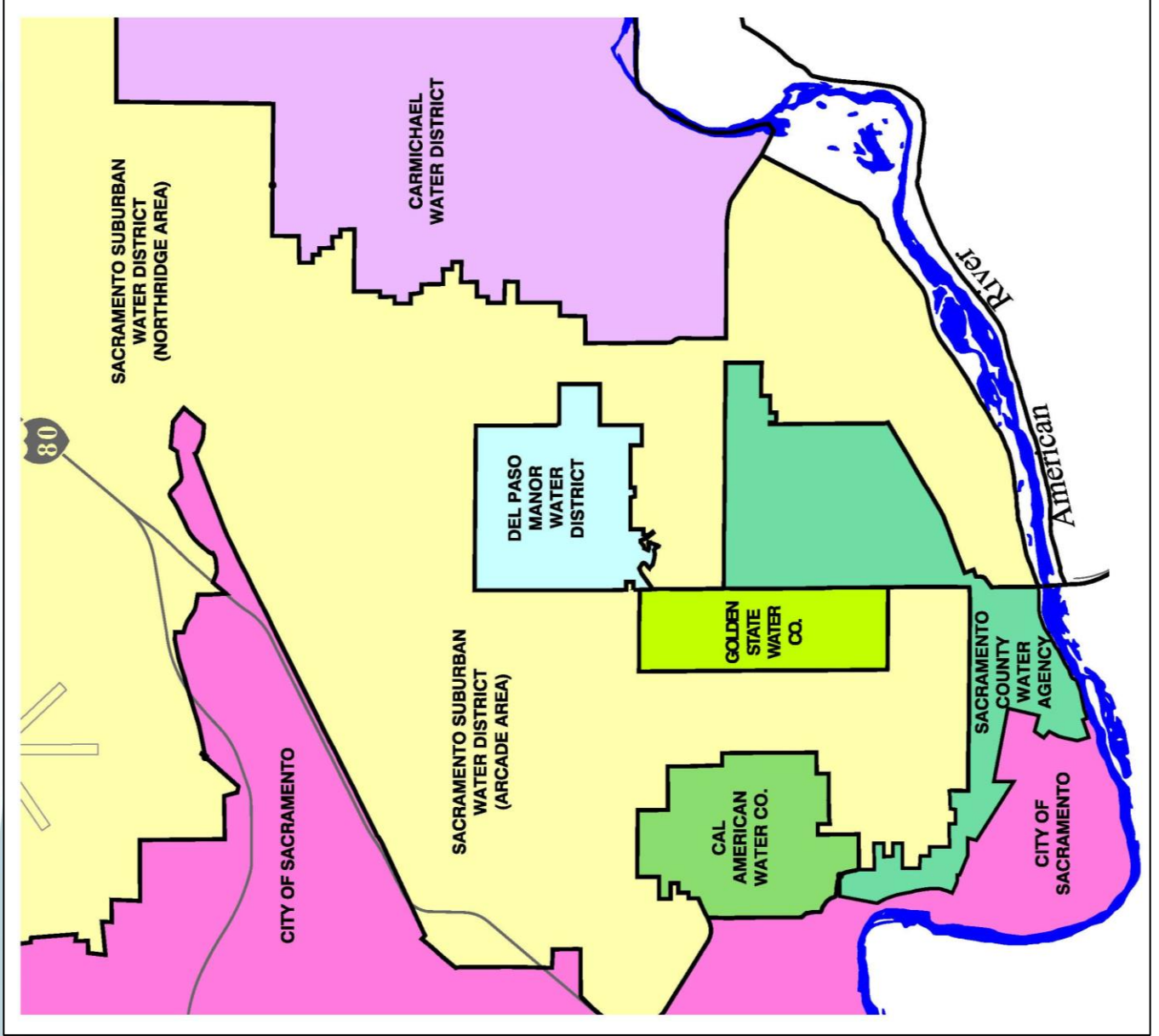
Phone: (916) 487-0419 Fax: (916) 487-8534

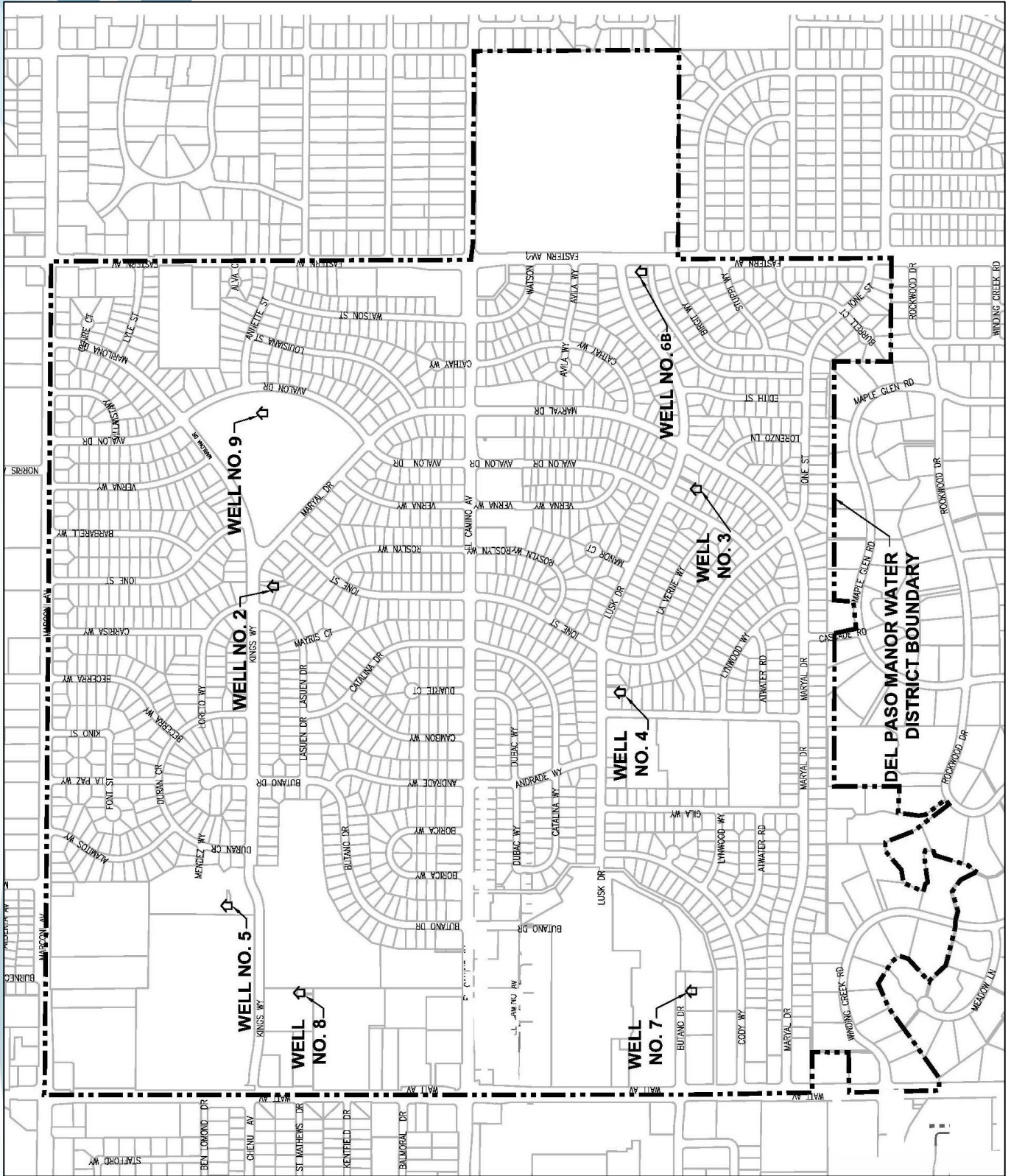
[www.delpasomanorwd.org](http://www.delpasomanorwd.org)



