



**REGULAR MEETING
BOARD OF DIRECTORS
THURSDAY, DECEMBER 17, 2020 - 6:30 PM**

DUE TO COVID-19, THIS MEETING WILL BE CONDUCTED AS A TELECONFERENCE PURSUANT TO THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-25-20 AND N-29-20, WHICH SUSPEND CERTAIN REQUIREMENTS OF THE RALPH M. BROWN ACT.

MEMBERS OF THE PUBLIC MAY NOT ATTEND THIS MEETING IN PERSON.

Public comments may be submitted via email to
District Secretary, Candy Pina, at candyp@midpeninsulawater.org.
Please indicate in your email the agenda item to which your comment applies.
Comments submitted before the meeting will be provided to the Board before or during the meeting.
Comments submitted after the meeting is called to order will be included
in correspondence that will be provided to the full Board.

Board members, staff, and the public may participate remotely.

Meeting Link: <https://global.gotomeeting.com/join/119766765>

Dial by Telephone: 1-877-309-2073

Access Code: 119-766-765

AGENDA

1. OPENING

- A. Call to Order
- B. Establishment of Quorum
- C. Receive November 3, 2020 MPWD Certified Election Results from San Mateo County Chief Elections Officer
- D. Election of Officers for 2021

2. PUBLIC COMMENT

If you wish to address the Board, please follow the directions at the top of the agenda. If you have anything that you wish distributed to the Board and included for the official record, please include it in your email. Comments that require a response may be deferred for staff reply.

3. AGENDA REVIEW: ADDITIONS/DELETIONS AND PULLED CONSENT ITEMS

4. ACKNOWLEDGEMENTS/PRESENTATIONS

- A. Robert T. Piccolotti, Water System Operator - Retirement (17.75 Years of Service)

5. CONSENT AGENDA

All matters on the Consent Agenda are to be approved by one motion. If Directors wish to discuss a consent item other than simple clarifying questions, a request for removal may be made. Such items are pulled for separate discussion and action after the Consent Agenda as a whole is acted upon.

- A. Approve Minutes for the Regular Board Meeting on November 18, 2020
- B. Approve Expenditures from November 10, 2020 through December 10, 2020
- C. Receive Update from General Manager regarding Actions taken During COVID-19 Pandemic

6. HEARING AND APPEALS - None

7. REGULAR BUSINESS AGENDA

- A. Review Investment Structure and MPWD Plan Performance for Public Agency Retirement Services (PARS) 115 Trust - Other Post-Employment Benefits (OPEB) Pre-Funding Program and Pension Rate Stabilization Program (PRSP), and Consider Resolution 2020-38 Approving Plan Investment Portfolio for 2021
- B. Review and Approve the MPWD's Response to the San Mateo County Grand Jury's Report issued October 7, 2020, regarding Ransomware/Cybersecurity Attacks
- C. Receive BAWSCA Update

8. MANAGER'S AND BOARD REPORTS

- A. Management Reports
 - 1. General Manager's Report
 - 2. Administrative Services Manager's Report
 - 3. Operations Manager's Report
 - 4. District Engineer's Report - None
- B. Financial Reports
 - 1. Month End November 30, 2020
- C. Director Reports

9. COMMUNICATIONS

10. CLOSED SESSION

- A. Public Employee Performance Evaluation and Associated Negotiations
Government Code Section Sections 54957 and 54957.6
Title: General Manager

11. RECONVENE TO OPEN SESSION

12. ADJOURNMENT

This agenda was posted at the Mid-Peninsula Water District's office, 3 Dairy Lane, in Belmont, California, and on its website at www.midpeninsulawater.org.

ACCESSIBLE PUBLIC MEETINGS

Upon request, the Mid-Peninsula Water District will provide written agenda materials in appropriate alternative formats, or disability related modification or accommodation (including auxiliary aids or services), to enable individuals with disabilities to participate in public meetings and provide comments at/related to public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, auxiliary aid, service or alternative format requested. Requests should be sent to the District Secretary at (650) 591-8941 or candyp@midpeninsulawater.org. Requests must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

NEXT REGULAR BOARD MEETING: THURSDAY, JANUARY 28, 2021 AT 6:30PM



OFFICE OF
**ASSESSOR-COUNTY CLERK-
RECORDER & ELECTIONS**
COUNTY OF SAN MATEO

4

MARK CHURCH
CHIEF ELECTIONS OFFICER &
ASSESSOR-COUNTY CLERK-RECORDER

December 3, 2020

*JK
for
12/9/2020*
Tammy Rudock
General Manager
Mid-Peninsula Water District
3 Dairy Lane, P.O. Box 129
Belmont, CA 94002

Subject: Certificate of the Chief Elections Officer for the Presidential General
Election held on Tuesday, November 3, 2020

Dear General Manager Rudock:

This is to advise you that we have completed the Official Canvass of the vote and I have
certified the election results.

Attached hereto is the official Chief Elections Officer's Certification of the November 3,
2020 Presidential General Election.

It has been a pleasure to work with you in conducting this election and I look forward to
serving you again in future elections.

Sincerely,

Mark Church

Enclosures

CERTIFICATE OF THE CHIEF ELECTIONS OFFICER

State of California

SS.

County of San Mateo

I, **MARK CHURCH**, Chief Elections Officer of the County of San Mateo, State of California, do hereby certify that:

WHEREAS, the number of nominees for the Office of Member, Board of Directors, does not exceed the number of offices required by law to be filled at the Presidential General Election within the MID-PENINSULA WATER DISTRICT, held on November 3, 2020, the time within which nominations may be made has expired, and a petition signed by ten percent (10%) of the voters or 50 voters, whichever is the smaller number, requesting that said election be held, was not presented to the Chief Elections Officer within the time provided by law.

NOW, THEREFORE, pursuant to Elections Code §10515, the following qualified persons as listed below, are required to be appointed to two (2) seats for four (4) year terms:

Matthew Zucca

Louis J. Vella

IN WITNESS WHEREOF, I hereunto affix my hand and seal this 3rd day of December, 2020, and file this date with the General Manager of the MID-PENINSULA WATER DISTRICT.



MARK CHURCH
Chief Elections Officer &
Assessor-County Clerk-Recorder

COUNTY OF SAN MATEO

CERTIFICATION OF ELECTION

This is to certify that

Louis J. Vella

was appointed to the office of

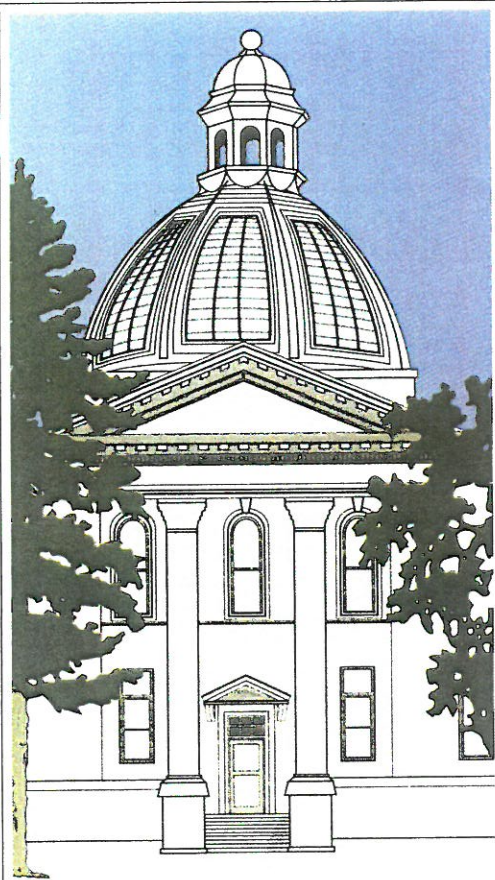
*Member, Board of Directors
Mid-Peninsula Water District*

In lieu of holding the Presidential General Election in San Mateo
County on the 3rd day of November, 2020.

In witness whereof, I have hereunto set my hand and affixed my
official seal this 3rd day of December, 2020.

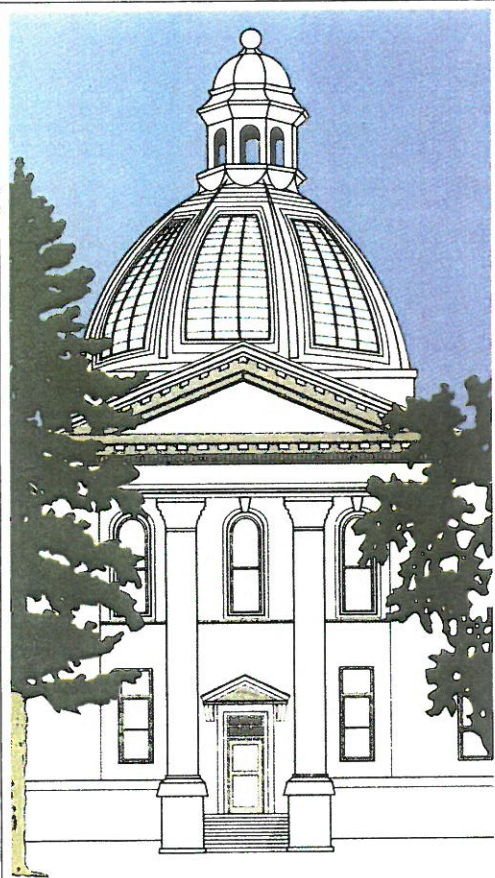


MARK CHURCH
Chief Elections Officer &
Assessor-County Clerk-Recorder



COUNTY OF SAN MATEO

CERTIFICATION OF ELECTION



This is to certify that

Matthew Zucca

was appointed to the office of

Member, Board of Directors

Mid-Peninsula Water District

In lieu of holding the Presidential General Election in San Mateo County on the 3rd day of November, 2020.

In witness whereof, I have hereunto set my hand and affixed my official seal this 3rd day of December, 2020.



A handwritten signature in blue ink that reads "Mark Church".

MARK CHURCH
Chief Elections Officer &
Assessor-County Clerk-Recorder

REGULAR MEETING
OF THE BOARD OF DIRECTORS
OF THE MID-PENINSULA WATER DISTRICT

November 18, 2020
Belmont, California

DUE TO COVID-19, THIS MEETING WAS CONDUCTED AS A TELECONFERENCE PURSUANT TO THE PROVISIONS OF THE GOVERNOR'S EXECUTIVE ORDERS N-25-20 AND N-29-20, WHICH SUSPENDS CERTAIN REQUIREMENTS OF THE RALPH M. BROWN ACT.

MEMBERS OF THE PUBLIC COULD NOT ATTEND THIS MEETING IN PERSON.
Board members, staff, and the public participated remotely.

A public comment submit option was available via email to District Secretary, Candy Pina, at candyp@midpeninsulawater.org.
No public comments were received.

1. OPENING

A. Call to Order:

The regular teleconference meeting of the Mid-Peninsula Water District Board of Directors was called to order by President Zucca at 6:38PM.

B. Establishment of Quorum:

PRESENT: Directors Zucca, Schmidt, Wheeler, Warden and Vella.

A quorum was present.

ALSO PRESENT: General Manager Tammy Rudock, Operations Manager Rene Ramirez, Administrative Services Manager and Board Secretary Candy Pina, District Engineer Brandon Laurie and District Counsel Julie Sherman.

2. PUBLIC COMMENT

None.

3. AGENDA REVIEW: ADDITION/DELETIONS AND PULLED CONSENT ITEMS

General Manager Rudock reported that the closed session Agenda Item would be moved to the December 2020 meeting.

4. ACKNOWLEDGEMENTS/PRESENTATIONS

None.

5. CONSENT AGENDA

A. Approve Minutes for the Board Meeting on October 22, 2020

B. Approve Expenditures from October 14, 2020 through November 9, 2020

C. Approve Resolution 2020-36 Authorizing Award of Construction Contract to Mitchell Engineering for Construction of the El Camino Real Water Main Replacement Project (#06-1621-CP) in the amount of \$2,113,072, Plus a 10% Contingency in the amount of \$211,000 for a Total Project Budget of \$2,324,072

- 51 **D. Approve Resolution 2020-37 Authorizing a Professional Services Contract with**
 52 **TRC Engineers, Inc. in the amount of \$345,134 for Construction Management and**
 53 **Inspection Services related to the El Camino Real Water Main Replacement Capital**
 54 **Project(CIP #06-1621-CP) and provide a contingency of 10% or \$34,500, for a total**
 55 **of \$379,634**

56 Director Vella moved to approve Consent Agenda Items 5.A. through 5.D. and Vice-
 57 President Schmidt seconded. Roll call vote was taken and they were unanimously
 58 approved.

59
 60 **6. HEARINGS AND APPEALS**

61 None.

62
 63 **7. REGULAR BUSINESS AGENDA**

64 **A. Consider and Confirm MPWD 2021 Regular Board Meeting Schedule**

65 General Manager Rudock reviewed the schedule with the Board, which was confirmed
 66 by the Board.

67
 68 **B. Update from General Manager on Actions Taken During COVID-19 Pandemic**

69 General Manager Rudock reported on the use of a new entry questionnaire that staff is
 70 using to screen any non-employees who enter the District office.

71
 72 President Zucca inquired about vehicle sanitation measures in place and General
 73 Manager Rudock explained daily cleaning procedures.

74
 75 General Manager Rudock also shared that the District had its first employee test positive
 76 for the Coronavirus after their family members tested positive, and testing information
 77 was provided to employees.

78
 79 **8. MANAGER'S AND BOARD REPORTS**

80 **A. General Manager's Report**

81 General Manager Rudock reported the January 2021 Special Board meeting was
 82 confirmed for Thursday, January 14, 2021 @ 6:00PM with the District's Consulting
 83 Facilitator, Julie Brown of Julie M. Brown and Associates.

84
 85 Director Vella asked if Ms. Brown would be able to accommodate the interactive format
 86 of the meeting virtually and General Manager Rudock confirmed in the affirmative.

87
 88 **1. Administrative Services Manager's Report**

89 Administrative Services Manager Pina reported on the LAIF account balance and
 90 General Manager Rudock reported on the recent Board Finance committee meeting.

91
 92 **2. Operations Manager's Report**

93 Operations Manager Ramirez reported on USA totals, recent flushing activities, a hit
 94 hydrant at 1301 Shoreway Rd, new development and October 2020 water
 95 consumption totals in relation to water conservation.

96
 97 Director Vella commented on the hit hydrant and water loss and an open Board
 98 discussion followed.

Director Wheeler inquired about the new meter that is being tested. Operations Manager Ramirez advised that it is a residential 5/8-inch meter and staff is simply evaluating the product at this point.

3. District Engineer's Report

District Engineer Laurie gave a progress report on capital projects.

President Zucca asked if staff was no longer requiring a written Engineer's report. General Manager Rudock expressed written reports occur when substantive project information is available. Larger projects are being worked on now and reports will be forthcoming from those engineering teams soon.

B. Financial Reports

1. Month End October 31, 2020

Administrative Services Manager Pina reported on year-to-date revenue and expense totals. She discussed the impact on the sale of 1513 Folger and its impact on Revenues and Expenses.

Director Vella sought staff confirmation that the financial reports are viewed by the Board Finance Committee. General Manager Rudock confirmed that they are not; however other financial reports are shared when necessary.

Administrative Services Manager Pina also commented that she meets with Vincent Xi from C. G. Uhlenberg, LLP, which performs a mini-audit on a monthly basis as oversight on the District financials.

C. Director Reports

Vice-President Schmidt and Director Warden commented on the Board Finance Committee meeting.

Director Vella reported that the BAWSCA Report has been moved next month's agenda.

Director Wheeler reported that he would be attending the ACWA JPIA Virtual Conference in two weeks.

9. COMMUNICATIONS

None.

10. CLOSED SESSION

A. Public Employee Performance Evaluation and Associated Negotiations Government Code Section §§54957 and 54957.6

Title: General Manager

Postponed until December 17, 2020

11. RECONVENE TO OPEN SESSION

None.

12. ADJOURNMENT

The meeting was adjourned at 7:18PM.

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APPROVED:

DISTRICT SECRETARY

BOARD PRESIDENT

Accounts Payable

12

Checks by Date - Summary by Check Date

User: candyp
Printed: 12/11/2020 11:07 AM



Check No	Vendor No	Vendor Name	Check Date	Check Amount
101231	CLIENTSV	Client Analysis Svs Charge	11/12/2020	3,444.52
Total for 11/12/2020:				3,444.52
36356	VALLEYOL	VALLEY OIL COMPANY	11/13/2020	2,622.95
36357	STEVCRKQ	STEVENS CREEK QUARRY, INC.	11/13/2020	231.74
36358	STATWIDE	STATEWIDE TRAFFIC SAFETY & SIGN	11/13/2020	550.00
36359	SMELECTR	SAN MATEO ELECTRIC SUPPLY	11/13/2020	44.84
36360	RANDB	ROBERTS & BRUNE CO. INC.	11/13/2020	787.17
36361	RECOLOGY	RECOLOGY SAN MATEO	11/13/2020	718.88
36362	OREILLYA	OREILLY AUTO PARTS, INC.	11/13/2020	119.60
36363	RNIEHAUS	ROBERT D. NIEHAUS, INC.	11/13/2020	285.00
36364	MATCOTLS	MATCO TOOLS	11/13/2020	1,314.70
36365	KIMBALLM	KIMBALL MIDWEST, INC.	11/13/2020	554.61
36366	JIFCOINC	JIFCO INC	11/13/2020	781.15
36367	INTRTRAF	INTERSTATE TRAFFIC CONTROL INC	11/13/2020	393.30
36368	HOMEDPC	HOME DEPOT	11/13/2020	559.70
36369	HASSETTH	HASSETT HARDWARE	11/13/2020	13.71
36370	GRANITE	GRANITE ROCK, INC.	11/13/2020	2,170.43
36371	GOTSAFE	GOTSAFETY	11/13/2020	585.00
36372	CINTS	CINTAS CORPORATION	11/13/2020	807.11
36373	CEDBAYAR	CED BAY AREA	11/13/2020	32.99
36374	CARQUEST	CARQUEST AUTO PARTS	11/13/2020	16.49
36375	BFIOFCAL	BFI of CALIFORNIA INC. - OX MTN. LA	11/13/2020	2,915.97
36376	BPLANDSC	BAY POINTE LANDSCAPE	11/13/2020	2,110.00
36377	BAIRDTRK	BAIRD TRUCKING INC.	11/13/2020	1,710.00
36378	ATT60197	AT&T 60197	11/13/2020	135.00
101213	AIRGAS	AIRGAS, LLC	11/13/2020	172.32
101214	DAVIDSON	JOHN T. DAVIDSON OR DBA JRocket77	11/13/2020	4,230.00
101215	LIFTOFFD	LIFTOFF DIGITAL	11/13/2020	262.50
101216	SFPUCWAT	SFPUC WATER QUALITY	11/13/2020	2,025.00
101217	SPRIHOLD	SPRINGBROOK HOLDING COMPANY I	11/13/2020	3,807.00
Total for 11/13/2020:				29,957.16
101207	CALPERS	CALPERS	11/15/2020	7,320.22
101208	CALPERS	CALPERS	11/15/2020	1,081.98
101209	HEALTHEQ	Health Equity	11/15/2020	650.84
101210	ICMACONT	ICMA contributions	11/15/2020	599.64
101211	ADPPAYRL	adp	11/15/2020	39,401.72
101212	ADPPAYRL	adp	11/15/2020	18,842.17
Total for 11/15/2020:				67,896.57
101232	TTECHACH	TTECH ACH BILLING	11/18/2020	2,323.96
Total for 11/18/2020:				2,323.96

