



FALLBROOK PUBLIC UTILITY DISTRICT
MEETING OF THE FISCAL POLICY AND INSURANCE COMMITTEE

AGENDA

FRIDAY, OCTOBER 12, 2018
10:00 A.M.

FALLBROOK PUBLIC UTILITY DISTRICT
990 E. MISSION RD., FALLBROOK, CA 92028
PHONE: (760) 728-1125

If you have a disability and need an accommodation to participate in the meeting, please call the Secretary at (760) 728-1125 for assistance so the necessary arrangements can be made.

Writings that are public records and are distributed during a public meeting are available for public inspection at the meeting if prepared by the local agency or a member of its legislative body or after the meeting if prepared by some other person.

I. PRELIMINARY FUNCTIONS

CALL TO ORDER / ROLL CALL

PUBLIC COMMENT

II. ACTION / DISCUSSION

- A. FISCAL POLICY & INSURANCE COMMITTEE INFORMATION REQUEST
- B. ADDITIONAL FUNDING REQUEST FOR AS-NEEDED PAVING SERVICES
- C. UPDATE ON PIPELINE AND VALVE REPLACEMENT PROGRAM ENGINEERING SERVICES FOR ASSESSMENT OF THE DISTRICT'S PIPELINE AND VALVE REPLACEMENT PROGRAM
- D. PROFESSIONAL SERVICES FOR THE EVALUATION AND IMPLEMENTATION OF COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEMS
- E. MODIFICATION TO ARTICLE 15 OF THE ADMINISTRATIVE CODE

III. ADJOURNMENT OF MEETING

* * * * *

DECLARATION OF POSTING

I, Mary Lou West, Secretary of the Board of Directors of the Fallbrook Public Utility District, do hereby declare that I posted a copy of the foregoing agenda in the glass case at the entrance of the District Office located at 990 East Mission Road, Fallbrook, California, at least 72 hours prior to the meeting in accordance with Government Code § 54954.2(a).

I, Mary Lou West, further declare under penalty of perjury and under the laws of the State of California that the foregoing is true and correct.

October 8, 2018
Dated / Fallbrook, CA

Mary Lou West
Secretary, Board of Directors

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M E M O

TO: Fiscal Policy & Insurance Committee
FROM: Jack Bebee, General Manager, JAB
Kevin Collins, Purchasing/Warehouse Supervisor
DATE: October 12, 2018
SUBJECT: Additional Funding Request for As-Needed Paving Services

Purpose

To request Board approval to add additional \$315,000 in funding to the As-Needed Paving contract previously awarded to Joe's Paving and Kirk Paving.

Summary

Joe's Paving (with Kirk Paving as a back-up vendor) was previously awarded a contract for Annual Paving Services on an as-needed basis. Before the contract was awarded, the District grouped needed paving jobs together and put them out to bid. This method resulted in long delays between certain jobs being completed. After a paving services contract was awarded, many of these jobs were completed quickly and efficiently, enabling faster turn-around times on necessary road repairs.

As FPUD's valve replacement program has successfully grown and gone quicker than expected, more paving work has been necessary than originally estimated. In addition, pipe leaks have happened at a faster pace than anticipated with a significant amount of paving required in the first three months of this fiscal year, also adding to paving costs.

In February 2018, the board approved \$328,400 for paving needs. It was originally anticipated that this funding would cover paving needs through February 2019. Due to completion of additional valve replacements and a number of large leaks, as of September 2018, only \$49,686 remains, with 12 jobs remaining to be invoiced and encumbering that balance so the as-needed paving contract will be out of funds by the end of October. FPUD staff, based on previous usage and future planned valve replacements, estimates that an additional \$315,000 is necessary in order to complete all District paving needs for on-call jobs through the end of fiscal year 2018/2019 (June 2019). The additional funds will be used to both cover additional paving needs through the originally project period (February 2019) and also cover needs through the balance of the Fiscal Year (June 2019). Paving jobs that are not on-call, which are typically larger and more costly, are not included in these estimated costs and those will go for board approval separately.

Paving costs are not a separately budgeted item in the approved budget, but are included in the overall cost for repairs and capital projects. For example, the pipeline and valve replacement capital budget of \$755,000 (Attachment A) includes the expected

labor and materials cost including valve replacements. The operating budgets the cost of paving is included in the materials/supplies and services budget under each division (Attachment B). Within these budget line items, a total of \$203,500 was allocated for paving and if the total amount approved by the Board is required, the total paving cost for the fiscal year would be \$477,074 versus \$203,500 that was allocated in the budget. Staff will work to reduce other costs in the water distribution budget to try and stay within the total approved budgeted amount. Staff will evaluate including a separate general ledger account for paving in the future so that the total cost of paving can be tracked to improve the overall budgeting for paving costs. Even though the cost approved by the Board for the as-needed paving contract were not sufficient at this time it is not anticipated that the total amounts in the budget that include paving related activities need to be increased at this time.

Recommended Action

That the Board authorize an additional \$315,000 in funding to be added to the As-Needed Paving contract for the remainder of fiscal year 2018/2019.

Attachment “A”

Pipeline and Valve Replacement Projects by District

Project Description:

Projects include replacing existing valves and pipelines by District staff based on highest priority section to reduce service interruptions. Primary focus is on valve replacements with a target of replacing 100 valves a year.

The proposed purchases and costs for Fiscal Year 2018-19 also include:

- Replacing fire detector checks and smaller pressure control stations throughout the District as-needed
- Design of pipeline replacement projects by District staff
- Rehabilitation of District easements that require significant rebuilding of the existing access roads
- Surveying of sections of the district for existing small leaks



Supports Strategic Goals:

Continue implementation of an asset-management program to improve system reliability by replacing existing aging infrastructure before its failure in an effort to avoid service disruptions and property damage.

Operating Impacts:

The valve replacement program is critical in reducing the number of accounts effected by unplanned water outages.

Projects Cost:

Fiscal Year 2018-19 Expenditures:	\$755,000
Total Capital:	\$755,000



Attachment “B”

Pipeline Maintenance and Construction

- Maintain the District's Water Services assets
- Manage all Water Services repairs and asset replacements
- Replace aged water mains and valves.
- Maintain 24-hour coverage of large water main breaks
- Maintain all right-of-way and interconnects with neighboring districts

System Services

- Meter reading, meter repair and meter exchange programs and delinquent account lock/unlocking

Table #6 - Water Services Total Operating Budget Summary

Description	FY 2016-17	FY 2017-18		FY 2018-19	Budget to Budget Change (%)
	Actual	Budget	Projected	Budget	
Total Labor *	\$ 1,486,420	\$ 1,523,700	\$ 1,523,700	\$ 1,404,962	-7.8%
Total Non-Labor	710,139	1,056,580	1,010,200	1,062,600	0.6%
Operating Total	\$ 2,196,559	\$2,580,280	\$2,533,900	\$ 2,467,562	-4.4%
Allocated Benefits Expenditures	656,829	953,036	953,036	856,056	-10.2%
Allocation of Administrative Services	2,852,039	3,238,990	3,238,990	4,123,530	27.3%
Total Services Budget	\$5,705,427	\$6,772,307	\$ 6,725,927	\$ 7,447,148	10.0%

* Total Labor does not include District's Benefits.