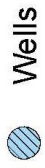
# Del Paso Manor Water District Water Supply System Assessment Summary

July 28, 2020





# LEGEND



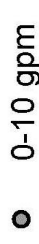
Wells



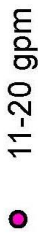
Pump

## Nodes

## Demand



0-10 gpm



11-20 gpm



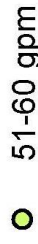
21-30 gpm



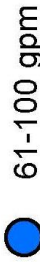
31-40 gpm



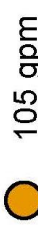
41-50 gpm



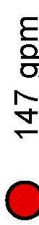
51-60 gpm



61-100 gpm



105 gpm



147 gpm



12-inch



10-inch



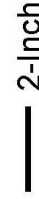
8-inch



6-inch

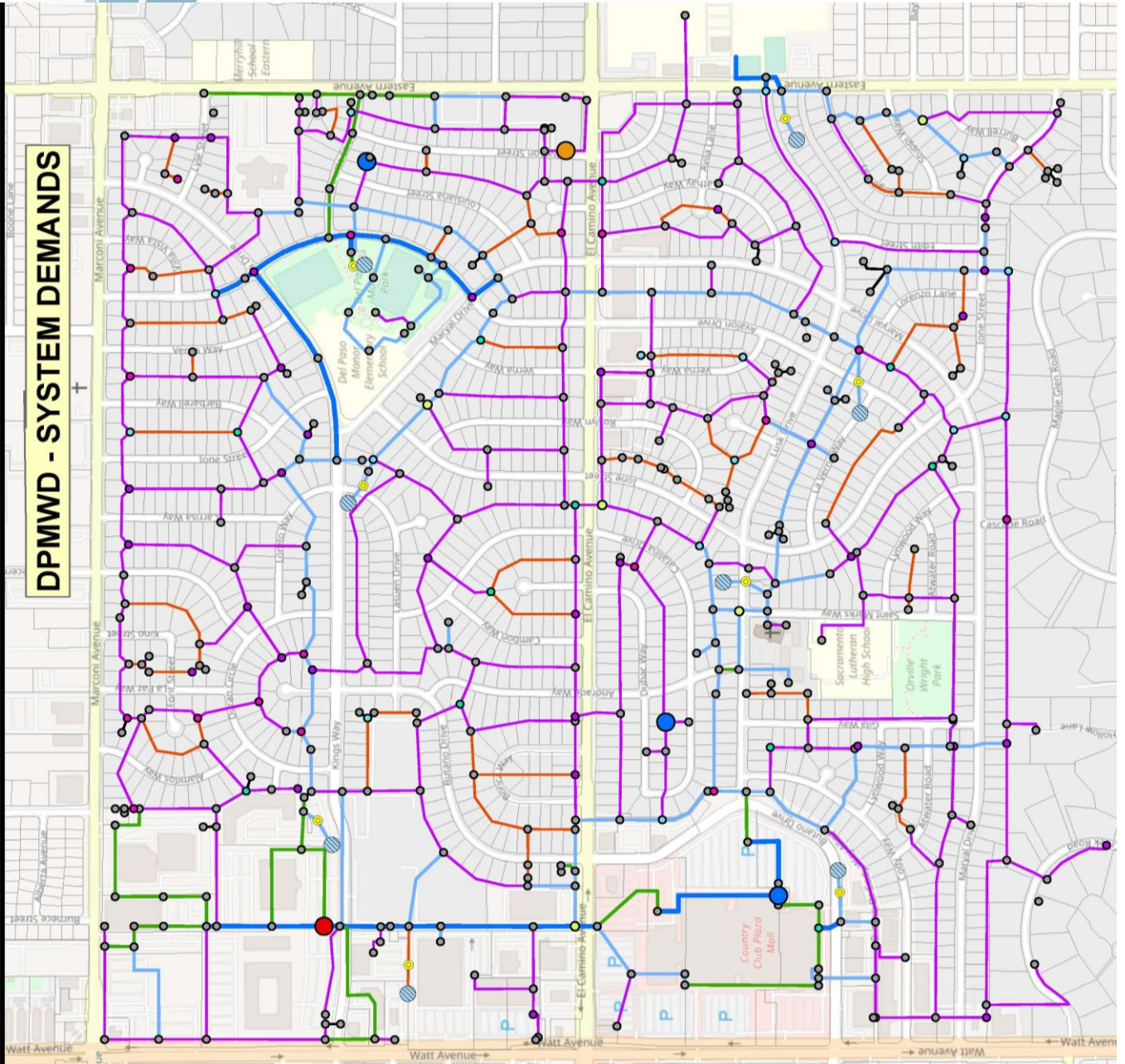


4-inch



2-inch

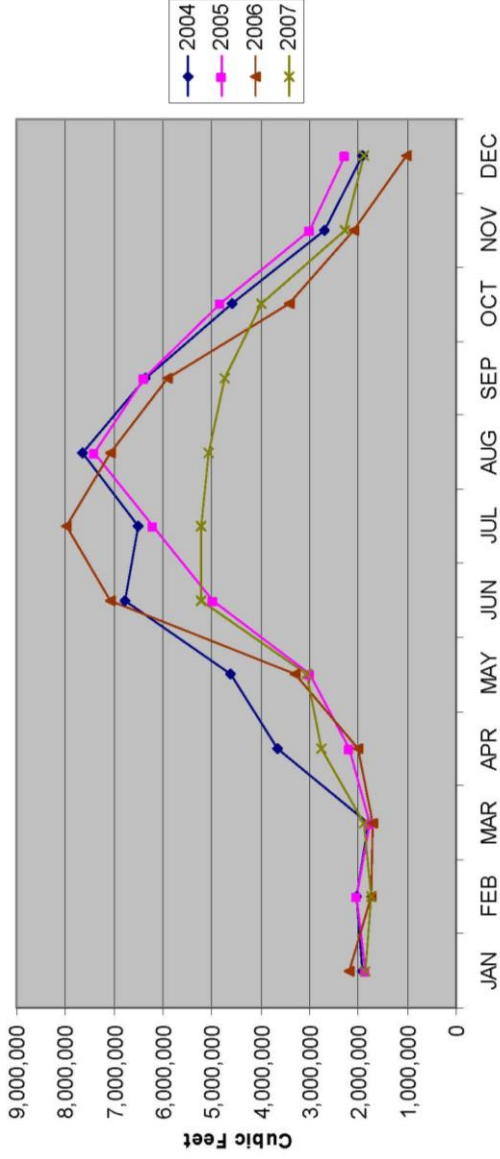
# DPMWD - SYSTEM DEMANDS



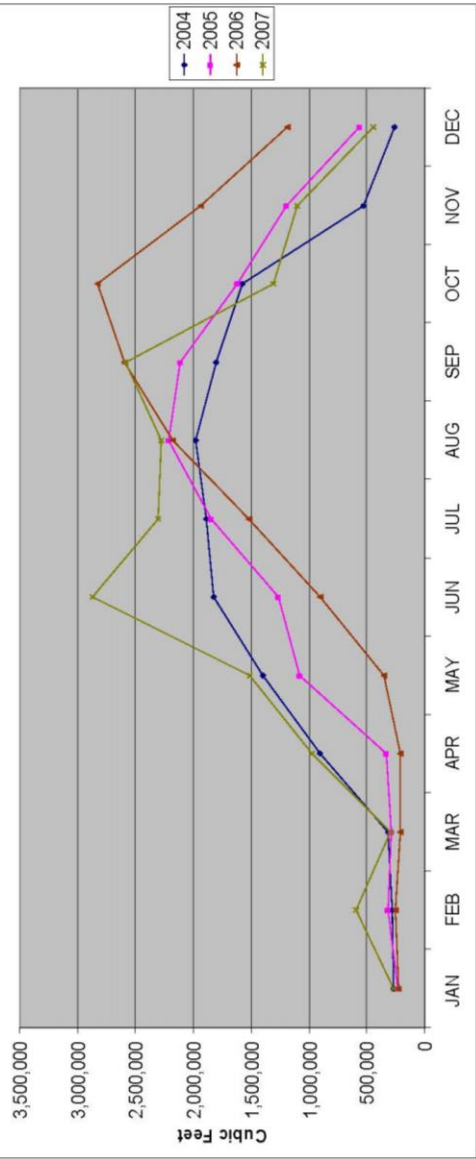
# Water System Demand Requirements

- Maximum day demand – 3,130 gpm or 5.5 mgd (permit requirement)
- Peak Hourly Demand – 4,700 gpm (minimum of 4 hours) or 750,000 gallons of storage (permit requirement)
- Maximum fire flow demand – 3,500 gpm (SMFD requirement)
- Average Day – 1,042 gpm or 1.50 mgd
- Maximum Month Daily Average – 2,035 gpm or 2.93 mgd
- Low flow demand (winter) – 150 gpm
- Water demand requirements can be met by wells that are on “active” and “standby” status
- Current District capacity – 6,725 gpm (combining wells 2 – 9)

### Residential Water Usage



### AT&T Metered Water Usage





# Summary of DPMWD Production Wells

Well Number	Capacity (gpm)	Status	Actions required
2	600	Active	Significant improvements required
3	675	Standby	1,2,3 TCP Contamination, rehabilitation unlikely
4	550	Active	Significant improvements needed
5	525	Active	Imperfection in casing being evaluated
6B	1,100	Active	Minor improvements required
7	675	Active to Standby	Significant improvements required
8	1,100	Active to Standby	PCE contamination, rehabilitation unlikely
9	1,500	Active	Minor improvements required
<b>Total</b>	<b>6,725</b>		



# DPMWD - 2019 Water Production by Well

## Total production in 2019 - 376,860,600 gallons

Well 6B – 226,159,000 gallons

Well 9 – 133,018,000 gallons

Well 8 – 16,329,000 gallons

Well 2 – 901,000 gallons

Well 4 – 281,000 gallons

Well 7 – 172,600 gallons

# Well 2



- Status – Active, constructed in 1948
- Used as back-up supply (along with well 4) to wells 6B and 9
- 600 gpm, fixed rate pump
- Never been pulled/assessed
- SCADA for monitoring only
- Unpermitted portable backup generator
- Hydro-pneumatic tank needs replacing
- Numerous safety and compliance issues

# Well 2 – Next Steps

Action Required	Cost
Well assessment	\$25,000 - \$50,000
Arc Flash Assessment	\$5,000
Pressure tank replacement or upgrade pump control system	\$25,000 to \$40,000
Add Secondary Containment	\$2,000