Check No	Vendor No	Vendor Name	Check Date	Check Amount
101218	CALPERS	CALPERS	11/20/2020	4,123.65
101219	CALPERS	CALPERS	11/20/2020	372.75
101220	ICMACONT	ICMA contributions	11/20/2020	2,921.28
101221	HEALTH EQ	Health Equity	11/20/2020	342.00
101222	ADPPAYRL	adp	11/20/2020	18,241.61
101223	ADPPAYRL	adp	11/20/2020	7,595.17
Total for 11/20/2020:				33,596.46
36379	ATT60197	AT&T 60197	11/23/2020	48.09
36380	BAAQMD	BAY AREA AIR QUALITY MGMT DIST.	11/23/2020	3,226.00
36381	BAWSCA	BAY AREA WATER SUPPLY & CONSER	11/23/2020	246.34
36382	BENNETT	BENNETT MARINE UTILITY, LLC.	11/23/2020	2,285.00
36383	CGUHLENB	C G UHLENBERG LLP	11/23/2020	883.25
36384	CERVANTE	CESAR CERVANTES	11/23/2020	143.00
36385	COMCAST	COMCAST	11/23/2020	626.83
36386	COMCASTB	COMCAST BUSINESS	11/23/2020	640.42
36387	DEWEYLAN	DEWEY LANE CO., INC.	11/23/2020	143.00
36388	GRANITE	GRANITE ROCK, INC.	11/23/2020	853.14
36389	HACHCOMI	HACH COMPANY INC	11/23/2020	4,277.67
36390	HOMEDPC	HOME DEPOT	11/23/2020	392.88
36391	INTRTRAF	INTERSTATE TRAFFIC CONTROL INC	11/23/2020	393.30
36392	LEITHNER	RON LEITHNER	11/23/2020	160.00
36393	M&MBACK	M&M BACKFLOW & METER MAINTEN	11/23/2020	1,503.56
36394	MAOBILL	BILL MAO	11/23/2020	85.25
36395	OFFICEDE	OFFICE DEPOT, INC.	11/23/2020	323.13
36396	OREILLYA	OREILLY AUTO PARTS, INC.	11/23/2020	26.62
36397	PACOFFIC	PACIFIC OFFICE AUTOMATION	11/23/2020	204.30
36398	PG&E	PG&E CFM/PPC DEPT	11/23/2020	7,387.25
36399	RANDB	ROBERTS & BRUNE CO. INC.	11/23/2020	2,512.97
36400	ROOKEPEN	PENNY ROOKE	11/23/2020	85.25
36401	ROSEWOOD	ROSEWOOD OAKS PROPERTY MANA	11/23/2020	1,590.33
36402	SANDIEAR	SANDIE ARNOTT	11/23/2020	3,409.85
36403	STANDINS	STANDARD INSURANCE COMPANY	11/23/2020	1,151.76
101233	HANSONBR	HANSON, BRIDGETT	11/23/2020	6,887.50
101234	SCOTSMAN	WILLIAMS SCOTSMAN	11/23/2020	583.16
Total for 11/23/2020:				40,069.85
101242	ACHRETN	ACH Returns	11/27/2020	282.60
Total for 11/27/2020:				282.60
101235	CALPERS	CALPERS	11/30/2020	6,888.99
101236	CALPERS	CALPERS	11/30/2020	1,081.98
101237	HEALTH EQ	Health Equity	11/30/2020	450.84
101238	ICMACONT	ICMA contributions	11/30/2020	549.64
101239	ADPPAYRL	adp	11/30/2020	33,183.43
101240	ADPPAYRL	adp	11/30/2020	14,828.51
101241	HEALTH EQ	Health Equity	11/30/2020	59.00
Total for 11/30/2020:				57,042.39
36404	ACWA5661	ACWA JPIA	12/02/2020	42,808.91
36405	BAYARPAV	BAY AREA PAVING CO. INC.	12/02/2020	49,337.00

Check No	Vendor No	Vendor Name	Check Date	Check Amount
36406	CINTS	CINTAS CORPORATION	12/02/2020	260.27
36407	VERIZON	VERIZON WIRELESS	12/02/2020	833.13
100637	BANKMTO1	Bankcard Mtot Disc	12/02/2020	4,019.22
100638	BANKMTO1	Bankcard Mtot Disc	12/02/2020	91.33
100639	BANKMTO1	Bankcard Mtot Disc	12/02/2020	66.85
101243	OPERTECH	OPERATIONAL TECHNICAL SERVICES	12/02/2020	13,366.99
101244	SFWATER	SAN FRANCISCO WATER DEPT	12/02/2020	519,877.27
101245	WFBUSCAR	WELLS FARGO -GM	12/02/2020	1,983.46
101246	WFBUSRR	WELLS FARGO-OM	12/02/2020	157.23
Total for 12/2/2020:				632,801.66
36408	ATT30348	AT&T	12/10/2020	1.13
36409	ATT60197	AT&T 60197	12/10/2020	948.18
36410	BPLANDSC	BAY POINTE LANDSCAPE	12/10/2020	1,425.00
36411	CINTS	CINTAS CORPORATION	12/10/2020	260.27
36412	CSDA	CSDA	12/10/2020	7,805.00
36413	FASTENAL	FASTENAL	12/10/2020	485.97
36414	HFHCONLT	HF & F CONSULTANTS, LLC	12/10/2020	2,080.00
36415	HOMEDEPC	HOME DEPOT	12/10/2020	172.23
36416	INTRBATT	INTERSTATE BATTERY SYSTEM, INC.	12/10/2020	273.01
36417	RAYMORG/	RAY MORGAN COMPANY	12/10/2020	2,474.81
36418	NICOWELD	NICOLE WELDING	12/10/2020	1,125.00
36419	OFFICEDE	OFFICE DEPOT, INC.	12/10/2020	183.90
36420	PACESUPL	PACE SUPPLY CORP	12/10/2020	274.87
36421	PACOFFIC	PACIFIC OFFICE AUTOMATION	12/10/2020	111.06
36422	PG&E	PG&E CFM/PPC DEPT	12/10/2020	18,032.63
36423	RANDB	ROBERTS & BRUNE CO. INC.	12/10/2020	6,054.76
36424	STEPFORD	STEPFORD BUSINESS, INC.	12/10/2020	1,400.00
36425	SWRCBACC	SWRCB ACCOUNTING OFFICE	12/10/2020	682.00
36426	TMOBILE	T-MOBILE	12/10/2020	31.40
36427	TOWNEFOR	TOWNE FORD SALES	12/10/2020	322.57
36428	XIOINC	XIO, INC.	12/10/2020	528.00
101247	DAVIDSON	JOHN T. DAVIDSON OR DBA JRocket77	12/10/2020	4,484.50
101248	DFS	DOCUMENT FULFILLMENT SERVICES	12/10/2020	2,612.11
101249	PAKPOUR	PAKPOUR CONSULTING GROUP, INC	12/10/2020	11,194.14
Total for 12/10/2020:				62,962.54
Report Total (112 checks):				930,377.71



AGENDA ITEM NO. 5.C.

DATE: December 17, 2020
 TO: Board of Directors
 FROM: Tammy Rudock, General Manager

SUBJECT: RECEIVE UPDATE FROM GENERAL MANAGER REGARDING ACTIONS TAKEN DURING COVID-19 PANDEMIC

RECOMMENDATION

Receive report.

FISCAL IMPACT – None.

BACKGROUND

Emergencies were declared statewide, locally, and federally because of the recent COVID-19 pandemic:

- On March 4, 2020 by the Governor for California;
- On March 10, 2020 by the San Mateo County Health Officer;
- On March 13, 2020 by the US President; and
- On March 16, 2020, the San Mateo County Health Officer issued an order for individuals to shelter-in-place at their residence unless receiving or providing essential services. It was revised many times always retaining the shelter-in-place order, until June 17th when the order rescinded the shelter-in-place and aligned with the state's reopening guidelines.

DISCUSSION

The Board President requested I provide a monthly report on actions taken or decisions made during the declared emergency that were outside of established policy.

There were two (2) new actions taken since last month's report that will be presented for ratification by the Board during the MPWD Mid-Year Budget Review at next month's regular meeting:

- **In December 2020:**
 - *Authorized initiation of engineering design, planning, and construction support with District Engineer Pakpour Consulting Group, Inc., for two additional (2) water main replacement projects within the MPWD's 5-year CIP to increase the size of the project for a more competitive field of potential bidders:*
 - Harbor Boulevard WMR (from Karen Road to Old County Road) – Project #20-07; and
 - Belmont Canyon Road WMR – Project 15-29.
- *Authorized funding for the purchase of a new pickup truck for Operations (for State contract pricing), which will replace an older model truck after the COVID-19 pandemic is over.*

- In October 2020:
 - Developed the attached questionnaire for necessary in-person visits (consultants, vendors, etc.) at the MPWD for continued workplace safety during the COVID-19 pandemic.
- In September 2020:
 - Revised Employee Workplace Safety Procedures During COVID-19 Pandemic (attached). All employees participated in revisions and signed.
- In August and September 2020:
 - Staff continued working on the El Camino Real WMR Capital Project, including final pre-bidding/construction review and customer outreach activities with TRC Companies, Inc., which exceeded my contract signature authority of \$25,000. The Operations Manager presented a contract amendment for the Board's approval on this month's Consent agenda since the project and services were budgeted.
- By August 31, 2020:
 - Allowed employees to cash out up to 80 hours of vacation leave to avoid bumping up against their vacation leave accrual caps.
- On August 25, 2020:
 - Amended MPWD's ICMA-RC (International City Managers Association-Retirement Corporation) 457 Plan to allow for CARES Act Coronavirus Related Distributions. I have authority to amend the plan as the designated Plan Administrator but wanted to report it out to the Board.
- On August 13, 2020:
 - Approved one additional month adjustment relief for a customer that had a water heater leak (three months instead of two).
- On April 14, 2020:
 - Credit card and debit card fees were suspended (and refunded for payments made since March 17, 2020) through the end of this fiscal year (June 30, 2020) or until further notice after discussion with the Board at a future meeting.
- On March 18, 2020:
 - Terminations of service for non-payment were suspended through the end of this fiscal year (June 30, 2020) or until further notice after discussion with the Board at a future meeting.
 - All fees related to late payments were suspended through the end of this fiscal year (June 30, 2020) or until further notice after discussion with the Board at a future meeting.

BOARD ACTION: APPROVED:_____ DENIED:_____ POSTPONED:_____ STAFF DIRECTION:_____

UNANIMOUS_____ ZUCCA_____ SCHMIDT_____ WHEELER_____ WARDEN_____ VELLA_____



AGENDA ITEM NO. 7.A.

DATE: December 17, 2020
 TO: Board of Directors
 FROM: Tammy Rudock, General Manager

SUBJECT: REVIEW INVESTMENT STRUCTURE AND MPWD PLAN PERFORMANCE FOR PUBLIC AGENCY RETIREMENT SERVICES (PARS) 115 TRUST – OTHER POST-EMPLOYMENT BENEFITS (OPEB) PRE-FUNDING PROGRAM AND PENSION RATE STABILIZATION PROGRAM (PRSP), AND CONSIDER RESOLUTION 2020-38 APPROVING PLAN INVESTMENT PORTFOLIO FOR 2021

RECOMMENDATION

Approve Resolution 2020-38 for retention of the MPWD's Plan in the Moderate investment portfolio in 2020.

FISCAL IMPACT

Attached is the annual client report prepared by PARS and HighMark Capital Investment.

The MPWD OPEB plan's discount rate (return on investment) target is 5.50%, as projected in the MPWD GASB 75 actuarial report dated April 22, 2020.

Summary of MPWD's OPEB Plan as of October 31, 2020:

Initial Contribution (August 2011)	\$ 81,159
Additional Contributions	\$2,234,834
Total Contributions	\$2,315,993
Disbursements	\$ -0-
Total Investment Earnings	<u>\$ 541,511</u>
Account Balance	\$2,823,573

OPEB Liability FYE June 30, 2020:

Total OPEB Liability:	\$3,474,604
Plan Fiduciary Net Position:	\$2,778,799
Net OPEB Liability:	\$ 695,805
Funded Ratio:	79.97%

Summary of MPWD's Pension Plan as of October 31, 2020:

Initial Contribution (August 2018)	\$ 400,000
Additional Contributions	\$1,200,000
Total Contributions	\$1,600,000
Disbursements	\$ -0-
Total Investment Earnings	<u>\$ 229,105</u>
Account Balance	\$1,814,314

CalPERS Annual Valuation Report Highlights FYE June 30, 2019:

Actuarial Liability:	\$8.2 million
Assets:	\$6.4 million
Unfunded Accrued Liability (UAL):	\$1.8 million
Funded Ratio:	78.4%

BACKGROUND

The investment strategy initially selected on May 16, 2011 for the MPWD PARS OPEB trust account was the Moderately Conservative HighMark PLUS. The investment objective was to “provide current income with moderate capital appreciation.” Approximately 15%-20% of public agencies participating in PARS OPEB plans have selected the Moderately Conservative portfolio.

The Board has reviewed the plan annually since inception, and between 2012 through 2017, it confirmed the retention of the Moderately Conservative HighMark PLUS investment strategy for the trust account.

For 2018 (via Resolution 2017-21), the Board elected to change the investment portfolio to the PARS Moderate HighMark Plus strategy, and it has since retained that portfolio.

DISCUSSION

Jennifer Meza, Manager/Consulting from PARS will present a review of the MPWD OPEB and PRSP programs, and Randall Yurchak, CFA and Vice President/Portfolio Manager from HighMark Capital Investment will provide an overview of the MPWD’s portfolio investment performance.

The following PARS investment portfolio options are available:

- Conservative;
- Moderately Conservative;
- Moderate;
- Balanced; and
- Capital Appreciation.

Staff recommends in the attached Resolution 2020-38 that the MPWD PARS Plan remain in the Moderate investment portfolio in 2021.

Attachments: Resolution 2020-38
MPWD PARS 115 Trust – OPEB Prefunding Program & PRSP Client Review (12/17/20)

BOARD ACTION: APPROVED:____ DENIED:____ POSTPONED:____ STAFF DIRECTION:____

UNANIMOUS____ ZUCCA____ SCHMIDT____ WHEELER____ WARDEN____ VELLA____

RESOLUTION NO. 2020-38**APPROVING THE 2021 INVESTMENT PORTFOLIO
FOR THE MPWD PARS 115 TRUST PLAN – OPEB AND PRSP**

* * *

MID-PENINSULA WATER DISTRICT

WHEREAS, the Mid-Peninsula Water District (MPWD) initiated an OPEB (Other Post Employment Benefits) IRS Section 115 Trust with PARS (Public Agency Retirement Services) in August of 2011; and

WHEREAS, in 2011 the MPWD selected as its investment strategy the PARS Moderately Conservative HighMark PLUS portfolio; and

WHEREAS, between 2012-2017, after review and consideration of its investment strategy and performance, the Board approved retention of the PARS Moderately Conservative HighMark PLUS investment portfolio for the MPWD OPEB trust account; and

WHEREAS, the MPWD PARS OPEB trust account investment strategy, annual performance, and portfolio options were reviewed and discussed by the Board of Directors at its regular meeting on November 15, 2017, after a presentation by staff, and PARS and HighMark Capital Management investment representatives, and the Board determined it was a good time to change to the PARS Moderate HighMark Plus investment portfolio for 2018; and

WHEREAS, on February 22, 2018, the Board approved Resolution No. 2018-03 and the establishment of a Pension Rate Stabilization Program (PRSP) in combination

with its OPEB plan; and

WHEREAS, on December 20, 2018, after review and consideration of the MPWD's combined PARS 115 Trust Plan – OPEB and PRSP (the 115 Plan) investment strategy and performance in 2018, the Board approved retention of the PARS Moderate HighMark Plus investment portfolio for 2019; and

WHEREAS, on December 19, 2019, after review and consideration of the MPWD 115 plan's investment strategy and performance in 2019, the Board approved retention of the PARS Moderate HighMark Plus Investment portfolio for 2020; and

WHEREAS, on December 17, 2020, after review and consideration of the MPWD 115 plan's investment strategy and performance in 2020, the Board approved retention of the PARS Moderate HighMark Plus Investment portfolio in 2021.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Mid-Peninsula Water District hereby approves retention of the PARS Moderate HighMark PLUS investment portfolio for the MPWD PARS 115 Trust Plan in 2021.

REGULARLY PASSED AND ADOPTED this 17th day of December 2020 by the following vote:

AYES:

NOES:

ABSTENTIONS:

ABSENCES:

Board President
Mid-Peninsula Water District

ATTEST:

Board Secretary

PUBLIC
AGENCY
RETIREMENT
SERVICES

PARS

TRUSTED SOLUTIONS. LASTING RESULTS.



MID-PENINSULA WATER DISTRICT

PARS 115 Trust – OPEB Prefunding Program and Pension Rate Stabilization Program
December 17, 2020

CONTACTS



Jennifer Meza
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jmeza@pars.org

Will Rogers
Client Services Coordinator
(800) 540-6369 x161
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Randall Yurchak, CFA
Vice President, Portfolio Manager
(415) 705-7579
randall.yurchak@highmarkcapital.com

PARS 115 TRUST TEAM

Trust Administrator & Consultant



- Recordkeeping
- Sub-trust accounting
- Monitors plan compliance
- Processes contributions/disbursements
- Hands-on, dedicated support teams
- Coordinates all agency services

36

Years of Experience
(1984-2020)

2,000+

Plans under
Administration

1,000+

Public Agency
Clients

500K+

Plan Participants

\$4.6B

Assets under
Administration

Trustee



- 5th largest commercial bank and one of the nation's largest trustees for Section 115 trusts
- Safeguard plan assets
- Oversight protection as plan fiduciary
- Custodian of assets

157

Years of Experience
(1863-2020)

\$5.0T

Assets under
Administration

Investment Manager



- Investment sub-advisor to trustee U.S. Bank
- Investment policy assistance
- Uses open architecture
- Active and passive platform options
- Customized portfolios (with minimum asset level)

101

Years of Experience
(1919-2020)

\$16.2B

Assets under
Management

SUMMARY OF AGENCY'S OPEB PLAN

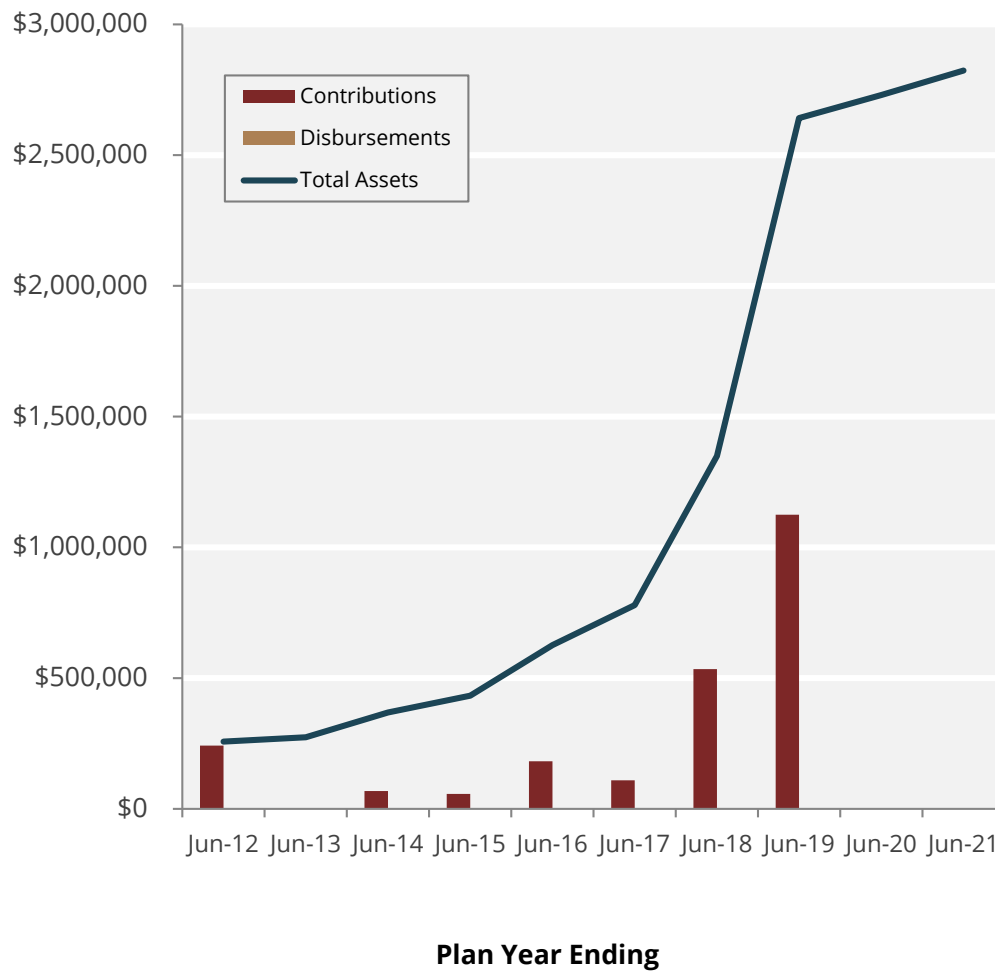
Plan Type:	IRC Section 115 Irrevocable Exclusive Benefit Trust
Trustee Approach:	Discretionary
Plan Effective Date:	April 28, 2011
Plan Administrator:	General Manager
Current Investment Strategy:	Moderate HighMark PLUS (Active) Strategy; Pooled Account

AS OF OCTOBER 31, 2020:

Initial Contribution:	August 2011: \$81,159
Additional Contributions:	\$2,234,834
Total Contributions:	\$2,315,993
Disbursements:	\$0
Total Investment Earnings:	\$541,511
Account Balance:	\$2,823,573

SUMMARY OF AGENCY'S OPEB PLAN

CONTRIBUTIONS, DISBURSEMENTS, AND TOTAL ASSETS AS OF OCTOBER 31, 2020:



Year	Contributions	Disbursements	Total Assets
Jun-12*	\$241,627	\$0	\$257,032
Jun-13	\$0	\$0	\$273,541
Jun-14	\$68,054	\$0	\$368,264
Jun-15	\$56,925	\$0	\$432,917
Jun-16	\$181,575	\$0	\$626,357
Jun-17	\$108,702	\$0	\$778,799
Jun-18	\$534,110	\$0	\$1,349,599
Jun-19	\$1,125,000	\$0	\$2,641,487
Jun-20	\$0	\$0	\$2,729,661
Jun-21**	\$0	\$0	\$2,823,573

*Plan Year Ending June 2012 is based on 11 months of activity.
 **Plan Year Ending June 2021 is based on 4 months of activity.