Table #7 - Water Services, Division Budget to Budget Comparison

Description	FY 2016-17	FY 2017-18		FY 2018-19	Budget to Budget Change (%)
	Actual *	Budget	Projected	Budget	
Production & Distribution					
Labor:					
Salaries	\$ 947,831	\$ 899,720	\$ 899,720	\$ 811,431	-9.8%
Non-Labor:					
Equipment - Non Capital		60,500	60,500	60,500	0.0%
Materials/Supplies/Services		306,150	306,150	332,550	8.6%
Power		282,380	236,000	236,000	-16.4%
Total Non-Labor	\$ 327,420	\$ 649,030	\$ 602,650	\$ 629,050	-3.1%
Division Operating Total	\$ 1,275,251	\$ 1,548,750	\$ 1,502,370	\$ 1,440,481	-7.0%

* Detailed line item expenditure not available for Fiscal Year 2016-17.

Table #7 - Water Services, Division Budget to Budget Comparison, con't

Description	FY 2016-17 Actual *	FY 2017-18		FY 2018-19 Budget	Budget to Budget Change (%)
		Budget	Projected		
Pipeline Maintenance & Construction					
Labor:					
Salaries	\$ 248,130	\$ 369,191	\$ 369,191	\$ 283,428	-23.2%
Non-Labor:					
Materials/Supplies/Services		174,000	174,000	192,000	10.3%
Total Non-Labor	\$ 219,578	\$ 174,000	\$ 174,000	\$ 192,000	10.3%
Division Operating Total	\$ 467,707	\$ 543,191	\$ 543,191	\$ 475,428	-12.5%
System Services					
Labor:					
Salaries	\$ 290,459	\$ 254,790	\$ 254,790	\$ 310,103	21.7%
Non-Labor:					
Materials/Supplies/Services		233,550	233,550	241,550	3.4%
Total Non-Labor	\$ 163,141	\$ 233,550	\$ 233,550	\$ 241,550	3.4%
Division Operating Total	\$ 453,600	\$ 488,340	\$ 488,340	\$ 551,653	13.0%

* Detailed line item expenditure not available for Fiscal Year 2016-17.

Fiscal Year 2017-18 Accomplishments

- Had no water quality violations during the year
- Installed solar mixer at Red Mountain Reservoir to improve water quality
- Automated/remote monitor flow and pressure controls in the distribution system
- Maintained schedule to exercise all valves on a three-year cycle
- Replaced 77 water main valves and 907 feet of water mains
- Met the meter replacement schedule

Fiscal Year 2018-19 Goals and Objectives

- Upgrade Supervisory Control and Data Acquisition (SCADA) to improve communications between critical sites

The divisions and their activities are summarized below.

Collections

- Provide emergency repairs and routine maintenance to the collections system
- Manage the District’s collection system inspection program that includes TV inspection of the collections system
- Maintain and operate a vactor truck
- Maintain lift stations, clean outs, system ocean outfall
- Provide light and heavy construction services

Treatment

- Operate and maintain the Water Reclamation Plant processes in the following areas: Headworks, Primary Sedimentation, Activated Sludge, Secondary Sedimentation and Solids Handling (which includes an aerobic digester, centrifuges and a sludge dryer)
- Conducts laboratory analysis and reporting to meet the Regional Water Quality Control Board’s discharge permit requirements

Table #10 - Wastewater Services Operating Budget Summary

Description	FY 2016-17	FY 2017-18		FY 2018-19	Budget to Budget Change (%)
	Actual	Budget	Projected	Budget	
Total Labor *	\$ 1,024,881	\$ 924,699	\$ 924,699	\$ 1,124,410	21.6%
Total Non-Labor	822,640	1,065,530	1,065,530	910,930	-14.5%
Operating Total	\$ 1,847,521	\$ 1,990,229	\$ 1,990,229	\$ 2,035,340	2.3%
Allocated Benefits Expenditures	722,393	578,376	578,376	685,113	18.5%
Allocation of Administrative Services	2,260,106	2,616,108	2,616,108	2,255,055	-13.8%
Total Services Budget	\$4,830,020	\$ 5,184,712	\$ 5,184,712	\$ 4,975,508	-4.0%

* Total Labor does not include District's Benefits.

Table #11 - Wastewater Services, Division Budget to Budget Comparison

Description	FY 2016-17 Actual *	FY 2017-18		FY 2018-19 Budget	Budget to Budget Change (%)
		Budget	Projected		
Collections					
Labor:					
Salaries	\$ 407,992	\$ 333,989	\$ 333,989	\$ 410,267	22.8%
Non-Labor:					
Materials/Supplies/Services		180,430	180,430	184,130	2.1%
Power		95,000	95,000	95,000	0.0%
Total Non-Labor	\$ 275,116	\$ 275,430	\$ 275,430	\$ 279,130	1.3%
Division Operating Total	\$ 683,108	\$ 609,419	\$ 609,419	\$ 689,397	13.1%
Treatment					
Labor:					
Salaries	\$ 616,889	\$ 590,710	\$ 590,710	\$ 714,143	20.9%
Non-Labor Expenses:					
Contractor Services		187,300	187,300	192,500	2.8%
Materials/Supplies/Services		278,300	278,300	270,800	-2.7%
Non-Capital Equipment		23,500	23,500	20,000	-14.9%
Power & Gas		301,000	301,000	148,500	-50.7%
Total Non-Labor	\$ 547,524	\$ 790,100	\$ 790,100	\$ 631,800	-20.0%
Division Operating Total	\$ 1,164,413	\$ 1,380,810	\$ 1,380,810	\$ 1,345,943	-2.5%

* Detailed line item expenditure not available for Fiscal Year 2016-17.

Fiscal Year 2017-18 Accomplishments

- Operating the Water Reclamation Plant processes from the headwork's to secondary treatment including solids handling, while staying in compliance with the applicable permits: National Pollutant Discharge Elimination System (NPDES) and Environmental Protection Agency (EPA) Bio-Solids Regulations.
- Maintaining the Water Reclamation Plant equipment from the headwork's to secondary treatment including solids handling equipment in order to sustain mechanical integrity and processes.