Remove backup generator	\$2,000
Address other safety issues including upgrading pump base/pedestal, upgrade chlorination system, repair electrical cables and overhead hazards, signage, eyewash/shower OSHA compliance	\$20,000 to \$30,000
Add back-up generator	\$20,000
No direct discharge to sewer, pump-to-waste is currently is to the surface and dissipates into nearby yards. May require an onsite inlet to nearby storm drain or sanitary sewer.	\$20,000 to \$70,000
<b>Total</b>	<b>\$99,000 to \$199,000</b>

# Well 3

- Status – Standby (2018), constructed in 1949
- 675 gpm, fixed rate pump
- 1,2,3 TCP detected in water samples from well
- Well has not been used to supply water to system since before 2015
- SCADA for monitoring only
- No back-up generator
- Hydro-pneumatic tank needs replacing
- Numerous safety and compliance issues



# Well 3 – Next Steps

Action Required	Cost
1,2,3 TCP treatment facility design and construction	\$1,500,000 to \$2,000,000
Annual Operation and Maintenance costs	\$250,000/yr
Well assessment	\$25,000 to \$40,000
Hydro-pneumatic/pressure tank replacement or upgrade control system	\$25,000 to \$40,000
Address other safety/compliance issues including upgrading pump base/pedestals, chlorination, repair electrical cables, overhead hazards	\$20,000 to \$30,000
Change from Standby to Active status	\$50,000
<b>Approximate Total</b>	<b>\$1.6 to \$2.2 million</b>

# Well 4

- Status – Active, constructed in 1951
- Used as back-up supply (along with well 2) to wells 6B and 9
- SCADA for monitoring only
- 550 gpm, fixed rate pump
- No back-up power/generator
- Hydro-pneumatic tank needs replacing
- Numerous safety and compliance issues



# Well 4 – Next Steps

Action Required	Cost
Arc flash hazard assessment	\$5,000
Well assessment	\$25,000 to \$40,000
Hydro-pneumatic/pressure tank replacement or upgrade pump control system	\$25,000 to \$40,000
Address other safety/compliance issues including upgrading pump base/pedestals, move eyewash system for OSHA compliance, add shower system, add secondary containment, chlorination system compliance, repair electrical cables, signage	\$20,000 to \$30,000
No direct discharge to sewer, pump-to-waste is currently is to the surface and dissipates into nearby yards. May require an onsite inlet to nearby storm drain or sanitary sewer.	\$20,000 to \$70,000
<b>Total</b>	<b>\$95,000 to \$180,000</b>



# Well 5

- Status – Active, constructed in 1955
- 525 gpm capacity, fixed rate pump
- Has not supplied water into the system since 2017
- Well casing condition is being evaluated
- SCADA for monitoring only
- No backup generator
- Hydro-pneumatic tank needs replacing
- Located near well 8 and in possible PCE plume path