OPEB ACTUARIAL RESULTS

- We have received the actuarial report by Pacific Crest Actuaries dated February 27, 2020 with a measurement date as of June 30, 2020. In the table below, we have summarized the results.

Demographic Study		Measurement Date: June 30, 2020
Actives		19
Retirees		5
Total		24
Average Active Age		50.16
Average Active Service		13.00

OPEB ACTUARIAL RESULTS

	Measurement Date: June 30, 2020 Discount Rate: 5.50%
Total OPEB Liability (TOL) <i>Actuarial Accrued Liability (AAL)</i>	\$3,474,604
Fiduciary Net Position <i>Actuarial Value of Assets</i>	\$2,778,799
Net OPEB Liability (NOL) <i>Unfunded Actuarial Accrued Liability (UAAL)</i>	\$695,805
Funded Ratio (%)	79.97%
Service Cost <i>Normal Cost</i>	\$86,889
Annual Benefit Payments (Pay-as-you-Go)	\$65,971

Rule of thumb: For every one percent increase in the discount rate, the unfunded liability is lowered by 10-12%.

SUMMARY OF AGENCY'S PENSION PLAN

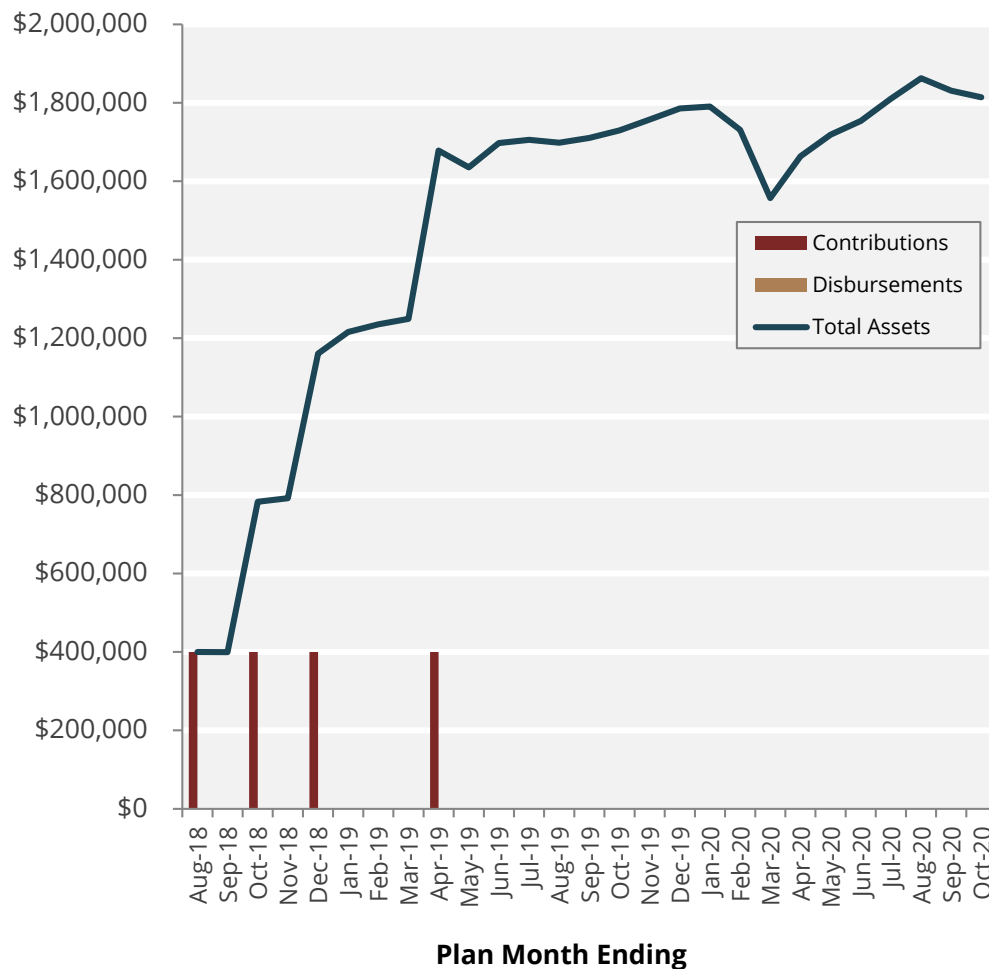
Plan Type:	IRC Section 115 Irrevocable Exclusive Benefit Trust
Trustee Approach:	Discretionary
Plan Effective Date:	February 22, 2018
Plan Administrator:	General Manager
Current Investment Strategy:	Moderate HighMark PLUS (Active) Strategy; Pooled Account

AS OF OCTOBER 31, 2020:

Initial Contribution:	August 2018: \$400,000
Additional Contributions:	\$1,200,000
Total Contributions:	\$1,600,000
Disbursements:	\$0
Total Investment Earnings:	\$229,105
Account Balance:	\$1,814,314

SUMMARY OF AGENCY'S PENSION PLAN

CONTRIBUTIONS, DISBURSEMENTS, AND TOTAL ASSETS AS OF OCTOBER 31, 2020:



Month	Contributions	Disbursements	Total Assets
Aug-18	\$400,000	\$0	\$400,017
Sep-18	\$0	\$0	\$399,564
Oct-18	\$400,000	\$0	\$782,948
Nov-18	\$0	\$0	\$791,669
Dec-18	\$400,000	\$0	\$1,160,458
Jan-19	\$0	\$0	\$1,215,717
Feb-19	\$0	\$0	\$1,235,277
Mar-19	\$0	\$0	\$1,249,145
Apr-19	\$400,000	\$0	\$1,678,185
May-19	\$0	\$0	\$1,635,372
Jun-19	\$0	\$0	\$1,697,313
Jul-19	\$0	\$0	\$1,705,714
Aug-19	\$0	\$0	\$1,698,424
Sep-19	\$0	\$0	\$1,710,589
Oct-19	\$0	\$0	\$1,729,785
Nov-19	\$0	\$0	\$1,757,620
Dec-19	\$0	\$0	\$1,785,702
Jan-20	\$0	\$0	\$1,790,663
Feb-20	\$0	\$0	\$1,730,809
Mar-20	\$0	\$0	\$1,557,309
Apr-20	\$0	\$0	\$1,663,459
May-20	\$0	\$0	\$1,718,683
Jun-20	\$0	\$0	\$1,753,971
Jul-20	\$0	\$0	\$1,810,363
Aug-20	\$0	\$0	\$1,862,513
Sep-20	\$0	\$0	\$1,831,053
Oct-20	\$0	\$0	\$1,814,314

PENSION FUNDING STATUS

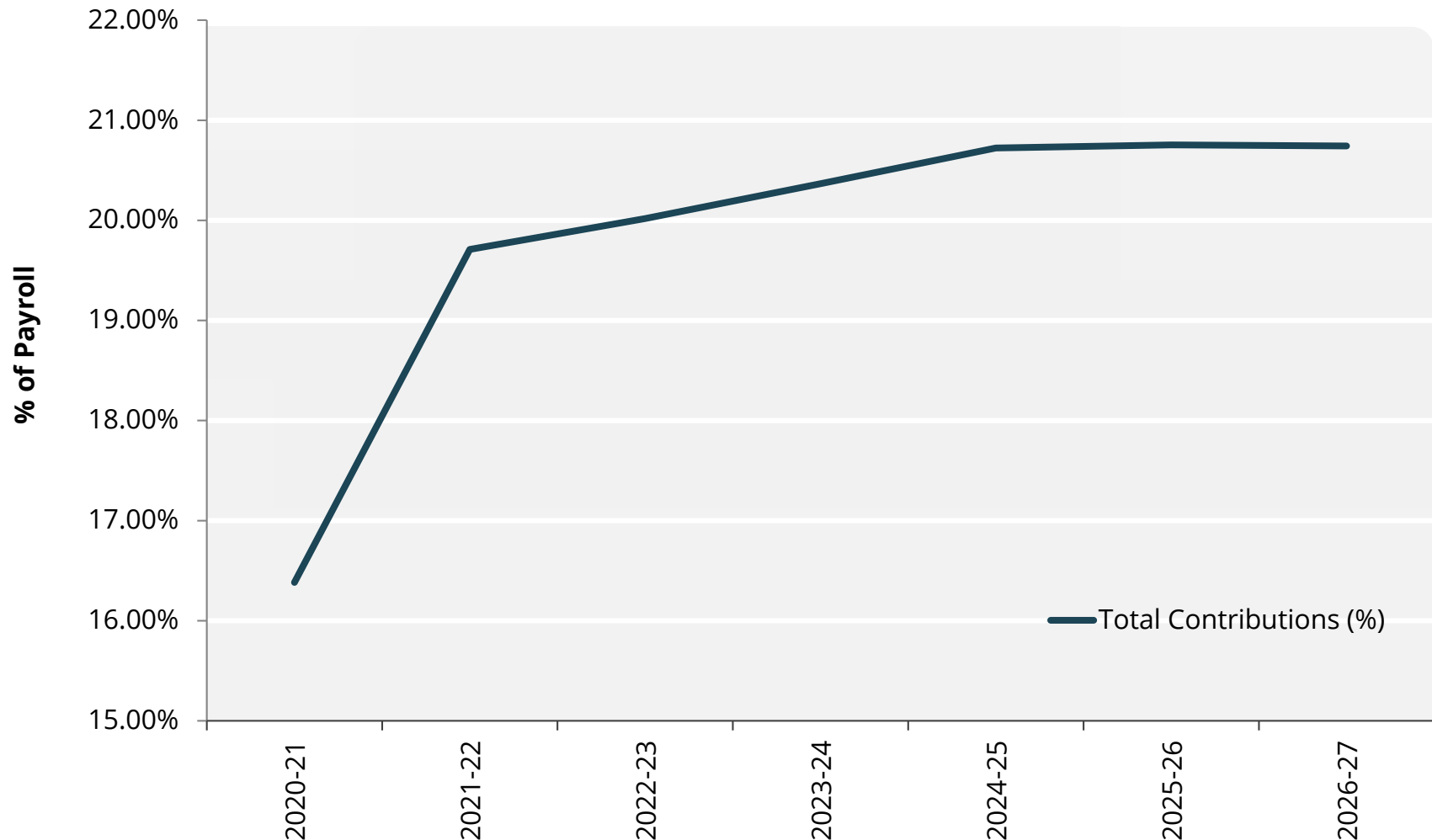
As of June 30, 2019, Mid-Peninsula Water District's CalPERS pension plan is funded as follows*:

Combined Miscellaneous & Safety Groups	Valuation as of June 30, 2018	Valuation as of June 30, 2019	Change
Actuarial Liability	\$7.8 M	\$8.2 M	5.13% ↑
Assets	\$6.1 M	\$6.4 M	4.92% ↑
Unfunded Liability	\$1.7 M	\$1.8 M	5.88% ↑
Funded Ratio	78.0%	78.4%	0.51% ↑
Employer Contribution Amount	\$313 K (FY 19-20)	\$285 K (FY 20-21)	8.95% ↓
Employer Contribution Amount (FY 26-27)	---	\$419 K (47.1% ↑)	---

* Data through 2026-27 from Agency's latest CalPERS actuarial valuation.

PROJECTED EMPLOYER CONTRIBUTIONS (MISC.)

Projected misc. contributions increase from \$285K to \$419K* (47.1% ↑)



PARS: Mid Peninsula Water District

November 30, 2020

**Presented by
Randall Yurchak, CFA**

DISCUSSION HIGHLIGHTS – Mid Peninsula Water District

Investment objective – Moderate HighMark Plus

Asset Allocation:

- Allocation: 51.2% stocks (40-60% range), 48.0% bonds (40-60% range), .8% cash (0-20% range)
- Breakdown: Large cap 30.4%, Mid-cap 3.4%, Small cap 5.8%, International 10.6%, REIT's 1.0%

Performance Moderate HighMark Plus *(as of 11-30-2020; net fund fees, gross investment management fees):*

- 3 month: 4.52%
- Year-to-date: 9.47%
- 3-year: 7.62%
- 5-year: 7.04%
- Inception (9/2011): 6.41%
- Bonds: Bond yields beginning to rise from very low levels as economic recovery continuing
- Stocks: Significant volatility from Covid-19, but equities up double-digits year-to-date partly due to significant stimulus
 - Domestic markets: Large Cap outperformed more risky Small Cap stocks
 - International: Developed underperformed due to slower recovery, and Emerging outperformed from more effective control of Covid-19 and quick economic rebound

12 Month Changes:

- Stocks: underweight to equal weight
- Bonds: neutral to overweight
- Cash: neutral to underweight

Outlook 2021:

- Covid-19, bankruptcies, uneven economic recovery may cause ongoing market volatility
- New administration and Congress: potential gridlock viewed as market friendly
- FY20 est. S&P 500 earnings -26% w/ a rebound in FY21
- Geopolitical uncertainty: China, Middle East, Russia

Selected Period Performance

Mid Peninsula Water District

Period Ending: 11/30/2020

	3 Months	Year to Date (11 Months)	1 Year	3 Years	5 Years	Inception to Date 09/01/2011
Cash Equivalents	.01	.36	.48	1.40	1.03	.56
<i>Lipper Money Market Funds Index</i>	.00	.40	.49	1.36	.96	.52
Total Fixed Income	1.13	6.68	6.73	4.98	4.26	3.63
<i>BBG Barclays US Aggregate Bd Index</i>	.48	7.36	7.28	5.45	4.34	3.50
Total Equities	7.80	11.90	15.56	10.12	11.56	11.84
Large Cap Funds	5.01	15.86	19.34	12.89	13.51	14.46
<i>S&P 500 Composite Index</i>	3.89	14.02	17.46	13.17	13.99	14.85
Mid Cap Funds	12.23	11.39	13.82	9.93	11.51	11.77
<i>Russell Midcap Index</i>	12.32	11.86	14.43	10.26	11.75	13.30
Small Cap Funds	19.56	12.13	16.10	10.77	12.53	14.47
<i>Russell 2000 Index</i>	16.87	10.41	13.59	7.09	10.25	11.98
International Equities	9.01	6.60	11.95	4.44	7.69	5.23
<i>MSCI EAFE Index</i>	8.01	3.03	6.37	3.26	6.19	6.16
<i>MSCI EM Free Index</i>	9.71	10.20	18.43	4.92	10.72	4.14
REIT Funds	3.52	-7.97	-7.30	3.51	5.00	
<i>Wilshire REIT Index</i>	4.00	-10.39	-10.99	2.31	4.08	7.91
Total Managed Portfolio	4.52	9.47	11.28	7.62	7.04	6.41

Account Funded Date: 8/18/2011. Performance Inception Date: 9/01/2011

Plan performance is indicative of plan being invested in account 6746019203, PARS Moderate Conservative HM Plus, from 9/01/2011 until December 31, 2017 and then subsequently being invested in account 6746019205, PARS HighMark Plus Moderate from January 1, 2018 to August 31, 2018, and then in account 6746050106 from September 1, 2018 and onwards. Returns are gross of account level investment advisory fees and net of any fees, including fees to manage mutual fund or exchange traded fund holdings. Returns for periods over one year are annualized. The information presented has been obtained from sources believed to be accurate and reliable. Past performance is not indicative of future returns. Securities are not FDIC insured, have no bank guarantee, and may lose value.

Asset Allocation – Mid Peninsula Water District

As of November 30, 2020

Current Asset Allocation		Investment Vehicle	
Equity		Range: 40%-60%	51.14%
Large Cap Core	COFYX	Columbia Contrarian Core Inst3	5.65%
	VGIAX	Vanguard Growth & Income Adm	12.73%
Large Cap Value	DODGX	Dodge & Cox Stock Fund	4.26%
	IVE	iShares S&P 500 Value ETF	1.68%
Large Cap Growth	HNACX	Harbor Capital Appreciation Retirement	3.07%
	PRUFX	T. Rowe Price Growth Stock Fund I	2.99%
Mid Cap Core	IWR	iShares Russell Mid-Cap ETF	3.44%
Small Cap Value	UBVFX	Undiscovered Managers Behavioral Val R6	3.00%
Small Cap Growth	RSEJX	Victory RS Small Cap Growth R6	2.80%
International Core	DFALX	DFA Large Cap International I	2.71%
International Value	DODFX	Dodge & Cox International Stock Fund	1.84%
International Growth	MGRDX	MFS® International Growth R6	1.69%
Emerging Markets	HHHFX	Hartford Schroders Emerging Mkts Eq F	4.33%
Real Estate	VNQ	Vanguard Real Estate ETF	0.95%
Fixed Income		Range: 40%-60%	48.03%
Short-Term	VFSUX	Vanguard Short-Term Investment-Grade Adm	9.37%
Intermediate-Term	DBLFX	DoubleLine Core Fixed Income I	12.83%
	PTTRX	PIMCO Total Return Instl Fund	12.82%
	PTRQX	Prudential Total Return Bond Q	13.01%
Cash		Range: 0%-20%	0.82%
	FGZXX	First American Government Oblig Z	0.82%
TOTAL			100.00%

Mid Peninsula Water District

For Period Ending November 30, 2020

LARGE CAP EQUITY FUNDS							
Fund Name	1-Month Return	3-Month Return	Year-to- Date	1-Year Return	3-Year Return	5-Year Return	10-Year Return
Columbia Contrarian Core Inst3	12.94	4.99	17.39	21.68	13.22	13.31	14.25
Vanguard Growth & Income Adm	10.86	3.58	13.33	16.65	12.34	13.31	14.18
Dodge & Cox Stock	18.31	12.32	2.89	6.38	6.93	10.77	12.35
iShares S&P 500 Value ETF	12.87	7.92	-2.16	0.87	5.99	9.22	11.05
Harbor Capital Appreciation Retirement	12.55	1.54	47.48	51.28	25.17	21.01	18.26
T. Rowe Price Growth Stock I	10.49	2.82	31.73	34.84	19.47	18.29	16.99
S&P 500 TR USD	10.95	3.89	14.02	17.46	13.17	13.99	14.19
MID CAP EQUITY FUNDS							
iShares Russell Mid-Cap ETF	13.80	12.24	11.70	14.25	10.11	11.58	12.48
Russell Mid Cap TR USD	13.82	12.32	11.86	14.43	10.26	11.75	12.65
SMALL CAP EQUITY FUNDS							
Undiscovered Managers Behavioral Val R6	22.52	25.98	-4.16	-0.92	0.38	5.53	10.65
Victory RS Small Cap Growth R6	13.58	13.03	29.20	33.90	18.00	16.51	15.84
Russell 2000 TR USD	18.43	16.87	10.41	13.59	7.09	10.25	11.13
INTERNATIONAL EQUITY FUNDS							
Dodge & Cox International Stock	21.20	12.08	-2.96	1.89	-0.10	4.52	4.90
DFA Large Cap International I	14.40	7.78	2.80	5.99	3.05	6.36	5.62
MFS International Growth R6	10.43	4.77	10.16	13.85	9.24	11.27	8.16
MSCI EAFE NR USD	15.50	8.01	3.03	6.37	3.26	6.19	5.85
Hartford Schroders Emerging Mkts Eq F	8.93	10.28	13.27	21.62	6.47	12.23	4.90
MSCI EM NR USD	9.25	9.71	10.20	18.43	4.92	10.72	3.61

Source: SEI Investments, Morningstar Investments

Returns less than one year are not annualized. Past performance is no indication of future results. The information presented has been obtained from sources believed to be accurate and reliable. Securities are not FDIC insured, have no bank guarantee and may lose value.

