Agenda

Rio Linda / Elverta Community Water District Executive Committee

Join Zoom Meeting https://us02web.zoom.us/j/87695245826?pwd=czlFNGVnd1lyRFhZSlIwd3FwN1Fqdz09

October 5, 2020 6:00 P.M.

Meeting ID: 876 9524 5826

Passcode: 597697 Dial by your location 408 638 0968 US

NOTICE: THIS MEETING WILL BE HELD IN ACCORDANCE WITH EXECUTIVE ORDER N-29-20, ISSUED BY CALIFORNIA GOVERNOR GAVIN NEWSOM ON MARCH 17, 2020, THE RALPH M. BROWN ACT (CALIFORNIA GOVERNMENT CODE SECTION 54950, ET SEQ.), AND THE FEDERAL AMERICANS WITH DISABILITIES ACT.

THIS MEETING WILL NOT BE PHYSICALLY OPEN TO THE PUBLIC. ALL MEMBERS OF THE PUBLIC MAY PARTICIPATE IN THE MEETING VIA VIDEO CONFERENCE OR BY TELEPHONE

Public documents relating to any open session items listed on this agenda that are distributed to the Committee members less than 72 hours before the meeting are available for public inspection on the counter of the District Office at the address listed above.

The public may address the Committee concerning any item of interest. Persons who wish to comment on either agenda or non-agenda items should address the Executive Committee Chair. The Committee Chair will call for comments at the appropriate time. Comments will be subject to reasonable time limits (3 minutes).

In compliance with the Americans with Disabilities Act, if you have a disability, and you need a disability related modification or accommodation to participate in this meeting, then please contact the District office at (916) 991-1000. Requests must be made as early as possible and at least one full business day before the start of the meeting.

Call to Order

Public Comment

This is an opportunity for the public to comment on non-agenda items within the subject matter jurisdiction of the Committee. Comments are limited to 3 minutes.

Items for Discussion:

- 1. Discuss the options to mitigate the rapidly increasing annual CalPERS Unfunded Accrued Liability (UAL) payments.
 - a. Discuss the impact on the ongoing cost of service analysis for mitigating and not mitigating UAL escalation.
- 2. Review and discuss the expenditures of the District for the month of August 2020.
- 3. Review and discuss the financial reports for the month of August 2020.
- 4. Discuss independent auditors report for fiscal year 2019-2020.
- 5. Status update on annual pipe replacement project capital improvement.
- Status update on customer water consumption hardware and software pilot project.
- 7. Update from Contract District Engineer
- 8. Request to borrow District equipment from a community benefit non-profit organization.

Directors' and General Manager Comments

Items Requested for Next Month's Committee Agenda

Adjournment

Next Executive Committee meeting: Monday, November 2, 2020 at 6:00 p.m. Remote (no in-person attendance)

ADA COMPLIANCE STATEMENT

In compliance with the Americans with Disabilities Act, if you need special assistance or materials to participate in this meeting, please contact the District Office at 916-991-1000. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to ensure accessibility to this meeting and agenda materials.



Executive Committee Agenda Item: 1 and 1a

Date: October 5, 2020

Subject: Escalations in CalPERS Annual UAL Charges

Staff Contact: Timothy R. Shaw, General Manager

Recommended Committee Action:

The Executive Committee should review this report and associated documents, then forward an item onto the October 19th Board agenda to allow discussion and action (if deemed appropriate) by the full Board.

Current Background and Justification:

More substantial details and explanation of the causes and contributors leading to an escalating annual payment by RLECWD to CalPERS for the Unfunded Accrued Liability (UAL) will be provided in the presentation from CalMuni Advisors. The annual UAL payment is a minimum payment on the unfunded accrued liability. Over the past decade skyrocketing, UALs are directly responsible for cities and other municipalities declaring bankruptcy. In simple terms, the UAL is the total amount the District owes the pension fund in order for the pension fund to meet the District's obligations to its employees (past and present) for the current set of facts, assumptions and circumstances. Even though the District may have made every one of the required normal costs payments for every pay period, an unfunded liability is created whenever something changes, e.g. the facts, assumptions, or circumstances change. In a timely example, the CalPERS pension fund investments did not perform as assumed for the past two fiscal years, i.e. the return on investment was less than 7% for both 2019 and 2020. Whenever that happens, the District's UAL increases.

An illustration of how dramatically the annual UAL payment can increase is the difference between they July 2020 payment of approximately \$68,000 and the anticipated July 2021 payment of approximately \$82,000 an increase of more than 20%. A similar large percentage increase is currently projected for July 2022.

A large component of the annual UAL payment is interest. The UAL is financed over 20-years. The District's current UAL is approximately \$1.1 million. Assuming nothing changes, good or

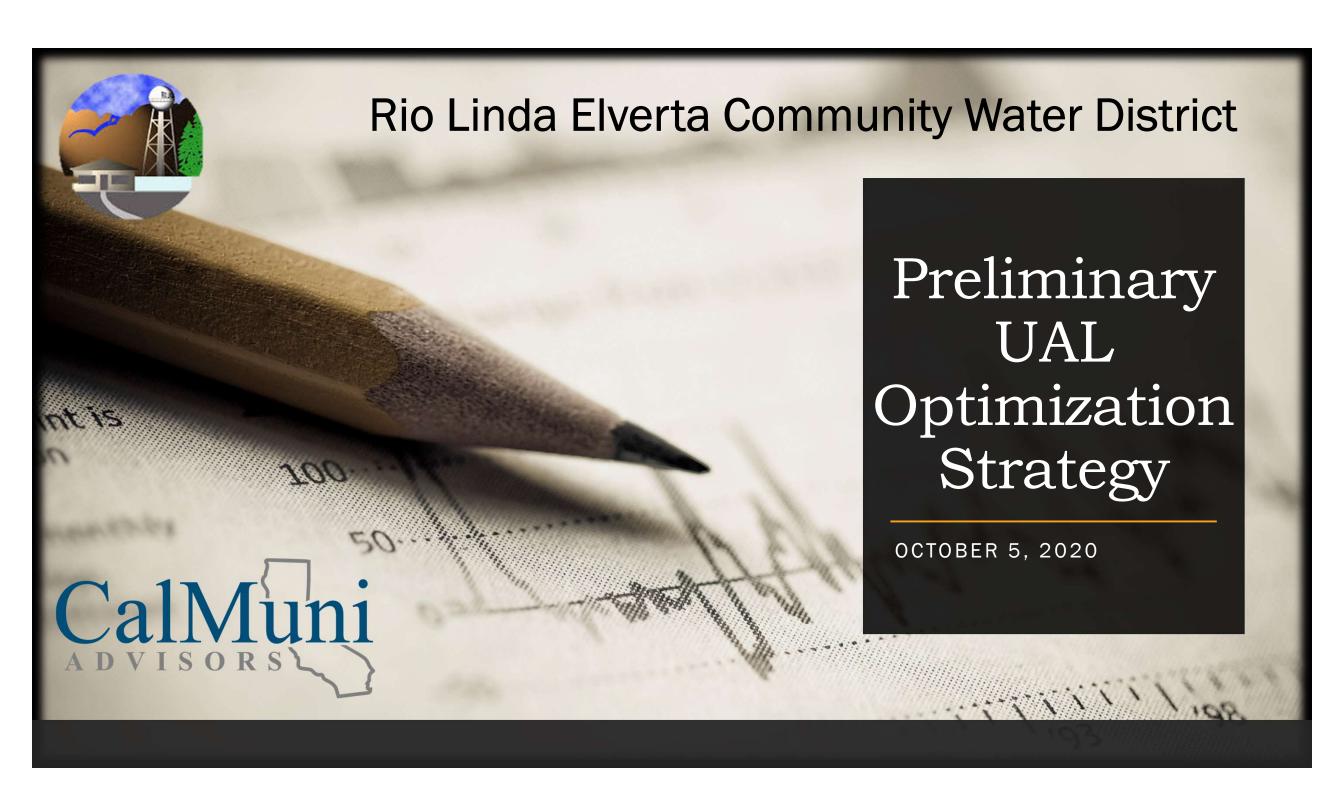
bad, the District will pay over \$900,000 in interest for the \$1.1 million debt at 7% interest over the next 20-years. The debt the District owes to the CalPERS pension fund is the most expensive debt the District has. If the District borrowed \$1.1 million at 3.5% interest, paid down the current UAL and made loan payments instead of UAL payments, the District would substantively save the ratepayers/taxpayers money for the next 20-years.

Similar to how a homeowner can save money on mortgage interest by making additional principal payments each year though the life of the mortgage, the District can save ratepayer/taxpayer money over the life of the UAL financing by making additional principal payments each year.

The rate structure study and cost of service analysis has been underway for months. I have confirmed that the draft cost of service analysis performed by the consultant has not yet contemplated large (20%) increases in annual UAL payments. The operating costs and budgets data provided to the consultant by staff for employment costs were consolidated into one figure (as opposed to expressing pay and pension costs separately). Commensurate with the date format provided by staff, the consultant applied a conservative inflation adjustment (e.g. Cost of Living Adjustments) to the employment anticipated employment costs. A 20% increase in UAL payments is far greater than the typical 2.5% inflation adjustment. The consultant has confirmed the cost of service analysis, as currently drafted, will need to be revised and the recommended rates increases over the 5-years span of the rate adjustment process will need to be revised accordingly. This cause and effect presumes the District does not take any mitigation measures to offset (completely or partially) the impact of the sharp increases in annual UAL payments currently forecasted by CalPERS. This is one of the reasons this topic is on the Executive Committee agenda and why the subject matter should be discussed at the October 19th Board meeting.

Conclusion:

The Executive Committee needs to forward this item onto the October 19th Board agenda for discussion and possible action.







06/30/2019 Pension Funding Status

Description	Misc	PEPRA Misc	Combined
Total Accrued Liability Market Value of Assets	\$4,367,599	\$225,810	\$4,593,409
	\$3,264,630	\$200,261	\$3,464,891
Unfunded Actuarial Liability (UAL) % Funded	\$1,102,969	\$25,549	\$1,128,518
	74.7%	88.7%	75.4%

Source: CalPERS Actuarial Valuation as of June 30, 2019

Definitions:

Total Accrued Liability = What You Need

Market Value of Assets = What You Have

Unfunded Actuarial Liability = What You Owe

Two Pension Plans:

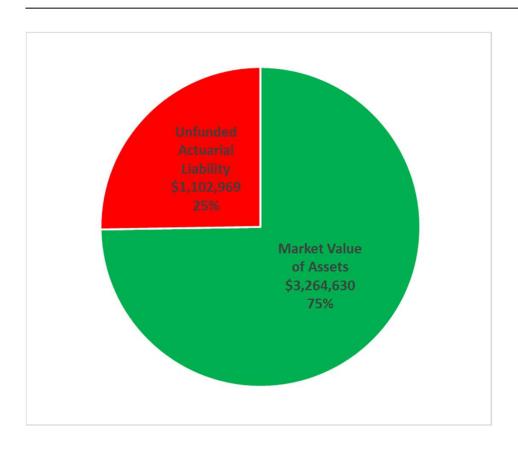
Miscellaneous and PEPRA Miscellaneous

MISCELLANEOUS represents largest savings opportunity





06/30/2019 Pension Funding Status



- Total Pension Obligations = \$4.4M
- Pension Assets = \$3.1M
- Shortfall = \$1.1M (25% of what is needed)

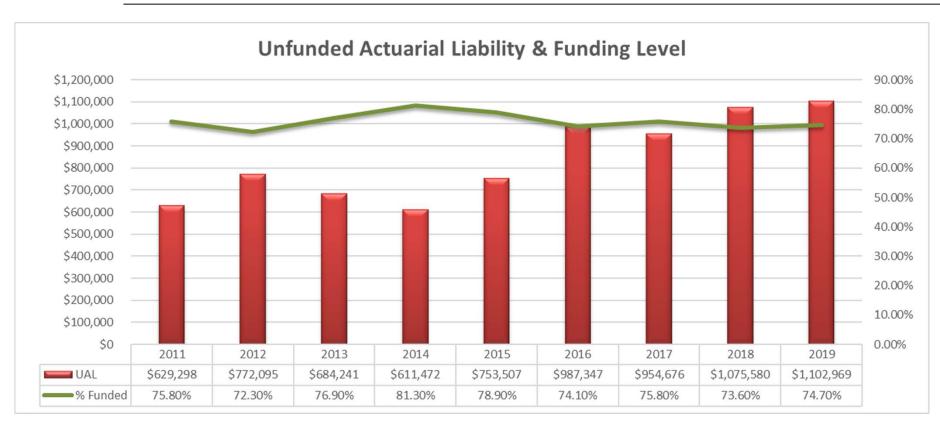
Shortfall (UAL) = DEBT:

- Owed to CalPERS
- Amortizes over time (20-30 years)
- Accrues interest at 7% interest rate (\$925K total)
- Reduced or delayed payments not allowed
- District's most expensive debt
- No prepayment restrictions or penalties





Pension Funding History



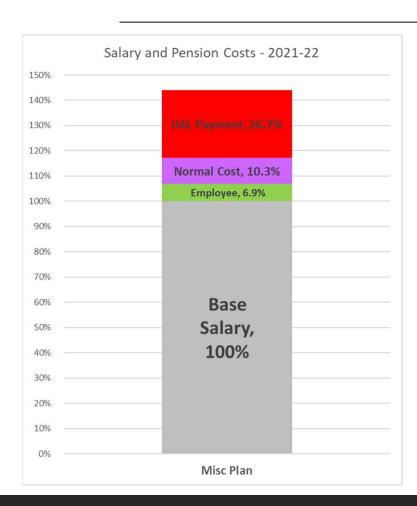
9 years later:

- Owe \$474K more
- Funded level 1% lower





Pension Costs - Overview



District and employee pension costs – 44% of salaries

District makes two types of payments to CalPERS each year:

- Normal Cost:
 - > Annual cost of pension benefits for current employees
 - % of payroll
- > UAL Payment
 - Repayment of pension funding shortfall
 - > Fixed dollar amount

<u>CalPERS charges 7% interest rate on UAL (included in UAL Payment)</u>





Pension Cost Increase Drivers

- Enhanced Pension Benefits (SB 400 / AB 616)
- Investment Performance vs Overly Optimistic Return Expectations
- People Living and Drawing Pensions Longer
- > Fewer Active Workers for Each Retiree
- CalPERS Assumption Changes
 - > Discount rate reduction
 - Actuarial Amortization Policy
 - Mortality rates
- Compensation Increases Above Plan Assumptions (2.75% per year)

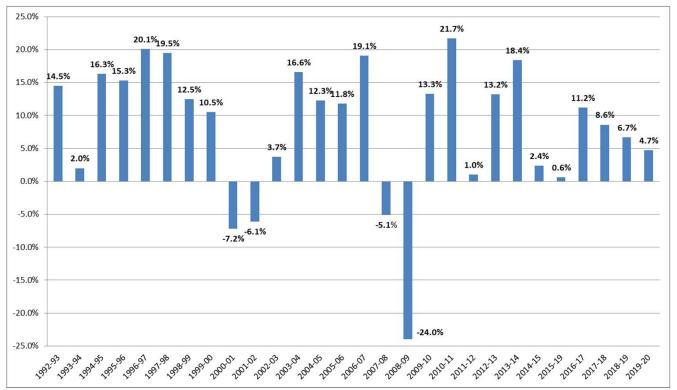




Investment Risk and Returns

CalPERS Historical Average Rates of Return through 2019-20:

Past: 5 years - 6.3% 10 years - 8.5% 20 years - 5.5% 30 years - 8.0%



2019: 58% of pension benefits funded by investment returns

CalPERS manages pension investments

District bears all investment risk

Failure by CalPERS to achieve target investment returns does not relieve District from pension benefit guarantees to employees and retirees

Lower returns => higher UAL and higher pension payments by District





Future Trend Expectations

Lower overall return environment:

- CalPERS has been reducing discount rate / return expectations (8.75% in 1995 => 7.0% in 2019)
- CalPERS's 2020 return estimate is 4.7% (last updated 07/15/2020)
- Any return below 7% is a shortfall and leads to UAL increase
- 4.7% return is 2.3% funding shortfall (~\$75K UAL increase)
- Conversations have started to further reduce discount rate to 6.50% (likely 5 years out)

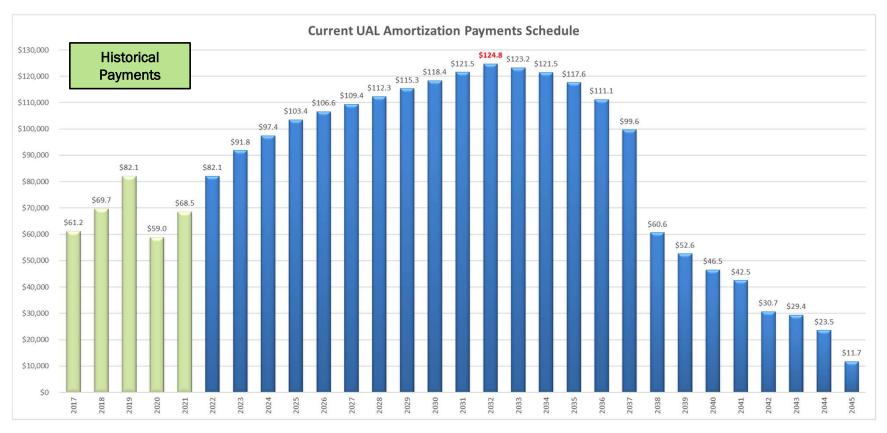
Lower revenues for local governments due to COVID-19 impacts on tax base / recession

Lower investment returns => higher pension costs, just as revenues are falling!!!