Fiscal Year 2018-19 Goals and Objectives

- Operates Water Reclamation Plant processes effectively from the headwork's to secondary treatment including solids handling to stay in compliance while optimizing operation. This includes minimizing power use, chemical use and overtime.
- Maintain Water Reclamation Plant equipment from the headwork's to secondary, including solids handling equipment using preventative and predictive measures.

MEMO

TO: Fiscal Policy & Insurance Committee
FROM: Jack Bebee, General Manager, JAB
Todd Jester, GIS Coordinator
DATE: October 12, 2018
SUBJECT: Update on Pipeline and Valve Replacement Program Engineering Services for Assessment of the District's Pipeline and Valve Replacement Program

Purpose

To provide an update to the Board on the Valve and Pipeline Replacement Program and to request for Board approval of award to HDR, Inc. to provide Engineering Services to provide assistance in updating the District's Pipeline and Valve Replacement Program in the not-to-exceed amount of \$151,175 to ensure the District has established an appropriate annual replacement budget.

Summary

The District has developed a comprehensive pipeline and valve replacement program. The program was initiated to evaluate the needs to replace pipelines prior to failure to avoid costly property damage and reduce unscheduled outages. The District completed a process using available data to assess long-term funding needs for pipeline replacement. A summary of the results including the estimated annual capital pipeline and valve investments needs for the next 100 years is shown in Table 1 below.

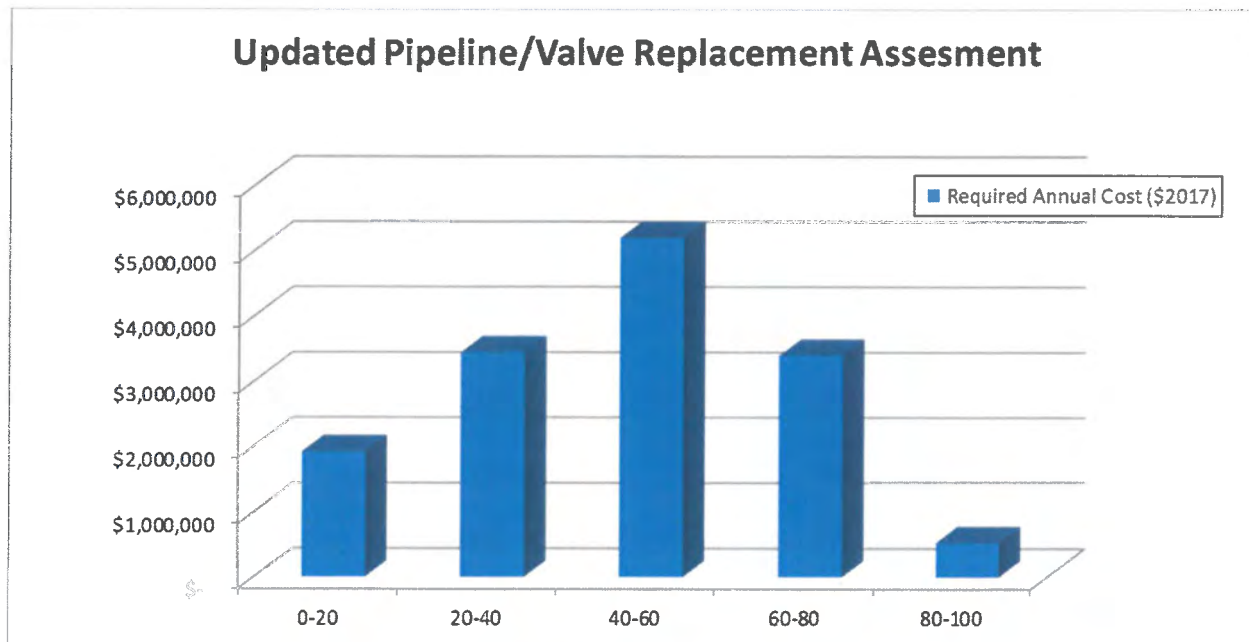


Figure 1 – Estimated Annual Investment Needs Over next 100 years in 20 year increments

The District was able to achieve the target replacement amount for the last Fiscal Year as shown in Table 2. The District replaced \$1,965,109 in buried pipeline and valve infrastructure in the last fiscal year which was right at the target developed from the assessment of \$1.94 million a year. A summary of the past performance compared to the target replacement needs is shown in Table 2.

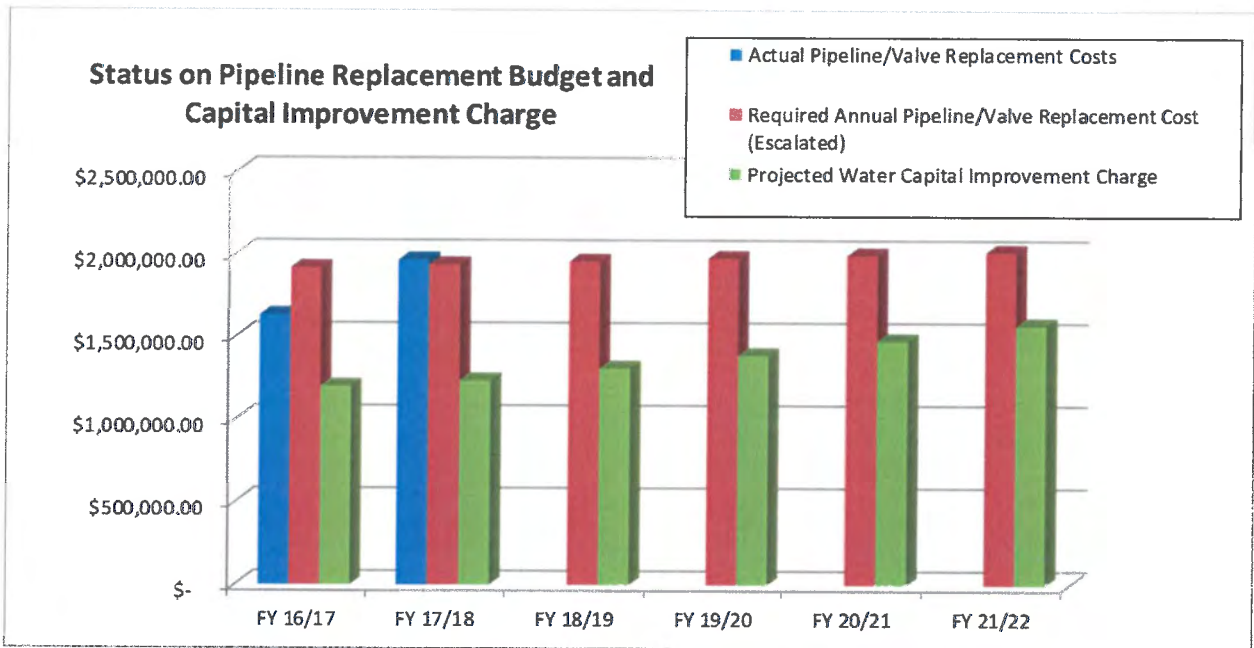


Figure 2 – Estimated required replacement investment compared to the capital improvement charge and actual completed replacements.