# Well 5 – Next Steps

Action Required	Cost
Well assessment	\$25,000 to \$30,000
Hydro-pneumatic/pressure tank replacement or upgrade pump control system	\$25,000 to \$40,000
Address other safety/compliance issues including raising pedestal, signage	\$10,000 to \$20,000
No direct discharge to sewer, pump-to-waste is currently is to the parking lot and then drains to a storm drain. May require an onsite inlet to nearby storm drain or sanitary sewer.	\$20,000 to \$70,000
<b>Total</b>	<b>\$80,000 to \$160,000</b>

# Well 6B

- Status – Active, constructed in 2013, replaced well 6
- 1,100 gpm capacity, VFD pump
- Flagship Well
- Pumped **226,159,000** gallons in 2019 (out of 376,860,600 total)
- Full SCADA system
- Permitted backup generator, only well with back-up power
- Some safety and compliance issues related to chemical storage and management
- Has direct discharge to storm drain



# Well 6B – Next Steps

<b>Action Required</b>	<b>Cost</b>
Address chemical storage and management issues	\$5,000
Address other safety/compliance issues	\$5,000 to \$10,000
<b>Total</b>	<b>\$10,000 to \$15,000</b>

# Well 7

- Status – Active, constructed in 1956
- 675 gpm capacity, fixed rate pump
- Currently not operated due to confined space entry issues
- Can only “pump to waste” to street and then to storm drain
- Mainly used to meet max day and fire flow demand
- VFD without program controls
- SCADA system purchased but not installed
- No backup generator
- Numerous safety and compliance issues



# Well 7 – Next Steps

Action Required	Cost
Well assessment	\$25,000 to \$30,000
Confined space entry issues, components need to be moved to the surface, well head raised, and contained in secure facility/building. Parcel is very small and there may not be enough available space for construction of building.	\$25,000 to \$40,000
Other safety and compliance issues including signage, eyewash and shower, chemical storage and management, chlorination	\$5,000
Installation of SCADA and PLC	\$46,000
No direct discharge to sewer, pump-to-waste is currently is to the street. May require an onsite inlet to storm drain or sanitary sewer. If discharge to sanitary sewer, sewer district will charge capacity fees.	\$20,000 to \$70,000
The acquisition of additional real estate may be required if the District chooses to keep and upgrade this well.	tbd
<b>Total</b>	<b>\$121,000 to \$191,000</b>

# Well 8

- Status – Being converted to “Standby” status at recommendation
- Constructed in 1977
- PCE detected in water samples
- Notice of Violation issued by DDW due to PCE detection/exceedance
- 1,100 gpm capacity, VFD pump (new)
- SCADA for monitoring only
- No backup generator, but has backup drive system
- Can only “pump to waste” to storm drain system via parking lot
- Numerous safety and compliance issues including with propane tank used for powering backup drive



# Well 8 – Next Steps

Action Required	Cost
PCE treatment facility – design and construction	\$1.5 to \$2.0 million
Annual operation and maintenance costs	\$250,000/yr
Electrical hazards including exposed wires, lock out controls	\$1,500
Back-up system - propane tank, bring permit up to date, maintenance of system and replacement of parts, shutoff valves, etc.	\$2,000
Health and Safety – access to eyewash system and secondary containment	\$5,000
No direct discharge to storm or sanitary sewer, pump-to-waste is to the parking lot. May require an onsite inlet to storm drain or sanitary sewer. If discharge to sanitary sewer, sewer district will charge capacity fees.	\$25,000 to \$50,000
<b>Approximate Total (does not include annual O&amp;M for PCE treatment)</b>	<b>\$1.5 to \$2.0 million</b>



# Well 9

- Status – Active, constructed in 2010 (replaced Well 1)
- 1,500 gpm capacity, VFD pump
- Primary well along with well 6B
- Pumped **133,018,000** gallons in 2019 (376,860,600 total)
- SCADA for monitoring only
- No backup generator due to proximity to school
- Some safety and compliance issues related to chemical storage and management



Action Required	Cost
Address chemical storage and management issues	\$5,000
Address other safety/compliance issues	\$5,000 to \$10,000
<b>Total</b>	<b>\$10,000 to \$15,000</b>

# Summary of DPMWD Production Wells

Well No.	Capacity (gpm)	Recommendation	Estimated Cost
2	600	Perform well assessment and upgrade well	\$79K to \$129K
3	675	1,2,3, TCP contamination, eventually abandon	\$1.6 to \$2.2 million
4	550	Perform well assessment and upgrade well	\$75,000 to \$110,000
5	525	Perform well assessment and upgrade well	\$60,000 to \$90,000
6B	1,100	Conduct required maintenance	\$10,000 to \$15,000
7	675	Convert to standby and eventually abandon	\$131,000 to \$196,000
8	1,100	PCE contamination, eventually abandon	\$1.5 to \$2.0 Million
9	1,500	Conduct required maintenance	\$10,000 to \$15,000
<b>Total</b>	<b>6,725</b>		

Rating	Total gpm
Reliable	2,600
Confirm Reliability	1,675
Unreliable	2,450

Max day demand	3,130 gpm
Peak hour demand	4,700 gpm
Fire flow demand	3,500 gpm
Max month daily average	2,035 gpm



# Recommendations

- Maintain and complete minor upgrades to **wells 6B and 9**
- Evaluate **wells 2, 4 and 5**, prioritize and determine which wells are worth investing in upgrading and continuing to utilize
- Evaluate threat of PCE plume to **Well 5**
- Work with SSWD regarding compensation for **well 8** from PCE source polluter
- If deemed economical, re-equip either (or both) **well 2 and/or 4** with a VFD with an optimal pumping range of 100 to 400 gpm to efficiently meet low flow demands (\$100,000) or re-locate VFD from Well 7, and install back-up power generator

# Recommendations - continued

- Assume wells 3, 7 and 8 (and possibly well 5) will not be put back into service which will require the development of an alternative source to meet peak flow requirements.

Alternatives include:

- Construct new well(s) – (\$2.5 to 3.0 million per well), assuming you can find a suitable location
- Buy water from SSWD, requires installation of pressure reducing valve on interconnection(s) to SSWD (\$20,000 to \$40,000)
  - Currently, SSWD would sell water for \$450/acre-foot or approximately \$450/2.4 million gallons or \$0.19/1000 gallons.

## **ITEM #2**

*Discussion and/or Action to Renew*

*Sacramento Suburban WD Service Agreement*

**CONTRACT SERVICES AGREEMENT BETWEEN SACRAMENTO SUBURBAN  
WATER DISTRICT AND DEL PASO MANOR WATER DISTRICT**

This Agreement is entered into as of January 27, 2020, by and between Sacramento Suburban Water District, a County Water District formed and existing under California Water Code § 30000 *et seq.* (hereinafter “SSWD”), and Del Paso Manor Water District, a County Water District formed and existing under California Water Code § 30000 *et seq.* (hereinafter “DPMWD”). SSWD and DPMWD may sometimes be referred to individually as “Party” or together as “Parties” throughout this Agreement.