Where Things Are



06/30/2019 Actuarial Valuation

UAL Payments Only

DOES NOT INCLUDE:

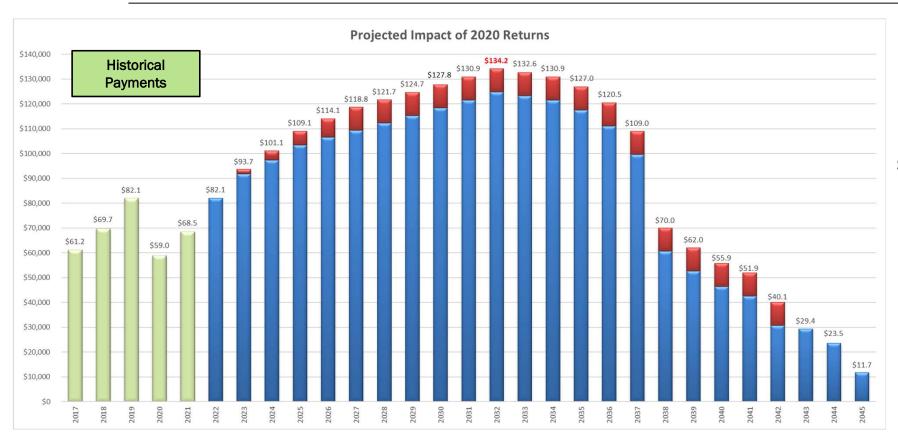
- Normal Cost (10.3%+ of salaries)
- 2020 COVID-19 impact

Total interest cost - \$925K





Adding 2020 Shortfall Impact



UAL Payments Only

DOES NOT INCLUDE:

 Normal Cost (10.3%+ of salaries)

Total interest cost - \$1M

(\$94K on 2020 Base)





UAL Optimization Strategy

Strategy must incorporate reserves, cash flow constraints, policy objectives, capital improvements strategy, etc.

Two approaches to UAL cost management:

- Reduce annual payments short-term cash flow management:
 - > Extend UAL payments over longer term
 - > Achieve interest cost savings comparing to 7% interest rate charged by CalPERS
- Reduce overall interest cost long-term cost management:
 - Prepay or accelerate UAL payments
- After reviewing 8 options to optimize UAL, District staff asked CalMuni Advisors to analyze impacts of:
 - making additional UAL payments of \$30K/yr from rate increase and
 - refunding the Miscellaneous UAL with pension obligation bonds





Impact of Additional \$30K/year

			- 100	
Description	Current	New	Difference	<u> </u>
First Payment		2022		
Final Payment Year	2045	2033	12	
Total Additional Payments		\$360,000		
Highest Annual Payment (2032) [1]	\$125,000	\$155,000	\$30,000	
Total Interest Cost [2]	\$926,000	\$655,000	\$271,000	SAVINO

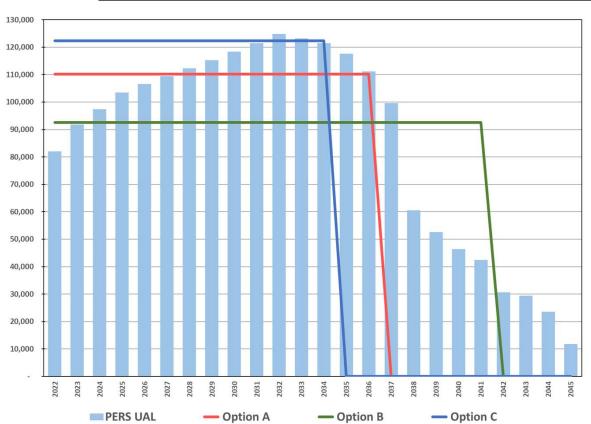
^[1] Payments are as shown in the 2019 CalPERS Actuarial Report and do not include 2020 and subsecuent adjustments.

^[2] Interest savings calculation assumes pro rate allocation across amortization bases.





Potential Refunding Options



Option	Term	UAL F	Refunded	Annual UAL Cost Years 1-15 [1]		Cash Flow - Savings [2]	Estimated Interest
		%	Amount	Min	Max	Javings [2]	Rate [3]
Currer	nt CalPERS S	Schedule	\$1,127,945	\$82,000	\$125,000		
A	15 years	100%	\$1,127,945	\$110,000	\$110,000	\$401,000	4.25%
В	20 years	100%	\$1,127,945	\$93,000	\$93,000	\$201,000	4.50%
С	13 years	100%	\$1,127,945	\$122,000	\$122,000	\$462,000	4.25%

[1] Annual UAL Cost consists of semi-annual loan payments, payments on unrefunded bases, and includes amortization of costs of issuance (estimated at \$85,000 for private placement).

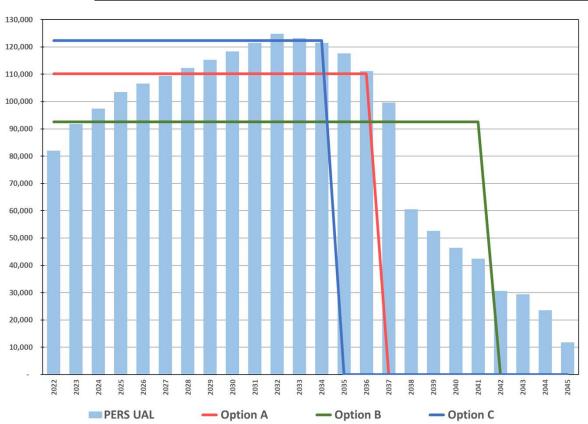
[3] Interest rate estimate is based on current market rates. Actual rates may vary.

^[2] Savings are based on 7% CalPERS discount rate. PV savings depend on actual rate of return and may be different.





Potential Cash Flow Savings



	% of UAL Total Cash Flow			Cash Flow	w Savings [2]		
Option Term	Refunded	Financing Cost [1]	Years 1-10	Years 11-15	Years 15-25	Total	
Currei	nt CalPERS	S Schedule	\$925,694				
Α	15 years	100%	\$524,850	(\$44,000)	\$208,000	\$237,000	\$401,000
В	20 years	100%	\$724,337	\$132,000	\$110,000	(\$41,000)	\$201,000
С	13 years	100%	\$463,299	(\$166,000)	\$391,000	\$237,000	\$462,000

^[1] Financing costs include interest and costs of issuance.

^[2] Savings are based on 7% CalPERS discount rate. PV savings depend on actual rate of return and may be different.





Refunding Considerations – Benefits

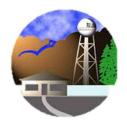
- > Enhanced budget predictability from new "flattened" repayment structure
- > Estimated near-term cashflow savings from lower interest rate
- Present value (PV) savings achieved if CalPERS earns more than the refunding interest rate
- Increased "funded status" of District's retirement plan
- Cash flow savings can be utilized to build up reserves, pay down future UAL increases, set up reserves for future OPEB costs, or any other legal purpose of the District
- ➤ Interest rates are presently at all-time lows





Refunding Considerations - Risks

- > CalPERS Reinvestment Risk: CalPERS will have more money to invest
 - > Same for any UAL prepayment
- > PV Savings not guaranteed: CalPERS has to earn more than the refunding interest rate
 - Easier to achieve than earning CalPERS' own 7% discount rate
- Listed as "debt" on District's financial statements
 - > UAL is also shown as liability on financial statements
- > For asset-secured structures, District's owned assets or revenues may be required as collateral





Next Steps

- ➤ Identify District's Priorities
- Develop Appropriate Strategies
- Implement Time-Sensitive Strategies
- Adopt Comprehensive Pension Liability Management Plan
- Annual Reviews of Actuarial Valuation
- ➤ There is no one-time fix!!!





Questions?

Dmitry Semenov

California Municipal Advisors, LLC

(916) 257-5789

dsemenov@calmuniadvisors.com

Cameron Weist

The Weist Law Firm

(831) 438-7900

cameron@weistlaw.com



California Public Employees' Retirement System Actuarial Office

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744 **888 CalPERS** (or **888**-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2020

Miscellaneous Plan of the Rio Linda Elverta Community Water District (CalPERS ID: 3301590511)
Annual Valuation Report as of June 30, 2019

Dear Employer,

Attached to this letter, you will find the June 30, 2019 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2021-22**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2019.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2019 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 1, 2020.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions, before any cost sharing, for fiscal year 2021-22 along with estimates of the required contributions for fiscal year 2022-23. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2021-22	10.34%	\$82,055
Projected Results		
2022-23	10.3%	<i>\$92,000</i>

Miscellaneous Plan of the Rio Linda Elverta Community Water District

(CalPERS ID: 3301590511)

Annual Valuation Report as of June 30, 2019

Page 2

The actual investment return for fiscal year 2019-20 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. To the extent the actual investment return for fiscal year 2019-20 differs from 7.00%, the actual contribution requirements for fiscal year 2022-23 will differ from those shown above. For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through fiscal year 2026-27.

Changes from Previous Year's Valuation

The CalPERS Board of Administration has adopted a new amortization policy effective with the June 30, 2019 actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year rampup and ramp-down on Unfunded Accrued Liability (UAL) bases attributable to assumption and method changes and non-investment gains/losses. The new policy does not utilize a 5-year ramp-down on investment gains/losses. These changes apply only to new UAL bases established on or after June 30, 2019.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effects of the changes on the required contributions are included in the "Reconciliation of Required Employer Contributions" section.

Questions

We understand that you might have some questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 1, 2020 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (888-225-7377).

Sincerely,

SCOTT TERANDO Chief Actuary



Actuarial Valuation as of June 30, 2019

for the Miscellaneous Plan of the Rio Linda Elverta Community Water District (CalPERS ID: 3301590511)

Required Contributions for Fiscal Year July 1, 2021 - June 30, 2022

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Section 2 - Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the Miscellaneous Plan of the Rio Linda Elverta Community Water District

(CalPERS ID: 3301590511) (Valuation Rate Plan ID: 1639)

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Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2019 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2019 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your Miscellaneous Plan has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2019 and employer contribution as of July 1, 2021 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

MAY SHUANG YU, ASA, MAAA Senior Pension Actuary, CalPERS

Highlights and Executive Summary

- Introduction
- Purpose of Section 1
- Required Employer Contributions
- Additional Discretionary Employer Contributions
- Plan's Funded Status
- Projected Employer Contributions
- Cost
- Changes Since the Prior Year's Valuation
- Subsequent Events

Introduction

This report presents the results of the June 30, 2019 actuarial valuation of the Miscellaneous Plan of the Rio Linda Elverta Community Water District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2021-22.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the Rio Linda Elverta Community Water District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2019;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2021 through June 30, 2022; and
- Provide actuarial information as of June 30, 2019 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Employer Contributions

	Fiscal Year
Required Employer Contributions	2021-22
Employer Normal Cost Rate	10.34%
Plus, Either	
1) Monthly Employer Dollar UAL Payment	\$6,837.92
0r	
2) Annual UAL Prepayment Option*	\$79,326

The total minimum required employer contribution is the **sum** of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) **plus** the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).

* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31). Any prepayment totaling over \$5 million requires a 72-hour notice email to FCSD_public_agency_wires@calpers.ca.gov. Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.

In accordance with Sections 20537 and 20572 of the Public Employees' Retirement Law, if a contracting agency fails to remit the required contributions when due, interest and penalties may apply.

	Fiscal Year 2020-21	Fiscal Year 2021-22
Development of Normal Cost as a Percentage of Payroll ¹		
Base Total Normal Cost for Formula	17.392%	17.25%
Surcharge for Class 1 Benefits ²		
None	0.000%	0.00%
Phase out of Normal Cost Difference ³	0.000%	0.00%
Plan's Total Normal Cost	17.392%	17.25%
Formula's Expected Employee Contribution Rate	6.908%	6.91%
Employer Normal Cost Rate	10.484%	10.34%
Projected Payroll for the Contribution Fiscal Year	\$290,258	\$306,901
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	\$30,431	\$31,734
Plan's Payment on Amortization Bases ⁴	68,517	82,055
% of Projected Payroll (illustrative only)	23.606%	26.74%
Estimated Total Employer Contribution	\$98,948	\$113,789
% of Projected Payroll (illustrative only)	34.090%	37.08%

¹ The results shown for fiscal year 2020-21 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after April 30, 2019.

² Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

³ The normal cost difference is phased out over a five-year period. The phase out of normal cost difference is 100% for the first year of pooling and is incrementally reduced by 20% of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

⁴ See Schedule of Plan's Amortization Bases.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2021-22 fiscal year is \$82,055. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2021-22 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2021-22

Estimated	Minimum UAL	ADP	Total UAL	Estimated Total
Normal Cost	Payment		Contribution	Contribution
\$31,734	\$82,055	\$0	\$82,055	\$113,789

Alternative Fiscal Year 2021-22 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$31,734	\$82,055	\$20,965	\$103,020	\$134,754
15 years	\$31,734	\$82,055	\$37,774	\$119,829	\$151,563
10 years	\$31,734	\$82,055	\$73,335	\$155,390	\$187,124
5 years	\$31,734	\$82,055	\$184,125	\$266,180	\$297,914

¹ The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2021 as determined in the June 30, 2019 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2018	June 30, 2019
1. Present Value of Projected Benefits (PVB)	\$4,458,317	\$4,761,999
2. Entry Age Normal Accrued Liability (AL)	4,071,672	4,367,599
3. Plan's Market Value of Assets (MVA)	2,996,092	3,264,630
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	1,075,580	1,102,969
5. Funded Ratio [(3) / (2)]	73.6%	74.7%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. As of the preparation date of this report, the year to date return for the 2019-20 fiscal year was well below the 7% assumed return. Actual contribution rates during this projection period could be significantly higher than the projection shown below.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2019-20)				
Fiscal Year	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Normal Cost %	10.34%	10.3%	10.3%	10.3%	10.3%	10.3%
UAL Payment	\$82,055	\$92,000	\$97,000	\$103,000	\$107,000	\$109,000

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section.

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- The Normal Cost, expressed as a percentage of total active payroll
- The Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to FY 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component will continue to be expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.8% over the 20 years ending June 30, 2019, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on the employer contribution is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

The CalPERS Board of Administration adopted a new amortization policy effective with this actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on UAL bases attributable to assumption and method changes and non-investment gains/losses. The new policy also does not utilize a 5-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

For inactive employers, the new amortization policy imposes a maximum amortization period of 15 years for all unfunded accrued liabilities effective June 30, 2017. Furthermore, the plan actuary has the ability to shorten the amortization period on any valuation date based on the life expectancy of plan members and projected cash flow needs to the plan.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2019. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2019-20 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2020. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- Breakdown of Entry Age Normal Accrued Liability
- Allocation of Plan's Share of Pool's Experience/Assumption Change
- Development of Plan's Share of Pool's Market Value of Assets
- Schedule of Plan's Amortization Bases
- Amortization Schedule and Alternatives
- Employer Contribution History
- Funding History

Breakdown of Entry Age Normal Accrued Liability

Active Members	\$971,616
Transferred Members	962,730
Terminated Members	195,265
Members and Beneficiaries Receiving Payments	<u>2,237,988</u>
Total	\$4,367,599

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	\$4,367,599
2.	Projected UAL balance at 6/30/2019	1,070,074
3.	Pool's Accrued Liability ¹	18,394,114,919
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2019 ¹	4,268,374,183
5.	Pool's 2018/19 Investment (Gain)/Loss ¹	68,711,010
6.	Pool's 2018/19 Non-Investment (Gain)/Loss ¹	70,985,020
7.	Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (2)] \div [(3) - (4)] \times (5)$	16,040
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (3) \times (6)$	16,855
9.	Plan's New (Gain)/Loss as of 6/30/2019: (7) + (8)	32,895
10.	Other Changes in the UAL ²	0

¹ Does not include plans that transferred to Pool on the valuation date.

Development of the Plan's Share of Pool's Market Value of Assets

11.	Plan's UAL: $(2) + (9) + (10)$	\$1,102,969
12.	Plan's Share of Pool's MVA: (1) - (11)	\$3,264,630

² May include Golden Handshakes, Service Purchases, etc. See Schedule of Plan's Amortization Bases for details.

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2019.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2021-22.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

		Ramp		Escala-			Expected		Expected		Minimum Required
	Date	Level	Ramp	tion	Amort.	Balance	Payment	Balance	Payment	Balance	Payment
Reason for Base	Est.	2021-22	Shape	Rate	Period	6/30/19	2019-20	6/30/20	2020-21	6/30/21	2021-22
Share of Pre-2013 Pool UAL	6/30/13	No	Ramp	2.75%	16	250,923	20,145	247,649	20,435	243,846	20,997
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	24	(3,906)	(262)	(3,908)	(265)	(3,907)	(272)
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	24	384,424	25,786	384,660	26,094	384,594	26,812
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	25	333	18	338	22	339	23
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	25	(298,580)	(15,849)	(303,086)	(20,042)	(303,570)	(20,593)
Side Fund	2013 or Prior	No	Ramp	2.75%	0	(129)	(90)	(45)	(46)	0	0
Assumption Change	6/30/14	100%	Up/Down	2.75%	15	186,420	13,865	185,127	17,604	179,876	18,088
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	(16,004)	(639)	(16,463)	(861)	(16,725)	(1,106)
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	195,244	7,792	200,851	10,505	204,044	13,493
Non-Investment (Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	(29,847)	(806)	(31,103)	(1,222)	(32,016)	(1,675)
Investment (Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	242,721	6,557	252,929	9,940	260,352	13,617
Assumption Change	6/30/16	80%	Up/Down	2.75%	17	72,636	2,681	74,947	4,080	75,973	5,590
Non-Investment (Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(6,056)	(84)	(6,393)	(170)	(6,665)	(262)
Investment (Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(117,611)	(1,634)	(124,154)	(3,300)	(129,431)	(5,086)
Assumption Change	6/30/17	60%	Up/Down	2.75%	18	78,249	1,478	82,198	2,997	84,852	4,620
Non-Investment (Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	16,571	0	17,731	242	18,722	498
Investment (Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	(33,145)	0	(35,465)	(484)	(37,447)	(995)
Method Change	6/30/18	40%	Up/Down	2.75%	19	32,383	(128)	34,782	649	36,545	1,333

N4!--!---

Schedule of Plan's Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2021-22	Ramp Shape	Escala- tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
Assumption Change	6/30/18	40%	Up/Down	2.75%	19	115,448	(1,940)	125,536	2,341	131,902	4,810
Non-Investment (Gain)/Loss	6/30/19	No	Ramp	0.00%	20	16,855	0	18,035	0	19,297	1,761
Investment (Gain)/Loss	6/30/19	20%	Up Only	0.00%	20	16,040	0	17,163	0	18,364	402
Total						1,102,969	56,890	1,121,329	68,519	1,128,945	82,055