The table also shows that a portion of this work is covered by the water capital improvement charge, which is escalated to meet the increasing long-term replacement needs. There are a number of assumptions on pipe age and failures that were used to develop the funding needs and staff has determined that some additional detailed analysis to verify and update the funding needs would be beneficial.

As part of the Board adopted District Strategic Plan under Strategic focus are #2, infrastructure, The District shall complete an update to the asset-management plan to help prioritize projects. This will help ensure lower cost alternatives are evaluated before full replacement of buried infrastructure.

In addition, per Section 21.4 and 21.10.1, staff is required to report back to the Board of Directors on the necessity of the Capital Improvement Charge every five years. In order to update the replacement needs projections, which is the basis of the capital improvement charge, the District requires the services of outside consultants who specialize in this area and have prepared these estimates for numerous similar utilities to help advance our pipeline replacement needs projection through additional evaluation

and testing that will provide a better useful life determination for our pipelines based on actual field data. The goal is to lay a foundation for data-driven assessment that is transparent, sustainable, and cost-effective. In order to complete this goal, an engineering consultant is required to determine the factors (material, pipe wall thickness, pipe type and vintage, pressure, soils, etc.) that drive likelihood of pipe failure and deterioration. With this assessment, the District will be able to better estimate useful life of pipe, prioritize renewal investments, assess possible failure mitigation strategies such as more robust inspection versus replacement, and optimize replacement specifications. The outcome of this project will be to help optimize the District programs to help ensure the proper annual investment needed in Pipeline and Valve Replacement pipeline and valve replacement. The outcome of the assessment along with any recommended changes in the replacement budgets will be presented to the Board.

The District does not have the resources, data or expertise to complete this evaluation internally. The effort to complete this effort internally would also not be economical as staff would be re-creating replacement models that have been developed by others. The Board approved consultant services to help develop the initial study that was used to develop Figure 1.

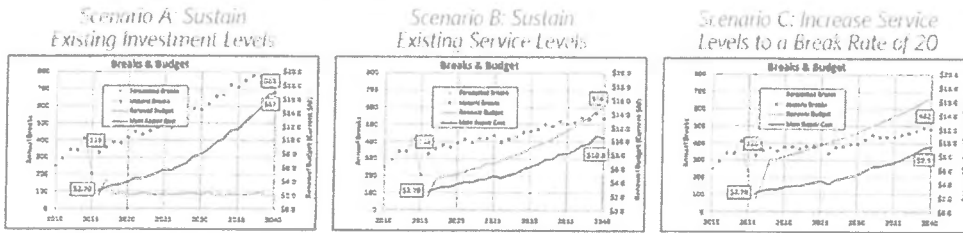
An RFP was issued for this request on 7/31/2018 to 6 firms and posted on the District's website; two proposals were received. After a comprehensive qualifications based review of both proposals, selection committee members recommended award to HDR, Inc. for a total of \$151,175.

The tasks proposed for this project include:

1. **Assessment and Data Clean-up:** Review existing program and approach and review data. Utilize established industry approved methodologies to assess the District's current approach.
2. **Measure System Deterioration:** Use existing District data and data consultant has developed from other agencies to evaluate the current status of the system.
3. **Risk Model and Decision Guidelines:** Develop an updated risk model based on District data and leverage models and results from past studies by consultant.
4. **Benchmarking and Sustainable Budget Scenarios for Inspection and Renewal:** Help District review and update proposed renewal, replacement and inspection investment levels and benchmark versus local, state and national benchmarks.

An example of the forecasting scenarios and approach used to establish investment levels is shown in Figure 3 below.

Resulting Forecast Scenarios



Scenario A is not recommended because service levels are not sustained with this level of investment.

Scenario B is a viable alternative in terms of sustaining current service levels. However, this scenario results in system replacement rates greater than the length

weighted useful life of the overall system (based on Weibull Modeling of asset useful life).

Scenario C is recommended because it is the most cost effective option to sustain service levels (in terms of break rate) and sustain overall system with a replacement

cycle that aligns with the overall system's useful life (based on Weibull useful life modeling). Scenario C is also only modestly more expensive in terms of total annual costs (i.e. total of renewal investments and main break repair costs) than Scenario B in 2040.

SCENARIO	FUNDING IN 2018	FUNDING INCREASES OVER TIME	2040 RENEWAL FUNDING	2040 BREAK RATE	2040 BREAKS PER YEAR	2040 REPLACEMENT CYCLE (YEARS)	2040 MAIN REPAIR COSTS	2040 TOTAL ANNUAL COSTS
A: Sustain Existing Investment Levels	\$2.1M	0%	\$2.1M	36	870	1,271 years	\$17M	\$19M
B: Sustain Existing Service Levels	\$4.9M	5.50%	\$15.2M	22	540	169 years	\$11M	\$26M
C: Break Rate = 20	\$7.3M	3.75%	\$16.6M	20	480	155 years	\$9.5M	\$26M

Figure 3 – Example of Replacement Investment Scenarios Analysis

The District budgeted \$150,000 for this assessment in the approved Fiscal Year 2018-19 budget (Attachment A).

Recommended Action

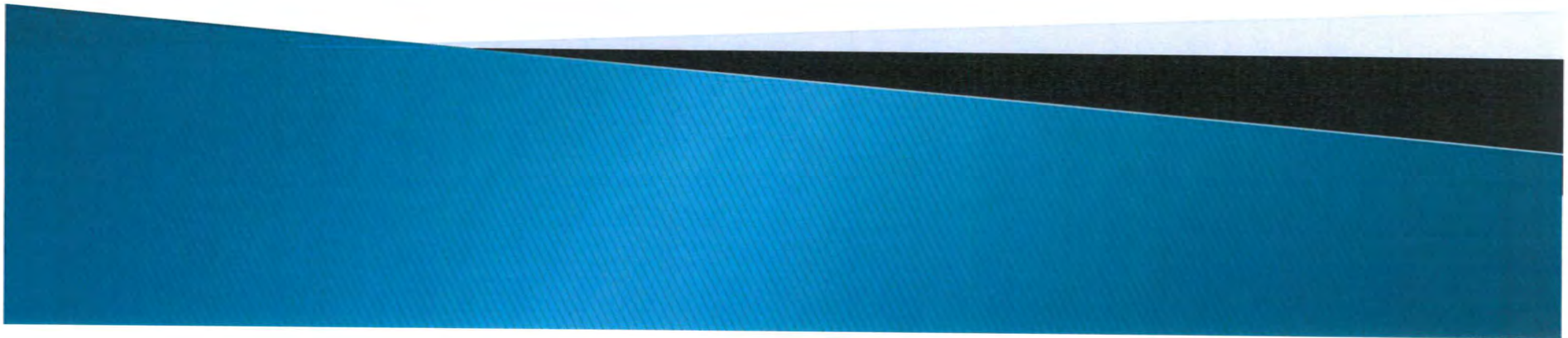
That the Board authorize award of Engineering Services for Assessment of the District's Valve and Pipeline Replacement Program to HDR, Inc. in the not-to-exceed amount of \$151,175 to help ensure the District's Pipeline and Valve Replacement Program has established an appropriate level of capital replacement expenditure.