Mid Peninsula Water District

For Period Ending November 30, 2020

REAL ESTATE FUNDS							
Fund Name	1-Month Return	3-Month Return	Year-to- Date	1-Year Return	3-Year Return	5-Year Return	10-Year Return
Vanguard Real Estate ETF	9.68	3.48	-7.29	-6.55	3.90	5.44	8.87
BOND FUNDS							
DoubleLine Core Fixed Income I	1.49	1.18	4.97	5.21	4.38	4.14	4.64
PIMCO Total Return Instl	1.19	0.84	8.55	8.28	5.64	4.77	4.10
PGIM Total Return Bond R6	2.49	1.76	7.48	7.56	6.18	5.69	5.27
Vanguard Short-Term Investment-Grade Adm	0.54	0.61	4.87	5.13	3.87	3.24	2.70
BBgBarc US Agg Bond TR USD	0.98	0.48	7.36	7.28	5.45	4.34	3.71

Source: SEI Investments, Morningstar Investments

Returns less than one year are not annualized. Past performance is no indication of future results. The information presented has been obtained from sources believed to be accurate and reliable. Securities are not FDIC insured, have no bank guarantee and may lose value.

PARS DIVERSIFIED PORTFOLIOS CONSERVATIVE

Q3 2020

WHY THE PARS DIVERSIFIED CONSERVATIVE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

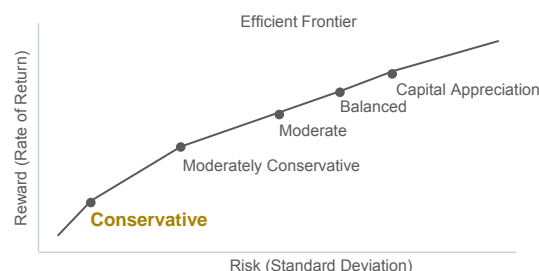
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide a consistent level of inflation-protected income over the long-term. The major portion of the assets will be fixed income related. Equity securities are utilized to provide inflation protection.



ASSET ALLOCATION — CONSERVATIVE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	5 – 20%	15%	15%
Fixed Income	60 – 95%	80%	84%
Cash	0 – 20%	5%	1%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

Current Quarter*	2.27%
Blended Benchmark*, **	1.61%
Year To Date*	4.94%
Blended Benchmark*, **	4.63%
1 Year	6.57%
Blended Benchmark**	6.30%
3 Year	5.16%
Blended Benchmark**	4.98%
5 Year	5.11%
Blended Benchmark**	4.69%
10 Year	4.51%
Blended Benchmark**	4.10%

Index Plus Composite (Passive)

Current Quarter*	1.53%
Blended Benchmark*, **	1.61%
Year To Date*	5.33%
Blended Benchmark*, **	4.63%
1 Year	6.80%
Blended Benchmark**	6.30%
3 Year	5.14%
Blended Benchmark**	4.98%
5 Year	4.78%
Blended Benchmark**	4.69%
10 Year	4.25%
Blended Benchmark**	4.10%

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 - Present: 7.5% S&P500, 1.5% Russell Mid Cap, 2.5% Russell 2000, 1% MSCI EM (net), 2% MSCI EAFE (net), 52.25% BBG Barclays US Agg, 25.75% ICE BofA 1-3 Yr US Corp/Gov't, 2% ICE BofA US High Yield Master II, 0.5% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012, the blended benchmark was 12% S&P 500; 1% Russell 2000, 2% MSCI EAFE (net), 40% ICE BofA 1-3 Year Corp./Gov't, 40% BBG Barclays US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 15% S&P 500, 40% ICE BofA 1-3Yr Corp/Gov, 40% BBG Barclays US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-9.04%
2009	15.59%
2010	8.68%
2011	2.19%
2012	8.45%
2013	3.69%
2014	3.88%
2015	0.29%
2016	4.18%
2017	6.73%
2018	-1.35%
2019	11.05%

Index Plus Composite (Passive)

2008	-6.70%
2009	10.49%
2010	7.67%
2011	3.70%
2012	6.22%
2013	3.40%
2014	4.32%
2015	0.06%
2016	3.75%
2017	5.52%
2018	-1.09%
2019	10.37%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	07/2004
No of Holdings in Portfolio	19

Index Plus (Passive)

Composite Inception Date	07/2004
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

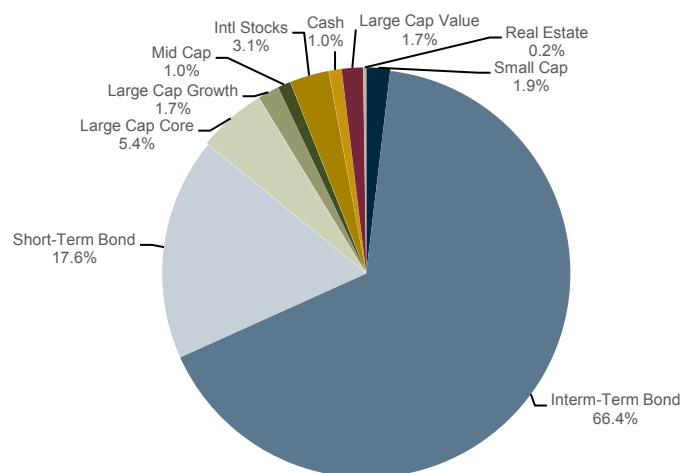
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
T. Rowe Price Growth Stock - I
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Victory RS Small Cap Growth - R6
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
Vanguard Short-Term Invest-Grade Adm
PIMCO Total Return Fund - Inst
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark Capital Advisors (HCA) with full investment authority according to the PARS Conservative active and passive objectives.

The adviser to the PARS portfolios is US Bank, and HighMark serves as sub-adviser to US Bank to manage these portfolios. US Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. US Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with US Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a \$10 million initial value would grow to \$12.53 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.

HIGHMARK CAPITAL MANAGEMENT³⁹

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has 100 years (including predecessor organizations) of institutional money management experience with \$8.6 billion in assets under management and \$8.3 billion in assets under advisement*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®

Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®

Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Randy Yurchak, CFA®

Senior Portfolio Manager
Investment Experience: since 2002
HighMark Tenure: since 2017
Education: MBA, Arizona State University; BS, University of Washington

Asset Allocation Committee

Number of Members: 17
Average Years of Experience: 25
Average Tenure (Years): 13

Manager Review Group

Number of Members: 7
Average Years of Experience: 17
Average Tenure (Years): 8

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.

PARS DIVERSIFIED PORTFOLIOS MODERATELY CONSERVATIVE

Q3 2020

WHY THE PARS DIVERSIFIED MODERATELY CONSERVATIVE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

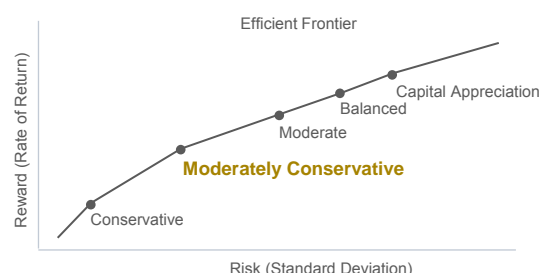
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide current income, with capital appreciation as a secondary objective. The major portion of the assets is committed to income-producing securities. Market fluctuations should be expected.



ASSET ALLOCATION — MODERATELY CONSERVATIVE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	20 - 40%	30%	30%
Fixed Income	50 - 80%	65%	69%
Cash	0 - 20%	5%	1%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

Current Quarter*	3.37%
Blended Benchmark*, **	2.67%
Year To Date*	4.24%
Blended Benchmark*, **	4.27%
1 Year	7.10%
Blended Benchmark**	7.20%
3 Year	5.58%
Blended Benchmark**	5.78%
5 Year	6.11%
Blended Benchmark**	6.05%
10 Year	5.68%
Blended Benchmark**	5.57%

Index Plus Composite (Passive)

Current Quarter*	2.50%
Blended Benchmark*, **	2.67%
Year To Date*	4.35%
Blended Benchmark*, **	4.27%
1 Year	7.06%
Blended Benchmark**	7.20%
3 Year	5.62%
Blended Benchmark**	5.78%
5 Year	5.92%
Blended Benchmark**	6.05%
10 Year	5.48%
Blended Benchmark**	5.57%

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 - Present: 15.5% S&P500, 3% Russell Mid Cap, 4.5% Russell 2000, 2% MSCI EM (net), 4% MSCI EAFE (net), 49.25% BBG Barclays US Agg, 14% ICE BofA 1-3 Yr US Corp/Gov't, 1.75% ICE BofA US High Yield Master II, 1% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 - 9/30/2012: the blended benchmark was 25% S&P 500, 1.5% Russell 2000, 3.5% MSCI EAFE (net), 25% ICE BofA 1-3 Year Corp./Gov't, 40% BBG Barclays US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007, the blended benchmark was 30% S&P 500, 25% ICE BofA 1-3Yr Corp/Gov't, 40% BBG Barclays US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-15.37%
2009	18.71%
2010	10.46%
2011	1.75%
2012	10.88%
2013	7.30%
2014	4.41%
2015	0.32%
2016	4.94%
2017	9.56%
2018	-2.60%
2019	13.73%

Index Plus Composite (Passive)

2008	-12.40%
2009	11.92%
2010	9.72%
2011	3.24%
2012	8.24%
2013	6.78%
2014	5.40%
2015	-0.18%
2016	5.42%
2017	8.08%
2018	-2.33%
2019	13.53%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	08/2004
No of Holdings in Portfolio	19

Index Plus (Passive)

Composite Inception Date	05/2005
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

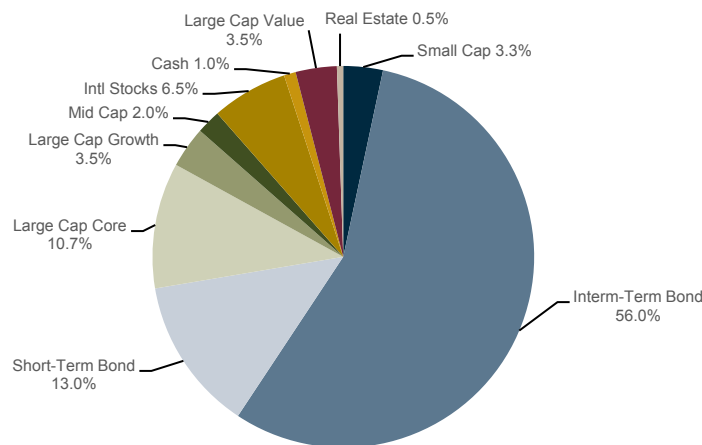
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Vanguard Short-Term Invest-Grade Adm
PIMCO Total Return Fund - Inst
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
First American Government Obligations Z

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STYLE



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Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

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HIGHMARK CAPITAL MANAGEMENT⁴¹

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has 100 years (including predecessor organizations) of institutional money management experience with \$8.6 billion in assets under management and \$8.3 billion in assets under advisement*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®

Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®

Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Randy Yurchak, CFA®

Senior Portfolio Manager
Investment Experience: since 2002
HighMark Tenure: since 2017
Education: MBA, Arizona State University; BS, University of Washington

Asset Allocation Committee

Number of Members: 17
Average Years of Experience: 25
Average Tenure (Years): 13

Manager Review Group

Number of Members: 7
Average Years of Experience: 17
Average Tenure (Years): 8

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.

PARS DIVERSIFIED PORTFOLIOS MODERATE

Q3 2020

WHY THE PARS DIVERSIFIED MODERATE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

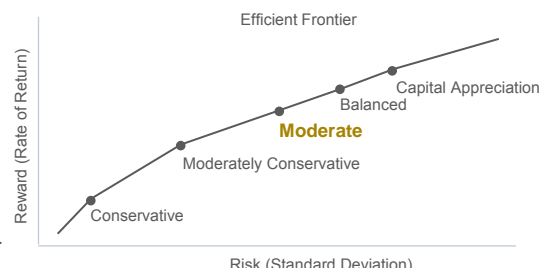
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide current income and moderate capital appreciation. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important.



ASSET ALLOCATION — MODERATE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	40 - 60%	50%	50%
Fixed Income	40 - 60%	45%	49%
Cash	0 - 20%	5%	1%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

Current Quarter*	4.62%
Blended Benchmark*, **	4.08%
Year To Date*	3.24%
Blended Benchmark*, **	3.19%
1 Year	7.87%
Blended Benchmark**	7.81%
3 Year	6.29%
Blended Benchmark**	6.49%
5 Year	7.51%
Blended Benchmark**	7.60%
10 Year	7.11%
Blended Benchmark**	7.30%

Index Plus Composite (Passive)

Current Quarter*	3.89%
Blended Benchmark*, **	4.08%
Year To Date*	2.92%
Blended Benchmark*, **	3.19%
1 Year	7.26%
Blended Benchmark**	7.81%
3 Year	6.09%
Blended Benchmark**	6.49%
5 Year	7.24%
Blended Benchmark**	7.60%
10 Year	7.01%
Blended Benchmark**	7.30%

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 – Present: 26.5% S&P500, 5% Russell Mid Cap, 7.5% Russell 2000, 3.25% MSCI EM (net), 6% MSCI EAFE (net), 33.50% BBG Barclays US Agg, 10% ICE BofA 1-3 Yr US Corp/Gov't, 1.50% ICE BofA US High Yield Master II, 1.75% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 43% S&P 500; 2% Russell 2000, 5% MSCI EAFE (net), 15% ICE BofA 1-3 Year Corp./Gov't, 30% BBG Barclays US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 50% S&P 500, 15% ICE BofA 1-3Yr Corp/Gov, 30% BBG Barclays US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-22.88%
2009	21.47%
2010	12.42%
2011	0.55%
2012	12.25%
2013	13.06%
2014	4.84%
2015	0.14%
2016	6.45%
2017	13.19%
2018	-4.03%
2019	17.71%

Index Plus Composite (Passive)

2008	-18.14%
2009	16.05%
2010	11.77%
2011	2.29%
2012	10.91%
2013	12.79%
2014	5.72%
2015	-0.52%
2016	7.23%
2017	11.59%
2018	-4.03%
2019	17.52%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	10/2004
No of Holdings in Portfolio	19

Index Plus (Passive)

Composite Inception Date	05/2006
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

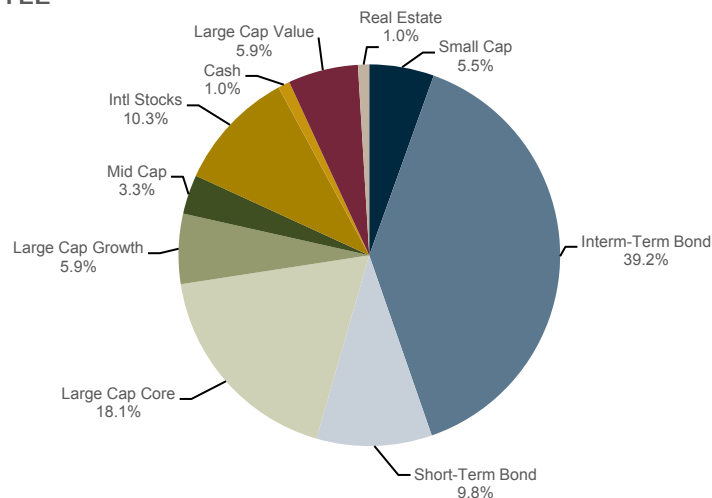
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PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



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Number of Members: 17

Average Years of Experience: 25

Average Tenure (Years): 13

Manager Review Group

Number of Members: 7

Average Years of Experience: 17

Average Tenure (Years): 8

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PARS DIVERSIFIED PORTFOLIOS BALANCED

Q3 2020

WHY THE PARS DIVERSIFIED BALANCED PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

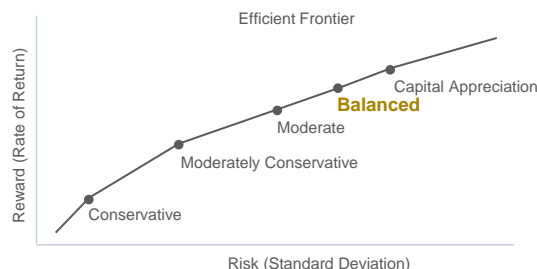
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide growth of principal and income. While dividend and interest income are an important component of the objective's total return, it is expected that capital appreciation will comprise a larger portion of the total return.