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

N4!--!---

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives

				<u>Alternate Schedules</u>				
	Current Am Sched		15 Year Am	ortization	10 Year Am	ortization		
Date	Balance	Payment	Balance	Payment	Balance	Payment		
6/30/2021	1,128,945	82,055	1,128,945	119,829	1,128,945	155,390		
6/30/2022	1,123,094	91,805	1,084,019	119,829	1,047,234	155,390		
6/30/2023	1,106,748	97,384	1,035,948	119,829	959,804	155,390		
6/30/2024	1,083,486	103,442	984,512	119,829	866,254	155,390		
6/30/2025	1,052,329	106,596	929,476	119,829	766,155	155,389		
6/30/2026	1,015,726	109,424	870,587	119,829	659,050	155,390		
6/30/2027	973,639	112,330	807,576	119,829	544,447	155,389		
6/30/2028	925,598	115,317	740,154	119,829	421,823	155,390		
6/30/2029	871,106	118,385	668,013	119,829	290,614	155,390		
6/30/2030	809,625	121,534	590,822	119,829	150,220	155,389		
6/30/2031	740,582	124,775	508,227	119,829				
6/30/2032	663,356	123,227	419,851	119,829				
6/30/2033	582,323	121,502	325,288	119,828				
6/30/2034	497,403	117,605	224,107	119,829				
6/30/2035	410,568	111,149	115,842	119,828				
6/30/2036	324,334	99,642						
6/30/2037	243,966	60,594						
6/30/2038	198,366	52,628						
6/30/2039	157,813	46,459						
6/30/2040	120,802	42,490						
6/30/2041	85,308	30,655						
6/30/2042	59,570	29,387						
6/30/2043	33,341	23,526						
6/30/2044	11,338	11,728						
6/30/2045								
6/30/2046								
6/30/2047								
6/30/2048								
6/30/2049								
6/30/2050								
Total		2,053,639		1,797,433		1,553,897		
Interest Paid		924,694		668,488		424,952		
Estimated Savi	ings		_	256,206		499,742		

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)
2016 - 17	8.377%	\$61,203
2017 - 18	8.418%	69,739
2018 - 19	8.892%	82,103
2019 - 20	9.680%	58,958
2020 - 21	10.484%	68,517
2021 - 22	10.34%	82,055

Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Plan's Share of Pool's Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/2011	\$2,597,618	\$1,968,320	\$629,298	75.8%	\$410,585
06/30/2012	2,783,714	2,011,619	772,095	72.3%	336,826
06/30/2013	2,961,249	2,277,008	684,241	76.9%	366,114
06/30/2014	3,260,987	2,649,515	611,472	81.3%	302,299
06/30/2015	3,562,708	2,809,201	753,507	78.9%	331,706
06/30/2016	3,806,619	2,819,272	987,347	74.1%	250,480
06/30/2017	3,941,738	2,987,062	954,676	75.8%	258,672
06/30/2018	4,071,672	2,996,092	1,075,580	73.6%	267,571
06/30/2019	4,367,599	3,264,630	1,102,969	74.7%	282,913

Risk Analysis

- Future Investment Return Scenarios
- Discount Rate Sensitivity
- Mortality Rate Sensitivity
- Maturity Measures
- Maturity Measures History
- Hypothetical Termination Liability

Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2019-20, 2020-21, 2021-22 and 2022-23). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2019-20, 2020-21, 2021-22, and 2022-23, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2023. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2019-20 through 2022-23	Projected Employer Contributions						
2013 20 tillough 2022 23	2022-23	2023-24	2024-25	2025-26			
1.0%							
Normal Cost	10.3%	10.3%	10.3%	10.3%			
UAL Contribution	\$97,000	\$112,000	\$133,000	\$156,000			
4.0%							
Normal Cost	10.3%	10.3%	10.3%	10.3%			
UAL Contribution	\$94,000	\$105,000	\$119,000	\$132,000			
7.0%							
Normal Cost	10.3%	10.3%	10.3%	10.3%			
UAL Contribution	\$92,000	\$97,000	\$103,000	\$107,000			
9.0%							
Normal Cost	10.6%	10.8%	11.0%	11.2%			
UAL Contribution	\$91,000	\$94,000	\$96,000	\$94,000			
12.0%							
Normal Cost	10.6%	10.8%	11.0%	11.2%			
UAL Contribution	\$88,000	\$86,000	\$80,000	\$67,000			

These projections reflect the impact of the CalPERS risk mitigation policy, which reduces the discount rate when investment returns exceed specified trigger points.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2019 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2019	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate	
Discount Rate	6.0%	7.0%	8.0%	
Inflation	2.5%	2.5%	2.5%	
Real Rate of Return	3.5%	4.5%	5.5%	
a) Total Normal Cost	21.50%	17.25%	14.00%	
b) Accrued Liability	\$4,958,421	\$4,367,599	\$3,878,134	
c) Market Value of Assets	\$3,264,630	\$3,264,630	\$3,264,630	
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,693,791	\$1,102,969	\$613,504	
e) Funded Status	65.8%	74.7%	84.2%	

Sensitivity to the Price Inflation Assumption

As of June 30, 2019	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate	
Discount Rate	6.0%	7.0%	8.0%	
Inflation	1.5%	2.5%	3.5%	
Real Rate of Return	4.5%	4.5%	4.5%	
a) Total Normal Cost	18.39%	17.25%	15.89%	
b) Accrued Liability	\$4,612,849	\$4,367,599	\$4,046,908	
c) Market Value of Assets	\$3,264,630	\$3,264,630	\$3,264,630	
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,348,219	\$1,102,969	\$782,278	
e) Funded Status	70.8%	74.7%	80.7%	

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2019 plan costs and funded ratio under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2019	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	17.55%	17.25%	16.97%
b) Accrued Liability	\$4,455,570	\$4,367,599	\$4,286,327
c) Market Value of Assets	\$3,264,630	\$3,264,630	\$3,264,630
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,190,940	\$1,102,969	\$1,021,697
e) Funded Status	73.3%	74.7%	76.2%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2018	June 30, 2019
1. Retired Accrued Liability	1,798,982	2,237,988
2. Total Accrued Liability	4,071,672	4,367,599
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.44	0.51

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	June 30, 2018	June 30, 2019
1. Number of Actives	4	4
2. Number of Retirees	10	11
3. Support Ratio [(1) / (2)]	0.40	0.36

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2018	June 30, 2019
1. Market Value of Assets	\$2,996,092	\$3,264,630
2. Payroll	267,571	282,913
3. Asset Volatility Ratio (AVR) [(1) / (2)]	11.2	11.5
4. Accrued Liability	\$4,071,672	\$4,367,599
5. Liability Volatility Ratio (LVR) [(4) / (2)]	15.2	15.4

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.42	0.40	11.5	15.2
06/30/2018	0.44	0.40	11.2	15.2
06/30/2019	0.51	0.36	11.5	15.4

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2019. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability ^{1,2} @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability ^{1,2} @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%	
\$3,264,630	\$8,617,983	37.9%	\$5,353,353	\$6,952,326	47.0%	\$3,687,696	_

¹ The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

² The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 2.31% on June 30, 2019, and was 1.83% on January 31, 2020.

Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	June 30, 2018	June 30, 2019
Reported Payroll	\$267,571	\$282,913
Projected Payroll for Contribution Purposes	\$290,258	\$306,901
Number of Members		
Active	4	4
Transferred	9	7
Separated	8	9
Retired	10	11

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

None

Plan's Major Benefit Options

Shown below is a summary of the major <u>optional</u> benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group)
Member Category	Misc	Misc
Demographics Actives Transfers/Separated Receiving	Yes Yes Yes	No No Yes
Benefit Provision		
Benefit Formula Social Security Coverage Full/Modified	2% @ 55 Yes Full	
Employee Contribution Rate	7.00%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits Optional Settlement 2 1959 Survivor Benefit Level Special Alternate (firefighters)	Yes No No No	
Post-Retirement Death Benefits Lump Sum Survivor Allowance (PRSA)	\$500 No	\$500 No
COLA	2%	2%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

Section 2 may be found on the CalPERS website (www.calpers.ca.gov) in the Forms and Publications section



California Public Employees' Retirement System Actuarial Office

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744 **888 CalPERS** (or **888**-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2020

Miscellaneous Plan of the Rio Linda Elverta Community Water District (CalPERS ID: 3301590511)
Annual Valuation Report as of June 30, 2019

Dear Employer,

Attached to this letter, you will find the June 30, 2019 actuarial valuation report of your CalPERS pension plan. **Provided in this report is the determination of the minimum required employer contributions for fiscal year 2021-22**. In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2019.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Miscellaneous or Safety Risk Pool Actuarial Valuation Report as appropriate.

Your June 30, 2019 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your assigned CalPERS staff actuary, whose signature appears in the Actuarial Certification section on page 1, is available to discuss the report with you after August 1, 2020.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution rates as needed. This valuation is based on an investment return assumption of 7.0% which was adopted by the board in December 2016. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from December 2017.

Required Contribution

The exhibit below displays the minimum employer contributions, before any cost sharing, for fiscal year 2021-22 along with estimates of the required contributions for fiscal year 2022-23. Member contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The employer contributions in this report do not reflect any cost sharing arrangements you may have with your employees**.

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2021-22	10.34%	\$82,055
Projected Results		
2022-23	10.3%	<i>\$92,000</i>

Miscellaneous Plan of the Rio Linda Elverta Community Water District

(CalPERS ID: 3301590511)

Annual Valuation Report as of June 30, 2019

Page 2

The actual investment return for fiscal year 2019-20 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 7.00%. *To the extent the actual investment return for fiscal year 2019-20 differs from 7.00%, the actual contribution requirements for fiscal year 2022-23 will differ from those shown above.* For additional details regarding the assumptions and methods used for these projections please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through fiscal year 2026-27.

Changes from Previous Year's Valuation

The CalPERS Board of Administration has adopted a new amortization policy effective with the June 30, 2019 actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year rampup and ramp-down on Unfunded Accrued Liability (UAL) bases attributable to assumption and method changes and non-investment gains/losses. The new policy does not utilize a 5-year ramp-down on investment gains/losses. These changes apply only to new UAL bases established on or after June 30, 2019.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effects of the changes on the required contributions are included in the "Reconciliation of Required Employer Contributions" section.

Questions

We understand that you might have some questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until after August 1, 2020 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or (888-225-7377).

Sincerely,

SCOTT TERANDO Chief Actuary



Actuarial Valuation as of June 30, 2019

for the Miscellaneous Plan of the Rio Linda Elverta Community Water District (CalPERS ID: 3301590511)

Required Contributions for Fiscal Year July 1, 2021 - June 30, 2022

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Section 2 - Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Plan Specific Information for the Miscellaneous Plan of the Rio Linda Elverta Community Water District

(CalPERS ID: 3301590511) (Valuation Rate Plan ID: 1639)

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Actuarial Certification

Section 1 of this report is based on the member and financial data contained in our records as of June 30, 2019 which was provided by your agency and the benefit provisions under your contract with CalPERS. Section 2 of this report is based on the member and financial data as of June 30, 2019 provided by employers participating in the Miscellaneous Risk Pool to which the plan belongs and benefit provisions under the CalPERS contracts for those agencies.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the risk pool containing your Miscellaneous Plan has been performed in accordance with generally accepted actuarial principles consistent with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2019 and employer contribution as of July 1, 2021 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary for CalPERS, a member of both the American Academy of Actuaries and Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

MAY SHUANG YU, ASA, MAAA Senior Pension Actuary, CalPERS

Highlights and Executive Summary

- Introduction
- Purpose of Section 1
- Required Employer Contributions
- Additional Discretionary Employer Contributions
- Plan's Funded Status
- Projected Employer Contributions
- Cost
- Changes Since the Prior Year's Valuation
- Subsequent Events

Introduction

This report presents the results of the June 30, 2019 actuarial valuation of the Miscellaneous Plan of the Rio Linda Elverta Community Water District of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the required employer contributions for fiscal year 2021-22.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the Rio Linda Elverta Community Water District of CalPERS was prepared by the plan actuary in order to:

- Set forth the assets and accrued liabilities of this plan as of June 30, 2019;
- Determine the minimum required employer contribution for this plan for the fiscal year July 1, 2021 through June 30, 2022; and
- Provide actuarial information as of June 30, 2019 to the CalPERS Board of Administration and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to GASB Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available from CalPERS and details for ordering are available on our website.

The measurements shown in this actuarial valuation may not be applicable for other purposes. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; and changes in plan provisions or applicable law.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the recommendations of Actuarial Standards of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 6.0% and 8.0%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Employer Contributions

	Fiscal Year
Required Employer Contributions	2021-22
Employer Normal Cost Rate	10.34%
Plus, Either	
1) Monthly Employer Dollar UAL Payment	\$6,837.92
Or	
2) Annual IIAI Prenayment Ontion*	\$79.326

2) Annual UAL Prepayment Option*

The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly in dollars).

* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31). Any prepayment totaling over \$5 million requires a 72-hour notice email to FCSD_public_agency_wires@calpers.ca.gov. Plan Normal Cost contributions will be made as part of the payroll reporting process. If there is contractual cost sharing or other change, this amount will change.

In accordance with Sections 20537 and 20572 of the Public Employees' Retirement Law, if a contracting agency fails to remit the required contributions when due, interest and penalties may apply.

	Fiscal Year 2020-21	Fiscal Year 2021-22
Development of Normal Cost as a Percentage of Payroll ¹		
Base Total Normal Cost for Formula	17.392%	17.25%
Surcharge for Class 1 Benefits ²		
None	0.000%	0.00%
Phase out of Normal Cost Difference ³	0.000%	0.00%
Plan's Total Normal Cost	17.392%	17.25%
Formula's Expected Employee Contribution Rate	6.908%	6.91%
Employer Normal Cost Rate	10.484%	10.34%
Projected Payroll for the Contribution Fiscal Year	\$290,258	\$306,901
Estimated Employer Contributions Based on Projected Payroll		
Plan's Estimated Employer Normal Cost	\$30,431	\$31,734
Plan's Payment on Amortization Bases ⁴	68,517	82,055
% of Projected Payroll (illustrative only)	23.606%	26.74%
Estimated Total Employer Contribution	\$98,948	\$113,789
% of Projected Payroll (illustrative only)	34.090%	37.08%

¹ The results shown for fiscal year 2020-21 reflect the prior year valuation and may not take into account any lump sum payment, side fund payoff, or rate adjustment made after April 30, 2019.

² Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges for each benefit.

³ The normal cost difference is phased out over a five-year period. The phase out of normal cost difference is 100% for the first year of pooling and is incrementally reduced by 20% of the original normal cost difference for each subsequent year. This is non-zero only for plans that joined a pool within the past 5 years. Most plans joined a pool June 30, 2003, when risk pooling was implemented.

⁴ See Schedule of Plan's Amortization Bases.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for the 2021-22 fiscal year is \$82,055. CalPERS allows employers to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Employers can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during fiscal year 2021-22 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

If you are considering making an ADP, please contact your actuary for additional information.

Minimum Required Employer Contribution for Fiscal Year 2021-22

Estimated	Minimum UAL	ADP	Total UAL	Estimated Total
Normal Cost	Payment		Contribution	Contribution
\$31,734	\$82,055	\$0	\$82,055	\$113,789

Alternative Fiscal Year 2021-22 Employer Contributions for Greater UAL Reduction

Funding Target	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$31,734	\$82,055	\$20,965	\$103,020	\$134,754
15 years	\$31,734	\$82,055	\$37,774	\$119,829	\$151,563
10 years	\$31,734	\$82,055	\$73,335	\$155,390	\$187,124
5 years	\$31,734	\$82,055	\$184,125	\$266,180	\$297,914

¹ The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected Unfunded Accrued Liability as of June 30, 2021 as determined in the June 30, 2019 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Plan's Funded Status

	June 30, 2018	June 30, 2019
1. Present Value of Projected Benefits (PVB)	\$4,458,317	\$4,761,999
2. Entry Age Normal Accrued Liability (AL)	4,071,672	4,367,599
3. Plan's Market Value of Assets (MVA)	2,996,092	3,264,630
4. Unfunded Accrued Liability (UAL) [(2) - (3)]	1,075,580	1,102,969
5. Funded Ratio [(3) / (2)]	73.6%	74.7%

This measure of funded status is an assessment of the need for future employer contributions based on the selected actuarial cost method used to fund the plan. The UAL is the present value of future employer contributions for service that has already been earned and is in addition to future normal cost contributions for active members. For a measure of funded status that is appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities, please see "Hypothetical Termination Liability" in the "Risk Analysis" section.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. As of the preparation date of this report, the year to date return for the 2019-20 fiscal year was well below the 7% assumed return. Actual contribution rates during this projection period could be significantly higher than the projection shown below.

	Required Contribution	Projected Future Employer Contributions (Assumes 7.00% Return for Fiscal Year 2019-20)							
Fiscal Year	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27			
Normal Cost %	10.34%	10.3%	10.3%	10.3%	10.3%	10.3%			
UAL Payment	\$82,055	\$92,000	\$97,000	\$103,000	\$107,000	\$109,000			

For some sources of UAL, the change in UAL is amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large increase in UAL, the relatively small amortization payments during the ramp up period could result in a funded ratio that is projected to decrease initially while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section.

Cost

Actuarial Determination of Pension Plan Cost

Contributions to fund the pension plan are comprised of two components:

- The Normal Cost, expressed as a percentage of total active payroll
- The Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to FY 2016-17, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2016-17, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There continues to be an option to prepay this amount during July of each fiscal year.

The Normal Cost component will continue to be expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 5.8% over the 20 years ending June 30, 2019, yet individual fiscal year returns have ranged from -23.6% to +20.7%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2017.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" and Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on the employer contribution is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or contribution is shown for any plan changes which were already included in the prior year's valuation.

Actuarial Methods and Assumptions

The CalPERS Board of Administration adopted a new amortization policy effective with this actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a 5-year ramp-up and ramp-down on UAL bases attributable to assumption and method changes and non-investment gains/losses. The new policy also does not utilize a 5-year ramp-down on investment gains/losses. These changes will apply only to new UAL bases established on or after June 30, 2019.

For inactive employers, the new amortization policy imposes a maximum amortization period of 15 years for all unfunded accrued liabilities effective June 30, 2017. Furthermore, the plan actuary has the ability to shorten the amortization period on any valuation date based on the life expectancy of plan members and projected cash flow needs to the plan.

Subsequent Events

The contribution requirements determined in this actuarial valuation report are based on demographic and financial information as of June 30, 2019. Changes in the value of assets subsequent to that date are not reflected. Investment returns below the assumed rate of return will increase future required contributions while investment returns above the assumed rate of return will decrease future required contributions.