**RECITALS**

WHEREAS, SSWD, under its permit with the State of California State Water Resources Control Board, Division of Drinking Water, is a public agency providing domestic drinking water to residential and commercial customers within its boundaries located in the County of Sacramento;

WHEREAS, DPMWD, under its permit with the State of California State Water Resources Control Board, Division of Drinking Water, is a public agency providing domestic drinking water to residential and commercial customers within its boundaries located in the County of Sacramento;

WHEREAS, the entirety of the DPMWD service area is inside of and contiguous with the SSWD service area;

WHEREAS, the Parties are participants in and parties to that certain “Mutual Aid and Assistance Agreement Between Del Paso Manor Water District and Sacramento Suburban Water District”, dated as of January 11, 2011 (the “Mutual Aid Agreement”);

WHEREAS, the Parties maintain interconnections between their respective water systems to enable groundwater and surface water deliveries (where permissible) to each other in the event of an emergency;

WHEREAS, the Mutual Aid Agreement sets forth additional resources, including personnel and equipment, which one Party may deploy to assist the other in the event of an emergency, including the criteria therefore and mechanisms for reimbursement;

WHEREAS, DPMWD requested assistance from SSWD under the Mutual Aid Agreement in May 2019, which request remains in effect, whereby SSWD has provided field personnel to assist SSWD during a staff shortage to ensure adequate, certified field maintenance support in the DPMWD service area in order for DPMWD to remain in compliance with applicable Division of Drinking Water regulations and the terms of its permit, and otherwise protect the public health and safety of customers within the DPMWD service area; and

WHEREAS, the Parties desire that DPMWD contract with SSWD for maintenance and support services on an as-needed basis under non-emergency conditions, based on the terms and conditions set forth below.

## AGREEMENT

**NOW, THEREFORE,** in consideration of the mutual covenants, conditions and promises herein contained, it is hereby agreed by and between SSWD and DPMWD as follows:

1. Recitals

The Recitals herein are expressly made part of this Agreement.

2. Contracted Services

SSWD agrees to provide the following services to DPMWD on a contract basis upon request: Field maintenance support, including on-call certified water treatment or distribution operator(s). Such services may include, but are not limited to, water service line repairs; customer service calls; well site operations; emergency repairs and maintenance support (the “Contracted Services”). Training and mentoring services relevant to water treatment or distribution operations that are provided to SSWD staff will be offered to DPMWD staff.

3. Control and Record Keeping

Field personnel provided by SSWD shall remain under the supervision and control of SSWD, and shall perform such tasks as requested or directed by DPMWD. SSWD shall designate a supervising employee to oversee the performance of any Contracted Services pursuant to this Agreement, and shall otherwise keep accurate records of the work performed, including the preparation of all time sheets for billing purposes.

4. Status

Unless otherwise provided by law, SSWD’s officers and employees retain the same privileges, immunities, rights, duties and benefits as provided in its own jurisdiction while performing Contracted Services within the DPMWD service area.

5. Licenses and Permits

To the extent permitted by law, SSWD personnel that hold licenses, certificates, or permits evidencing professional, mechanical, or other skills shall be allowed to carry out activities and tasks relevant and related to their respective credentials during the performance of any Contracted Services requested by DPMWD under this Agreement.

6. SSWD Discretion Regarding Availability of Personnel

SSWD retains the right to commit or withdraw some or all of its resources at any time for any reason in SSWD’s sole and absolute discretion. SSWD shall have the sole and exclusive discretion to determine availability of personnel and resources requested by DPMWD. SSWD shall make a reasonable attempt to provide DPMWD with 24 hours’ notice of withdrawal of resources and personnel.

7. Personnel

SSWD shall be paid by DPMWD for personnel costs incurred for work performed. Time incurred will be charged at a minimum of 15 minutes and will be rounded up to the next 15-minute increment. DPWMD will be billed overtime for the time SSWD staff spends working outside of normal work hours, which includes time spent working for DPWMD and time spent working on tasks that were delayed when helping DPWMD during normal work hours. SSWD personnel costs shall be calculated according to the most current pricing and in compliance to the terms provided in its employment contracts or other conditions of employment. SSWD's designated supervisor(s) must keep accurate records of work performed by personnel. Payment for services rendered shall consist of all personnel costs, including salaries or hourly wages, costs for fringe benefits, and indirect costs.

8. Equipment

DPMWD shall reimburse SSWD for the use of equipment during the performance of services, including, but not limited to, reasonable rental rates, all fuel, lubrication, maintenance, transportation, and loading/unloading of loaned equipment. Applicable rates for equipment used during the performance of Contracted Services are listed on the attached Schedule 1.

9. Materials and Supplies

DPMWD shall reimburse SSWD in kind or at actual replacement cost, plus handling charges, for use of expendable or non-returnable supplies. SSWD will not charge direct fees or rental charges to DPMWD for other supplies and reusable items that are returned to SSWD in a clean, damage-free condition. Reusable supplies that are returned to SSWD with damage must be treated as expendable supplies for purposes of cost reimbursement.

10. Payment Period

SSWD shall provide an itemized invoice to DPMWD for all costs associated with providing Contracted Services. Invoices shall be submitted on a monthly basis for Contracted Services provided during the previous month. DPMWD shall render payment in full of all undisputed invoices by the thirtieth day of the following month.

11. Records

Each Party and its duly authorized representatives shall have access to the other Party's books, documents, notes, reports, papers and records which are directly pertinent to this Agreement for the purposes of reviewing the accuracy of a cost bill or making a financial, maintenance or regulatory audit. Such records shall be maintained for at least three (3) years or longer where required by law.

12. Term

This Agreement shall take effect on February 1, 2020 and terminate on August 31, 2020, unless extended upon mutual written agreement of the Parties. Upon termination, SSWD shall be



compensated for all work performed to the date of termination as calculated by SSWD based on the above payment provisions.

13. Insurance

Each Party is a member of ACWA-JPIA and has sufficient coverage under the pool's memorandum of coverage to cover all risks that may occur under this Agreement. Each Party shall maintain such coverage in good standing at its sole cost. Each Party shall name the other Party, its officers, agents, and employees as additional insureds on all insurance policies, except its worker's compensation policy, for activities undertaken pursuant to this Agreement.

14. Indemnification

Each Party agrees to indemnify, defend, and hold harmless the other Party and its Directors, officers, employees, representatives, and agents from and against any and all actions, claims, costs, damages, demands (including reasonable outside attorneys' fees), liability, losses, obligations, penalties, suits in law or in equity which are made by a third party to the extent arising out of the Party's negligence or willful misconduct in performing any work or taking any actions authorized by or related to this Agreement.

15. Miscellaneous

15.1 Entire Agreement

This Agreement (including the Exhibits hereto) constitutes the entire understanding and agreement of the Parties relating to subject matter hereof.

15.2 Waiver

No waiver of any right or remedy by a Party with respect to any occurrence or event under this Agreement shall constitute a continuing waiver or be deemed a waiver of any right or remedy in respect to any other or subsequent occurrence or event.