ASSET ALLOCATION — BALANCED PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	50 – 70%	60%	60%
Fixed Income	30 – 50%	35%	39%
Cash	0 – 20%	5%	1%

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

ANNUALIZED TOTAL RETURNS

HighMark Plus Composite (Active)

Current Quarter*	5.16%
Blended Benchmark*, **	4.77%
Year To Date*	2.68%
Blended Benchmark*, **	2.65%
1 Year	8.20%
Blended Benchmark**	8.14%
3 Year	6.60%
Blended Benchmark**	6.84%
5 Year	8.18%
Blended Benchmark**	8.37%
10 Year	7.82%
Blended Benchmark**	8.20%

Index Plus Composite (Passive)

Current Quarter*	4.67%
Blended Benchmark*, **	4.77%
Year To Date*	2.33%
Blended Benchmark*, **	2.65%
1 Year	7.50%
Blended Benchmark**	8.14%
3 Year	6.30%
Blended Benchmark**	6.84%
5 Year	7.92%
Blended Benchmark**	8.37%
10 Year	7.70%
Blended Benchmark**	8.20%

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 – Present: 32% S&P500, 6% Russell Mid Cap, 9% Russell 2000, 4% MSCI EM (net), 7% MSCI EAFE (net), 27% BBG Barclays US Agg, 6.75% ICE BofA 1-3 Yr US Corp/Gov't, 1.25% ICE BofA US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 51% S&P 500, 3% Russell 2000, 6% MSCI EAFE (net), 5% ICE BofA 1-3 Year Corp/Gov't, 30% BBG Barclays US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 60% S&P 500, 5% ICE BofA 1-3Yr Corp/Gov't, 30% BBG Barclays US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-25.72%
2009	21.36%
2010	14.11%
2011	-0.46%
2012	13.25%
2013	16.61%
2014	4.70%
2015	0.04%
2016	6.81%
2017	15.46%
2018	-4.88%
2019	19.85%

Index Plus Composite (Passive)

2008	-23.22%
2009	17.62%
2010	12.76%
2011	1.60%
2012	11.93%
2013	15.63%
2014	6.08%
2015	-0.81%
2016	8.25%
2017	13.39%
2018	-5.05%
2019	19.59%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	10/2006
No of Holdings in Portfolio	19

Index Plus (Passive)

Composite Inception Date	10/2007
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

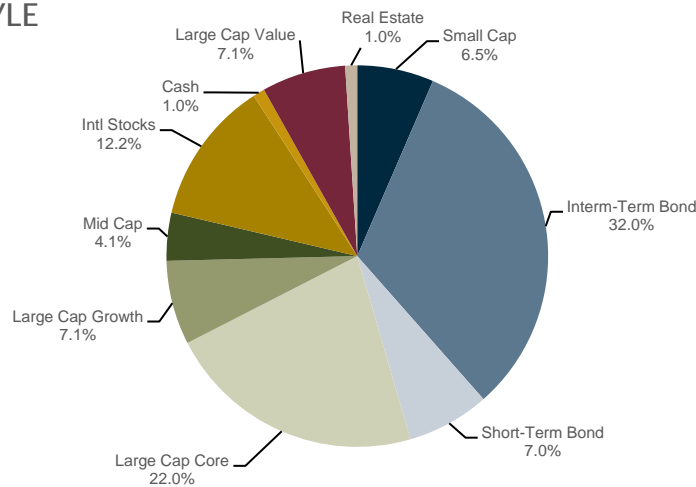
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
T. Rowe Price Growth Stock - I
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Victory RS Small Cap Growth - R6
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
Vanguard Short-Term Invest-Grade Adm
PIMCO Total Return Fund - Inst
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
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PARS DIVERSIFIED PORTFOLIOS CAPITAL APPRECIATION

Q3 2020

WHY THE PARS DIVERSIFIED CAPITAL APPRECIATION PORTFOLIO?

Comprehensive Investment Solution

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Rigorous Manager Due Diligence

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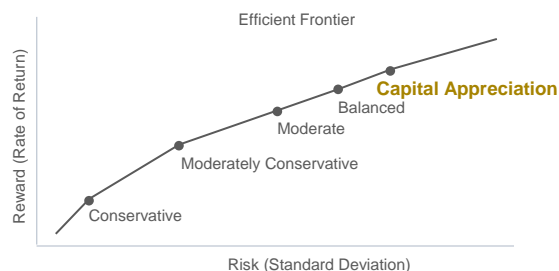
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INVESTMENT OBJECTIVE

To provide growth of principal. The major portion of the assets are invested in equity securities and market fluctuations are expected.



ASSET ALLOCATION — CAPITAL APPRECIATION PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	65 - 85%	75%	75%
Fixed Income	10 - 30%	20%	24%
Cash	0 - 20%	5%	1%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

Consolidated Composite

Current Quarter*	5.87%
Blended Benchmark*, **	5.82%
Year To Date*	1.54%
Blended Benchmark*, **	1.65%
1 Year	8.11%
Blended Benchmark**	8.40%
3 Year	6.89%
Blended Benchmark**	7.15%
5 Year	9.03%
Blended Benchmark**	9.39%
10 Year	8.63%
Blended Benchmark**	9.04%

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: 39.5% S&P500, 7.5% Russell Mid Cap, 10.5% Russell 2000, 5.25% MSCI EM (net), 10.25% MSCI EAFE (net), 16% BBG Barclays US Agg, 3% ICE BofA 1-3 Yr US Corp/Gov't, 1% ICE BofA US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

Consolidated Composite

2008	N/A
2009	23.77%
2010	12.95%
2011	-1.35%
2012	13.87%
2013	20.33%
2014	6.05%
2015	-0.27%
2016	8.81%
2017	16.72%
2018	-5.82%
2019	22.62%

PORTFOLIO FACTS

Consolidated Composite

Composite Inception Date	01/2009
No of Holdings in Portfolio	19

HOLDINGS

HighMark Plus (Active)

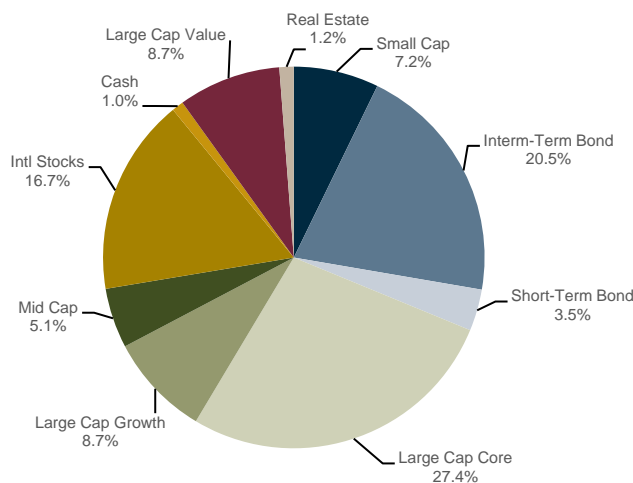
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AGENDA ITEM NO. 7.B.

DATE: December 17, 2020

TO: Board of Directors

FROM: Tammy Rudock, General Manager

SUBJECT: REVIEW AND APPROVE THE MPWD'S RESPONSE TO THE SAN MATEO COUNTY GRAND JURY'S REPORT ISSUED OCTOBER 7, 2020, REGARDING RANSOMWARE/CYBERSECURITY ATTACKS

RECOMMENDATION

Approve the MPWD's response.

FISCAL IMPACT

IT consultant costs to create CONFIDENTIAL internal report and potential presentation during future Closed Session, and District Counsel time for review of report and future Closed Session - \$2,500.

BACKGROUND

On October 7, 2020, the 2019-2020 San Mateo County Grand Jury issued a report entitled "*Ransomware: It is Not Enough to Think You are Protected,*" which contained findings and recommendations for local governmental agencies to consider when developing or updating a cybersecurity strategy.

The Grand Jury's report is attached for reference and was initially provided to the Board at its regular meeting on October 22, 2020.

The MPWD along with 67 other governmental agencies within San Mateo County are required to respond to the Grand Jury no later than January 5, 2021, and the response must be reviewed and approved by the MPWD Board of Directors in a public meeting.

DISCUSSION

Staff prepared the attached DRAFT response for the Board's consideration.

Attachments: San Mateo Grand Jury Report issued October 7, 2020
MPWD DRAFT Response to Grand Jury's Findings and Recommendations

BOARD ACTION: APPROVED:____ DENIED:____ POSTPONED:____ STAFF DIRECTION:____

UNANIMOUS____ ZUCCA____ SCHMIDT____ WHEELER____ WARDEN____ VELLA____

December 18, 2020

Hon. Danny Y. Chou
Judge of the Superior Court
c/o Jenarda Dubois
Hall of Justice
400 County Center, 8th Floor
Redwood City, CA 94063-1655

Re: Response by Mid-Peninsula Water District Grand Jury Report
Entitled "Ransomware: It is Not Enough to Think You Are Protected"
issued October 7, 2020

Honorable Chou:

The Mid-Peninsula Water District (MPWD) has reviewed and considered the referenced Grand Jury report, and responds to the report's findings and recommendations as follows:

RESPONSES TO FINDINGS:

The MPWD cannot agree or disagree with Findings F1 through F3 without undertaking independent research and analysis.

The MPWD generally agrees with Findings F4 through F8.

RESPONSES TO RECOMMENDATIONS:

Response to R1: The recommendation has been implemented. The MPWD requested the CONFIDENTIAL internal report from its IT consultant.

Response to R2: The recommendation has not been implemented but the CONFIDENTIAL internal report will be provided to the MPWD Board of Directors by June 30, 2021.

Response to R3: The recommendation requires further analysis and will be evaluated upon receipt of the CONFIDENTIAL internal report from the MPWD's IT consultant. If the MPWD chooses to request further guidance from the U.S. Department of Homeland Security or the County's Controller's Office, it will do so by June 30, 2021.

Response to R4: The recommendation requires further analysis and will be evaluated upon receipt of the CONFIDENTIAL internal report from the MPWD's IT consultant. If the MPWD chooses to request its IT consultant to review the MPWD's cybersecurity plan with the template

Hon. Danny Y. Chou
Judge of the Superior Court
December 17, 2020
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provided by the FCC's Cybersecurity Planning Guide and/or customize the MPWD's plan using the FCC's Create Custom Cybersecurity Planning Guide tool, it will do so by June 30, 2021.

This response was considered and approved by the MPWD Board of Directors at its regularly scheduled meeting on Thursday, December 17, 2020.

Sincerely,

Tammy A. Rudock
General Manager

DRAFT



Ransomware: It Is Not Enough To Think You Are Protected

[Issue](#) | [Summary](#) | [Glossary](#) | [Background](#) | [Discussion](#) | [Findings](#)
[Recommendations](#) | [Methodology](#) | [Bibliography](#) | [Appendixes](#) | [Responses](#)

ISSUE

City and county government computer systems are at risk of Ransomware attacks. Are adequate measures being taken by local government agencies to mitigate the risks and provide recovery options?

SUMMARY

Ransomware has already hit many governmental Information Technology (IT) systems in San Mateo County. In December 2019 the Grand Jury sent an online survey to all 68 public entities in San Mateo County,¹ received 37 survey responses (a 54% response rate), and interviewed several responders including one IT Manager (who had refused to respond to the survey for fear of being successfully attacked once again), for a total of 38 responses via survey and interview. More than 25% (10 of 38) of the public entities responding to the Grand Jury reported that they have been a victim of one or more Ransomware attacks. More concerning is the certainty that there will be more attempts to violate the integrity of our local governments' electronic infrastructure.

This report is intended to present “best practices” in developing a Cybersecurity strategy, then implementing and testing that plan. It addresses actions that can be taken (and have been taken, in some cases) in order to guard against Ransomware attacks, recover from an attack and the additional measures that can be taken to reduce the possibility of an attack. However, it is not an exposé with details of potential system weaknesses, in light of the need for Cybersecurity strategies and practices to be highly confidential. As such, this report walks the line between providing an informed discussion of potential concerns without providing a road map of how to breach public government IT systems.

The single largest exposure every organization has to cyber-thieves is phishing, the illegal practice of sending legitimate-looking emails to an organization's employees. These emails may contain malware or links that, when clicked, infect the computer with a virus that can spread to the entire information systems network.

Although many email software programs include some level of protection against Ransomware attacks, such protections require customization and activation, and it is not clear that local public

¹ See Appendix F: Public Entities in San Mateo County (Cities, County, School Districts, Special Districts)

entity IT departments are undertaking these necessary customization and activation steps. In addition, training for new employees and recurring training for existing employees is critical to dramatically reducing the probability of a Ransomware infection. In some agencies, it appears that only limited training is provided for new employees with little or no recurring training provided for current employees.²

Ransomware and other malware attacks are a test to an organization's backup and restoration procedures.³ The Grand Jury found that none of the survey responders has actually performed a full restore as a test of their backup process. However, without adequate testing, backups do not provide sufficient protection.

Rigorous preparation for an attack is essential if fast and full recovery is desired and the payment of a ransom is to be avoided. There are several significant steps that local public entities should take to improve their defenses, their ability to detect incursions, and their responses to Ransomware attacks. These steps include:

- Using firewalls to protect internal environments from breaches;
- Using malware detection software to monitor incoming emails and network activity;
- Ensuring that users are educated and tested to learn what to watch for and avoid, especially in emails;
- Developing and fully testing a thorough backup and restore strategy to enable a complete recovery from an attack;
- Putting in place internal controls such as subnets, which require departmental authorization to access other department's data or programs.

In addition, cloud hosting should be considered for email and certain applications to reduce the success of Malware and Ransomware attacks on information systems infrastructure.

While all attacks are malicious in terms of time and potential data loss, in the case of Ransomware (or worse, Ransomware 2.0 that also infects backup data) the financial cost of paying the ransom in order to remove the infection and restore a data system can be significant. Alternatively, if the decision is to not pay the ransom but to attempt to recover from the infection manually, the direct and indirect costs could be considerably more.

This report is directed to the governing bodies of government entities in San Mateo County urging them to have their IT staff confidentially and urgently assess their respective Ransomware protection strategies and training and then move with all deliberate speed to address any shortcomings in their Cybersecurity programs.

GLOSSARY

CLOUD COMPUTING

Cloud computing is the delivery of on-demand computing services -- from applications to storage and processing power -- typically over the internet and on a pay-as-you-go basis. Rather

² Grand Jury interviews

³ Epicor Corporation, *Protecting Yourself From Ransomware*, January 2020

than owning their own computing infrastructure or data centers, companies can rent access to anything from applications to storage from a cloud service provider.⁴ Some examples of this are Yahoo Mail, services like Google Docs, and customer relationship management software.⁵

CYBERSECURITY

Cybersecurity refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access.⁶

Cybersecurity is a combination of secure systems (hardware and software) built into technology as well as human intervention, monitoring, training, awareness, and recovery.

ENCRYPTION

The process of locking out the contents of a file and the renaming of the file such that it cannot be opened and used in the intended application (e.g. Microsoft Excel). Typically, a 128 Bit (or larger) encryption key (a long series of letters and numbers) is used first to encrypt then later to un-encrypt a file.

MALWARE

Short for “malicious software,” this software is designed specifically to damage or disrupt computer systems. Not all malware is Ransomware because some malware has no related attempt to extort money.

PHISHING

The illegal practice of sending email claiming to be from reputable companies to induce individuals to reveal personal information or click on website links or open attachments that then install malware.

RANSOMWARE

Ransomware can be simply described as an infection on a host machine that prevents access to data until a ransom is paid. The most common method of infection is to encrypt files making them totally unreadable by a user. The infection is usually delivered by a *Trojan Horse* (a term referring to the misleading of users of its true intent) installed when a user clicks on a malicious link or attachment in an email.

RANSOMWARE 2.0

This newer version of Ransomware no longer is just malware that encrypts data and asks for ransom, the attacker also threatens to release the data onto the internet and demands money in order not to do so. This newer Ransomware works in such a way that even backup copies of most important files will not be able to save an infected organization.⁷ By planting the malware but delaying its activation, Ransomware 2.0 can infect backups thus defeating their value.

⁴ <https://www.zdnet.com/article/what-is-cloud-computing-everything-you-need-to-know-from-public-and-private-cloud-to-software-as-a/>

⁵ Pearson Education, Ubuntu Unleashed 2015 Edition: Covering 14.10 and 15.04, page 655

⁶ <https://digitalguardian.com/blog/what-cyber-security>

⁷ <https://www.itproportal.com/news/welcome-to-the-era-of-ransomware-20/>

BACKGROUND

Ransomware is a real and serious threat to every entity: government organizations, corporations, and individuals. The more dependence an organization has on the software and data in its network(s), the more important the concern should be. Loss of access to mission-critical data, systems, and software can severely impact an organization in both the short and long term.

According to an October 2019 report by the National League of Cities, since 2013, Ransomware attacks have been reported by at least 170 county, city or state government entities across the United States.⁸ The actual number is likely to be much higher because it represents only those attacks that have been reported. Many infections go unreported when ransoms are paid,⁹ when organizations are seeking to avoid embarrassment, or when the attacks were simply undetected or untraceable.¹⁰ This has been true even in San Mateo County where local public governing entities have had Ransomware attacks that were not publicly reported.¹¹

Not only do such data breaches embarrass and slow organizational productivity, they can be very expensive. For example, the MIT Technical Review (2019) asserts: “Ransomware may have cost the U.S. more than \$7.5 billion in 2019... the victims were 113 governments and agencies, 764 health-care providers, and up to 1,233 individual schools affected by Ransomware attacks...most local governments do a poor job of practicing Cybersecurity.”¹² The cost to the city of Atlanta to recover from its Ransomware breach was estimated at \$17 million.¹³ Similarly, a recent Baltimore Ransomware breach is estimated to have cost over \$18 million.¹⁴ In 2020, the UC San Francisco School of Medicine paid \$1.14 million in ransom to recover its own data.¹⁵ These are large cities and entities and although the ransom amounts they paid may not represent the expenses a San Mateo County public organization could incur, they provide examples of the severity of the potential threat and the enormous costs.

Specifically, the costs of a Ransomware attack could include some or all of the following:¹⁶

- Direct Costs:
 - Paying the ransom to obtain an encryption key and hoping that it works;

⁸ National League of Cities report, *Protecting Our Data: What Cities Should Know About Cybersecurity*. Forward by Clarence Anthony, CEO and Executive Director.

⁹ <https://healthitsecurity.com/news/as-ransomware-attacks-increase-dhs-alerts-to-Cybersecurity-insights>

¹⁰ Sheehan, Patrick, Ohio Emergency Management Agency, *Cascading Effects of Cyber Security on Ohio*, September 19, 2012

¹¹ Grand Jury survey responses

¹² MIT Technology Review, *Ransomware may have cost the US more than \$7.5 billion in 2019*, January 2, 2020

¹³ The Atlanta Journal- Constitution, Stephen Deere. *Confidential Report: Atlanta’s cyber attack could cost taxpayers \$17 million*. August 2018.

¹⁴ Baltimore Sun, Ian Duncan, *Baltimore estimated cost of ransomware attack at \$18.2 million as government begins to restore email accounts*. May 29, 2019.

¹⁵ San Jose Mercury News, David Wu, “UCSF pays \$1.14 million ransom to recover data”, July 4, 2020

¹⁶ <https://www.sentinelone.com/blog/what-is-the-true-cost-of-a-ransomware-attack-6-factors-to-consider/>

- Expenditures for outside IT professionals and new systems providers to plan and implement improved breach security based on new Ransomware strategies;
- Paying for enrollments in credit reporting bureaus to stop or correct identity thefts (from the release of previously confidential or secure personal information) for client/customers.
- Replacing hardware and/or software.
- Indirect Costs:
 - Operations efforts to restore systems and data;
 - Organizational downtime as well as employee overtime;
 - Reputation loss including negative public relations and loss of confidence by the organizations' constituents;
 - Liabilities for legal costs, including defense of lawsuits for breach of private and confidential information and poor handling of personal data.

According to the Coveware Report,¹⁷ the median ransom payment in the first quarter of 2020 was \$44,021. This was an increase of roughly 10% over the last quarter of 2019. Public sector entities represented 12% of attacks, about half of which were school systems. The average days of downtime was 15 representing an alarming number of days of inability to service constituents.¹⁸ This underlines an urgent need to understand and evaluate current local governments' Cybersecurity strategies.

The discussion that follows is intended to encourage local public agencies and their IT staff to confidentially evaluate their respective Cybersecurity plans, software and prevention strategies. Since data and systems security are essential to the operation of every public entity in the County, the discussion will not present a specific road map for potential Ransomware-prevention actions but rather establish a "best practice model" that will enhance understanding of the elements essential for an adequate protection plan.

DISCUSSION

In December 2019, the Grand Jury developed an online survey that was sent to all 68 public entities in San Mateo County.¹⁹ Responses were received from 37 of the entities (a 54% response rate). Additionally, follow-up interviews were conducted with three local public IT Managers, one of whom had refused to complete the online survey for fear of disclosing confidential information that could lead to a successful malware or Ransomware attack. These interviewees were questioned regarding the adequacy of Cybersecurity planning and execution. Following a general analysis of local government practices, this report concludes with a review of Cybersecurity best practices which local agencies should consider adopting.

Two Ransomware Attacks Derailed: Best Practices in Action

¹⁷ <https://www.coveware.com/blog/q1-2020-ransomware-marketplace-report>

¹⁸ <https://www.msspalert.com/Cybersecurity-research/average-ransomware-payment-rises-again-research/>

¹⁹ Appendix F

In order to better understand how to successfully defeat a Ransomware attack, the Grand Jury interviewed an IT Manager of a private enterprise that was attacked twice by Ransomware and was able to fully restore the environment and re-establish workflow within just a few hours.