The projected employer contributions on Page 6 are calculated under the assumption that the discount rate remains at 7.0% going forward and that the realized rate of return on assets for fiscal year 2019-20 is 7.0%.

This actuarial valuation report reflects statutory changes, regulatory changes and CalPERS Board actions through January 2020. Any subsequent changes or actions are not reflected.

Assets and Liabilities

- Breakdown of Entry Age Normal Accrued Liability
- Allocation of Plan's Share of Pool's Experience/Assumption Change
- Development of Plan's Share of Pool's Market Value of Assets
- Schedule of Plan's Amortization Bases
- Amortization Schedule and Alternatives
- Employer Contribution History
- Funding History

Breakdown of Entry Age Normal Accrued Liability

Active Members	\$971,616
Transferred Members	962,730
Terminated Members	195,265
Members and Beneficiaries Receiving Payments	<u>2,237,988</u>
Total	\$4,367,599

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1.	Plan's Accrued Liability	\$4,367,599
2.	Projected UAL balance at 6/30/2019	1,070,074
3.	Pool's Accrued Liability ¹	18,394,114,919
4.	Sum of Pool's Individual Plan UAL Balances at 6/30/2019 ¹	4,268,374,183
5.	Pool's 2018/19 Investment (Gain)/Loss ¹	68,711,010
6.	Pool's 2018/19 Non-Investment (Gain)/Loss ¹	70,985,020
7.	Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (2)] \div [(3) - (4)] \times (5)$	16,040
8.	Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (3) \times (6)$	16,855
9.	Plan's New (Gain)/Loss as of 6/30/2019: (7) + (8)	32,895
10.	Other Changes in the UAL ²	0

¹ Does not include plans that transferred to Pool on the valuation date.

Development of the Plan's Share of Pool's Market Value of Assets

11.	Plan's UAL: (2) + (9) + (10)	\$1,102,969
12.	Plan's Share of Pool's MVA: (1) - (11)	\$3,264,630

² May include Golden Handshakes, Service Purchases, etc. See Schedule of Plan's Amortization Bases for details.

Schedule of Plan's Amortization Bases

Note that there is a two-year lag between the valuation date and the start of the contribution fiscal year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2019.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: fiscal year 2021-22.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment on the UAL for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

		Ramp		Escala-			Expected		Expected		Minimum Required
	Date	Level	Ramp	tion	Amort.	Balance	Payment	Balance	Payment	Balance	Payment
Reason for Base	Est.	2021-22	Shape	Rate	Period	6/30/19	2019-20	6/30/20	2020-21	6/30/21	2021-22
Share of Pre-2013 Pool UAL	6/30/13	No	Ramp	2.75%	16	250,923	20,145	247,649	20,435	243,846	20,997
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	24	(3,906)	(262)	(3,908)	(265)	(3,907)	(272)
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.75%	24	384,424	25,786	384,660	26,094	384,594	26,812
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	25	333	18	338	22	339	23
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.75%	25	(298,580)	(15,849)	(303,086)	(20,042)	(303,570)	(20,593)
Side Fund	2013 or Prior	No	Ramp	2.75%	0	(129)	(90)	(45)	(46)	0	0
Assumption Change	6/30/14	100%	Up/Down	2.75%	15	186,420	13,865	185,127	17,604	179,876	18,088
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	(16,004)	(639)	(16,463)	(861)	(16,725)	(1,106)
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.75%	26	195,244	7,792	200,851	10,505	204,044	13,493
Non-Investment (Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	(29,847)	(806)	(31,103)	(1,222)	(32,016)	(1,675)
Investment (Gain)/Loss	6/30/16	80%	Up/Down	2.75%	27	242,721	6,557	252,929	9,940	260,352	13,617
Assumption Change	6/30/16	80%	Up/Down	2.75%	17	72,636	2,681	74,947	4,080	75,973	5,590
Non-Investment (Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(6,056)	(84)	(6,393)	(170)	(6,665)	(262)
Investment (Gain)/Loss	6/30/17	60%	Up/Down	2.75%	28	(117,611)	(1,634)	(124,154)	(3,300)	(129,431)	(5,086)
Assumption Change	6/30/17	60%	Up/Down	2.75%	18	78,249	1,478	82,198	2,997	84,852	4,620
Non-Investment (Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	16,571	0	17,731	242	18,722	498
Investment (Gain)/Loss	6/30/18	40%	Up/Down	2.75%	29	(33,145)	0	(35,465)	(484)	(37,447)	(995)
Method Change	6/30/18	40%	Up/Down	2.75%	19	32,383	(128)	34,782	649	36,545	1,333

N4!--!---

Schedule of Plan's Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level 2021-22	Ramp Shape	Escala- tion Rate	Amort. Period	Balance 6/30/19	Expected Payment 2019-20	Balance 6/30/20	Expected Payment 2020-21	Balance 6/30/21	Minimum Required Payment 2021-22
Assumption Change	6/30/18	40%	Up/Down	2.75%	19	115,448	(1,940)	125,536	2,341	131,902	4,810
Non-Investment (Gain)/Loss	6/30/19	No	Ramp	0.00%	20	16,855	0	18,035	0	19,297	1,761
Investment (Gain)/Loss	6/30/19	20%	Up Only	0.00%	20	16,040	0	17,163	0	18,364	402
Total						1,102,969	56,890	1,121,329	68,519	1,128,945	82,055

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

N4!--!---

Amortization Schedule and Alternatives

The amortization schedule on the previous page shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over a reasonable period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives

				<u>Alternate</u>	Schedules	
	Current Am Sched		15 Year Am	ortization	10 Year Am	ortization
Date	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2021	1,128,945	82,055	1,128,945	119,829	1,128,945	155,390
6/30/2022	1,123,094	91,805	1,084,019	119,829	1,047,234	155,390
6/30/2023	1,106,748	97,384	1,035,948	119,829	959,804	155,390
6/30/2024	1,083,486	103,442	984,512	119,829	866,254	155,390
6/30/2025	1,052,329	106,596	929,476	119,829	766,155	155,389
6/30/2026	1,015,726	109,424	870,587	119,829	659,050	155,390
6/30/2027	973,639	112,330	807,576	119,829	544,447	155,389
6/30/2028	925,598	115,317	740,154	119,829	421,823	155,390
6/30/2029	871,106	118,385	668,013	119,829	290,614	155,390
6/30/2030	809,625	121,534	590,822	119,829	150,220	155,389
6/30/2031	740,582	124,775	508,227	119,829		
6/30/2032	663,356	123,227	419,851	119,829		
6/30/2033	582,323	121,502	325,288	119,828		
6/30/2034	497,403	117,605	224,107	119,829		
6/30/2035	410,568	111,149	115,842	119,828		
6/30/2036	324,334	99,642				
6/30/2037	243,966	60,594				
6/30/2038	198,366	52,628				
6/30/2039	157,813	46,459				
6/30/2040	120,802	42,490				
6/30/2041	85,308	30,655				
6/30/2042	59,570	29,387				
6/30/2043	33,341	23,526				
6/30/2044	11,338	11,728				
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
6/30/2050						
Total		2,053,639		1,797,433		1,553,897
Interest Paid		924,694		668,488		424,952
Estimated Savi	ings		_	256,206		499,742

Employer Contribution History

The table below provides a recent history of the required employer contributions for the plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made during a fiscal year.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)
2016 - 17	8.377%	\$61,203
2017 - 18	8.418%	69,739
2018 - 19	8.892%	82,103
2019 - 20	9.680%	58,958
2020 - 21	10.484%	68,517
2021 - 22	10.34%	82,055

Funding History

The funding history below shows the plan's actuarial accrued liability, share of the pool's market value of assets, share of the pool's unfunded liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Plan's Share of Pool's Unfunded Liability	Funded Ratio	Annual Covered Payroll
06/30/2011	\$2,597,618	\$1,968,320	\$629,298	75.8%	\$410,585
06/30/2012	2,783,714	2,011,619	772,095	72.3%	336,826
06/30/2013	2,961,249	2,277,008	684,241	76.9%	366,114
06/30/2014	3,260,987	2,649,515	611,472	81.3%	302,299
06/30/2015	3,562,708	2,809,201	753,507	78.9%	331,706
06/30/2016	3,806,619	2,819,272	987,347	74.1%	250,480
06/30/2017	3,941,738	2,987,062	954,676	75.8%	258,672
06/30/2018	4,071,672	2,996,092	1,075,580	73.6%	267,571
06/30/2019	4,367,599	3,264,630	1,102,969	74.7%	282,913

Risk Analysis

- Future Investment Return Scenarios
- Discount Rate Sensitivity
- Mortality Rate Sensitivity
- Maturity Measures
- Maturity Measures History
- Hypothetical Termination Liability

Future Investment Return Scenarios

Analysis was performed to determine the effects of various future investment returns on required employer contributions. The projections below provide a range of results based on five investment return scenarios assumed to occur during the next four fiscal years (2019-20, 2020-21, 2021-22 and 2022-23). The projections also assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

For fiscal years 2019-20, 2020-21, 2021-22, and 2022-23, each scenario assumes an alternate fixed annual return. The fixed return assumptions for the five scenarios are 1.0%, 4.0%, 7.0%, 9.0% and 12.0%.

These alternate investment returns were chosen based on stochastic analysis of possible future investment returns over the four-year period ending June 30, 2023. Using the expected returns and volatility of the asset classes in which the funds are invested, we produced five thousand stochastic outcomes for this period based on the most recently completed Asset Liability Management process. We then selected annual returns that approximate the 5th, 25th, 50th, 75th, and 95th percentiles for these outcomes. For example, of all the 4-year outcomes generated in the stochastic analysis, approximately 25% had an average annual return of 4.0% or less.

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 1.0% or greater than 12.0% over this four-year period, the likelihood of a single investment return less than 1.0% or greater than 12.0% in any given year is much greater.

Assumed Annual Return From 2019-20 through 2022-23	Projected Employer Contributions					
2013 20 tillough 2022 23	2022-23	2023-24	2024-25	2025-26		
1.0%						
Normal Cost	10.3%	10.3%	10.3%	10.3%		
UAL Contribution	\$97,000	\$112,000	\$133,000	\$156,000		
4.0%						
Normal Cost	10.3%	10.3%	10.3%	10.3%		
UAL Contribution	\$94,000	\$105,000	\$119,000	\$132,000		
7.0%						
Normal Cost	10.3%	10.3%	10.3%	10.3%		
UAL Contribution	\$92,000	\$97,000	\$103,000	\$107,000		
9.0%						
Normal Cost	10.6%	10.8%	11.0%	11.2%		
UAL Contribution	\$91,000	\$94,000	\$96,000	\$94,000		
12.0%						
Normal Cost	10.6%	10.8%	11.0%	11.2%		
UAL Contribution	\$88,000	\$86,000	\$80,000	\$67,000		

These projections reflect the impact of the CalPERS risk mitigation policy, which reduces the discount rate when investment returns exceed specified trigger points.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.50% and 2.50%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2019 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 7.0% as well as alternate discount rates of 6.0% and 8.0%. The rates of 6.0% and 8.0% were selected since they illustrate the impact of a 1.0% increase or decrease to the 7.0% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2019	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	6.0%	7.0%	8.0%
Inflation	2.5%	2.5%	2.5%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	21.50%	17.25%	14.00%
b) Accrued Liability	\$4,958,421	\$4,367,599	\$3,878,134
c) Market Value of Assets	\$3,264,630	\$3,264,630	\$3,264,630
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,693,791	\$1,102,969	\$613,504
e) Funded Status	65.8%	74.7%	84.2%

Sensitivity to the Price Inflation Assumption

As of June 30, 2019	1% Lower Inflation Rate	Current Assumptions	1% Higher Inflation Rate	
Discount Rate	6.0%	7.0%	8.0%	
Inflation	1.5%	2.5%	3.5%	
Real Rate of Return	4.5%	4.5%	4.5%	
a) Total Normal Cost	18.39%	17.25%	15.89%	
b) Accrued Liability	\$4,612,849	\$4,367,599	\$4,046,908	
c) Market Value of Assets	\$3,264,630	\$3,264,630	\$3,264,630	
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,348,219	\$1,102,969	\$782,278	
e) Funded Status	70.8%	74.7%	80.7%	

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2019 plan costs and funded ratio under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2017. This type of analysis highlights the impact on the plan of improving or worsening mortality over the long-term.

As of June 30, 2019	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	17.55%	17.25%	16.97%
b) Accrued Liability	\$4,455,570	\$4,367,599	\$4,286,327
c) Market Value of Assets	\$3,264,630	\$3,264,630	\$3,264,630
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$1,190,940	\$1,102,969	\$1,021,697
e) Funded Status	73.3%	74.7%	76.2%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan to tolerate risk is important in understanding how the plan is impacted by investment return volatility, other economic variables and changes in longevity or other demographic assumptions. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2018	June 30, 2019
1. Retired Accrued Liability	1,798,982	2,237,988
2. Total Accrued Liability	4,071,672	4,367,599
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.44	0.51

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the Support Ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures, and members retire, the ratio starts declining. A mature plan will often have a ratio near or below one. The average support ratio for CalPERS public agency plans is 1.25.

Support Ratio	June 30, 2018	June 30, 2019
1. Number of Actives	4	4
2. Number of Retirees	10	11
3. Support Ratio [(1) / (2)]	0.40	0.36

Maturity Measures (Continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio (AVR)

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio (LVR)

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to investment return and changes in liability. For example, a plan with LVR ratio of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility. The AVR, described above, will tend to move closer to the LVR as a plan matures.

Contribution Volatility	June 30, 2018	June 30, 2019
1. Market Value of Assets	\$2,996,092	\$3,264,630
2. Payroll	267,571	282,913
3. Asset Volatility Ratio (AVR) [(1) / (2)]	11.2	11.5
4. Accrued Liability	\$4,071,672	\$4,367,599
5. Liability Volatility Ratio (LVR) [(4) / (2)]	15.2	15.4

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.42	0.40	11.5	15.2
06/30/2018	0.44	0.40	11.2	15.2
06/30/2019	0.51	0.36	11.5	15.4

Hypothetical Termination Liability

The hypothetical termination liability is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2019. The plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. For the hypothetical termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees.

A more conservative investment policy and asset allocation strategy was adopted by the CalPERS Board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to 7 months after.

Market Value of Assets (MVA)	Hypothetical Termination Liability ^{1,2} @ 1.75%	Funded Status	Unfunded Termination Liability @ 1.75%	Hypothetical Termination Liability ^{1,2} @ 3.25%	Funded Status	Unfunded Termination Liability @ 3.25%	
\$3,264,630	\$8,617,983	37.9%	\$5,353,353	\$6,952,326	47.0%	\$3,687,696	_

¹ The hypothetical liabilities calculated above include a 5% mortality contingency load in accordance with Board policy. Other actuarial assumptions can be found in Appendix A of the Section 2 report.

In order to terminate the plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. CalPERS advises you to consult with the plan actuary before beginning this process.

² The current discount rate assumption used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 2.31% on June 30, 2019, and was 1.83% on January 31, 2020.

Participant Data

The table below shows a summary of your plan's member data upon which this valuation is based:

	June 30, 2018	June 30, 2019
Reported Payroll	\$267,571	\$282,913
Projected Payroll for Contribution Purposes	\$290,258	\$306,901
Number of Members		
Active	4	4
Transferred	9	7
Separated	8	9
Retired	10	11

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

None

Plan's Major Benefit Options

Shown below is a summary of the major <u>optional</u> benefits for which your agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

	Benefit Group)
Member Category	Misc	Misc
Demographics Actives Transfers/Separated Receiving	Yes Yes Yes	No No Yes
Benefit Provision		
Benefit Formula Social Security Coverage Full/Modified	2% @ 55 Yes Full	
Employee Contribution Rate	7.00%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits Optional Settlement 2 1959 Survivor Benefit Level Special Alternate (firefighters)	Yes No No No	
Post-Retirement Death Benefits Lump Sum Survivor Allowance (PRSA)	\$500 No	\$500 No
COLA	2%	2%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

Section 2 may be found on the CalPERS website (www.calpers.ca.gov) in the Forms and Publications section



Executive Committee Agenda Item: 2

Date: October 5, 2020

Subject: Expenditure Summary

Staff Contact: Timothy R. Shaw, General Manager

Recommended Committee Action:

It is recommended that the Executive Committee review the expenditures for August 2020, then forward the item to the October 19th Board agenda, consent section, with a recommendation for approval.

Current Background and Justification:

These expenditures were necessary and prudent for operation of the District and consistent with the policies and budget adopted by the Board of Directors. The Expenditure Summary provides the listing of expenditures which have occurred since the last regular meeting of the Board.

Conclusion:

Consistent with the District policies, the Expenditure Summary is to be reviewed by the Executive Committee and approved by the Board of Directors.