15.3 Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which shall constitute but one and the same instrument.

15.4 Severability

If any term, provision, covenant, or condition set forth in this Agreement is held by the final judgment of a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions, covenants, and conditions shall continue in full force and effect to the extent that the basic intent of the Parties as expressed herein can be accomplished.

15.5 Amendments

All amendments to this Agreement shall be in writing and, if approved, must be signed by all Parties.

15.6 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of California.

16. Legal Action

In addition to any other rights and remedies, either Party may institute legal action to cure, correct, or remedy any default, to specifically enforce any covenant or agreement herein, or to enjoin any threatened or attempted violation of this Agreement.

17. Authority to Execute Agreement

The person or persons executing this Agreement on behalf of SSWD and DPMWD warrant and represent that they have the authority to execute this Agreement and the authority to bind SSWD or DPMWD, as appropriate, to the performance of its obligations hereunder.

18. Consent

Where consent or approval of a Party hereto is required or necessary under this Agreement, such consent or approval shall not be unreasonably withheld, conditioned or delayed.

19. Assignment

This Agreement and all rights and obligations under it are personal to the Parties. The Agreement may not be transferred, assigned, delegated or subcontracted in whole or in part, whether by assignment, subcontract, merger, operation of law or otherwise, by either party without the prior written consent of the other party. Any transfer, assignment, delegation, or subcontract in violation of this provision is null and void and grounds for the other party to terminate the Agreement.

20. Interpretation of Agreement

All Parties hereto have been represented by legal counsel in the preparation of this Agreement and no presumption or rule that ambiguity shall be construed against the drafting party shall apply to interpretation or enforcement hereof. Captions on sections and subsections are provided for convenience only and shall not be deemed to limit, amend, or affect the meaning of the provision to which they pertain.

21. No Joint Venture or Partnership

SSWD and DPMWD hereby renounce the existence of any form of joint venture, partnership or other association between them, and agree that nothing in this Agreement or in any

document executed in conjunction with this Agreement shall be construed as creating any such relationship between the Parties.

22. Partial Invalidity Due to Governmental Action

In the event that State or Federal laws or regulations enacted after the effective date of this Agreement, or formal action of any governmental jurisdiction other than SSWD or DPMWD, prevent compliance with one or more provisions of this Agreement, the Parties agree that the provisions of this Agreement shall be modified or suspended only to the minimum extent necessary to comply with such laws or regulations.

23. Further Actions and Instruments

The Parties agree to provide reasonable assistance to each other and cooperate to carry out the intent and fulfill the provisions of this Agreement. Each of the Parties shall promptly execute and deliver all documents and perform all acts as necessary to carry out the matters contemplated by this Agreement.

24. No Third Party Beneficiaries

This Agreement is made and entered into for the sole protection and benefit of the Parties and their successors and assigns. No other person shall have any right or action based upon any provision of this Agreement.

25. Venue

Any action arising out of this Agreement shall be brought in the Superior Court of Sacramento County, California, regardless of where else venue may lie.

26. Time is of the Essence

Time is of the essence of each and every provision of this Agreement.

27. Notices

All notices required or provided under this Agreement shall be in writing and shall be sent by (i) U.S. mail first class postage prepaid with return receipt requested, (ii) by overnight courier or hand delivery, or (iii) by facsimile with original forwarded by U.S. mail, addressed as follows, with any email copies provided to the email addresses below:

Notice to SSWD: Sacramento Suburban Water District  
Attention: General Manager  
3701 Marconi Avenue  
Sacramento, CA 95821  
Telephone: (916) 972-7171  
Facsimile: (916) 972-7639

Notice to DPMWD: Del Paso Manor Water District  
Attention: General Manager

1817 Maryal Drive, #300  
Sacramento, CA 95864  
Telephone: (916) 487-0419  
Facsimile: (916) 487-8534

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed by their duly authorized officers as of the date first set forth above.

“SSWD”

SACRAMENTO SUBURBAN WATER DISTRICT

By: \_\_\_\_\_  
Daniel R. York  
General Manager

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Joshua M. Horowitz  
General Counsel

“DPMWD”

DEL PASO MANOR WATER DISTRICT

By: \_\_\_\_\_  
Adam Coyan  
General Manager

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Barbara Brenner  
General Counsel

**SCHEDULE 1**

**SSWD LABOR AND EQUIPMENT RATES (2020)**

## **ITEM #3**

*Discussion and direction regarding GM's proposed Staffing Plan*

## **Del Paso Manor Water District**

### **Staffing Plan Supplementary Documentation**

Below are two possible staffing plans. I have also attached a spread sheet showing the costs associated with each based up on my limited understanding of the current budget. I used percentages to figure cost saving from the different categories, so the figures are accurate but not precise.

**Plan A:** In this plan we would formalize a service contract with Sacramento Suburban Water District. This would take both boards voting on the contract to execute. Under this plan I would do all reporting to the Regional Water Quality Control Board and I also would be responsible to check the well sites occasionally for accountability. Del Paso Manor would not employ field staff but would mainly use contractors for anything that staff could not do. Ken's position as Field Supervisor would be left vacant.

It would be necessary to require SSWD to get permission to execute repairs or do additional labor that was not covered by the contract other than emergencies to keep costs from ballooning. It is possible if costs are controlled to save a lot of money a year.

- I was unaware where the company's general insurance was on the budget, so this figure was not shown in cost savings on the spread sheet. Also, there would be a long-term savings when it came to retirement health benefits, but I did not include that in the spreadsheet because I am not familiar enough with these charges. Further, with no field staff we would no longer need to buy new trucks, tools, computers etc...
- I do not know what the average costs are for SSWD so did not include those, but the cost would impact the amount of savings that could be had. The last bill with the CCR preparation on it was over \$33,000.
- Going with plan A puts DPMWD in a weak position and this option should only be chosen if future merger is what the board plans.

**Plan B:** In this plan Ken's position as Field Supervisor would be left vacant. We would hire an O & M II and an O & M I for field staff. Under this plan I would need to work 10% - 25% of the time in the field to supervise employees or contract with SSWD until the new hires are up to par. Initially there would be a lot of employee turnover until we found the "right" fit. I would suggest

keeping SSWD contract for at least a month for training purposes and as a backup plan if the staff do not work out.

It is my understanding that one of the trucks is due for replacement, this is not reflected in the spreadsheet. Also, there is no official stand-by policy in place. The costs on the spread sheet represent \$20 a day standby. Finally, the wages do not include any overtime and start at step 1.

**Recommendation:** My recommendation is to pursue Plan B, although; the district can not save as much money. The district could maintain control and stay independent. In this plan we would need to start doing things differently than we currently do things.