Given the usual secrecy involved in most malware incursions, the following description of this IT manager's actual experience is instructive since it offers an example of "best practices" that can guide others anticipating or facing a Ransomware threat.²⁰

This organization suffered two serious breaches less than two months apart and successfully recovered both times. In the first breach, within 45 minutes of a user clicking on an email attachment, the Crypto virus had spread to 12 of the organization's 23 servers. The IT Manager was alerted to the problem both by the user whose PC was locked with the Ransomware demand on his screen and an auto alert from the network scanning software that reported unusual activity.

The IT Manager's first action was to rapidly shut down the entire server network. This of course stopped the spread of the virus, but also prevented users from performing their jobs. Fortunately, their backup strategy implementation worked well as they were able to fully recover within hours.

The major components of the protection strategy employed included:

- Separating the network into discrete departments or segments (creating subnets) which restricted individuals' access to only servers containing their department's software and network storage. This limited the spreading of the virus across various departments within the organization. The analogy is a modern ship with rooms and decks that can be completely closed off from each other in the event of a fire or explosion.
- Taking snapshots (copies) of their Storage Area Network (SAN) twice a day.
- Completing full nightly backups of their SQL databases and incremental backups of the databases at five-minute intervals.
- Performing server backups with a commercial external backup appliance and/or service. See Appendix D for examples of companies in this market.²¹
- Regularly testing the restore process to ensure the successful recovery of critical server hardware. Without testing, there is no assurance that the Cybersecurity plan will work. Moreover, even if it works once, that is no assurance it will work again, without periodic re-testing.
- Conducting weekly backups of critical personnel's full PC hard drives.
- Use the "3-2-1 strategy"²²: do three backups into two different media including one offsite.

Having all of these Cybersecurity plan components was a good start but it took much more to affect a recovery. First a commercial Virus Removal Software Tool was used which did not work (in this case). Therefore, the IT team used the snapshot copies to replace corrupted data on

²⁰ Grand Jury Interview

²¹ These services include onsite and offsite backup and recovery services which are usually located outside the immediate locale.

²² Management Wire, *The 3-2-1 Backup Rule and Effective Cybersecurity Strategy*, January 7, 2020.

infected server units followed by the application of the incremental backups of the database to complete the restore.

This detailed example represents a well thought out and highly prepared plan, executed with precision. The first breach resulted in 4½ hours of downtime as 12 servers were infected. The second breach resulted in 6 ½ hours of downtime to recover 19 affected servers. The IT team was able to recover the servers and their data both times, become fully operational within hours, and the organization did not pay any ransom demands.

Grand Jury Cybersecurity Survey and Follow-up Interviews

Survey question:²³ *“Has your Organization had a Ransomware attack? Specifically, has there been an instance or multiple instances when an attack has locked up a computer or computers and presented a demand for ransom to unlock the infection?”*

Nine survey responders and one non-survey responder interviewee, a total of 10 of 38 (37 responders to the online survey and one non-survey responder) affirmed an attack had occurred or had possibly occurred in their organization, a 26% “hit” rate. The circumstances of their attacks were reviewed.²⁴ The non-survey interviewee was the IT manager from a public entity in the County who was unwilling to complete the survey because they did not want to reveal that their organization had been subject to “one or more” Ransomware attacks. Nor were they willing to disclose how successful the Ransomware attack(s) were for fear that they would open themselves up to more attacks.

Survey Question:²⁵

“Is your Information Systems Budget adequate to secure your network properly from malicious attack?”

Thirty-two of the 37 survey respondents, or 86%, answered Yes to this question. This high percentage of “Yes” responses either indicates a high level of confidence in their defense setup, a reluctance to complain about their IT budget, or as two of our follow-up interviewees revealed²⁶, a lack of understanding of the complexity of a well-written, well-executed Cybersecurity Plan.²⁷ Suggesting the latter, The National League of Cities conducted a similar survey of 165 city governments nationwide and asked the same question, (*“Is your budget adequate enough to secure your network properly?”*): 67% replied “No”.²⁸

Investigation Results Regarding Backup/Restore/Maintenance

The Grand Jury survey and follow-up interviews revealed that, while many local agencies have backup plans,²⁹ only a portion of those same agencies had successfully recovered lost files from

²³ Appendix A – Question #1

²⁴ Grand Jury Interview

²⁵ Appendix A – Question #2

²⁶ Grand Jury Interviews

²⁷ Federal Communications Commission, *Cyber Security Planning Guide*, October 2012.

²⁸ National League of Cities report, *Protecting Our Data: What Cities Should Know About Cybersecurity*, page 8

²⁹ Appendix A – Question #3

backups and none of the survey responders had ever done a full restore of a server.³⁰ When an attack occurs with inadequate backup processes in place, there is no way to recover. Moreover, a proactive and well-thought-out business continuity plan is something that all system and data administrators must embrace.

What is a good backup strategy? Certain applications provide the ability within the applications themselves to set up different types of backups and schedule them to be performed automatically. A good example of this is SQL.³¹ Using a SQL-based approach, both nightly full database backups can be scheduled as well as intermittent transaction log backups (which capture activity during small time increments), so that a recovery could be completed with virtually no loss of data. These backups should then be stored according to the 3-2-1 backup rule³² whereby three copies or versions are taken, stored on two different media, one of which is offsite. Operating systems and third-party vendors offer a multitude of backup solutions for servers. Snapshots or image backups³³ provide the most complete backup and the fastest restore option.³⁴

Raj Samani, Chief Technology Officer for Europe at Intel Security captures the importance of a complete backup strategy, “Most Ransomware attacks can be avoided through good cyber hygiene and effective, regular data backups that are continually tested to ensure they can be restored if needed.”³⁵

As this discussion shows, the technology to prevent and if necessary, correct, the impact of a malware attack is available. Local government agencies must be pro-active and vigilant in using such to protect their data and their businesses.

Investigation Results Regarding Employee Training

Education is the best defense. “Preventing infection is far easier than correcting the situation as most of the infections are acquired either from a socially engineered email (one that appears reputable or from a familiar source), or from visiting an infected website, so controlling risk on your side is the easiest method.”³⁶

Answers to Survey Question #5 provide strong evidence for the need for the governing boards to review with their IT managers their defenses against cyberthreats: “*Do you provide training to employees regarding malware?*” 12 responded with a non-qualified “Yes”. Nine responded “No” (24%) and 16 responded with a qualified “Yes” (42%) and described their training as

³⁰ Appendix A – Question #4

³¹ Structured Query Language (SQL) is a programming language

³² Management Wire, *The 3-2-1 Backup Rule and Effective Cybersecurity Strategy*, January 7, 2020.

³³ Image backup consists of block by block storing of the contents of a hard drive

³⁴ <https://www.itnow.com/file-backup-vs-image-backup-which-is-best/>

³⁵ Zerto, Raj Samani, *Ransomware – Mitigating the Threat of Cyber Attacks*, 2019

³⁶ Epicor, *Protecting Yourself from Ransomware*, January 2020

needing improvements.³⁷ As one survey responder commented, “The answer is yes, but a lot more needs to be done.”

Cybersecurity training is a well-established industry – providing a focused set of classes and materials designed to reduce users’ clicks on harmful links and attachments. Security training, awareness, and assessment should be a routine part of the Cybersecurity strategy in government. Deploying such a program covers the education, training and testing of employees to recognize, delete and report attempted attacks. Studies show these programs reduce but do not eliminate user error.

Government Technology magazine captured it best in their cover story entitled “In the quest to guard against cyberthreats, can we solve the people problem? The Weakest Link.”³⁸ The article concluded that even with the best training programs and defenses, the human element may never be completely overcome.³⁹ This is precisely why recurring training and user testing is encouraged by best practices.

Handling Incoming Emails – Phishing Defenses

In a worldwide survey of Managed IT Service Providers (MSP’s) in 2019, “67% of Ransomware attacks originated from a phishing or spam email...the easiest method of delivery and man does it pay off.”⁴⁰ The greatest threats take advantage of users “within” the network, i.e., users who click on malicious links or open email attachments that contain viruses or make other mistakes that allow hackers to gain access to the entity’s system or network. Trend Micro estimates that the vast majority of all attacks occur when a user clicks on something they should not.⁴¹

There are different ways to help the user community recognize and protect against a phishing attack. Most network environments utilize spam filters to automatically filter incoming messages. Spam filters are used to detect unsolicited, unwanted, and virus-infested email and stop it from getting into email inboxes.⁴² “Additionally, malware detection software can also be highly successful in reducing the risk of Ransomware but the anti-malware definitions (a database of known infectious code) need to be constantly updated...which takes effort and time but represents the single most effective defensive strategy.”⁴³

Message rules can be used to flag external emails and thereby decrease the probability that a user clicks on bad content. An administrator can set up message rules on a users’ client or the email server. An example of a message rule might be if the sending organization includes @smithco.com in the sender’s address, the message is automatically moved the incoming message into a personal folder called “Smith Company.” A better example would be a rule that

³⁷ Grand Jury Survey responses

³⁸ Government Technology Magazine, Adam Stone, *The Weakest Link*, Oct/Nov 2018

³⁹ Ibid

⁴⁰ VadeSecure – Predictive Email Defense, *Ransomware Attacks: Why Email is still the #1 Delivery Method*, January 16, 2020

⁴¹ <https://blog.trendmicro.com/online-phishing-how-to-stay-out-of-the-hackers-nets/>

⁴² <https://www.mailchannels.com/what-is-spam-filtering/>

⁴³ Epicor, *Protecting Yourself from Ransomware*, January 2020

flags all external emails (not from the host's domain) and warns about the threats of clicking on attachments or weblinks. An example of this visual potential threat message rule is displayed in Appendix C.

Message rules can be very powerful to alert users of potential threats or to be careful about what they might click on and endanger their system. Some of the vendors listed in Appendix B also can "report" a suspected phishing attempt to an IT administrator. The Grand Jury's review revealed that some of the Information Technology Services departments for local public entities have installed message rules on their email servers to notify users of external emails.⁴⁴ This is a "best practice" which all local governmental agencies should consider.

Phishing emails are easy to create, as they do not take a high level of skill to provide the illusion of legitimacy by mimicking web-site brands or using logos from Google images. They can also easily spoof (fake) an email address to look like a trusted source.⁴⁵ It can often be very difficult to catch these risky emails, as the spoofed emails are cleverly disguised. A YouTube video created by Cisco Systems illustrates the sophisticated approach a phishing email may take – "Anatomy of an Attack".⁴⁶ It shows an attacker constructing a realistic identity deception email and can be viewed at <https://www.youtube.com/watch?v=4gR562GW7TI>. After you watch this video please note, had an email filter caught this message and flagged it as external and warned about clicking on links, the deception may have been caught.

What Does Excellent Cyber Defense Look Like?

Survey Question⁴⁷: *"What defenses do you currently employ to block malware? Please be specific. (Firewall brand/model, Software filters/spam blocker, etc.)"*

Five survey responders did not divulge the infrastructure of their environment. 17 responders provided abbreviated details indicating they do have Cybersecurity protections in place. The remaining 15 responses were explicit about their organizations' hardware and software defense strategies. Below is a survey response that illustrates a well-protected environment using some of the best practices of Cybersecurity:

"At the first layer, we use a PAN 220 Firewall with all subscriptions enabled, (URL Filtering, Antivirus/Vulnerability, Wildfire, etc.), block all international countries both in and outbound. Once traffic is passed for email, it passes through a Barracuda spam filter, filtering and scanning phishing and virus emails, checks with External Reputation servers for known virus and spamming servers, then passes to an on-premise exchange server. The exchange servers have another layer installed, Symantec Antivirus, giving a third layer of scanning. All servers and workstations have the latest version of the antivirus installed controlled by a centralized server. Window patches are applied on a monthly basis to all servers and workstations, and servers are retired once Microsoft ends support for an operating system."⁴⁸

⁴⁴ Grand Jury interviews

⁴⁵ Ibid

⁴⁶ Cisco Systems, *Ransomware - Anatomy of an Attack*, <https://www.youtube.com/watch?v=4gR562GW7TI>

⁴⁷ Appendix A - Question #6

⁴⁸ Grand Jury Survey response

The survey respondent's best practices:

- Filtering incoming email for viruses, malware, and phishing attempts;
- Utilizing protection software from multiple vendors;
- Utilizing multiple layers of defense;
- Keeping systems up-to date.

Breaches and attacks that manage to extract data (Ransomware 2.0) expose additional risks to sensitive information. Security professionals point out additional options for securing organizational data:⁴⁹

- Use Subnets⁵⁰ to section out servers with separate security permissions and limited access;
- Disable and block unused services, protocols and ports;
- Perform Backup & Recovery (focus on full testing of recovery);
- Strengthen the password policy (long, complex, with expiration dates);
- Employ 2-factor authentication (password then keycode) for external user access.⁵¹
- Install Anti-malware / Antivirus software on all machines and keep current (update at least monthly);
- Update at least monthly, patches for operating systems, firewalls, spam filters, malware, and other key applications;
- Perform monitoring and auditing of failed logins, password changes, resource usage, and services stopping.

Local public entities can get assistance from The Federal Communications Commission's (FCC) Cyber Security Planning Guide that includes a customized Cyber Security Planning Tool to craft and execute a customizable Cybersecurity plan.⁵² As their introduction explains, "data security is crucial ... customer and client information, payment information, personal files, bank account details ... all of this information is often impossible to replace if lost and dangerous in the hands of criminals... losing (your data) to hackers or malware infection can have far graver consequences."⁵³ Public entities should take advantage of this Guide in reviewing the current status of their own data system security.

When answering questions of respondents via email it was found that some already use cloud hosting for email.⁵⁴ During the interviews it was further uncovered that a school IT manager is considering additional cloud hosting of one or more of their applications. Cloud providers are able to provide layers of protection for a customer's network and software, as well as creating a segregation between their network and their customers. A cloud provider will patch and

⁴⁹ Government Technology Magazine, Adam Stone, *The Weakest Link*, Oct/Nov 2018

⁵⁰ <https://searchnetworking.techtarget.com/tutorial/Protocols-Lesson-6-IP-subnetting-The-basic-concepts>

⁵¹ The County's Office of the Assessor-County Clerk-Recorder and Elections has already instituted 2-factor authentication. 2018-2019 Grand Jury Report – Security of Election Announcements.

⁵² Federal Communications Commission, *Cyber Security Planning Guide* <https://transition.fcc.gov/cyber/cyberplanner.pdf> and FCC *Cyber Security Planner* (customizable) <https://www.fcc.gov/cyberplanner>

⁵³ Ibid, page PDS-1

⁵⁴ eMails received from public domain accounts

maintain current software versions, leverage security and malware and have a dedicated security team (24x7x365) that is responsible for staying on top of the security risks.⁵⁵

Conclusions

Grand Jury survey results and in-depth interviews determined that some local government agencies have Cybersecurity strategies in place. For them, this report is asking those IT departments to re-challenge the sufficiency of their employee training, the regular (full) testing of their defense strategies and the adequacy/age of their Cybersecurity strategy including consideration of cloud hosting. For the rest, this is a good time to complete a review and see what additional measures can be taken to beef up their IT security using the information provided in this report as a guide. The biggest trap is believing that a malware attack, or in the worst case a Ransomware attack, is unlikely to happen to organizations and that the Cybersecurity strategies already in place are sufficient to successfully recover.

As learned from the best practices example of the IT manager who thwarted two attacks successfully, a comprehensive Cybersecurity plan includes user prevention steps, spam and malware software, back-ups and full recovery testing. These suggestions as well as those from the professional literature on Cybersecurity include the following list of best practices:

- Anti-Malware definitions need to be constantly updated to retain their effectiveness.
- Software updates need to be kept current.
- To identify external emails, message rules can be used to flag external emails and thereby decrease the probability that a user clicks on bad content.
- To thwart phishing attempts, footers can be added to incoming emails to warn about opening attachments and clicking on links (see Appendix C).
- Security training, awareness and assessment need to be routine along with testing all employees to recognize, delete and report attempted attacks (See Appendix B).
- Establishing a thorough and comprehensive backup process for all Servers using the 3-2-1 rule and establishing a separate backup process for key users' critical folders (e.g., administration, accounting, human resources) to be able to restore/recover from a secure onsite and/or offsite backup.
- Snapshots and/or image backups provide the most complete backup and the fastest recovery option.
- Consider cloud-hosting of email and other applications to provide added security, backup & restore capabilities and filtering benefits to close the largest and easiest route for Ransomware to penetrate entity systems.

FINDINGS

- F1. Ransomware is a real and growing threat to public entities including those in San Mateo County.
- F2. Across the country, local governments and schools represent 12% of all Ransomware attacks.

⁵⁵ Government Technology Magazine, Adam Stone, *The Weakest Link*, Oct/Nov 2018

- F3. The direct and indirect costs of Ransomware can be significant.
- F4. Cybersecurity reviews and assessments, and an updated, well-executed Cybersecurity plan, are critical components of IT security strategy.
- F5. A comprehensive Cybersecurity plan should include, at a minimum, information concerning prevention steps, spam and malware software, and backups and full recovery testing.
- F6. The identification of phishing attempts, including the use of spam filters, is an important component to protecting an IT system from Ransomware attacks.
- F7. Testing a full restore of a server to ensure that backups are reliable should be undertaken regularly as part an entity's backup plan to recover lost information.
- F8. Training of new employees, and the recurring training of existing employees, is an important component of defense against Ransomware.

RECOMMENDATIONS

The Grand Jury recommends that each governing body undertake its own confidential effort to protect against Ransomware attacks. Specifically:

- R1. Each of the governmental entities in San Mateo County with an IT department or IT function (whether in-house, handled by another government unit or outsourced to a private enterprise) as listed in Appendix F, should by November 30, 2020, make a request for a report from their IT organization that addresses the concerns identified in the report, specifically:
 - 1. System Security (Firewalls, Anti-malware/Antivirus software, use of subnets, strong password policies, updating/patching regularly)
 - 2. Backup & Recovery (In the event of an attack, can you shut down your system quickly? What is being backed up, how it is being backed up, when are backups run, and where are the backups being stored? Have backups been tested? Can you fully restore a Server from a backup?)
 - 3. Prevention (turning on email filtering, setting up message rules to warn users, providing employee training on phishing and providing a reporting system to flag suspect content)
- R2. These confidential internal reports should be provided to the governing body by June 30, 2021. This report should describe what actions have already been taken and which will be given timely consideration for future enhancements to the existing cybersecurity plan.
- R3. Given the results of their internal reports, governmental entities may choose to request further guidance by means of a Cybersecurity review from the U.S. Department of

Homeland Security⁵⁶ and/or a cyber hygiene assessment from the County Controller's Office.⁵⁷

- R4. Given the results of their internal reports, governmental entities may choose to ask their IT departments to review their own Cybersecurity Plan with the detailed template provided by the FCC's Cybersecurity Planning Guide and consider customizing it using FCC's Create Custom Cybersecurity Planning Guide tool (see footnote 52).

METHODOLOGY

Documents

- Attack incident reports were requested from IT Departments who experienced attack(s). No incident reports were received.

Site Tours

- No site tours were performed as a part of this report.

Interviews

Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury.

- Three Information Systems Managers of three different public entity IT organizations.
- Two non-public professional IT Managers. Both of these Managers' IT infrastructure environments had been infected with Ransomware attacks. One paid the ransom and the other did not.
- A professional Ransomware expert who often consults with companies who have been attacked or desire assistance preventing attacks. He also teaches classes on preparing for and preventing Ransomware attacks.
- Numerous security industry professionals at the RSA Conference held at Moscone Center in San Francisco between February 24th and 28th 2020.

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⁵⁶ <https://www.us-cert.gov/resources/assessments>

⁵⁷ 2018-2019 San Mateo Grand Jury Report – Security of Election Announcements

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APPENDIX A – SURVEY QUESTIONS

1. Has your Organization had a Ransomware attack? Specifically, has there been an instance or multiple instances when an attack has locked up a computer or computers and presented a demand for ransom to unlock the infection?