Rio Linda Elverta Community Water District Expenditure Report August 2020

Туре	Date	Num	Name	Memo	Amount
Liability Check	08/12/2020	EFT	QuickBooks Payroll Service	For PP Ending 08/08/20 Pay date 08/13/20	19,407.57
Liability Check	08/13/2020	EFT	CalPERS	For PP Ending 08/08/20 Pay date 08/13/20	2,852.32
Liability Check	08/13/2020	EFT	CalPERS	For PP Ending 08/08/20 Pay date 08/13/20	1,106.49
Liability Check	08/13/2020	EFT	Internal Revenue Service	Employment Taxes	7,482.64
Liability Check	08/13/2020	EFT	Employment Development	Employment Taxes	1,458.36
Liability Check	08/13/2020	EFT	Nationwide	Deferred Compensation Plan: Employer & Employee Share	1,370.03
Bill Pmt -Check	08/13/2020	EFT	Adept Solutions	Computer Maintenance	1,333.00
Bill Pmt -Check	08/13/2020	EFT	Comcast	Phone/Internet	236.03
Bill Pmt -Check	08/13/2020	EFT	PG&E	Utilities	60.35
Bill Pmt -Check	08/13/2020	EFT	Republic Services	Utilities	84.24
Bill Pmt -Check	08/13/2020	EFT	Verizon	Field Communication, Field IT	495.69
Liability Check	08/13/2020	EFT	Voyager Fleet Commander	Transportation Fuel	223.14
Bill Pmt -Check	08/13/2020	EFT	Umpqua Bank CC	Backflow, Computer, Office, Postage, Safety	1,618.43
Transfer	08/13/2020	EFT	RLECWD	Umpqua Bank Monthly Debt Service Transfer	16,500.00
Check	08/13/2020	EFT	RLECWD - Capital Improvement	Current Monthly Transfer	43,500.00
Check	08/13/2020	EFT	RLECWD - SURCHARGE ACCOUNT 1	Bi-monthly Transfer	86,828.51
Check	08/13/2020	EFT	RLECWD - SURCHARGE ACCOUNT 2	Bi-monthly Transfer	72,359.34
Check	08/13/2020	1365	Customer	Hydrant Meter Deposit Refund	982.70
Bill Pmt -Check	08/13/2020	1366	ABS Direct, Inc.	Printing, Postage	5,845.45
Bill Pmt -Check	08/13/2020	1367	ACWA/JPIA Powers Insurance Authority	EAP	25.70
Bill Pmt -Check	08/13/2020	1368	CoreLogic Solutions	Metro Scan	134.75
Bill Pmt -Check	08/13/2020	1369	Ferguson Enterprises	Annual Maintenance Contract	9,261.00
Bill Pmt -Check	08/13/2020	1370	Inductive Automation	Annual Maintenance Contract	2,472.00
Bill Pmt -Check	08/13/2020	1371	Intermedia.net	Phone/Internet	80.60
Bill Pmt -Check	08/13/2020	1372	Lechowicz & Tseng Municipal Consultants	Professional Fees-Rate Study	5,240.00
Bill Pmt -Check	08/13/2020	1373	Rio Linda Elverta Recreation & Park	Meeting Fee	50.00
Bill Pmt -Check	08/13/2020	1374	Rio Linda Hardware & Building Supply	Shop Supplies	122.78
Bill Pmt -Check	08/13/2020	1375	Sierra Chemical Company	Chemical Supplies	861.30
Bill Pmt -Check	08/13/2020	1376	SMUD	Utilities	24,769.72
Bill Pmt -Check	08/13/2020	1377	Spok, Inc.	Field Communication	15.30
Bill Pmt -Check	08/13/2020	1378	Tesco Controls, Inc.	Annual Maintenance Contract	5,500.00
Bill Pmt -Check	08/13/2020	1379	Unifirst Corporation	Uniforms	233.32
Bill Pmt -Check	08/13/2020	1380	Vanguard Cleaning Systems	Janitorial	195.00
Bill Pmt -Check	08/13/2020	1381	Anvil Builders	Capital Improvement: Well 16	254,837.50
Liability Check	08/14/2020	EFT	ARCO	Transportation: Fuel	605.64
Bill Pmt -Check	08/17/2020	EFT	WageWorks	FSA Administration Fee	76.25
Liability Check	08/26/2020	EFT	QuickBooks Payroll Service	For PP Ending 08/22/20 Pay date 08/27/20	19,627.41
Liability Check	08/27/2020	EFT	CalPERS	For PP Ending 08/22/20 Pay date 08/27/20	2,852.32
Liability Check	08/27/2020	EFT	CalPERS	For PP Ending 08/22/20 Pay date 08/27/20	1,106.49
Liability Check	08/27/2020	EFT	Nationwide	Deferred Compensation Plan: Employer & Employee Share	1,356.77
Liability Check	08/27/2020	EFT	Internal Revenue Service	Employment Taxes	7,265.82
Liability Check	08/27/2020	EFT	Employment Development	Employment Taxes	1,343.56
Liability Check	08/27/2020	EFT	Kaiser Permanente	Health Insurance	2,178.78

Rio Linda Elverta Community Water District Expenditure Report August 2020

Type	Date	Num	Name	Memo	Amount
Liability Check	08/27/2020	EFT	Principal	Dental & Vision Insurance	1,363.75
Liability Check	08/27/2020	EFT	Western Health Advantage	Health Insurance	9,358.06
Bill Pmt -Check	08/27/2020	EFT	Buckmaster Office Solutions	Office Equipment Expense	59.62
Bill Pmt -Check	08/27/2020	EFT	Voyager Fleet Commander	Transportation Fuel	238.61
Check	08/27/2020	1382	Special District Management Auth.	Workers Compensation 2019-20 Liability	1,473.79
Liability Check	08/27/2020	1383	Teamsters Local	Union Dues-Employee Paid	776.00
Check	08/27/2020	1384	Customer	Final Bill Refund	288.15
Check	08/27/2020	1385	Customer	Final Bill Refund	139.88
Bill Pmt -Check	08/27/2020	1386	ABS Direct	Printing, Postage	222.98
Bill Pmt -Check	08/27/2020	1387	BSK Associates	Lab Fees	1,475.00
Bill Pmt -Check	08/27/2020	1388	DirectHit Pest Control	Building Maintenance	75.00
Bill Pmt -Check	08/27/2020	1389	EKI Environment & Water	Engineering	5,000.00
Bill Pmt -Check	08/27/2020	1390	ICONIX Waterworks	Distribution Supplies	1,615.18
Bill Pmt -Check	08/27/2020	1391	RDO Equipment Co.	Construction Equipment Maintenance	807.16
Bill Pmt -Check	08/27/2020	1392	Sacramento Suburban Water District	Regional Collaboration Project	565.94
Bill Pmt -Check	08/27/2020	1393	Safety-Kleen Systems, Inc.	Transportation Maintenance	348.20
Bill Pmt -Check	08/27/2020	1394	Sierra Chemical Company	Chemical Supplies	1,349.32
Bill Pmt -Check	08/27/2020	1395	Staples	Office Expense	5.97
Bill Pmt -Check	08/27/2020	1396	The News	Publication Fee	61.00
Bill Pmt -Check	08/27/2020	1397	Underground Service Alert	Distribution Supplies	820.31
Bill Pmt -Check	08/27/2020	1398	Ferguson Enterprises	Capital Improvement: Small Meter Replacement	29,590.68
Total 10000 · Bank - Operating Account					659,590.90

Rio Linda Elverta Community Water District Expenditure Report August 2020

Type	Date	Num	Payee	Memo	Amount
				CIP Expense Transfer: Refer to operating check	
Transfer	08/26/2020	EFT	RLECWD	numbers: 1381	254,837.50
10385 · O	PUS Bank Che	cking			254,837.50
Туре	Date	Num	Payee	Memo	Amount
				CIP Expense Transfer: Refer to operating check	
Transfer	08/27/2020	EFT	RLECWD	numbers: 1398	29,590.68
10475 · C	apital Improven	nent-Ump	oqua Bank		29,590.68



Executive Committee Agenda Item: 3

Date: October 5, 2020

Subject: Financial Reports

Staff Contact: Timothy R. Shaw, General Manager

Recommended Committee Action:

The Executive Committee should review the Finance Reports of the District for the month of August 2020, then forward the report onto the October 19th Board agenda with the Committee's recommendation for Board approval.

Current Background and Justification:

The financial reports are the District's balance sheet, profit and loss, and capital improvements year to date. This report provides the snapshot of the District's fiscal health for the period covered.

Conclusion:

Consistent with District policies, these financials are to be reviewed by this committee and presented to the Board of Directors to inform them of the District's current financial situation.

Rio Linda Elverta Community Water District Balance Sheet

As of August 31, 2020

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ASSETS	
Current Assets	
Checking/Savings	
100 · Cash & Cash Equivalents	
10000 · Operating Account	
10020 · Operating Fund-Umpqua	707,444.59
Total 10000 · Operating Account	707,444.59
10475 · Capital Improvement	
10480 · General	1,536,235.29
10482 · Future Capital Imp Projects	129.68
10485 · Vehicle Replacement Reserve	15,000.00
Total 10450 · Capital Improvement	1,551,364.97
Total 100 · Cash & Cash Equivalents	2,258,809.56
102 · Restricted Assets	
102.2 · Restricted for Debt Service	
10700 · ZIONS Inv/Surcharge Reserve	524,881.94
10300 · Surcharge 1 Account	750,801.23
10350 · Umpqua Bank Debt Service	70,700.84
10380 · Surcharge 2 Account	297,025.59
10385 · OpusBank Checking	2,267,675.16
Total 102.2 · Restricted for Debt Service	3,911,084.76
102.4 · Restricted Other Purposes 10600 · LAIF Account	205 202 06
10650 · Carr Account	305,282.96 301,641.52
Total 102.4 · Restricted Other Purposes	606,924.48
· •	·
Total 102 · Restricted Assets	4,518,009.24
Total Checking/Savings	6,776,818.80
Accounts Receivable	525,236.93
Other Current Assets	04 500 00
12000 · Water Utility Receivable	91,589.08
12200 · Accrued Revenue	150,000.00
12250 · Accrued Interest Receivable	1,033.61 68,727.94
15000 · Inventory Asset 16000 · Prepaid Expense	101,956.04
Total Other Current Assets	938,543.60
Total Current Assets	7,715,362.40
Fixed Assets	7,713,302.40
17000 · General Plant Assets	709,029.25
17100 · Water System Facilities	21,058,271.17
17300 · Intangible Assets	373,043.42
17500 · Accum Depreciation & Amort	-9,894,836.59
18000 · Construction in Progress	2,498,738.27
18100 ⋅ Land	576,673.45
Total Fixed Assets	15,320,918.97
Other Assets	
19000 · Deferred Outflows	227,638.00
19900 · Suspense Account	0.00
Total Other Assets	227,638.00
TOTAL ASSETS	23,263,919.37
-	

Rio Linda Elverta Community Water District Balance Sheet

As of August 31, 2020

LIADU ITIES & FOLUTY	
LIABILITIES & EQUITY Liabilities	
Current Liabilities	100 001 00
Accounts Payable	102,001.02
Credit Cards	60.00
Other Current Liabilities	833,867.92
Total Current Liabilities	935,928.94
Long Term Liabilities	
23000 · OPEB Liability	115,693.00
23500 · Lease Buy-Back	656,542.27
25000 · Surcharge 1 Loan	3,833,912.47
25050 · Surcharge 2 Loan	2,790,040.16
26000 · Water Rev Refunding	1,806,855.00
27000 · Community Business Bank	244,415.94
29000 · Net Pension Liability	1,055,771.00
29500 · Deferred Inflows-Pension	20,431.00
29600 · Deferred Inflows-OPEB	82,332.00
Total Long Term Liabilities	10,605,992.84
Total Liabilities	11,541,921.78
Equity	
31500 · Invested in Capital Assets, Net	8,842,880.46
32000 · Restricted for Debt Service	705,225.24
38000 · Unrestricted Equity	2,121,928.59
Net Income	51,963.30
Total Equity	11,721,997.59

TOTAL LIABILITIES & EQUITY

23,263,919.37

Rio Linda Elverta Community Water District Operating Profit & Loss Budget Performance As of August 31, 2020

	Annual Budget	Aug 20	Jul-Aug 20	% of Annual Budget	YTD Annual Budget Balance
Ordinary Income/Expense					
Income					
Total 40000 · Operating Revenue	2,719,575.00	160,703.31	327,194.55	12.03%	2,392,380.45
41000 · Nonoperating Revenue					
41110 · Investment Revenue					
41112 · Interest Revenue	400.00	15.54	30.54	7.64%	369.46
Surcharg Total 41110 · Investment Revenue	400.00	15.54	30.54	7.64%	369.46
41120 · Property Tax	88,500.00	2,418.40	2,418.40	2.73%	86,081.60
Total 41000 · Nonoperating Revenue	88,900.00	2,433.94	2,448.94	2.76%	86,451.06
Total Income	2,808,475.00	163,137.25	329,643.49	11.74%	2,478,831.51
Gross Income	2,808,475.00	163,137.25	329,643.49	11.74%	2,478,831.51
Expense 60000 · Operating Expenses					
	405.000.00	44.005.04	40.050.00	0.400/	100 044 44
60010 · Professional Fees	135,000.00	11,305.94	12,358.89	9.16%	122,641.11
60100 · Personnel Services					
60110 · Salaries & Wages	729,867.00	57,329.22	107,714.41	14.76%	622,152.59
60150 · Employee Benefits & Expense	489,145.00	24,431.49	60,228.04	12.31%	428,916.96
Total 60100 · Personnel Services	1,219,012.00	81,760.71	167,942.45	13.78%	1,051,069.55
60200 · Administration	205,010.00	33,585.02	45,632.57	22.26%	159,377.43
64000 · Conservation	300.00	0.00	0.00	0.00%	300.00
65000 · Field Operations	436,400.00	36,009.67	56,751.12	13.00%	379,648.88
Total 60000 · Operating Expenses	1,995,722.00	162,661.34	282,685.03	14.17%	1,713,036.97
69000 · Non-Operating Expenses 69010 · Debt Service 69100 · Revenue Bond					
69105 · Principle	145,736.00	0.00	0.00	0.00%	145,736.00
69110 · Interest	57,490.00	0.00	0.00	0.00%	57,490.00
Total 69100 · Revenue Bond	203,226.00	0.00	0.00	0.00%	203,226.00
69125 · AMI Meter Loan	203,220.00	0.00	0.00	0.0076	203,220.00
69130 · Principle	48,281.00	0.00	24,703.02	51.17%	23,577.98
69135 · Interest	10,233.00	0.00	4,553.94	44.50%	5,679.06
Total 69125 · AMI Meter Loan	58,514.00	0.00	29,256.96	50.00%	29,257.04
Total 69010 · Debt Service	261,740.00	0.00	29,256.96	11.18%	232,483.04
69400 · Other Non-Operating Expense	2,000.00	0.00	0.00	0.00%	2,000.00
Total 69000 · Non-Operating Expenses	263,740.00	0.00	29,256.96	11.09%	234,483.04
Total Expense	2,259,462.00	162,661.34	311,941.99	13.81%	1,947,520.01
Net Ordinary Income	549,013.00	475.91	17,701.50		, , , , , , , , , , , , , , , , , , , ,
t Income	549,013.00	475.91	17,701.50		
	343,010.00	77 0.01	17,701.30		

Rio Linda Elverta Community Water District CAPITAL BUDGET VS ACTUAL FISCAL YEAR 2020-21 As of August 31, 2020

	GENERAL		VEHICLE REPL	ACEMENT	FUTURE CAPITAL IMPROVEM PROJECTS		
	Annual Budget	YTD Actual	Annual Budget	YTD Actual	Annual Budget	YTD Actual	
FUNDING SOURCES							
Fund Transfers							
Operating Fund Transfers In	549,013.00	91,500.00	-	-	-	-	
CIP Fund Intrafund Transfers	(456,670.00)	-	75,000.00	-	381,670.00	-	
Beginning Balance Redistribution	(1,396,338.00)	-	-	-	1,396,338.00	-	
Surcharge 2 Surplus Repayment	107,171.00	-	-	-	-	-	
Investment Revenue	-	-	-	-	3,500.00	129.68	
PROJECTS							
A · WATER SUPPLY							
A-1 · Miscellaneous Pump Replacements	40,000.00	-					
Total A · WATER SUPPLY	40,000.00	-	-	-	-	-	
B · WATER DISTRIBUTION							
B-1 · Service Replacements	30,000.00	-	-	-	-	-	
B-2 · Small Meter Replacements	120,000.00	33,728.28					
B-3 · Large Meter Replacements	5,000.00	-	-	-	-	-	
Total B · WATER DISTRIBUTION	155,000.00	33,728.28	-	-	-	-	
TOTAL BUDGETED PROJECT EXPENDITURES	195,000.00	33,728.28	-	-	-	-	



Executive Committee Agenda Item: 4

Date: October 5, 2020

Subject: Independent Auditor's Report for Fiscal Year 2019-2020

Staff Contact: Timothy R. Shaw, General Manager

Recommended Committee Action:

The Executive Committee should forward this item onto the October 19th Board agenda with the Committee's recommendation for Board acceptance.

Current Background and Justification:

Statutory requirements as well as fundamentals of transparency, fiscal responsibility, and good governance compel the District to obtain an independent audit for each fiscal year.

Once again, the audit report reflects the District's excellence in financial reporting.

Conclusion:

This item will be forwarded to the October 19th Board agenda.

RIO LINDA/ELVERTA COMMUNITY WATER DISTRICT ANNUAL FINANCIAL REPORT WITH INDEPENDENT AUDITOR'S REPORT JUNE 30, 2020 AND 2019

Annual Financial Report June 30, 2020 and 2019

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INDEPENDENT AUDITOR'S REPORT

Board of Directors Rio Linda/Elverta Community Water District Rio Linda, California

Report on the Financial Statements

We have audited the accompanying financial statements of Rio Linda/Elverta Community Water District (the District), which comprise the balance sheet as of June 30, 2020 and 2019, and the related statements of revenues, expenses, changes in net position, and cash flows for the years then ended and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and the State Controller's Minimum Audit Requirements for California Special Districts. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the District as of June 30, 2020, and the results of its operations and cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Board of Directors Rio Linda/Elverta Community Water District

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis information, the schedule of the District's proportionate share of the net pension liability, and the schedule of contributions, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the District's basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied to the basic financial statements and, accordingly, we express no opinion or provide any assurance on it.

Fechter & Company Certified Public Accountants

Sacramento, California September 22, 2020

Management's Discussion and Analysis June 30, 2020 and 2019

The management of the Rio Linda/Elverta Water District (District) presents this Management's Discussion and Analysis to achieve two goals:

To comply with the requirements of Governmental Accounting Standards Board Statement 34 (GASB 34) that are designed to provide more and easier-to-understand information about the finances of local government agencies such as the District; and,

To provide readers with narrative information that may help in understanding and interpreting the information presented in the District's financial statements for the fiscal year ended June 30, 2020 (FY 2019-20).

Questions or comments regarding this Management's Discussion and Analysis may be directed to the District General Manager via the following methods:

Mailing address: Rio Linda/Elverta Community Water District

730 L St.

Rio Linda, California 95673

Telephone: (916) 991-1000 E-mail: gm@rlecwd.com

Financial Highlights

The following items are, in the opinion of District management, among the most significant in assessing the District's overall financial activities during FY 2019-20 and its financial position at the close of FY 2019-20.