Fallbrook Public Utility District

Pipeline and Valve Replacement Program Update

September 2018



Pipeline and Valve Replacement Needs

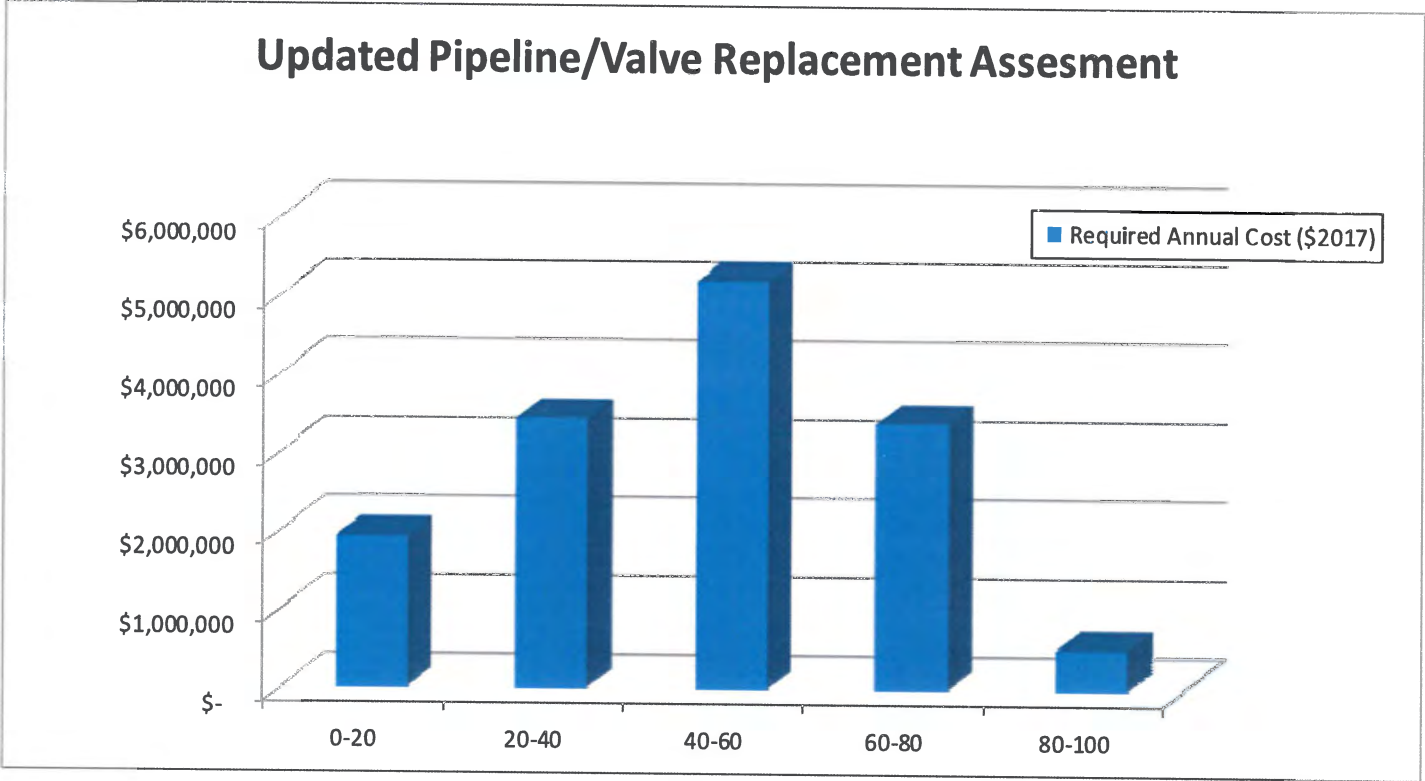


Figure 1 – Estimated Annual Investment Needs Over next 100 years in 20 year increments