If you answered Yes or Possibly to Question 1, please provide a detailed description of the attack. What actions were taken once the attack was realized?

2. Is your Information Systems Budget adequate to secure your network properly from malicious attack?

3. Please provide an explanation of your Systems Backup processes? How often are backups run, where do you store the Backups?

4. Have you ever had to Restore from Backups? Please describe in detail why you did the Restore and describe the process used.

5. Do you provide training to employees regarding Malware?

6. What defenses do you currently employ to block malware? Please be specific. (Firewall brand/model, Software filters/spam blocker, etc.)

APPENDIX B – EMPLOYEE TRAINING OPTIONS

Phishing is the primary method of entry in cyber-attacks worldwide. Over the past few years, some security industry companies have come up with excellent testing, training, monitoring, measuring and reporting solution to help with employee training. The primary goal of an employee training program is to change user's behavior when viewing emails that might contain threats.

The typical components of these solutions include:

- Customized phishing attacks designed to test employees in spotting attack attempts
- Provide users a simple to use reporting tool to flag suspected attacks
- An incidence response platform for controlling the spread of an attack
- Reporting dashboards tracking user click-throughs
- Employee training programs

Here are some website links for the companies offering training solutions.

www.knowbe4.com

www.lucysecurity.com

www.metacompliance.com

www.mediapro.com

www.cofense.com

www.elevatesecurity.com

www.securitymentor.com

www.habitu8.io

APPENDIX C – EMAIL MESSAGE RULE - EXTERNAL

Send	To...	Name Hidden
	Cc...	
Account ▾	Subject:	[EXTERNAL] Setup a Conference Call to review nest steps

CAUTION: EXTERNAL EMAIL. Verify before you click links or open attachments. Questions? Contact GIS.

APPENDIX D – BACKUP & RECOVERY APPLIANCES & SERVICES

There are a large number of companies that provide Backup and Recovery solutions. Solutions Review has prepared a buyer's guide for the leading vendors. Click on the following link or copy and paste this URL into a browser to get your own copy of this guide.

<https://solutionsreview.com/backup-disaster-recovery/get-a-free-backup-and-disaster-recovery-buyers-guide/>

Specifically, some of the vendors in this report do not provide appliances, only virtual server support. Here is a partial list of appliance and solution vendors:

www.unitrends.com
www.barracuda.com
www.carbonite.com
www.commvault.com
www.dellemc.com
www.axcient.com
www.cohesity.com
www.datto.com
www.infrascale.com

APPENDIX E – PHISHING DEFENSE VENDORS

Some companies that provide solutions that improve email defenses are:

<https://www.opswat.com/products/metadefender/email-gateway-security>
<https://www.agari.com/products/phishing-defense/>
<https://www.inky.com/anti-phishing-software>
<https://www.mimecast.com/products/email-security-with-targeted-threat-protection/>

APPENDIX F: PUBLIC ENTITIES IN SAN MATEO COUNTY (68)

City/Town Governments (20)

Town of Atherton
 City of Belmont
 City of Brisbane
 City of Burlingame
 City of Colma
 City of Daly City
 City of East Palo Alto
 City of Foster City
 City of Half Moon Bay
 City of Hillsborough
 City of Menlo Park
 City of Millbrae
 City of Pacifica
 Town of Portola Valley
 City of Redwood City
 City of San Bruno
 City of San Carlos
 City of San Mateo
 City of South San Francisco
 Town of Woodside

County Government (1)

County of San Mateo, Information Services Department

School Districts (25)

Bayshore Elementary School District
 Belmont Redwood Shores School District
 Brisbane School District
 Burlingame School District
 Cabrillo Unified School District
 Hillsborough City School District
 Jefferson Elementary School District
 Jefferson Union High School District
 La Honda Pescadero School District
 Las Lomas Elementary School District
 Menlo Park City School District
 Millbrae School District
 Pacifica School District
 Portola Valley School District
 Ravenswood City School District
 Redwood City School District
 San Bruno Park School District
 San Carlos School District

San Mateo Foster City School District
 San Mateo Union High School District
 Sequoia Union High School District
 San Mateo County Community College School District
 San Mateo County Office of Education
 South San Francisco Unified School District
 Woodside School District

Independent Special Districts (22)

Bayshore Sanitary District
 Broadmoor Police Protection District
 Coastside County Water District
 Coastside Fire Protection District
 Colma Fire Protection District
 East Palo Alto Sanitary District
 Granada Community Services District
 Highlands Recreation District
 Ladera Recreation District
 Menlo Park Fire Protection District
 Mid Peninsula Regional Open Space District
 Mid-Peninsula Water District
 Montara Water and Sanitary District
 North Coast County Water District
 Peninsula Health Care District
 San Mateo County Harbor District
 San Mateo County Mosquito and Vector Control District
 San Mateo County Resource Conservation District
 Sequoia Healthcare
 West Bay Sanitary District
 Westborough Water District
 Woodside Fire Protection District

Not Included: County-governed special districts and subsidiary special districts governed by their respective city councils.

Issued: October 7, 2020



TO: Board of Directors

FROM: Tammy A. Rudock
General Manager

DATE: December 17, 2020

MANAGER'S REPORT

FOLLOW-UP FROM 11/18/2020 REGULAR BOARD MEETING

- Execution of contract documents for construction and construction support are in progress for the El Camino Real Water Main Replacement Project.

DISTRICT TREASURER VACANCY

There has been a delay in getting the RFP and Notice of Vacancy published due to a very hectic and busy workload. They will go out in January 2021.

3-MONTH "LOOK AHEAD" FOR BOARD MEETINGS

JANUARY 14, 2021

- MPWD 2021-2022 Strategic Planning Session (Virtual).

JANUARY 28, 2021

- Amend Pakpour Consulting Group's professional services contract to add the Harbor Boulevard and Belmont Canyon Road Water Main Replacement Capital Projects to their engineering design work.
- Receive BAWSCA update.
- Required Ethics training reminder.

FEBRUARY 25, 2021

- Consider and approve 2020-2021 MPWD Strategic Plan.
- Receive mid-year review of current fiscal year Operating and Capital Budgets and consider/approve Amended Budgets (as needed).
- Award Construction Contract for Dekoven Tanks Replacement Capital Project.
- Award Professional Services Contract for Transmission Water Mains Assessments Capital Project.
- Authorize Purchase Sale Agreement between the MPWD and County of San Mateo for the F Street Parcel in San Carlos.
- Review preliminary Water Rate Study results and consider scheduling water rate workshop.
- Review preliminary Water Capacity Charge Study results.

MARCH 25, 2021

- Award Construction Contract for Demolition of MPWD's Abandoned Pump Station Capital Project at 1510 Folger Drive in Belmont.
- Award Contract for Professional Accounting Services (and District Treasurer services at the Board's option).
- Receive District Treasurer Candidate Presentations (and authorize appointment at the Board's option).
- Consider revenue requirements for FY 2020/2021 and preliminary Operating and Capital budgets.
- Consider Amendment to Water Supply Agreement with San Francisco Water.
- Receive BAWSCA update.

UPCOMING MEETINGS/EVENTS

HIA Meeting (Belmont): CANCELED (until further notice)

ACWA JPIA 2021 Spring Conference (Monterey): May 10-11, 2021

ACWA 2021 Spring Conference & Exhibition (Monterey): May 11-14, 2021

CSDA Annual Conference (Monterey): August 30 – September 2, 2021



TO: Board of Directors

FROM: Candy Pina

DATE: December 17, 2020

ADMINISTRATIVE SERVICES MANAGER'S REPORT

FINANCIAL REPORTING:

Schedule of Cash and Investments:

SCHEDULE OF CASH AND INVESTMENTS		
CASH ACCOUNT	BALANCE 11/30/2020	BALANCE 12/11/2020
PETTY CASH	\$400	\$400
CASH DRAWER	\$200	\$200
WELLS FARGO CHECKING	\$521,166	\$260,519
LAIF	\$10,423,646	\$10,223,646
BNY INSTALLMENT ACCOUNT	\$927,532	\$927,532
TOTAL	\$11,872,944	\$11,412,297

Water Revenue Report:

WATER REVENUES for FISCAL YEAR 2020/2021					
Month	Total Units	Water Commodity Charges	Fixed System Charges	Total Water Revenues	Misc Rev
JUL	127,235	1,155,373	265,043	1,420,416	1,372
AUG	130,402	1,190,550	262,741	1,453,291	1,384
SEP	130,150	1,186,635	262,913	1,449,548	1,384
OCT	118,225	1,069,196	263,124	1,332,320	1,381
NOV	110,690	997,521	263,308	1,260,829	1,397
TOTAL	616,702	5,599,275	1,317,129	6,916,404	6,918

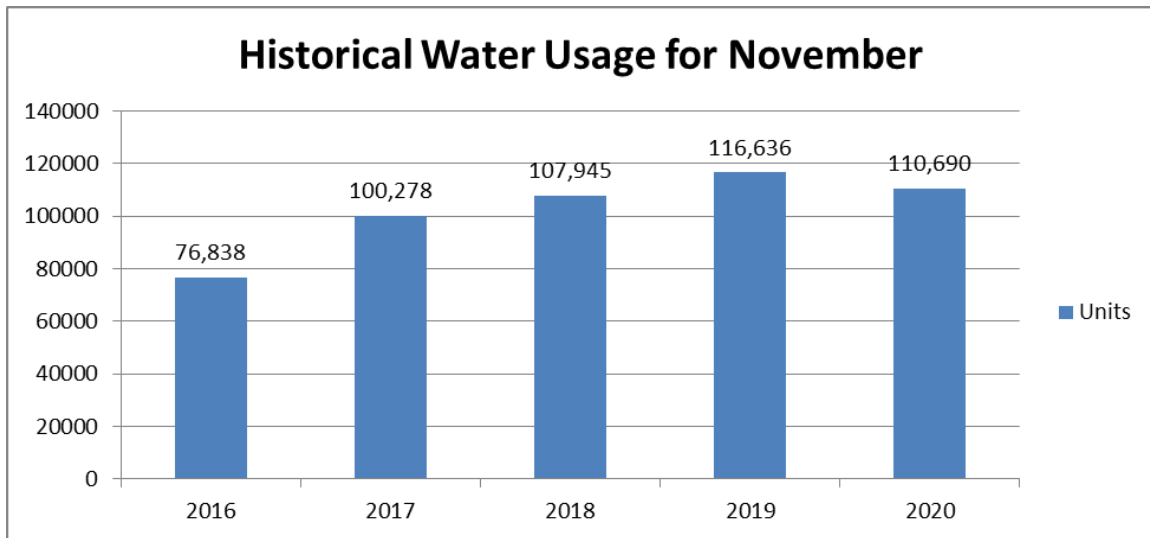
Please note the following: Total Units for each month on this report are calculated when customer meters are read:

Zone 2 meters are read on the 1st of each month

Zone 3 meters are read on the 5th

Zones 1, 4, 5, 6, 7, 8 and 9 are read on the 15th

In the Operations Manager's report, units being reported are based on SFPUC reads, which occurs at 8:00 a.m. on the last day of each month.



CONFERENCES, TRAINING, & MEETINGS:

- 1) Candy Pina: 12/14/20 – ADP Performance Dashboard #2 Webinar
- 2) Candy Pina: 12/15/20 – Executive Team Meeting
- 3) Candy Pina: 12/15/20 – Mandating COVID Vaccines at Work
- 4) Misty Malzcon/Candy Pina: 12/15/20 – Leadership Team Briefing
- 5) All staff: 12/15/20 – Group Grief Counseling session
- 6) Candy Pina: 12/16/20 – ACWA JPIA monthly meeting
- 7) Candy Pina: 12/16/20 – Finance Committee Meeting
- 8) All Staff: 12/17/20 – Safety Meeting
- 9) Candy Pina: 12/17/20 – Regular Board Meeting
- 10) Candy Pina: 12/18/20 – ADP Performance Dashboard #2 Webinar

PUBLIC SERVICE ETHICS EDUCATION (AB 1234)

Everyone is current with their Ethics training. The due dates (in alphabetical order) for certification renewal of Public Service Ethics education, required every two (2) years by AB 1234:

• Joubin Pakpour	November 6, 2022
• Candy Pina	November 19, 2022
• Rene Ramirez	December 7, 2022
• Tammy Rudock	November 29, 2020
• Brian Schmidt	March 18, 2021
• Julie Sherman	February 8, 2021
• Louis Vella	December 4, 2022
• Dave Warden	January 26, 2021
• Kirk Wheeler	January 3, 2021
• Matt Zucca	March 29, 2021

For compliance, training should be completed on or before the due date, and the certificate turned in to the MPWD.

Here is the link to the FPPC free online ethics training:

<http://localethics.fppc.ca.gov/login.aspx>

SEXUAL HARASSMENT PREVENTION EDUCATION (AB 1825 FOR MANAGERS, SB 1343 FOR EMPLOYEES, AB 1661 FOR ELECTED OFFICIALS)

Everyone is current with Harassment Prevention training (required every two years). Due dates (in alphabetical order) for certification renewal of Sexual Harassment Prevention Education:

• Joubin Pakpour	June 14, 2021
• Candy Pina	December 18, 2021
• Rene Ramirez	December 18, 2021
• Tammy Rudock	December 18, 2021
• Brian Schmidt	December 18, 2021
• Julie Sherman	December 13, 2020
• Louis Vella	October 22, 2021
• Dave Warden	December 18, 2021
• Kirk Wheeler	December 17, 2021
• Matt Zucca	March 19, 2021



TO: Board of Directors

FROM: Rene A. Ramirez, Operations Manager

DATE: December 17, 2020

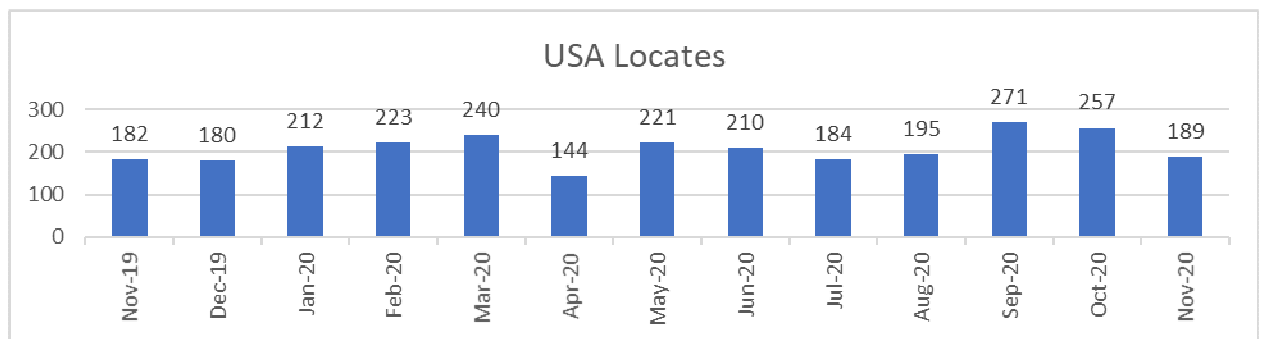
OPERATIONS REPORT – November

Projects:

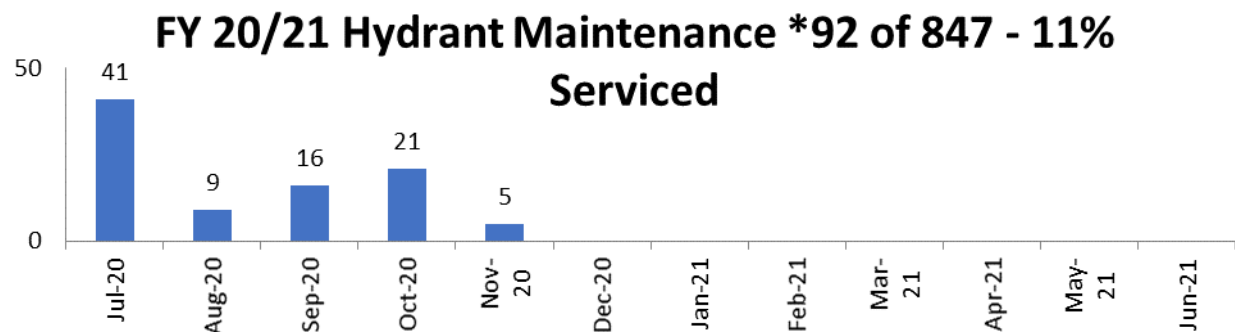
- Held discussion with consultant after reviewing and providing feedback on Chapter 4 of the draft Urban Water Management Plan document;
- Phase 1 of capital project 04-1621-CP, the construction of some 700 feet of new pipe in an easement on the PAMF property. D&D Pipeline was awarded the project after the public bid process and started in earnest on November 16, 2020. This project should be completed in early December;
- Performed a fire flow test at PAMF with contractor, D&D Pipeline, to make certain that PAMF alarm system would not sound off when contractor used hydrant on site for capital project construction;
- Staff installed XiO SCADA hardware at the San Juan Pressure Regulating Station;
- Staff completed work to abandon an 18-inch CCP water main on Ralston-Hall Road (Notre Dame Campus) to complete our portion of the Folger Pump Station Abandonment project;
- Bay Area Paving completed the pedestrian walkway, concrete curb and gutter, sidewalk replacement, and Ralston paving from water main rupture in August. The only work left is striping;
- Staff attended a virtual meeting with District Engineer and company that performs water main assessments to gather information on the technology available;
- Held a community-wide virtual meeting for the El Camino Real capital project. There were some 7 to 8 members of the community that attended as well as staff and consultants for the project;
- Staff attended a site meeting prior to contractor starting work on Phase 1 of capital project 04-1621-CP with representatives from: staff, District Engineer's office, contractor – D&D Pipelines and PAMF officials;
- Met at Hersom Tank site to go over findings from recent survey of property boundaries; and
- Completed the abandonment of an 18-inch concrete water main behind Notre Dame College, which will allow for the demolition of the Folger Pump Station – a facility that no longer has a purpose in the system.

Maintenance:

- Sawcut and paved previous water system repairs on Notre Dame, Pullman and Sunnyslope;
- Repaired service leak at 2530 Lincoln;
- Repair main breaks on Pullman, Barclay, Christian Court, Shelford, ;
- Replaced inoperable 8-inch gate valve on San Ardo;
- Worked with homeowner on Tioga to install a decorative poly-rock over a new air-relief vacuum valve following their front yard improvements. This was our first attempt at integrating a water system appurtenance in the right of way, but in someone's front yard;
- Responded to and completed 189 USA (underground service alerts) location requests during the month;

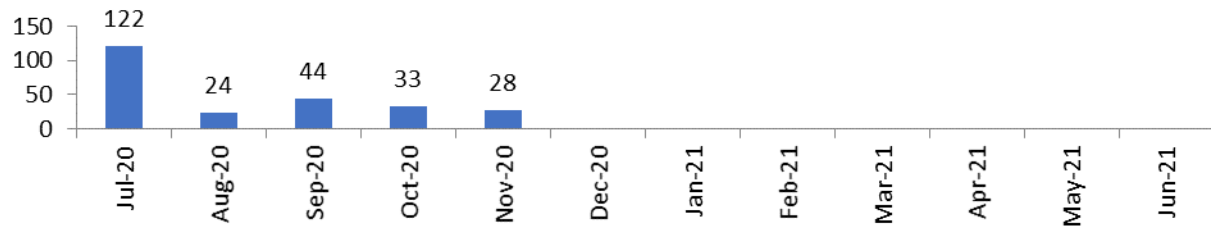


During the month of November 5 fire hydrants received a service visit. This maintenance work brings the percentage up to 11% of the system's 847 fire hydrants;



- During the month of November 28 valves were exercised. This brings the percentage of system valves exercised to 9% of the system's 2,780 valves;

Valve Maintenance *251 of 2780 - 9% Exercised



- Collected a requisite 44 water samples during the month for bacteriological testing from 11 sample station sites. None of the samples tested positive for total coliform; and
- Monitoring for signs of nitrification within our tanks, sample stations and dead ends, and with temperatures cooling off including water temperature, nitrification in the system is no longer consuming as much staff time as the past couple of months. We always monitor and operate the system with an eye on optimal water quality with efficient operation.