- ❖ The District's assets exceeded its liabilities by \$11,545,161 as of June 30, 2020, which is an increase of \$1,717,999 compared to June 30, 2019. Total assets increased by \$4,656,687 while total liabilities increased by \$2,973,814. The deferred outflow decreased to \$227,638 and deferred inflows increased to \$102,763 as of June 30, 2020. The District's net investment in capital assets, \$8,842,880, is composed of the capital assets of the District net of related debt − the water transmission and distribution system, water production facilities, land, buildings, and equipment belonging to the District. Unrestricted net assets totaled \$2,121,930, an increase of \$447,308 from the end of FY 2018-19.
- ♣ The District's operating revenues were \$2,800,111 and non-operating revenues were \$1,151,861, totaling \$3,951,972. Water sales to customers totaled 67% of all revenues.
- ❖ The District's total net long-term liabilities were \$10,503,230 and includes the Water Revenue Refunding Bond, State Revolving Fund Loan, Water Meter Replacement Loan, Installment Sales Agreement, Unearned revenue, OPEB Liability, and Net Pension Liability.

Management's Discussion and Analysis June 30, 2020 and 2019

OVERVIEW OF THE FINANCIAL STATEMENTS

This annual report consists of two parts: (1) Management's Discussion and Analysis; and (2) the financial statements, which includes the notes to financial statements.

The financial statements provide both long-term and short-term information about the District's overall financial status. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data.

The District's financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to government units on an accrual basis. Under this basis, revenues are recognized in the period in which they are earned, expenses are recognized in the period in which they are incurred, and depreciation of assets is recognized in the Statement of Revenues, Expenses, and Changes in Net Position. All assets and liabilities associated with the operation of the District are included in the Statement of Net Position.

The Statement of Net Position presents the financial position of the District on a full accrual historical cost basis and provides information about the nature and amount of resources and obligations at year-end.

Statement of Net Position

As of June 30, 2020, the total net position of the District was \$11,670,036. The following table summarizes assets, liabilities and net position at June 30, 2020, 2019, and 2018:

	 2020	 2019	 2018
Current Assets, Unrestricted	\$ 3,402,506	\$ 2,916,941	\$ 1,992,373
Restricted Cash and Cash Equivalents	5,136,746	1,479,705	1,533,974
Capital assets, net	15,022,960	 14,473,753	14,847,090
Total Assets	23,562,212	18,870,399	18,373,437
Total Deferred Outflows	227,638	262,764	347,606
Total Assets and Deferred Outflows	23,789,850	19,133,163	18,721,043
Current Liabilities	1,513,821	701,609	618,177
Long-Term Liabilities	10,503,230	 8,341,628	9,198,981
Total Liabilities	12,017,051	9,043,237	9,817,158
Total Deferred Inflows	102,763	32,003	41,572
Total Liabilities and Deferred Inflows	12,119,814	9,075,240	9,858,730
Net Position			
Net investment in capital assets	8,842,880	7,681,068	7,519,910
Restricted debt service reserves	705,226	702,233	699,787
Unrestricted	2,121,930	1,674,622	642,616
Total Net Position	\$ 11,670,036	\$ 10,057,923	\$ 8,862,313

The District's net position reflects Debt Service restrictions imposed as its loan requirements.

Management's Discussion and Analysis June 30, 2020 and 2019

Below is a summary analysis of changes:

Summary Analysis of Changes	2020 & 2019	2019 & 2018
Total Assets and Deferred Outflows	24.34%	2.20%
Total Liabilities and Deferred Inflows	33.55%	-7.95%
Total Net Position	16.03%	13.49%

Changes in Net Position

The following table summarizes the changes in net position for the fiscal years ended June 30, 2020, 2019, and 2018:

		2020		2019		2018
Operating Revenues:		2020		2015		2010
Water sales	\$	2,665,072	\$	2,560,294	\$	2,499,949
Other operating revenues	_	135,039	_	156,924	,	137,403
Total Operating Revenues		2,800,111		2,717,218		2,637,352
Operating Expenses:						_
Personnel services		1,228,884		1,065,785		1,061,163
Professional services		102,556		149,693		177,479
Field operations		492,255		422,419		379,372
Conservation		-		5,844		5,946
Administration		207,356		236,116		230,626
Depreciation and Amortization		636,432		637,022		654,174
Total Operating Expenses		2,667,483		2,516,879		2,508,760
Net Income from Operations		132,628		200,339		128,592
Non-Operating Revenues (Expenses):						
Surcharge		962,068		949,903		743,152
Other non-operating revenues		189,793		156,217		108,561
Non-operating expenses		(268,276)		(252,635)		(228,634)
Net Non-Operating Revenues		883,585		853,485		623,079
Net income before capital contributions		1,016,213		1,053,824		751,671
Capital Contributions						
Capacity fees		90,900		51,705		129,808
Capital grants		505,000		-		-
Contributed assets				90,081		22,833
Total Capital Contributions		595,900		141,786		152,641
Change in net position		1,612,113		1,195,610		904,312
Net position, beginning of year		10,057,923		8,862,313		8,218,372
Prior period adjustment		-		-		(260,371)
Beginning net position, restated		10,057,923		8,862,313		7,958,001
Net position, end of year	\$	11,670,036	\$	10,057,923	\$	8,862,313

Management's Discussion and Analysis June 30, 2020 and 2019

Changes from Fiscal Year 2018/2019 to Fiscal Year 2019/2020:

Total net position increased \$1,612,113 or 16.03% from fiscal year 2019 to 2020.

Total operating revenues increased \$82,893 or 3.05% from fiscal year 2019 to 2020. Operating revenue exceeded operating expenses by \$132,628. Operating expenses increased by \$150,604, a 5.98% increase from fiscal year 2019 to 2020.

Changes from Fiscal Year 2017/2018 to Fiscal Year 2018/2019:

Total net position increased \$1,195,610 or 13.49% from fiscal year 2018 to 2019.

Total operating revenues increased \$79,866 or 3.03% from fiscal year 2018, to 2019. Operating revenue exceeded operating expenses by \$200,339. Operating expenses increased by \$8,119, a 0.32% increase from fiscal year 2018 to 2019.

CAPITAL ASSETS AND DEBT ADMININSTRATION

Capital Assets

As of June 30, 2020, the District's net investment in capital assets was \$8,842,880 including: the water transmission and distribution system (underground pipelines, water services, water meters, fire hydrants, and other components); water production facilities (groundwater wells); land; buildings and both mobile and fixed equipment.

Additional information on the District's capital assets can be found in Note 3, Capital Assets, of the notes to the basic financial statements.

Debt Administration

The District continues to meet its debt obligations under its Water Revenue Refunding Bonds. Through scheduled debt service payments during 2019-20, principal on its collective debt was reduced by \$139,015 during the year. The District's total debt from its 2016 issuance now stands at approximately \$1.95 million.

The District continues to meet its debt obligations to the State Water Resource Control Board State Revolving Fund (SRF) Loan through scheduled debt service payments during 2019-20, principal on its collective debt was reduced by \$351,402 during the year. The District's total debt from the SRF Loan now stands at approximately \$4.01 million.

The District continues to meet its debt obligation called the Meter Replacement Loan for the AMR/AMI Meter Program capital improvement project. Principal on its collective debt was reduced by \$48,281 during the year. The District's total debt from the Meter Replacement Loan now stands at approximately \$294,205.

During FY 18-19, the District entered into an installment sale agreement with Opus Bank for \$3.87 million. During FY 19-20, the District drew down \$3,210,040 and paid principal of \$210,000 on this debt. As of June 30, 2020, the District's total debt from the Opus Bank loan was \$3.00 million.

Management's Discussion and Analysis June 30, 2020 and 2019

Compensated absences, composed of vacation hours earned by employees that are payable upon termination or retirement, are valued at \$44,121 at the end of 2019-20, an increase of \$7,163 from the 2018-19 year-end amount of \$36,958.

Additional information on debt activity can be found in Note 4, Long-Term Liabilities, of the notes to the basic financial statements.

ECONOMIC FACTORS AND FUTURE BUDGET CONSIDERATIONS

The District adopted a budget for FY 2020-21 (\$2.8 M revenue and \$2.3 M expenses) with a 0.38% increase in income, a 3.31% decrease in expense, and a 19.1% increase in net income compared with the FY 2019-20 Operating Budget.

The District implemented a multi-year Water Rate adjustment and Capacity Fee increase in calendar year 2016 to fund repairs/renovation projects addressing aging infrastructure and regulatory changes. This included Chromium 6 (Cr6) compliance and adding new supply facilities to consolidate and replace less efficient aging wells. The District engaged a rates study consultant for another multi-year rates restructuring but does not include capacity fees review. The adoption of new laws (SB 555, SB 606, AB 1668) have created new requirements for water efficiency and limits on water loss. These laws also compel the District to modify the existing rate structure.

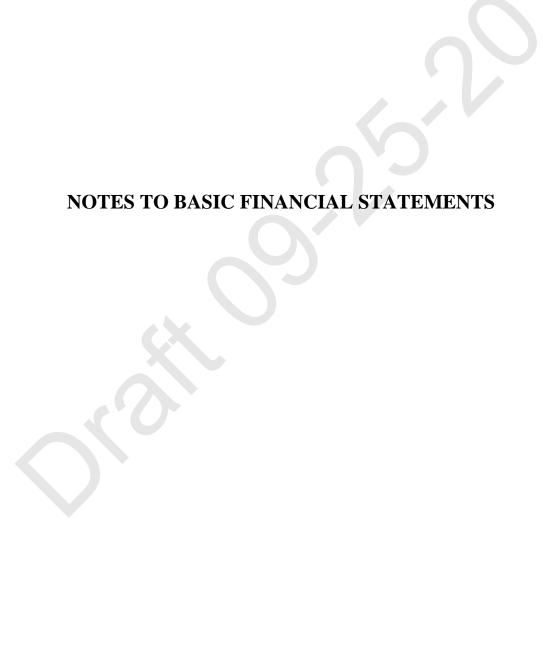
A significant portion of the District's budget continues to be repayment of 15-year long-term debt consolidated financing of Water Revenue Bonds in the amount of approximately \$200,000 per year.

A complex formula and practices deployed by CalPERS results in a lag between events impacting employee pension Unfunded Accrued Liability (UAL) and the CalPERS implementation of increased annual UAL payments. The net effect of these CalPERS formulas/practices is a much higher total interest amount paid by the employers. Additionally, the ramp up in annual payments is not linear, they increase in the first two years following a change are approximately 2 to 3%. The increase in the subsequent 18-years is in the 15 to 20% range. The increase in the annual payment the District will pay in July 2021 is at least 16% higher than the \$68,000 payment the District paid in July 2020. The District will consider exploring mitigation measures to offset the dramatic annual UAL payments it would otherwise incur.

In September 2017, the District was awarded Prop 84 funding in the amount of \$530,000 for Well 10 Cr6 Treatment Mitigation. The District recently received approval from the Department of Water Resources to reallocate the Well 10 grant to the Well 16 project, an alternative means for Cr6 mitigation. The construction of the Well 16 project is scheduled to be complete in October 2020.

Large-scale residential development remains on the horizon, but not in the financial planning range. Additionally, infill projects and some small commercial development is likely to continue if the economic conditions remain favorable. Rio Linda is strategically located directly between the large new commercial development in the Airport Industrial Park and the McClellan Business park. Both areas are bringing additional jobs into the region which adds to housing demand in the District. Sacramento County has recently approved increased density for a project within the District boundaries, yet there are no financial agreements or definitive plans in place. SB 13 was signed by the Governor, which may lead to a new form of development via accessory dwelling units. It is likely that any significant projects which would increase the number of connections or water demand will not occur until FY 2021-22.

BASIC FINANCIAL STATEMENTS



Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 1: REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The basic financial statements of the Rio Linda/Elverta Community Water District (District) have been prepared in conformity with generally accepted accounting principles as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard setting body for establishing governmental accounting and financial reporting principles. In addition, the District applies Financial Accounting Standards Board Statements and Interpretations, Accounting Principles Board Opinions, and Accounting Research Bulletins of the Committee of Accounting Procedures issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements. The more significant of the District's accounting policies are described below.

<u>Reporting Entity</u>: The District was formed on November 9, 1948, and provided water and sewer services. Sewer services were transferred to Sacramento County in 1976. The District no longer provides sewer service. The District currently provides domestic water service and fire flows to approximately 4,640 metered accounts, including procurement, quality, and distribution. The District is governed by a Board of Directors consisting of five directors elected by residents of the District.

<u>Basis of Presentation – Fund Accounting</u>: The District's resources are allocated to and accounted for in these basic financial statements as an enterprise fund type of the proprietary fund group. The enterprise fund is used to account for operations that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges, or where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other policies. Net position for the enterprise fund represents the amount available for future operations.

Basis of Accounting: The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The enterprise fund type is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operation of this fund are included on the balance sheet. Net position is segregated into amounts invested in capital assets, net of related debt, amounts restricted, and amounts unrestricted. Enterprise fund type operating statements present increases (i.e., revenues) and decreases (i.e., expenses) in net total assets.

The District uses the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred. Earned but unbilled water services are accrued as revenue.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 1: REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - CONTINUED

Basis of Accounting: (continued)

Operating revenues and expenses consist of those revenues and expenses that result from the ongoing principle operations of the District. Operating revenues consist primarily of charges for services. Non-operating revenues and expenses consist of those revenues and expenses that are related to financing and investing types of activities and result from nonexchange transactions or ancillary activities.

When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, then unrestricted resources as they are needed.

<u>Use of Estimates</u>: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

<u>Cash and Cash Equivalents</u>: For purposes of the statement of cash flows, the District considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. Cash and cash equivalents held include bank deposits, Local Agency Investment Fund (LAIF), an investment pool managed by the State of California, and money market mutual funds.

<u>Restricted Assets</u>: Certain proceeds of the District's long-term debt are classified as restricted investments on the balance sheet because their use is limited by applicable debt covenants and ordinances. In addition, proceeds from the surcharge levied on customer accounts are restricted for capital improvements. Certain other amounts received by the District are restricted for other purposes.

<u>Investments</u>: Investments are stated at their fair value, which represents the quoted or stated market value. Investments that are not traded on a market, such as investments in external pools, are valued based on the stated fair value as represented by the external pool.

<u>Inventory</u>: Inventory consists primarily of materials used in the construction and maintenance of the water distribution facilities and is valued on a first-in, first-out basis.

<u>Capital Assets</u>: Capital assets are recorded at historical cost. Donated assets are valued at acquisition value on the date received. Self-constructed assets are recorded based on the amount of direct labor, material, and certain overhead charged to the asset construction. Depreciation is calculated using the straight-line method over estimated useful lives of 8 to 60 years for transmission and distribution, and 3 to 50 years for general plant assets.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 1: REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - CONTINUED

Capital Assets: (continued)

Maintenance and repairs are charged to operations when incurred. It is the District's policy to capitalize all capital assets with an initial cost of more than \$5,000 and an estimated useful life in excess of two years. Costs of assets sold or retired (and the related amounts of accumulated depreciation) are eliminated from the balance sheet in the year of sale or retirement, and the resulting gain or loss is recognized in operations.

<u>Accounts Receivable</u>: The District issues water invoices bi-monthly based on meter readings. Delinquent water invoices may have a lien placed on the property. The District does not provide for an allowance for uncollectible accounts due to the lien process.

<u>Deferred Outflows and Inflows of Resources</u>: Pursuant to GASB Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position, and GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, the District recognizes deferred outflows and inflows of resources.

In addition to assets, the Statement of Financial Position will sometimes report a separate section for deferred outflows of resources. A deferred outflow of resources is defined as a consumption of net position by the District that is applicable to a future reporting period. The District has one item which qualifies for reporting in this category. Please refer to Note 7 for a detailed listing of the deferred outflows of resources the District has recognized.

In addition to liabilities, the Statement of Financial Position will sometimes report a separate section for deferred inflows of resources. A deferred inflow of resources is defined as an acquisition of net position by the District that is applicable to a future reporting period. The District has two items which qualify for reporting in this category. Please refer to Notes 7 and 8 for a detailed listing of the deferred inflows of resources.

<u>Unearned Revenues</u>: Unearned revenue represents funds received for future rental income on various cell tower leases.

<u>Contributed Facilities</u>: The District receives facilities (hydrant, pipes, valves, etc.), from developers resulting from developers preparing the sites to connect to the District. The District records these items as capital assets and depreciates them over their estimated useful life.

<u>Property Taxes</u>: Property tax revenue is recognized in the fiscal year for which the tax and assessment is levied. The County of Sacramento levies, bills, and collects property taxes and special assessments for the District. Under the County's "Teeter Plan", the County remits the entire amount levied and handles all delinquencies, retaining interest, and

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 1: REPORTING ENTITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Property Taxes: (continued)

penalties. Secured property tax is due in two installments, on November 1 and February 1, and becomes a lien on July 1. It becomes delinquent on December 10 and April 10, respectively. Unsecured property tax is due on July 1 and becomes delinquent on August 31.

Compensated Absences: The District has a policy whereby employees can accrue up to a maximum of 300 hours of vacation leave. All accrued vacation leave will be paid to the employee on termination of employment. Accumulated unpaid vacation leave is accrued when earned. Employees accrue sick leave, but any remaining balance at termination of employment is not paid out to the employee; thus, the District does not accrue a liability for sick leave, except for those that have contracts that specifically state that sick leave will be paid out upon termination.

NOTE 2: CASH AND INVESTMENTS

Cash and investments as of June 30, 2020 and 2019, are classified in the accompanying financial statements as follows:

	2020	2019
Cash and cash equivalents	\$ 2,261,229	\$ 2,259,237
Restricted cash and investments	5,136,746	1,479,705
Total Cash and Investments	\$ 7,397,975	\$ 3,738,942

Cash and investments as of June 30, 2020 and 2019, consisted of the following:

	2020			2019	
Deposits with financial institutions					
Total Cash	\$	6,568,892	\$	3,028,707	
Investments in Local Agency Investment					
Fund (LAIF)		304,201		205,000	
Held by Bond Trustee:					
Money market mutual fund		64,694		201,027	
Negotiable certificates of deposits		460,188		254,368	
Government agency securities		-		49,840	
Total Investments		829,083		710,235	
Total Cash and Investments	\$	7,397,975	\$	3,738,942	

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 2: CASH AND INVESTMENTS - CONTINUED

<u>Investment Policy</u>: California statutes authorize districts to invest idle, surplus, or reserve funds in a variety of credit instruments as provided for in the California Government Code, Section 53600, Chapter 4 – Financial Affairs. The list below identifies the investment types that are authorized by the District's investment policy.