For instance, we spend an extraordinary amount of money contracting leak repair with GM Construction. Every place that I have ever worked we handled all the leaks in house with just two staff members and a backhoe. If the leak occurred in the street, we would get temporary workers to do traffic control. Since most of the mains are in back yards it is my recommendation to buy a small vacuum trailer and possibly a truck big enough to haul the trailer. Further it would also be beneficial to either start renting equipment from home depot or buying it. For new construction, a mini backhoe would be needed as well as a ditch witch and a compactor. All the above tools could be bought used for what Del Paso Manor spent in one year on GM Construction. Also, for new construction it can easily be done with two guys and equipment because there is no timeline. Meaning you install the new pipe alongside old pipe and then when ready, switching to the new pipe is simply a turn of a valve.

Another thing, in every place I ever worked we never shut off the water to repair leaks, never ever! In this district it seems like a common occurrence. Unless a whole section needs to be replaced all water leaks should be fixed with the system charged, this ensures no contaminate can enter the line. Sometimes it becomes necessary to lower the pressure in the line with major leaks, but it still has positive pressure. If done correctly then the district does not have to take a sample, saving the district more money. If the water does need to be shut down, then it should be done in the middle of the night.

The trucks get replaced every 10-15 years. It is much cheaper to maintain the trucks rather than buy new. New trucks depreciate 11% the second you drive it off the lot and 30% over



the first year. Also, staff treat the trucks with more respect if they know they are going to have to live with them.

There are plenty of opportunities to save money going forward.

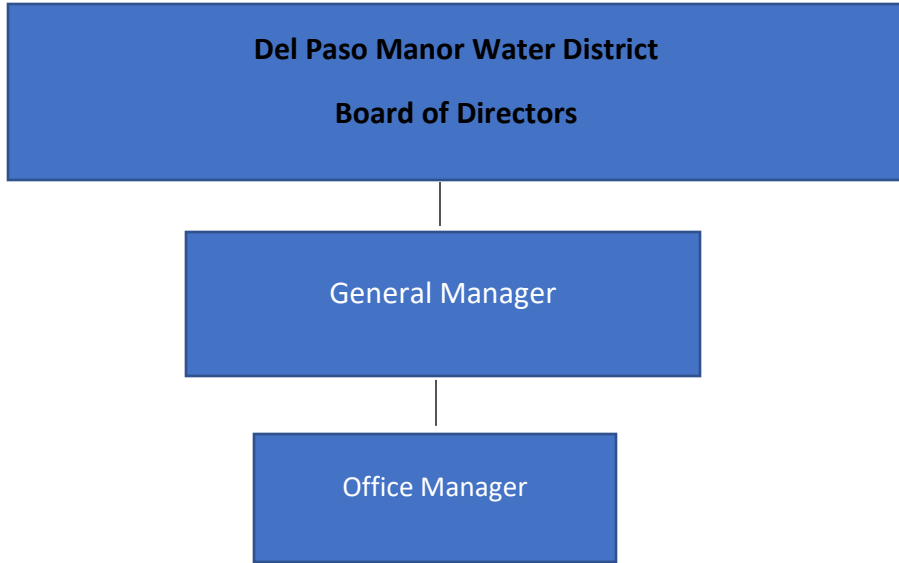
Plan A	Plan A	Proposed	Change
Field Salaries	\$0.00	\$140,000.00	\$140,000.00
Field Supplies	\$0.00	\$3,000.00	\$3,000.00
Soc Sec	\$10,000.00	\$21,000.00	\$11,000.00
Medicare	\$3,450.00	\$5,000.00	\$1,550.00
Cal Pers	\$44,000.00	\$80,000.00	\$36,000.00
Health Care	\$28,300.00	\$53,000.00	\$24,700.00
Certification/ Cont ed.	\$0.00	\$3,000.00	\$3,000.00
Fuel Vehicles	\$0.00	\$3,200.00	\$3,200.00
Vehicle Repair	\$0.00	\$500.00	\$500.00
Field Staff Cell	\$0.00	\$3,300.00	\$3,300.00
OPEB	\$24,780.00	\$45,000.00	\$20,220.00
<b>Total</b>	<b>\$110,530.00</b>	<b>\$357,000.00</b>	<b>\$246,470.00</b>

**Total:** \$246,470.00  
**A Month:** \$20,539.17

Plan B	Plan B	Proposed	Change
Field Salaries	\$86,840.00	\$140,000.00	\$53,160.00
Soc Sec	\$15,830.00	\$21,000.00	\$5,170.00
Medicare	\$3,957.00	\$5,000.00	\$1,043.00
Cal Pers	\$65,960.00	\$80,000.00	\$14,040.00
<b>Total</b>	<b>\$172,587.00</b>	<b>\$246,000.00</b>	<b>\$73,413.00</b>

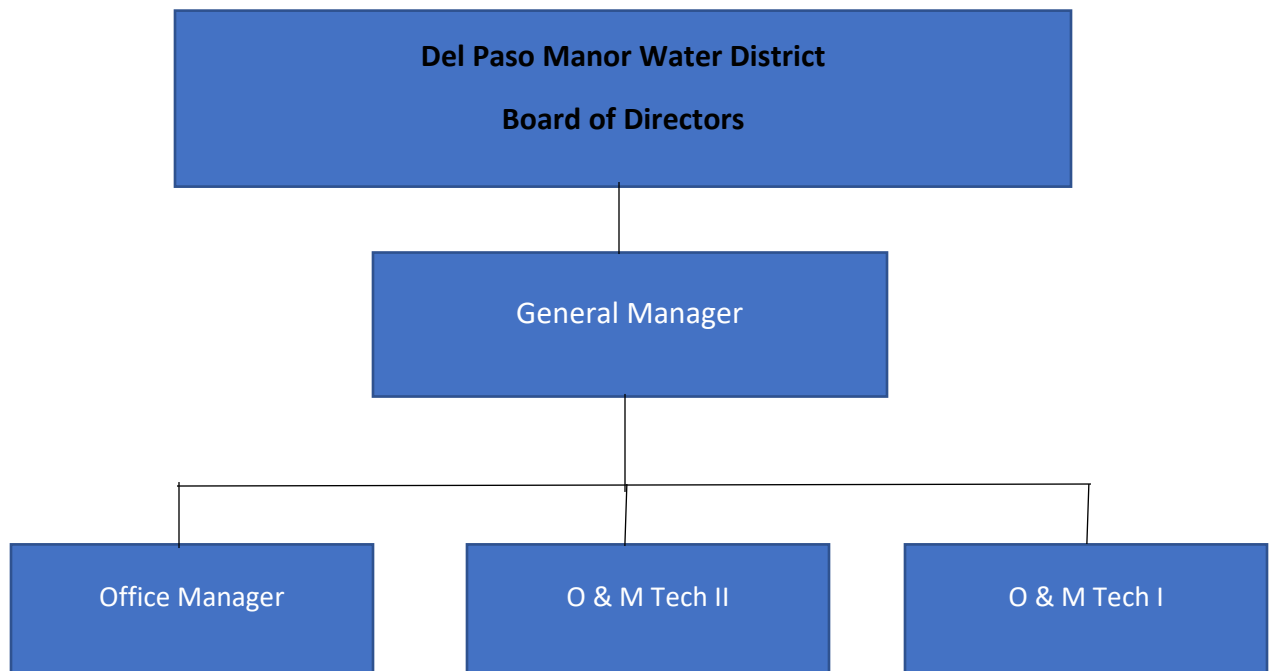
**Total:** \$73,413.00  
**A Month:** \$6,117.75

**Plan A**



**Plan B**

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## **ITEM #4**

*Discussion and Direction Regarding GM's District Strategic Plan*

## Options Going Forward

### Recommendations and Options:

These recommendations take into consideration the condition assessment that was done by JPIA, SWRCB and SSWD. The repair costs for the wells on the excel spreadsheet were taken specifically as an average of Jeff Nelson's figures. Further the pipeline replacement cost estimate comes from what the average cost is to do pipeline replacement by the foot for different sizes.