System Repairs:

Date	Location	Event	Material	Installation Date	Estimated Water Loss (Gals.)
11/1/20	475 Shelford	Main Break	CIP	2007	<2,500
11/6/20	2530 Lincoln	Service Failure	Copper	1958	<100
11/12/20	2136 Pullman	Main Break	CIP	1956	8,600
11/13/20	1400 Civic Lane	Service Failure	Copper	1949	<800
11/25/20	1360 Civic Lane	Main Break	CIP	1949	13,200
11/27/20	2042 Monroe	Main Break	CIP	1956	33,000
11/30/20	2703 Barclay Way	Main Break	CIP	1958	3,100
11/30/20	10 Christian Ct.	Main Break	CIP	1962	<1,000

Development:

Staff is currently working with developers on 50 development projects:

Mixed Use Commercial/Multi-Family Residential: 10

- 1300 El Camino Real; a 66-unit multi-family residential project starting on 2nd floor with commercial lease space on 1st floor covering 0.72 acres;

- 1324 Old County Road; a 2 or 3 unit multi-family with ground floor retail space;
- 1325 Old County Road; a 250-unit multi-family residential project covering 2.09 acres;
- 425-501 Old County Road; a 94-unit multi-family residential project (area not provided on our water system improvement plans);
- 608 Harbor; a 103-unit multi-family development.
- 800 Laurel Avenue; a 16-unit town home residential project (area not provided);
- 800-803 Belmont Avenue; a 125-unit multi-family residential project (area not provided);
- 815 Old County Road; a 177-unit multi-family residential project (area not provided);
- 900 El Camino Real; a 37-unit multi-family residential project starting on 2nd floor with commercial lease space on 1st floor (area not provided);
- Proposed Zone 1 Residential

Commercial: 7

- Reviewing Plans – 4
- Approvals Received – 3
- In Construction -

Residential: 33

- Plans In Review – 18
- Plans Through Staff Approval Process – 11
- Project In Construction - 4

Administration:

- Staff attended 2 AWIA RRA workshops on Modules 1 and 3 on two separate dates;
- Staff participated in an ACWA JPIA webinar with Target Solutions on training courses;
- Staff conducted two pre-site inspections for Lawn-Be-Gone rebates;
- Staff attended a DWR webinar on the 2020 UWMP Guidebook update;
- Staff participated in 3 virtual meetings with the UWMP consultant to review chapters 4 and 5;
- Participate on interviews with temporary operators;
- Participated in Agenda Review, Executive Team and Leadership Team virtual meetings;
- Staff attended the 10th annual SFPUC Water Quality and Technology webinar;
- Virtual meeting with PARS representatives in preparation of report to Board in December;
- Participated in a Board Finance Committee meeting;
- Staff participated in a virtual discussion following a contractor created water leak near the Fire House Square development project;

- Staff participated in a status report from the Water Capacity Charge study consultant RDN Associates;
- Participated in weekly check-in calls with GM and District Engineer; and
- Continue to actively manage power use for pumping operations via SCADA.

Water Conservation:

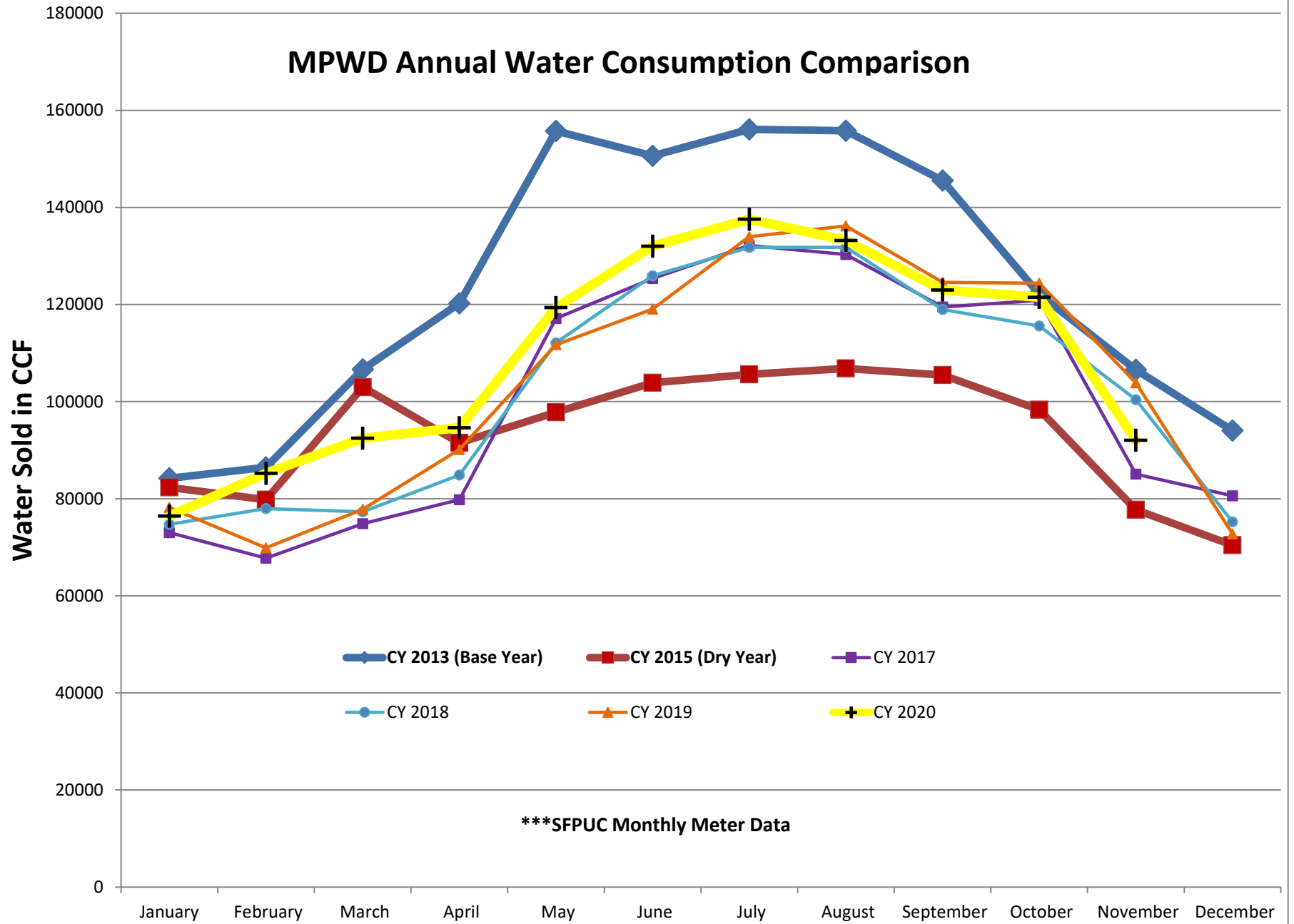
Recent 2-Month Comparison Summary

2019/2020 MONTH	2019/2020 UNITS	2013 UNITS	PERCENT CHANGE*	CUMULATIVE WATER SAVINGS*	2019/2020 R-GPCD**	2013 R-GPCD
October 2020	121,506	122,117	-0.5%	-11.1%	98.0	96.2
November 2020	92,047	106,535	-13.6%	-11.5%	76.7	86.7

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2018/2019 MONTH	2018/2019 UNITS	2013 UNITS	PERCENT CHANGE*	CUMULATIVE WATER SAVINGS*	2018/2019 R-GPCD**	2013 R-GPCD
October 2019	124,373	122,117	-1.9%	-10.4%	100.3	96.2
November 2019	103,869	106,535	-2.5%	-9.2%	86.6	86.7

MPWD Annual Water Consumption Comparison



**MID-PENINSULA WATER DISTRICT
OPERATIONS BUDGET FOR FY 2020-2021
SUMMARY**

				Target YTD % 41.9%
DESCRIPTION	APPROVED FY 2020-2021 BUDGET \$	ACTUALS 7/1/2020 11/30/2020	REMAINING BALANCE/ (OVER BUDGET)	Y-T-D % OF BUDGET
OPERATING REVENUE				
WATER COMMODITY CHARGES (A)	9,800,000	5,599,275	4,200,725	57.1%
FIXED SYSTEM CHARGES	3,000,000	1,317,129	1,682,871	43.9%
FIRE SERVICE CHARGES	14,000	6,918	7,082	49.4%
MISC CUSTOMER ACCOUNT FEES	49,750	(462)	50,212	-0.9%
MISCELLANEOUS OPERATING	60,000	-	60,000	N/A
PROPERTY TAX REVENUE	268,000	79,755	188,245	29.8%
TOTAL OPERATING REVENUE *	13,191,750	7,002,615	6,189,135	53.1%
WATER SYSTEM CAPACITY CHARGES	40,000	10,043	29,957	25.1%
WATER DEMAND OFFSET CHARGES	20,000	673	19,327	3.4%
SERVICE LINE & INSTALLATION CHARGES	60,000	15,799	44,201	26.3%
MISCELLANEOUS NON-OPERATING * (B)	75,000	1,934,740	(1,859,740)	2579.7%
INTEREST REVENUE - LAIF *	75,000	23,924	51,076	31.9%
INTEREST REVENUE - COP	150,000	1,980	148,020	1.3%
LEASE OF PHYSICAL PROPERTY *	175,000	59,734	115,266	34.1%
LANDSCAPE PERMIT REVENUE (C)	10,000	9,800	200	98.0%
TOTAL NON-OPERATING REVENUE	605,000	2,056,693	(1,451,693)	339.9%
TOTAL REVENUE	13,796,750	9,059,307	4,737,443	65.7%
OPERATING EXPENDITURES (OP EXP)				
SALARIES & WAGES	2,148,750	795,595	1,353,155	37.0%
PAYROLL TAXES & BENEFITS	1,320,352	489,630	830,722	37.1%
PURCHASED WATER (A)	5,667,168	2,861,863	2,805,305	50.5%
OUTREACH & EDUCATION	66,000	17,876	48,124	27.1%
M&R - OPS SYSTEM	458,557	220,854	237,703	48.2%
M&R - FACILITIES & EQUIPMENT	141,625	55,461	86,164	39.2%
SYSTEM SURVEYS ' (D)	85,000	49,970	35,030	58.8%
ADMINISTRATION & EQUIPMENT ' (E)	346,500	223,234	123,266	64.4%
MEMBERSHIP & GOV FEES	261,894	92,225	169,669	35.2%
BAD DEBT & CLAIMS	56,000	5,121	50,879	9.1%
UTILITIES	347,600	121,724	225,876	35.0%
PROFESSIONAL SERVICES	886,675	262,274	624,401	29.6%
TRAINING/TRAVEL & RECRUITMENT	61,500	7,287	54,213	11.8%
RESTRICTED EARNINGS	225,000	25,904	199,096	11.5%
DEPRECIATION	1,080,000	432,091	647,909	40.0%
DEBT SERVICE	1,069,500	280,276	789,224	26.2%
TOTAL OPERATING EXPENSES	14,222,121	5,941,385	8,280,736	41.8%
NET OPERATING SURPLUS/LOSS	(425,370)	3,117,922	(3,543,293)	-733.0%
TRANSFER FROM WORKING CAPITAL RESERVES*	425,370	(3,117,922)	3,543,293	-733.0%
NET TRANSFERS TO CAPITAL	-	-	-	N/A
DEBT SERVICE COVERAGE	1.80	2.46		

* Revenues included in Debt Service Coverage Ratio

- A Water revenues are at 47% and water purchases are at 41.3%.
- B Proceeds from Sale of 1513 Folger Property totaling \$1,925,000.
- C Three (3) Plan Reviews and two (2) Landscape Reviews were completed totaling \$9,800.
- D Leak Detection survey project underway, so will conclude and be complete.
- E Fees related to the sale of 1513 Folger Property totaling \$98,953.

**MID-PENINSULA WATER DISTRICT
CAPITAL BUDGET FOR FY 2020-2021
CAPITAL IMPROVEMENT PROGRAM (CIP)**

PROJ #	PROJECT NAME	CAPITAL FY 2020-2021 BUDGET \$	ACTUAL 07/01/20 11/30/20	BALANCE/ (OVER BUDGET)	2016 COP FUNDED BUDGET \$	ACTUAL THROUGH 06/30/20	ACTUAL 07/01/20 11/30/20	ACTUAL PROJECT TOTAL	BALANCE/ (OVER BUDGET)
15-86	Folger Pump Station Demolition - Project #15-86	330,000	289	329,711					
20-05	Transmission Water Main Assessments	220,000	9,009	210,991					
20-09	Dairy Lane Operations Center Rehabilitation – Phase 1 (Planning, Architectural/Engineering Design, and Construction Support, including Contingencies)	150,000	-	150,000					
20-01	Hastings Drive Service Connection Replacements; and	138,000	-	138,000					
15-40	Hastings Drive Water Main Replacement (Planning, Engineering Design, and Construction Support, including Contingencies)	88,000	6,973	81,027					
15-88	Vine Street (Zone 5) Improvements (Planning, Engineering Design, and Construction Support, including Contingencies)	165,000	-	165,000					
N/A	Miscellaneous Capital Outlay/Projects	50,000	102	49,898					
15-76	El Camino Real Water Main Replacement				3,520,000	385,328	62,549	447,877	3,072,123
15-89	Dekoven Tanks Replacement				3,850,000	160,013	139,935	299,949	3,550,051
15-72-A	SR 101 Crossing at PAMF Hospital – Phase 1 (Water Main Construction within easement on PAMF property in San Carlos from Industrial Road to PAMF property line west of SR101)				595,000	427,416	28,227	455,643	139,357
15-75A	Old County Road Improvements				4,030,000	258,548	17,480	276,028	3,753,972
TOTAL		1,141,000	16,373	1,124,627	11,995,000	1,231,306	248,191	1,479,498	10,515,502
DEPRECIATION		1,080,000	432,091	647,909					
NET OPERATING SURPLUS/LOSS		(425,370)	3,117,922	(3,543,292)					
TRANSFER FROM WORKING CAPITAL RESERVES*		425,370	(3,117,922)	3,543,292					
NET TRANSFERS TO CAPITAL		61,000	(415,718)	476,718					
CAPITAL OUTLAY/CAPITAL PROJECTS		(1,141,000)	(16,373)	(1,124,627)					
NET RESULTS OF CAPITAL		-	(0)	0					

**MID-PENINSULA WATER DISTRICT
STATEMENT OF NET POSITION
PREVIOUS YEAR COMPARISON**

<i>DESCRIPTION</i>	<i>30-Nov-20</i>	<i>30-Nov-19</i>	<i>\$ Change</i>	<i>% Change</i>
ASSETS				
CURRENT ASSETS				
Total Checking/Savings	11,882,520	7,016,458	4,866,063	69.35%
Total COP Funds	11,349,134	12,567,618	-1,218,483	-9.7%
Total Accounts Receivable	1,288,834	1,371,493	-82,660	-6.03%
Total Other Current Assets	422,341	365,947	56,394	15.41%
TOTAL CURRENT ASSETS	24,942,829	21,321,515	3,621,314	16.98%
FIXED ASSETS				
Fixed Assets	51,152,112	51,337,633	-185,521	-0.36%
Accumulated Depreciation	-29,178,799	-28,713,636	-465,163	-1.62%
Construction in Progress	4,538,878	3,352,965	1,185,912	35.37%
TOTAL FIXED ASSETS	26,512,191	25,976,963	535,229	2.06%
TOTAL OTHER ASSETS	721,495	2,226,591	-1,505,096	-67.6%
TOTAL ASSETS	52,176,516	49,525,069	2,651,446	5.35%
LIABILITIES				
CURRENT LIABILITIES				
Total Accounts Payable	648,404	594,796	53,608	9.01%
Total Other Current Liabilities	1,682,171	1,750,795	-68,624	-3.92%
TOTAL CURRENT LIABILITIES	2,330,575	2,345,591	-15,016	-0.64%
LONG TERM LIABILITIES				
Total COP Financing Debt (B)	17,175,000	17,550,000	-375,000	-2.14%
Total COP Premium (B)	813,321	844,603	-31,282	-3.7%
Total Other Long Term Liabilities (B)	915,934	2,281,061	-1,365,127	-59.85%
TOTAL LONG TERM LIABILITIES	18,904,255	20,675,664	-1,771,409	-8.57%
TOTAL LIABILITIES	21,234,830	23,021,255	-1,786,424	-7.76%
EQUITY				
Reserves	10,423,646	5,673,331	4,750,315	83.73%
Fund Bal Invest in Util Plant	26,512,191	25,976,963	535,229	2.06%
Net Assets (A)	-5,994,152	-5,146,479	-847,673	-16.47%
TOTAL EQUITY	30,941,686	26,503,815	4,437,871	16.74%
TOTAL LIABILITIES & EQUITY	52,176,516	49,525,069	2,651,446	5.35%

(A) CalPERS Net Pension Liability - GASB 68 requirement.

(B) COP Financing Debt and Debt Premium total \$19,185,626.90.

**MID-PENINSULA WATER DISTRICT
STATEMENT OF REVENUES & EXPENSES
PREVIOUS YEAR COMPARISON - GAAP BASIS**

<i>DESCRIPTION</i>	<i>Jul 20-Nov 20</i>	<i>Jul 19-Nov 19</i>	<i>\$ Change</i>	<i>% Change</i>
ORDINARY INCOME/EXPENSE				
INCOME				
OPERATING REVENUE	7,002,615	6,935,201	67,413	0.97%
INTEREST INCOME	25,904	161,653	-135,749	-83.98%
CAPITAL CONTRIBUTION	35,883	65,086	-29,203	-44.87%
OTHER INCOME	2,030,788	239,890	1,790,898	746.55%
TOTAL INCOME	9,095,190	7,401,831	1,693,360	22.88%
EXPENSE				
PERSONNEL COSTS	1,285,225	992,930	292,295	29.44%
PURCHASED WATER	2,861,863	2,828,697	33,166	1.17%
OUTREACH/EDUCATION	17,876	16,210	1,666	10.28%
M&4 - OPS SYSTEMS	220,854	62,638	158,216	252.59%
FACILITIES & EQUIPMENT	55,461	51,049	4,413	8.64%
MAJOR MAINTENANCE	49,970	0	49,970	100.0%
OFFICE SUPPLIES & EQUIPMENT	223,234	113,187	110,047	97.23%
MEMBERSHIP & GOV FEES	92,225	107,923	-15,698	-14.55%
BAD DEBT & CLAIMS	5,121	0	5,121	100.0%
UTILITIES	121,724	120,095	1,629	1.36%
PROFESSIONAL SERVICES	262,274	220,115	42,159	19.15%
TRAINING & TRAVEL	7,287	10,919	-3,632	-33.27%
TOTAL EXPENSES	5,203,114	4,523,762	679,352	15.02%
NET ORDINARY INCOME	3,892,077	2,878,069	1,014,008	35.23%
OTHER INCOME/EXPENSE				
OTHER EXPENSE				
DEPRECIATION	432,091	431,084	1,006	0.23%
DEBT SERVICE PRINCIPAL & INTEREST PAYMENT	279,466	285,466	-6,000	-2.1%
COP FINANCING COSTS	810	510	300	58.78%
TOTAL OTHER EXPENSE	712,367	717,061	-4,694	-0.7%
NET REVENUE/(EXPENSES)	3,179,710	2,161,008	1,018,702	47.1%
RECONCILIATION TO OPERATING BUDGET				
ADJUSTMENTS TO INCREASE NET OPERATING SURPLUS				
INTEREST INCOME - LAIF & COP INTEREST	-25,904			
CAPITAL CONTRIBUTION	-35,883			
TOTAL ADJUSTMENTS TO INCREASE NET OPERATING SURPLUS	-61,787			
NET OPERATING SURPLUS/(LOSS) TRANSFER TO CAPITAL	3,117,922			