This table does not address investments of debt proceeds held by the bond trustee that are governed by the provisions of debt agreements of the District, rather than the general provisions of the California Government Code or the District's investment policy. During the year ended June 30, 2020, the District's permissible investments included the following instruments:

- Investment pool authorized under \$50 million Liquid CA Account Statues governed by Government Code Sections 16429.1-16429.4 AKA Local Agency Investment Fund of LAIF.
- California Employers Retiree Benefit Trust (CERBT).
- Money Market Mutual Funds governed by Government Code Sections 53601.6(b).

The District complied with the provisions of the California Government Code pertaining to the types of investments held, the institutions in which deposits were made, and the security requirements. The District will continue to monitor compliance with applicable statutes pertaining to public deposits and investments.

<u>Investments Authorized by Debt Agreements</u>: Investments of debt proceeds held by the bond trustee are governed by provisions of the debt agreements, rather than the general provisions of the California Government Code or the District's investment policy. The Water Revenues Refunding Bond agreements contain certain provisions that address interest rate risk and credit risk, but not concentration of credit risk.

<u>Interest Rate Risk</u>: Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways the District manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 2: CASH AND INVESTMENTS – CONTINUED

Information about the sensitivity of the fair value of the District's investments (including investments held by bond trustees) to market interest rate fluctuations is provided by the following table that shows the distribution of the District's investments by maturity:

	12 Months	13-24	25-60	
Total	or Less	Months	Months	
\$ 304,201	\$ 304,201	\$ -	\$ -	
64,694	64,694		_	
460,188	156,709	52,178	251,301	
\$ 829,083	\$ 525,604	\$ 52,178	\$ 251,301	
	\$ 304,201 64,694 460,188	Total or Less \$ 304,201 \$ 304,201 64,694 64,694 460,188 156,709	Total or Less Months \$ 304,201 \$ 304,201 \$ - 64,694 64,694 - 460,188 156,709 52,178	

<u>Credit Risk</u>: Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the minimum rating required by (where applicable) the California Government Code, the District's investment policy, or debt agreements, and the actual rating as of year-end for each investment type.

	Minimum				
	Legal		Ratings as of Year End		
	Rating	Total		AAA	Not Rated
Local Agency Investment Fund	N/A	\$ 304,201	\$	-	\$ 304,201
Held by Bond Trustee:					
Money market mutual fund	N/A	64,694		-	64,694
Negotiable certificates of deposits	N/A	460,188			460,188
Total Investments		\$ 829,083	\$	-	\$ 829,083
·	N/A		\$	-	

<u>Custodial Credit Risk</u>: Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 2: CASH AND INVESTMENTS - CONTINUED

The California Government Code and the District's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits, other than the following provision for deposits:

• The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure public agency deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

At June 30, 2020, the carrying amount of the District's deposits were \$6,873,093 and the balances in financial institutions were \$6,850,815. Of the balance in financial institutions, \$1,054,201 was covered and \$5,796,614 was not covered by federal depository insurance. As of June 30, 2020, District investments in the following investment types were held by the same broker-dealer (counterparty) that was used by the District to buy the securities:

Reported Investment Type		Amount
Money market mutual funds Negotiable certificates of participation	\$	64,694 460,188

Investment in LAIF: LAIF is stated at amortized cost, which approximates fair value. The LAIF is a special fund of the California State Treasury through which local governments may pool investments. The Local Investment Advisory Board (Board) has oversight responsibility for LAIF. The Board consists of five members as designated by State Statute. The fair value of the District's investment in this pool is reported in the accompanying financial statements at amounts based upon the District's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 3: CAPITAL ASSETS

Capital asset activity for the year ended June 30, 2020, was as follows:

	Balance		Deletions/	Balance
	July 1, 2019	Additions	Transfers	June 30, 2020
Nondepreciable:				
Land	\$ 576,673	\$1,185,639	\$ -	\$ 1,762,312
Construction in progress	1,313,099		_	1,313,099
Total nondepreciable assets	1,889,772	1,185,639	-	3,075,411
Depreciable:				
Water system facilities	20,760,312		-	20,760,312
General plant assets	733,399		(24,369)	709,030
Intangible assets	373,043	_		373,043
Total depreciable assets	21,866,754		(24,369)	21,842,385
Less: Accumulated depreciation	Y			
Water system facilities	(8,541,014)	(572,827)	-	(9,113,841)
General plant assets	(480,627)	(46,895)	24,369	(503,153)
Intangible assets	(261,132)	(16,710)		(277,842)
Total accumulated depreciation	(9,282,773)	(636,432)	24,369	(9,894,836)
Net assets being depreciated	12,583,981	(636,432)		11,947,549
Total capital assets	\$14,473,753	\$ 549,207	\$ -	\$15,022,960

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 3: CAPITAL ASSETS – CONTINUED

Capital asset activity for the year ended June 30, 2019, was as follows:

	Balance		Deletions/	Balance
	July 1, 2018	Additions	Transfers	June 30, 2019
Nondepreciable:				
Land	\$ 496,673	\$ 80,000	\$ -	\$ 576,673
Construction in progress	1,250,106	84,085	(21,092)	1,313,099
Total nondepreciable assets	1,746,779	164,085	(21,092)	1,889,772
Depreciable:				
Water system facilities	20,717,060	43,252	-	20,760,312
General plant assets	712,767	80,252	(59,620)	733,399
Intangible assets	373,043			373,043
Total depreciable assets	21,802,870	123,504	(59,620)	21,866,754
Less: Accumulated depreciation				
Water system facilities	(7,965,838)	(575,176)	-	(8,541,014)
General plant assets	(492,299)	(45,136)	56,808	(480,627)
Intangible assets	(244,422)	(16,710)		(261,132)
Total accumulated depreciation	(8,702,559)	(637,022)	56,808	(9,282,773)
Net assets being depreciated	13,100,311	(513,518)	(2,812)	12,583,981
Total capital assets	\$14,847,090	\$ (349,433)	\$(23,904)	\$14,473,753

Depreciation expense in the amount of \$636,432 and \$637,022 was recorded for the years ended June 30, 2020 and 2019, respectively, and is included with depreciation expense on the Statement of Revenues, Expenses, and Changes in Net Position.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 4: LONG-TERM LIABILITIES

2015 Water Revenue Refunding Bonds: On April 1, 2015, the District entered into a loan agreement with Umpqua Bank to issue Series 2015 Water Revenue Refunding Bonds at an interest rate of 3.61%, the proceeds of which were used to provide financing for the refunding and defeasance of the District's 2003 Water Revenue Refunding Bonds. These 2003 Bonds were issued to refund debt used to finance certain capital improvements to the District's water system. Semi-annual principal payments, ranging from \$48,776 to \$136,000, and semi-annual interest payments, ranging from \$1,210 to \$40,642, are due on May 1 and November 1, through November 1, 2031. As of June 30, 2020, the District's loan balance was \$1,952,591.

Safe Drinking Water State Revolving Fund Loan: On June 30, 2011, the District finalized the Safe Drinking Water Loan funding agreement in the amount of \$7,499,045 at an interest rate of 2.57% to be paid over 20 years. The loan proceeds will assist the District in complying with the State safe drinking water standards. The project was completed in June 2015, and the actual borrowed by the District was only \$7,179,073. Semi-annual loan payments of \$230,677 are due on January 1 and July 1, through July 1, 2035. As of June 30, 2020, the District's loan balance was \$4,013,009.

Water Meter Replacement Loan: In July 2015, the District entered into an installment purchase agreement with Holman Capital Corporation for \$499,835 at an interest rate of 3.10% to be paid over 10 years. The agreement is for the acquisition and installation of 813 meters and solar-powered data collectors that will electronically connect to the existing automatic meter reading system, and installation of a dashboard system that will provide water data analytics to detect leaks, high water users, and overall system performance. Semi-annual loan payments of \$29,257 are due on January 23 and July 23, through July 23, 2025. As of June 30, 2020, the District's loan balance was \$294,205.

<u>Installment Sale Agreement</u>: On March 1, 2018, the District entered into an installment sale agreement with Opus Bank for \$3,870,000 at an interest rate of 3.28%. Proceeds from the agreement are for the construction of Well 16 and future wellhead treatment. Semi-annual principal payments, ranging from \$110,000 to \$155,000, and semi-annual interest payments, ranging from \$2,706 to \$49,201, are due on April 1 and October 1, through April 1, 2032. As of June 30, 2020, the District's loan balance was \$3,000,040.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 4: LONG-TERM LIABILITIES - CONTINUED

The activity of the District's long-term liabilities during the year ended June 30, 2020, was as follows:

					Due
	Balance			Balance	Within
	July 1, 2019	Additions	Reductions	June 30, 2020	One Year
State safe drinking water loan	\$ 4,364,411	\$ -	\$ (351,402)	\$ 4,013,009	\$ 179,096
2015 water revenue refunding	2,091,606	-	(139,015)	1,952,591	145,736
Water meter replacement loan	342,486	-	(48,281)	294,205	49,789
Opus Bank loan	-	3,210,040	(210,000)	3,000,040	210,000
Subtotal bonds and loans payable	6,798,503	3,210,040	(748,698)	9,259,845	584,621
Compensated absences	36,958	42,585	(35,422)	44,121	44,121
Net pension liability	987,630	68,141	-	1,055,771	-
Other post-employment					
benefits	211,573	10,035	(105,915)	115,693	-
	\$ 8,034,664	\$ 3,330,801	\$ (890,035)	\$ 10,475,430	\$ 628,742

The activity of the District's long-term liabilities during the year ended June 30, 2019, was as follows:

									Due
	Balance						Balance	7	Within
	July 1, 2018	Ac	lditions	Re	ductions	Jui	ne 30, 2019	Oı	ne Year
							_		
State safe drinking water loan	\$ 4,706,952	\$	-	\$	(342,541)	\$	4,364,411	\$	174,579
2015 water revenue refunding	2,224,769		-		(133,163)		2,091,606		139,015
Water meter replacement loan	389,304		-		(46,818)		342,486		48,281
Opus Bank loan	99,141		-		(99,141)		-		-
Subtotal bonds and loans payable	7,420,166				(621,663)		6,798,503		361,875
Compensated absences	22,142		36,958		(22,142)		36,958		36,958
Net pension liability	1,033,555		-		(45,925)		987,630		-
Other post-employment					,				
benefits	262,349		22,178		(72,954)		211,573		-
	\$ 8,738,212	\$	59,136	\$	(762,684)	\$	8,034,664	\$	398,833

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 4: LONG-TERM LIABILITIES - CONTINUED

The annual requirements to amortize the outstanding debt as of June 30, 2020, are as follows:

	Principal	Principal Interest	
2021	\$ 594,621	\$ 214,393	\$ 809,014
2022	789,630	245,888	1,035,518
2023	809,796	222,914	1,032,710
2024	835,776	199,380	1,035,156
2025	862,931	175,035	1,037,966
2026-2030	4,434,509	500,339	4,934,848
2031-2032	932,582	26,478	959,060
	\$9,259,845	\$1,584,427	\$10,844,272

<u>Pledged Revenue</u>: The District pledged future water system revenues, net of specified expenses, to repay the 2015 Water Revenue Refunding Bonds in the original amount of \$2,688,622. Proceeds of the refunded bonds funded the acquisition and construction of certain facilities, as indicated above. The Bonds are payable solely from water customer net revenues and are payable through November 2031. Annual principal and interest payments on the Bonds are expected to require less than 80% of net revenues. Total principal and interest remaining to be paid on the Bonds was \$2,323,254 and \$2,523,985 at June 30, 2020 and 2019, respectively.

The District pledged surcharge fee revenues, to repay the 2011 State Safe Drinking Water Loan in the amount up to \$7,499,045. Annual principal and interest payments on the Loan are expected to be fully recovered by the surcharge fees from customers. Total principal and interest paid on the loan from surcharge fees was \$461,355 and \$461,355 for the years ended June 30, 2020 and 2019, respectively. The total surcharge fee revenues were \$525,183 and \$524,907 for the years ended June 30, 2020 and 2019, respectively. The District is required to maintain net revenues at least 1.2 times total annual debt service. The District's surcharge revenues exceeded this requirement at June 30, 2020 and 2019. Total principal and interest remaining to be paid on the Bonds was \$4,571,598 and \$5,032,952 at June 30, 2020 and 2019, respectively.

The District pledged surcharge fee revenues, to repay the installment sale agreement with Opus Bank in the amount up to \$4,094,662. Annual principal and interest payments on the Loan are expected to be fully recovered by the surcharge fees from customers. Total principal and interest paid on the loan from surcharge fees was \$270,312 and \$197,158 for the years ended June 30, 2020 and 2019, respectively. The total surcharge fee revenues were \$436,885 and \$424,996 for the years ended June 30, 2020 and 2019, respectively. The District is required to maintain net revenues at least 1.25 times total annual debt service. The District's surcharge revenues exceeded this requirement at June 30, 2020 and 2019. Total principal and interest remaining to be paid on the Bonds was \$3,000,040 and \$0 at June 30, 2020 and 2019, respectively.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 4: LONG-TERM LIABILITIES - CONTINUED

Arbitrage Rebate Liability: Section 148(f) of the Internal Revenue Code requires issuers of tax-exempt state and local bonds to remit to the federal government amounts equal to (a) the excess of the actual amounts earned on all "Non-Purpose Investments" allocable to "Gross Proceeds" of an issue of municipal obligations less the amount that would have been earned if the investments bore a rate equal to the amount that would have been earned if the investments bore a rate equal to the yield on the issue, plus (b) all income attributable to the excess. Issuers must make rebate payments at least once every five years and upon final retirement or redemption of the bonds. There was no arbitrage liability at June 30, 2020 and 2019.

NOTE 5: UNEARNED REVENUE

In August 2014, the District assigned the right to receive rental income on various cell tower leases for a period of 20 years to Wireless Capital Partners, LLC, in exchange for \$985,101 of cash. The District is also entitled to receive 50% of any rental increases after the expiration of the current leases. The District will recognize the revenue from this agreement over a period of 20 years, or \$49,255 annually. The balance of unearned revenue at June 30, 2020, was \$705,797.

NOTE 6: NET POSITION

<u>Restrictions</u>: Restricted net position consist of constraints placed on net position use through external requirements imposed by creditors (such as through debt covenants), grantors, contributors, or laws and regulations of other governments or constraints by law through constitutional provisions or enabling legislation. Restricted net position consisted of the following at June 30:

	2020		 2019	
Debt service reserve on 2015 Water	\$	243,871	\$	240,878
Revenue Refunding Bonds				
Debt service reserve on State Loan		461,355		461,355
Total Cash and Investments	\$	705,226	\$	702,233

The restrictions for debt service represent debt service and other reserves required by the related debt covenants. The restriction for State Loan repayment represents surcharges collected under Ordinance No. 2009-03 passed by the Board in May 2009 to fund projects to comply with a State of California Department of Public Health Compliance Order and to repay the State Loan per the loan agreement.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 7: DEFINED BENEFIT PENSION PLAN

Plan Description: The District contributes to the California Public Employees Retirement System (PERS), a cost sharing multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public employers within the State of California. PERS require agencies with less than 100 active members in the plan to participate in the risk pool. All full and part-time District employees working at least 1,000 hours per year are eligible to participate in PERS. Under PERS, benefits vest after five years of service. Upon retirement, participants are entitled to an annual retirement benefit, payable for life, in an amount equal to a benefit factor times the monthly average salary of their highest twelve consecutive months, full-time equivalent, monthly pay. A menu of benefit provisions as well as other requirements is established by State statutes within the Public Employees' Retirement Law. The Plan selects optional benefit provisions from the benefit menu by a contract with PERS and adopts those benefits through District resolution. PERS issues a separate comprehensive annual financial report. Copies of the PERS' annual financial report may be obtained from the PERS Executive Office, 400 P Street, Sacramento, California 95814.

<u>Funding Policy</u>: The District has two tiers of participants, classic and PEPRA. Active classic plan members were required to contribute 7% of their annual covered salary. Starting in December 2011, the District contributed 3.5% on behalf of the employees. Active PEPRA plan members are required pay all of their employee share currently at 6.75%. The District is required to contribute at an actuarially determined rate. The required employer contribution rate for the classic plan for fiscal year 2019/2020, 2018/2019, and 2017/2018 was 9.680%, 8.892%, and 8.418%, respectively. The required employer contribution rate for the PEPRA plan for fiscal year 2019/2020, 2018/2019, and 2017/2018 was 6.985%, 6.842%, and 6.533%, respectively. The contribution requirements of the plan members and the District are established and may be amended by PERS. The District's contributions for the years June 30, 2020, 2019, and 2018, were \$119,688, \$137,446, and \$126,796, respectively, which were equal to the required contributions each year.

At June 30, 2020, the District reported a liability of \$1,055,771 in the Statement of Net Position for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The District's proportion of the net pension liability was based on a projection of the District's long-term share of contributions to the pension plan relative to the projected contributions of all Pension Plan participants, which was actuarially determined.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 7: DEFINED BENEFIT PENSION PLAN – CONTINUED

Actuarial Assumptions

The total pension liability in the June 30, 2019, actuarial valuation was determined using the following actuarial assumptions. Total pension liability represents the portion of the actuarial present value of projected benefit payments attributable to past periods of service for current and inactive employees.

- Discount Rate 7.0%
- Investment Rate 7.0%
- Inflation Rate 2.5%
- Salary Increases Varies by Entry Age and Service
- COLA Increases up to 2.5%
- Post-Retirement Mortality Derived using CalPERS' Membership Data for all Funds

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period July 1, 2014, through June 30, 2018.

The long-term expected rate of return on pension plan investments (7.15%) was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	New	Real Return	Real Return
	Strategic	Years	Years
Asset Class	Allocation	1 - 10(a)	> 10(b)
Global equity	50.0%	4.80%	5.98%
Global fixed income	28.0%	1.00%	2.62%
Inflation sensitive	0.0%	0.77%	1.81%
Private equity	8.0%	6.30%	7.23%
Real estate	13.0%	3.75%	4.93%
Liquidity	1.0%	0.00%	-0.92%
	100.00%		

- (a) An expected inflation of 2.5% used for this period
- (b) An expected inflation of 3.0% used for this period

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 7: DEFINED BENEFIT PENSION PLAN – CONTINUED

The discount rate used to measure the total pension liability was 7.15 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that contributions from the District will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension fund's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. In theory, the discount rate may differ from the long-term expected rate of return discussed previously. However, based on the projected availability of the pension fund's fiduciary net position, the discount rate is equal to the long-term expected rate of return on pension plan investments, and was applied to all periods of projected benefit payments to determine the total pension liability.