### Options:

1. Fix the wells to an acceptable standard and raise rates to allow for pipeline replacement and additional maintenance going forward. It would be my recommendation to go above the figure in red and use the average figure in blue. The well sites are going to need additional maintenance going forward and the district should also be saving up to dig an additional well if needed.
  - a. The district needs to start doing business differently than it has in the past. I recommend purchasing a used vacuum trailer and possibly a truck to pull it if need be and repair any leaks in house and use the money that would be spent on contractors and buy tools and equipment. Do as much as possible in house. I would rather spend district money to train personal or buy equipment than to hire a contractor and have no benefit beyond the contract.
2. The other option is to seek a merger with SSWD. If initiated today that process would still take close to two years. There would need to be additional planning on what maintenance

needed to be addressed if this option is chosen. Certain things would still need to get fixed to maintain compliance with JPIA and SWRCB.

3. The final option is to do the minimum to pacify JPIA and SWRCB. Keep the budget the same and wait until something big breaks and figure it out as we go. I do not condone this and caution the board that this is the most dangerous of the options.

A. **Wells:** Some of the wells have exceeded the MCL for certain constituents and have been put into a standby status; other wells are starting to test higher for iron which is a secondary standard and it is an indication that the well casing is starting to rust. Further the Department of Drinking Water is looking at releasing a new MCL for Hexavalent Chromium, we should have a plan in place if that standard is lower than the levels contained in our wells. Keep in mind that we need to keep enough wells to hit **4,700 gpm** in order to meet our estimated peak hourly demand. If we cannot meet that demand, we will need to seek outside water during high flows.

**Options:**

1. Treat in place any wells that have exceeded MCL.
2. Treat in one centralized location. Pipe all wells to this location and treat for multiple contaminants. The treatment would consist of a settling tank, mixed media filters followed by granular activated carbon filters. This would require the installation of a one-million-gallon clear well tank.
3. Abandoned wells that have tested above MCL's. In this plan it would be necessary to either drill new wells or purchase water from an adjoining water district.

4. Do not do any additional treatment. Put/keep in standby wells 3 and 8. Put money into the remaining wells to bring them up to a viable, safe and acceptable level.

Ensure that we are meeting the maximum daily demand.

**B. Pipelines:** There is a sense of urgency when it comes to pipeline replacement, however; we have time to get this done. The leaks will continue and get more frequent, but it is best to act once and act right then to spend money frivolously or not well planned out. The estimates on the spread sheet are for C900 and they are only an estimate. If we wanted to put in iron pipe which is a little more durable the cost would be more. As we get closer, I will perform a cost basis analysis and a return on investment to compare how many years of in ground service we get compared to dollars spent.

**Options:**

1. Multi-year project to replace or retrofit the pipelines. This could either be done by hiring part time workers and buying a backhoe and other needed equipment or by hiring a contractor that is on a multi-year contract. This would take a rate increase.
2. Complete the work as a super project and complete it all at once. The downside of this option is that you would be paying for all the cost up front.
3. Do no replacement at all. This will incur repair bills that will increase with time.

**C. Money:** This is truly the most limiting factor of any future-plans.

**Options:**

1. Do a multi-year rate increase. This could be long term such as 5% a year for 20 years or could be short term with increases every year for five years.
2. One big rate increase all at once. This is a tough option and will incur more wrath from the rate payers but once the rate increase is passed then it is done.
3. Depend on grants and loans. Grants are easier to get the worse off a system is but there is no guarantee and with Covid 19, it is unclear how much grant money will be available in the coming years. It is possible to get long term loans that go out fifty years. What is the districts credit like and what is the income to debt ratio?

### **Recommendations:**

My recommendations are going to be a brief timeline, where one represents the most urgent item, we need short- and long-term planning in order to move forward as efficiently as possible.

1. Hire staff for plan B and conduct training as needed so there can be a smooth transition with SSWD.
2. Purchase necessary equipment for district staff to do leak repairs in house.
3. Update the master plan and then stick to it. Make sure that the master plan includes the future planning that the district needs going forward and eliminates the unnecessary. Formulating a proper master plan is just as important as following it once written.
4. Fix wells to bring them up to an acceptable standard. Some of this work will need to be done by contractors.
5. Raise rates in small increments over many years.



6. Start a multi-year project of replacing 1 mile of pipeline a year for 20 years. This can be done in house by hiring staff either seasonal or permanent or it can be accomplished with contractors which would be more expensive.
7. Build a water treatment plant for treatment of well water. This could be a GAC plant or trickling filter. Long term, all the wells will become contaminated as they pull contaminants from outside the district.
  - A. Build a surface water plant for the 2460-acre feet water rights that we have. Another option is to enter into a wheeling agreement where we allow a water company to treat the water and give them access to some of our permitted water use or pay them for the treatment Treated surface water should be the primary source with wells as back up.
8. Build a water storage tank preferably an aerial tank even though it is very expensive. This goes hand in hand with the treatment. Our peak hourly demand is 4,700 Gallons/ minute. We would want a tank to even out the flows. If we had a large tank, then we could pump water all night when power is cheaper and then use the water during the day. The benefit is that we could hit peak hourly demand by using the tank and one third of the current wells.
  - A. We can also do a below ground tank under either a park or possibly under a baseball or soccer field at a school district. This way it is not an eye sore, this would be dependent on land use through a long-term lease or land purchase.
  - B. The aerial tank benefit is that there is pressure even when the power is out.

Water Pipes	Unit Cost \$/ foot	Feet	Over 20 years
4" -6 "	\$65.00	77,900	
6"-12"	\$117.00	31,184	
<b>Cost</b>		\$8,712,028.00	\$435,601.40
<b>Under 6" average Cost</b>	\$91.00	109,400	5,470 feet/year
<b>Total</b>		\$9,955,400.00	\$497,770.00
<b>Water Meter Connections</b>	<b>Unit Cost Installed</b>		
1,782	\$300.00		
<b>Total</b>		\$534,600.00	\$26,730.00
<b>Total distribution:</b>		\$10,490,000.00	<b>\$462,331.40</b>

Wells	Ave Rehab Cost	Flows gpm
2	\$150,000.00	600
4	\$137,500.00	550
5	\$120,000.00	525
6B	\$12,500.00	1100
7	\$156,000.00	675
9	\$12,500.00	1500
<b>Total</b>	\$588,500.00	4950

Peak Hourly Demand = 4,700 Gallons/ Minute