Pipeline and Valve Replacement Performance

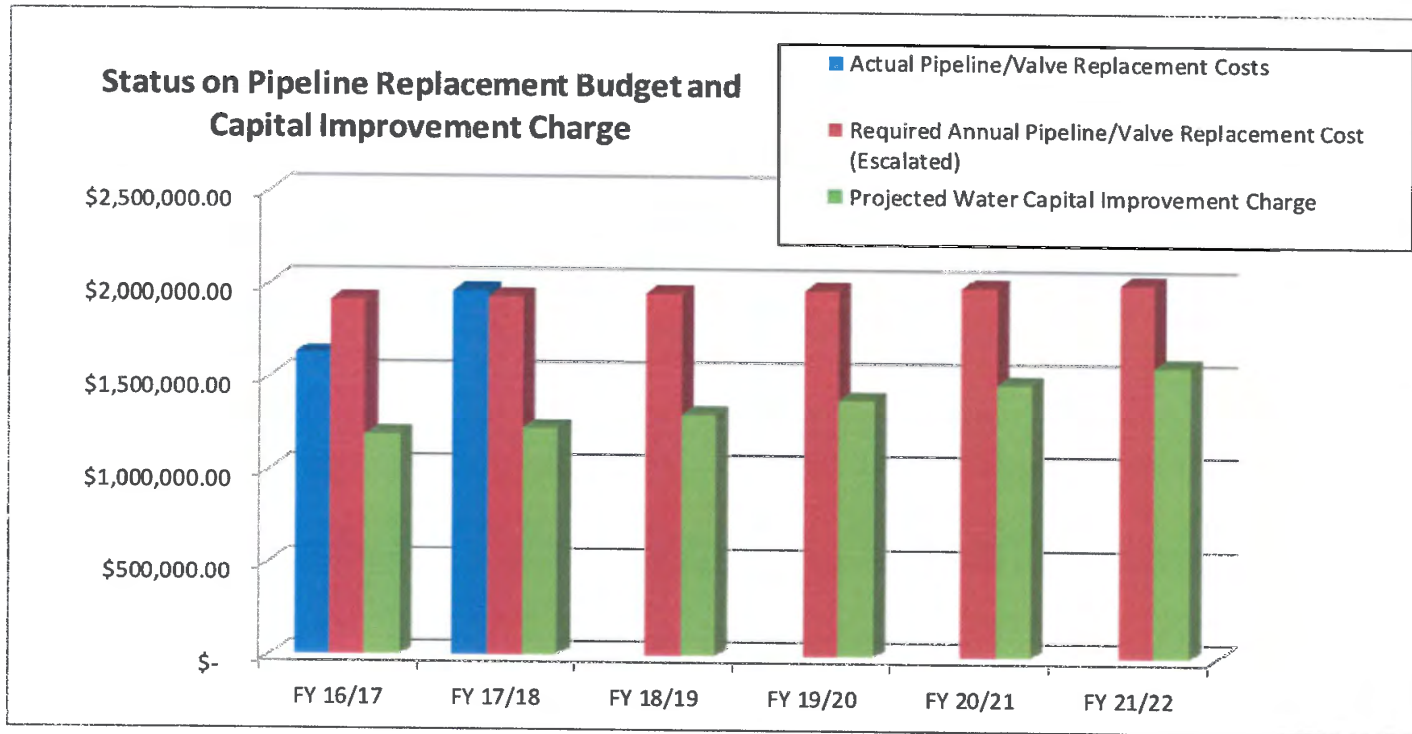


Figure 2 – Estimated required replacement investment compared to the capital improvement charge and actual completed replacements.

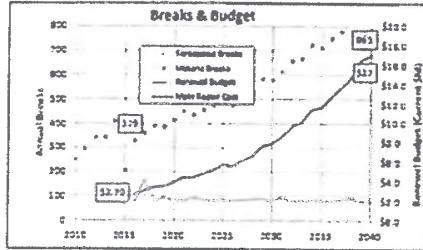
Proposed Services to Update Replacement Budget

- ▶ **Assessment and Data Clean-up:** Review existing program and approach and review data. Utilize established industry approved methodologies to assess the District's current approach.
- ▶ **Measure System Deterioration:** Use existing District data and data consultant has developed from other agencies to evaluate the current status of the system.
- ▶ **Risk Model and Decision Guidelines:** Develop an updated risk model based on District data and leverage models and results from past studies by consultant.
- ▶ **Benchmarking and Sustainable Budget Scenarios for Inspection and Renewal:** Help District review and update proposed renewal, replacement and inspection investment levels and benchmark versus local, state and national benchmarks.

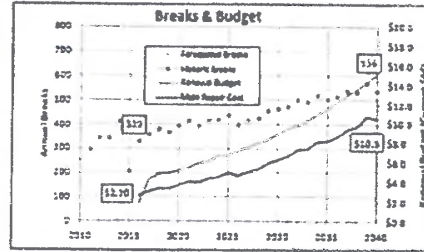
Example of Study Outcomes

Resulting Forecast Scenarios

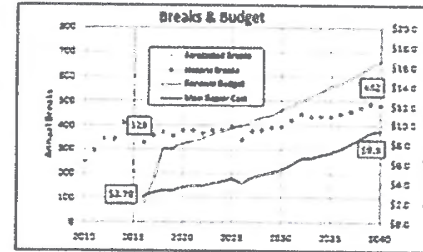
Scenario A: Sustain Existing Investment Levels



Scenario B: Sustain Existing Service Levels



Scenario C: Increase Service Levels to a Break Rate of 20



Scenario A is not recommended because service levels are not sustained with this level of investment.

Scenario B is a viable alternative in terms of sustaining current service levels. However, this scenario results in system replacement rates greater than the length

weighted useful life of the overall system (based on Weibull Modeling of asset useful life).

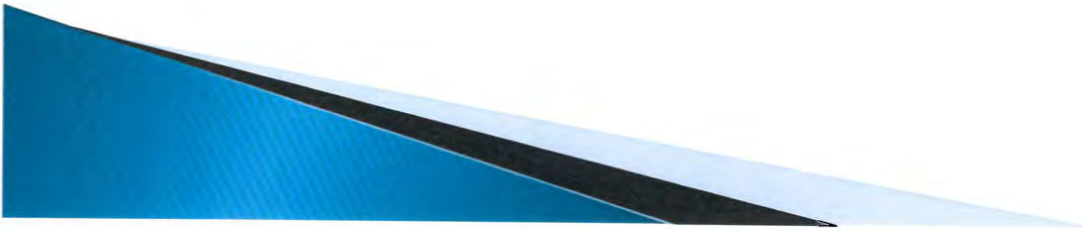
Scenario C is recommended because it is the most cost effective option to sustain service levels (in terms of break rate) and sustain overall system with a replacement

cycle that aligns with the overall system's useful life (based on Weibull useful life modeling). Scenario C is also only modestly more expensive in terms of total annual costs (i.e. total of renewal investments and main break repair costs) than Scenario B in 2040.

SCENARIO	FUNDING IN 2018	FUNDING INCREASE (ANNUAL)	2040 RENEWAL FUNDING	2040 BREAK RATE	2040 BREAK COUNT	2040 REPLACEMENT CYCLE (YEARS)	2040 MAIN REPAIR COSTS	2040 TOTAL ANNUAL COSTS
A: Sustain Existing Investment Levels	\$2.1M	0%	\$2.1M	36	870	1,271 years	\$17M	\$19M
B: Sustain Existing Service Levels	\$4.9M	5.50%	\$15.2M	22	540	169 years	\$11M	\$26M
C: Break Rate = 20	\$7.3M	3.75%	\$16.6M	20	480	155 years	\$9.5M	\$26M

Why do we need a consultant – Why can't we do this ourselves?

- ▶ Consultant has specialized experience in developing industry guidance and best practices for pipeline replacement planning
- ▶ Consultant has existing tools, models and data to help perform assessment.
- ▶ District has limited data in some areas and it is necessary to leverage data from other agencies.
- ▶ Our long-term replacement budget is a major factor driving future expenditures and our rates.



QUESTIONS?



Attachment “A”

Pipeline and Valve Replacement Projects by District

Project Description:

Projects include replacing existing valves and pipelines by District staff based on highest priority section to reduce service interruptions. Primary focus is on valve replacements with a target of replacing 100 valves a year.

The proposed purchases and costs for Fiscal Year 2018-19 also include:

- Replacing fire detector checks and smaller pressure control stations throughout the District as-needed
- Design of pipeline replacement projects by District staff
- Rehabilitation of District easements that require significant rebuilding of the existing access roads
- Surveying of sections of the district for existing small leaks



Supports Strategic Goals:

Continue implementation of an asset-management program to improve system reliability by replacing existing aging infrastructure before its failure in an effort to avoid service disruptions and property damage.