<u>Sensitivity of the District's Proportionate Share of the Net Pension Liability to Changes in</u> the Discount Rate

The following presents what the District's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.15%) or 1 percentage point higher (8.15%) than the current rate:

	Discount Rate		
	1% Decrease	Discount Rate	1% Increase
	6.15%	7.15%	8.15%
Plan's net pension liability	\$ 1,642,844	\$ 1,055,771	\$ 571,182

For the fiscal year ended June 30, 2020, the District recognized a pension expense of \$238,194 in its financial statements. Pension expense represents the change in the net pension liability during the measurement period, adjusted for actual contributions and the deferred recognition of changes in investment gain/loss, actuarial gain/loss, actuarial assumptions or method, and plan benefits.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 7: DEFINED BENEFIT PENSION PLAN - CONTINUED

Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2020, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred	Deferred
	Outflows of	Inflows of
	Resources	Resources
Change in assumptions	\$ 32,497	\$ -
Differences between Expected and Actual Experience	67,647	-
Differences between Projected and Actual Investment		
Earnings	-	18,458
Differences between Employer's Contributions and		
Proportionate Share of Contributions	594	259
Change in Employer's Proportion	7,212	1,714
Pension Contributions Made Subsequent to		
Measurement Date	119,688	
Totals	\$ 227,638	\$ 20,431

Deferred outflows of resources and deferred inflows of resources above represent the unamortized portion of changes to net pension liability to be recognized in future periods in a systematic and rational manner.

\$119,688 reported as deferred outflows of resources related to pensions resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending June 30,	 Amount
2021	\$ 81,562
2022	(7,654)
2023	9,881
2024	3,730
Totals	\$ 87,519

Detailed information about the pension fund's fiduciary net position is available in the separately issued PERS comprehensive annual financial report which may be obtained by contacting PERS.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY

Generally accepted accounting principles require that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

Valuation Date July 1, 2019 Measurement Date June 30, 2020

Measurement Period July 1, 2019 to June 30, 2020

<u>Plan Description:</u> The District administers a single-employer, defined-benefit, postemployment healthcare plan. The District's retiree healthcare benefit is not subject to the Public Employees' Medical & Hospital Care Act (PEMHCA) and the plan does not issue a stand-alone financial report. The District provides funding in varying amounts to eligible retirees to assist eligible retirees with their cost of maintaining healthcare insurance. Retiree health benefits are secured through outside providers and premiums are reimbursed by the District according to the rules and to the extent described below. Because retirees do not remain on the District's group health plans, there is no implicit rate subsidy.

Retiree health benefits vary by tier, which is based on date of hire, as follows:

Tier 1: Hired prior to January 1, 2003: Eligible for District-paid retiree health benefits after the later of age 50 and 5 years of service. Coverage will be for retiree and one eligible dependent, up to \$600/month for retiree and \$800/month for retiree plus one coverage.

Tier 2: Hired on or after January 1, 2003 but prior to May 1, 2004: The District contributes a percentage of the premium for retiree and one eligible dependent, up to a maximum of \$600/month for retiree and \$800/month for retiree plus one coverage, based on years of service at retirement, as follows:

Years of Service	District Share	Retiree Share
0 - 9.9	0% (\$0/\$0)	100%
10	50% (\$300/\$400)	50%
11	55% (\$330/\$440)	45%
12	60% (\$360/\$480)	40%
13	65% (\$390/\$520)	35%
14	70% (\$420/\$560)	30%
15	75% (\$450/\$600)	25%
16	80% (\$480/\$640)	20%
17	85% (\$510/\$680)	15%
18	90% (\$540/\$720)	10%
19	95% (\$570/\$760)	5%
20+	100% (\$600/\$800)	0%

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY – CONTINUED

<u>Plan Description</u>: (continued)

Tier 3: Hired on or after May 1, 2004 and before January 1, 2013: Eligible for District-paid benefits after the later of age 50 and 5 years of service. Benefit of \$300/month for the retiree only.

Tier 4: Hired on or after January 1, 2013: Eligible for District-paid benefits after the later of age 62 and 20 years of service. Benefits limited to \$300/month for the retiree only.

Benefits for all tiers end at eligibility for Medicare (age 65). Benefits are reduced for employees working less than full-time for the 3-year period before retirement.

One retired General Manager is receiving District-paid benefits of \$300/month until age 65. One retired management employee is receiving benefits being provided according to special arrangements not expected to be repeated in the future. The retired management employee is receiving District-paid benefits equal to elected healthcare coverage; the retired management employee is receiving District-paid benefits not to exceed \$1,050 per month for retiree and spouse coverage.

Current Board members and the General Manager will not be entitled to District-paid retiree health benefits upon retirement.

Plan membership as of July 1, 2019, consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	2
Active plan members	9

<u>Contributions</u>: The contribution requirements of Plan members and the District are established and amended by the District. Assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement 75. Contributions made on behalf of the plan members for the year ended June 30, 2020 were \$36,563.

Net OPEB Liability: The District's net OPEB liability was measured as of June 30, 2020 and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of July 1, 2019. Standard actuarial update procedures were used to project/discount from valuation to measurement dates.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY - CONTINUED

Actuarial assumptions. The total OPEB liability was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Actuarial cost method	Entry Age, Level Percent of Pay
Recognition of deferred inflows and outflows of resources	Closed period equal to the average of the expected remaining service lives of all employees provided with OPEB
Salary increases	3.00 percent
Inflation rate	3.00 percent
Investment rate of return	5.75 percent, net of OPEB plan investment expense
Healthcare cost trend rate	5.90 percent for 2020; 5.80 percent for 2021; 5.70 percent for 2022; and decreasing 0.10 percent per year to an ultimate rate of 5.00 percent for 2029 and later years

Pre-retirement mortality rates were based on the RP-2014 Employee Mortality Table for Males or Females, as appropriate, without projection. Post-retirement mortality rates were based on the RP-2014 Health Annuitant Mortality Table for Males or Females, as appropriate, without projection.

Actuarial assumptions used in the July 1, 2018 valuation were based on a review of plan experience during the period July 1, 2018 to June 30, 2019.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. The calculated investment rate of return was set equal to the expected ten-year compound (geometric) real return plus inflation (rounded to the nearest 25 basis points, where appropriate). The table below provides the long-term expected real rates of return by asset class (based on published capital market assumptions).

Asset Class	Assumed Asset Allocation	Real Rate of Return
Global ex-U.S. Equity	40%	5.5%
U.S. Fixed	43%	1.5%
TIPS	5%	1.2%
Real Estate	8%	3.7%
Commodities	4%	0.6%

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY - CONTINUED

Discount rate. GASB 75 requires a discount rate that reflects the following:

- a) The long-term expected rate of return on OPEB plan investments to the extent that the OPEB plan's fiduciary net position (if any) is projected to be sufficient to make projected benefit payments and assets are expected to be invested using a strategy to achieve that return;
- b) A yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher to the extent that the conditions in (a) are not met.

To determine a resulting single (blended) rate, the amount of the plan's projected fiduciary net position (if any) and the amount of projected benefit payments is compared in each period of projected benefit payments. The discount rate used to measure the District's Total OPEB liability is based on these requirements and the following information:

Reporting Date	Measurement Date	Long-Term Expected Return of Plan Investments (if any)	Fidelity GO AA 20 Years Municipal Index	Discount Rate
June 30, 2019	June 30, 2019	5.75%	3.13%	5.01%
June 30, 2020	June 30, 2020	5.75%	2.45%	5.75%

Changes in the Net OPEB Liability

The table below shows the changes in the total OPEB liability, the Plan Fiduciary Net Position, and the net OPEB liability during the measurement period ending on June 30, 2020 for the District.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY - CONTINUED

	Plan					
	Total OPEB Fiduciary Net			Net OPEB		
	I	Liability	Position		Liability (Asset)	
		(a)		(b)	(c)	= (a) - (b)
Balance at June 30, 2018	\$	262,349	\$	-	\$	262,349
Changes recognized for the service period:						
Service cost		1,649		-		1,649
Interest		9,099		-		9,099
Changes of assumptions		(22,885)		-		(22,885)
Employer contributions		-		38,534		(38,534)
Net investment income		-		105		(105)
Benefit payments		(22,178)		(22,178)		-
Net Changes		(34,315)		16,461		(50,776)
Balance at June 30, 2019	\$	228,034	\$	16,461	\$	211,573
Changes recognized for the service period:						
Service cost	\$	1,179		-	\$	1,179
Interest		8,856		-		8,856
Difference between expected and actual						
experience		(57,042)		-		(57,042)
Changes of assumptions		(9,986)		-		(9,986)
Employer contributions		-		36,563		(36,563)
Net investment income		-		2,324		(2,324)
Benefit payments		(16,563)		(16,563)		-
Net Changes		(73,556)		22,324		(95,880)
Balance at June 30, 2020	\$	154,478	\$	38,785	\$	115,693

Sensitivity of the District's Net OPEB Liability to Changes in the Discount Rate
The following presents the net OPEB liability, as well as what the net OPEB liability would
be if it were calculated using a discount rate that is 1- percentage point lower (4.75 percent)
or 1-percentage-point higher (6.75 percent) than the current discount rate:

		Decrease 4.75%	Discount Rate 5.75%		1% Increase 6.75%	
Net OPEB liability	\$	125,935	\$	115,693	\$	106,387

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY – CONTINUED

Sensitivity of the District's Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB liability, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (4.90 percent decreasing to 4.00 percent) or 1- percentage-point higher (6.90 percent decreasing to 6.00 percent) than the current healthcare cost trend rates:

	Heal	thcare Cost	Heal	Ithcare Cost	Healthcare Cost	
	Tr	Trend - 1% Trend Assumed		Trend - 1%		Trend + 1%
Net OPEB liability	\$	113,230	\$	115,693	\$ 117,580	

Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At June 30, 2020, the District's deferred outflows of resources and deferred inflows of resources to OPEB from the following sources are:

	De	ferred	D	eferred
	Outflows of		Inflows of	
	Resources		Resources	
Differences between expected and actual experience	\$	-	\$	50,251
Change in assumptions		-		31,093
Differences between projected and actual return				
on plan investments		-		988
Totals	\$	-	\$	82,332

Recognition of Deferred Outflows and Deferred Inflows of Resources

Gains and losses related to changes in total OPEB liability and fiduciary net position are recognized in OPEB expense systematically over time. Amounts are first recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense. The recognition period differs depending on the source of the gain or loss. The amortization period for the change in assumptions is 8.4 years.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 8: OTHER POST EMPLOYMENT BENEFITS (OPEB) LIABILITY - CONTINUED

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Year Ending June 30,	Amount		
2021	\$	(12,672)	
2022		(12,672)	
2023		(12,672)	
2024		(12,369)	
2025		(10,991)	
2026		(9,788)	
2027		(7,980)	
2028		(3,188)	
Totals	\$	(82,332)	

Net OPEB Expense

For the year ended June 30, 2020, the District's OPEB expense was \$(3,796). Detail of the expense is shown below:

Service cost	\$ 1,179
Interest cost	8,856
Expected return on assets	(1,159)
Recognition of deferred outflows and inflows:	
Differences between expected and actual experience	(6,791)
Changes of assumptions	(5,630)
Differences between projected and actual experience	(251)
Total	(12,672)
Net OPEB Expense	\$ (3,796)

NOTE 9: INSURANCE

The District participates in the Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA), a public entity risk pool of California water agencies, for general and auto liability, public official's liability, employment practices liability, property damage and fidelity insurance. ACWA/JPIA provides insurance through the pool up to a certain level, beyond which the group purchases commercial excess insurance.

Notes to Basic Financial Statements June 30, 2020 and 2019

NOTE 9: INSURANCE – CONTINUED

The District pays an annual premium to ACWA/JPIA that includes its pro-rata share of excess insurance premiums, charges for the pooled risk, claims adjusting and legal costs, and administrative and other costs to operate the ACWA/JPIA. The District's deductibles and maximum coverage are as follows:

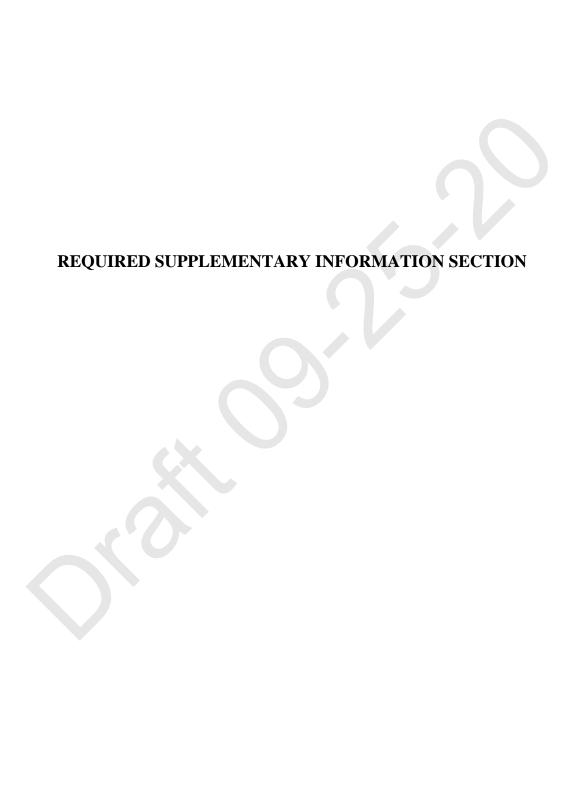
		Re-	
	ACWA/JPIA	Insurance/Excess	
	Self-Insured	Commercial	
Coverage	Retention	Insurance	Deductible
Liability – General, Auto, & Public		\$ 5,000,000 -	
Officials Errors & Omissions	\$ 5,000,000	55,000,000	None
		2,500,000 -	\$1,000 -
Property Program	100,000	500,000,000	\$100,000
Crime Program	100,000	n/a	\$1,000

The District continues to carry commercial insurance for all other risks of loss to cover all claims for risk of loss to which the District is exposed. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

NOTE 10: SUBSEQUENT EVENT

Management has evaluated subsequent events through September 22, 2020, the date which the financial statements were available to be issued. Based upon this evaluation, except for the following, it was determined that no other subsequent events occurred that require recognition or additional disclosure in the financial statements.

In January 2020, the virus SARS-CoV-2 was transmitted to the United States from overseas sources. This virus, responsible for the Coronavirus disease COVID-19 has proven to be extremely virulent with transmission rates as yet unknown. The economic impact in the State of California and the County of Sacramento as yet has not been determined and therefore any potential impact on the District is not yet known.





Date: October 5, 2020

Subject: Status of Annual Pipe Replacement Project

Staff Contacts: Tim Shaw, General Manager and Mike Vasquez, Contract District Engineer

Recommended Committee Action:

The Executive Committee should receive the report from staff on the current status of the annual pipe replacement project, then provide direction to staff as appropriate.

Current Background and Justification:

The Executive Committee discussed the annual pipe replacement project at the September 8th Committee meeting. The Contract District Engineer reported a need to engage in dialog with potential time and material construction services vendors in our region. The District Engineer also conveyed the need to similarly dialog with Sacramento County construction oversight personnel.

Unfortunately, due to circumstances beyond the Contract District Engineer's control, he has had very limited opportunities to perform the above described tasks, which may delay progress on the annual piper replacement project.

Conclusion:

Assuming the Contract District Engineer is available to participate in the October 5th Executive Committee meeting, the Executive Committee should receive his update and provide direction to staff as appropriate.



Date: October 5, 2020

Subject: Update on Pilot Project with Metron Farnier Innov8

Staff Contact: Timothy R. Shaw, General Manager

Recommended Committee Action:

N/A -This item is an update in the incipient stages of exploring options.

Current Background and Justification:

Staff will update the Executive Committee on the current status of a small-scale pilot program to evaluate the feasibility of using hardware and software from Metron Farnier to provide customer water consumption data. The Metron-Farnier option is premised on absolute scalability, wherein the charges are linearly proportionate to the number of customers enrolled to receive the service.

Conclusion:

N/A



Date: October 5, 2020

Subject: General Status Update from the District Engineer

Contact: Mike Vasquez, PE, PLS, Contract District Engineer

Recommended Committee Action:

Receive a status report on specific focus items currently being addressed by the District Engineer.

Current Background and Justification:

Subjects anticipated for discussion include:

- Well 16 Pump Station Construction
- Electric Avenue Residential Development (7 Lots, between Cypress Street and Elverta Road)
- Fox Hollow Residential Development (28 lots, 6th Street between Q Street and S Street)
- 428 West Delano Street Development (5 lots, between El Rio Avenue and Marindell Street)
- Wildflower Solar Project (7501 West 6th Street)

Conclusion:

I recommend the Executive Committee receive the status report from the District Engineer. Then, if necessary and appropriate, forward an item(s) onto the October 19, 2020 Board of Directors Meeting agenda with recommendations as necessary.



Date: October 5, 2020

Subject: Request to Borrow District Equipment from Non-Profit Organization

Staff Contact: Timothy R. Shaw, General Manager

Recommended Committee Action:

The Executive Committee should provide direction to staff in response to a written request from a community benefit non-profit organization.

Current Background and Justification:

The District received a written request from a community benefit non-profit organization in the District's service area. The request is to borrow the District portable light tower for one night in support of an event to benefit youth in the District's service area. Follow up interaction has confirmed the non-profit organization has personnel trained in the safe, proper use of the portable light tower.

The District does not yet have a written policy regarding community requests to borrow equipment. However, I have considerable experience with such request. Generally, the practice needs to be limited to only supporting community benefit non-profit organizations and other public agencies (schools, parks, fire etc.). The practice needs to confirm the non-profit community benefit status, confirm the requested equipment is available, confirm the requested equipment will be transported and used safely without incurring unreasonable risk of damaging the equipment. Deposits may be considered to leverage against damages, but the need should be evaluated on a case by case basis, e.g. required by default and waived when appropriate. In the vast majority of the requests, the non-profit writes a check, which is shredded when the non-profit returns the equipment on-time and undamaged.

Another thing to consider in relation to these types of requests from community benefit non-profits and other agencies within our service area, we share common threads. The community

owns the District and its assets. The fellow agencies taxpayers are also the District's ratepayer's taxpayers. Saving our community member money and providing convenience and safety benefits our community without exposing undue detriments or costs to our ratepayers/taxpayers.

Conclusion:

Direct staff in response to the request from a community benefit non-profit organization.