Operating Impacts:

The valve replacement program is critical in reducing the number of accounts effected by unplanned water outages.

Projects Cost:

Fiscal Year 2018-19 Expenditures:	\$755,000
Total Capital:	\$755,000



Collections System Projects

Project Description:

Projects include replacements and major repairs to existing sewer infrastructure.

The proposed purchases and costs for Fiscal Year 2018-19 include:

- Updates to the Asset Management Plan to verify long-term replacement needs
- Lining of the wet well at Green Canyon to prevent further corrosion
- Replacement of sewer section at creek and culvert crossing by District staff to prevent spills into waterbodies
- Relining of both sewer sections and manholes to extend the life of these facilities
- Additional telemetry for operation of the lift stations and collections system



Supports Strategic Goals:

Continue implementation of an asset-management program to improve system reliability by replacing existing aging infrastructure before its failure in an effort to avoid service disruptions and property damage.

Operating Impacts:

The collection systems capital program is critical in reducing the number of spills and potential fines.

Projects Cost:

Fiscal Year 2018-19 Expenditures:	\$485,000
Total Capital:	\$485,000



WATER DEPARTMENT
Capital Budget
Project Detail

Project Title:

Pipelines

Description:

Pipeline projects include main line water pipelines, valves and appurtanances. The primary District effort is to replace deteriorated pipelines and valves to maintain service reliability in accordance with the asset management plan. Pipeline and valve replacement is a top priority of the District capital program in order to maintain reliable service.

<u>Location of Project</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	<u>2023-24</u>	<u>2024-25</u>
Assett Management Plan Update	30,000	100,000					100,000	
Pipe Lines Projects								
Projects to be Completed by District Staff								
Misc Pipeline Replacement	150,000	100,000	100,000	100,000	100,000	100,000	100,000	350,000
Valve Replacements	350,000	400,000	400,000	400,000	400,000	400,000	400,000	150,000
Replace Fire Detector Checks	36,936	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Rebuild Pressure Stations	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Design of Pipeline Replacements	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Mainline leak survey	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Easement Maintenance								
Easement Rehabilitation	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
TOTAL	681,936	755,000	655,000	655,000	655,000	655,000	755,000	655,000

Pipeline Replacement

	<u>LF</u>	<u>Cost/LF</u>								
1. Old Stage 6" Pipeline Replacement	1000	260		260,000						
2. Pheasant Run 6" Replacement	4,500	170	\$	765,900						
3. Old Hwy 395 24" Relocation	1,700	278	\$	471,750						
4. Santa Margaritta at Hilbert to Cemetary 12"	3,400	240						816,000		
5. Deluz Road Dougerty to Patton Oaks	2,120	192						407,888		
6. Hawthorne at Main and Ivy to Hawthorne Alley	800	170.2					136,160			
7. O'hearn S. of Almond 8"	1000	192.4					192,400			
8. Alvarado Brandon to Brandenburg 12"	1600	222					355,200			
9. Gum Tree Gum Tree Ln to Ridge 20"	3900	314.5				613,275	613,275			
10. Winterhaven Green Canyon to Via Arroyo 12"	1500	222						333,000		
11. Hillside Drive Sunset to Portofino 12"	5200	222						577,200		
12. Hughes Lane to Clearcrest 12"	1000	222							222,000	
13. Via Arroyo Via Rancheros to Adler Creek 12"	1800	222							2,590,000	
14. Winterhaven, Yarnell to Rattlesnake PRV	7400	350							399,600	
TOTAL				1,237,650	1,683,888	683,760	613,275	613,275	910,200	3,389,200
TOTAL				1,237,650	1,683,888	683,760	613,275	613,275	910,200	3,389,200

Total	1,919,586	2,438,888	1,338,760	1,268,275	1,268,275	1,565,200	4,144,200	1,054,600
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WASTEWATER DEPARTMENT
Capital Budget
Project Detail

Project Title:


Collection System

Description:

The Board of Directors established a prioritized work program for the Collection system to address trouble areas in the Collections System. The collection system work contemplated to comply with that work program is: Force Main Replacements, Brandon Trunk Main Upgrade and E. Alvarado Trunk Main Upgrade. An evaluation of the most cost effective methodology for upgrades to these sections was conducted and an asset management program will be implemented to determine long term collection system replacement needs. A relining program will be initiated to start relining 1200 lf per year of older VCP pipelines.

<u>Title</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	<u>2023-24</u>	<u>2024-25</u>
Asset Management Program Updates				30,000	30,000	50,000		20,000				
N. Brandon/E. Alvarado Trunk Main					1,500,000							
Plant 2 Force Main Replacement			300,000	150,000								
VCP Pipe Replacement											200,000	200,000
Creek and Culvert Crossing replacements						75,000	75,000	75,000	50,000	50,000		
Green Canyon Force Main Replacement									100,000	100,000		
Plant 2 PS Pump Replacement												
Planning/Design					40,000							
Design /Construction Administration						80,000						
Construction						550,000	550,000					
Hawthorne LS Replacement										130,000		
Green Canyon LS Repairs							200,000					
Debbie Street LS Replacement								770,000				
Anthony Corner LS Repairs											150,000	
Shady Lane LS Replacement									530,000			
Collections Repair/Relining	60,000	61,800	63,654	90,000	95,000	100,000	105,000	110,000	116,000	122,000	128,000	130,000
Manhole Replacement/Relining	45,000	46,350	47,741	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Telemetry Upgrades	10,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Totals	115,000	128,150	431,395	330,000	1,725,000	1,115,000	790,000	1,035,000	856,000	612,000	388,000	390,000

M E M O

TO: Fiscal Policy & Insurance Committee
FROM: Jason Cavender, Operations Manager 
DATE: October 12, 2018
SUBJECT: Professional Services for the Evaluation and Implementation of Computerized Maintenance Management Systems

Purpose

To request for Board approval of award to Black and Veatch to provide Professional Services for the evaluation and implementation of Computer Maintenance Management Systems (CMMS) for the amount of \$98,560 to help reduce the on-going operating costs for the District and to advance one of the key objectives in the Board adopted District Strategic plan under strategic focus area #3: Efficiency.

SummaryWhat is CMMS and why do we need it

A CMMS system is an information system to help support the operations component of the District. The District currently spends \$4.4 million annual in operating labor and benefits or roughly \$12,000 a day. The core function of a CMMS system is to improve the efficiency of this workforce. These improvements are made through streamlining the workflow processes to increase time in the field working (wrench time) and reduce time driving to jobs, filling out paperwork and improve transparency of these resources. A simple analogy of what a CMMS system does can be explored by looking at a related example of a rental car company. Many years ago, rental car companies kept hard files and every time a car came and went, it was tracked by a hard file. Once computers became available the data was tracked in a computer, but a hard copy was created and entered manually into the computer. Now car companies have scanners and the data automatically is entered into the computer. The end result is improved efficiency and improved level of service for the customer with fewer staff. The District currently is at the equivalent level of the computer with manual entry. While we have saved on the cost of the filling cabinet, we have not fully realized the benefits of a fully implemented operational information system.

Function of CMMS in Water/Wastewater Industry

The core function of CMMS software for water/wastewater utilities is to help manage assets, schedule maintenance, and track and monitor work orders. This results in a reduction of maintenance costs, improved equipment performance, and will extend the life of critical assets. CMMS is a critical tool used by utilities to track costs and resources to help improve overall efficiency. Other potential uses for CMMS include:

1. Inventory control

2. Labor tracking
3. Budgeting
4. Work requests
5. Scheduling and planning
6. Asset history recording
7. Provide data for analysis
8. Support Key Performance Indicators (KPIs)

CMMS is utilized at adjacent Districts such as Rainbow MWD and Rancho California MWD to help improve scheduling of resources and better track operating costs. The District currently utilizes Maintenance Connection as its primary work order/preventative maintenance system. Although Maintenance Connection has adequately served its purpose over the last five years, the software is not up to date and it has limited functionality. With the recent rehabilitation of the Fallbrook Water Reclamation Plant and the addition of the Santa Margarita Treatment Plant (SMTP) scheduled for 2020, the District needs a more robust maintenance software system to ensure that both preventative and reactive maintenance is performed in a timely manner, and labor and materials costs are tracked to maintenance activities. A summary of the limitations of the current system compared to expected benefits of completing an upgrade to the CMMS system is summarized in Table 1.

Current CMMS System	Upgraded CMMS System
Limited Application for Preventative Maintenance. No interface for mobile applications and improved workflows	Ability to expand to reactive maintenance, mobile work orders and labor and resource tracking.
Complex interface. Requires significant staff time to update and maintain.	More user friendly interface. Provide overall efficiency improvements once implemented. Reduce staff time associated with managing and updating system.
No integration with other system such as GIS	Integrated with other system to keep updated data on all assets. Reduce duplication of data entry.
Helps keep records of planned maintenance and ensure maintenance is done, but does not provide significant efficiency improvements.	Ability to reduce manual process and improve efficiency of overall operation. Reduce time in receiving, distributing and schedule work orders.
Low initial cost.	Higher initial cost to implement. On-going cost to be evaluated.

Table 1 – Comparison of Existing CMMS System versus Upgraded CMMS system.

In the Board adopted strategic plan, the implementation of a CMMS system was identified as a key objective under the strategic focus area of efficiency. The specific adopted objective is listed below:

Complete efficiency improvements in payroll, budget status and meter reading processes. Develop a plan to improve the work order tracking and field data collection and management through implementation of a new Computerized Maintenance Management System (CMMS) with mobile applications.

In order to select and implement the appropriate CMMS, the District requires the services of outside consultants who specialize in this area. The consultant will identify which software package will best serve both current and future needs, and will ensure that the selected CMMS will be compatible with Springbrook, GIS, and other software systems currently in use at the District. The consultant will perform the following tasks:

1. Evaluate FPUDs current use of CMMS and compare that usage against water and wastewater industry best practices
2. Work with staff to identify assets and determine maintenance requirements
3. Identify the future needs and the best CMMS solutions
4. Review the existing financial (Springbrook) system and its CMMS compatibility
5. Identify and compare leading CMMS vendors and develop a "short list"
6. Compare software costs (initial and ongoing), implementation timeline and costs, staffing skills/capabilities for support, and company stability/longevity
7. Develop and implementation plan including software acquisition costs, ongoing maintenance and support costs, and estimated costs and timelines for system implementation

An RFP was issued on 8/1/2018 for this service. On 9/10/2018, a selection panel consisting of Todd Jester, GIS Specialist, and Jason Cavender, Operations Manager, interviewed three firms. Two firms were determined to be qualified and after a comprehensive qualifications based review of the proposals and interview, the selection committee members recommended award to Black and Veatch. The price from the two qualified firms was within \$4,500. The services are anticipated to be completed within 8 months of award. The total cost was \$98,560 and \$150,000 was budgeted for this project (Attachment A).

Options for Board consideration

Option 1 – Discontinue use of CMMS system

Results – Savings in annual software costs of \$9,000. Revert to paper records for maintenance of equipment which results in poor tracking in the past of limited information on equipment. This past approach was a driving factor in the condition of the equipment at the WRP and need to do a wholesale replacement of mechanical and electrical equipment.

Option 2 – Continue to utilize maintenance connection and develop approach internally to expand utilization to the SMTP.

Result – On going cost of \$9,000 for software. Helps ensure routine maintenance is completed and tracked. Little overall efficiency benefit in long-term operating costs.

Option 3 – Implement new CMMS system using only internal resources

Result – Potential for higher or lower on-going software costs. This is the approach the District used to implement our Accounting Software (Springbrook). This approach resulted in ultimately having to re-implement the system and an overall system with limitations in functionality.

Option 4 – Complete study to determine District needs and overall costs and benefits of implementation through award of the contract to Black and Veatch (staff recommendation)

Results – Potential for additional costs for implementation. Additional \$150,000 was budgeted in the current budget, but the total cost could be up to \$500,000 depending on approach and software system selected. As part of the study, staff would have to demonstrate payback for any investment. From a very preliminary level, implementation of a system that allows for mobile applications including scheduling and tracking with automation of existing processes could achieve efficiency of 5% in overall operating labor which is an annual saving or increase in productivity of \$220,000 (5% of \$4.4 million).

Recommended Action

That the Board authorize award of Professional Services for the Evaluation and Implementation to Black & Veatch for the amount of \$98,560 to ensure that the District's CMMS will fill both current and future needs and to reduce the on-going operating costs for the District.

Attachment “A”

Administration Capital Projects

Project Description:

The project includes capital projects for administration facilities to help maintain efficient operation of the administration facility and departments.

The projects include the following:

- Replacement and addition of new hardware and software to support the business systems, including system to provide remote back-up of District electronic files
- Upgrades to the Geographic Information System (GIS) software and hardware to improve tracking and monitoring on District assets
- Implementation of a new Computerized Maintenance Management System (CMMS) to better track work orders and resources and provide for more efficient deployment of District staff
- Additional improvements to the administration building including additional security cameras, purchase of a new office cubicle for the Public Relations Specialist to relocate to improve coordination of District messaging, replacement of deteriorated office furniture for construction office. Evaluation of District roof and repair of roof leaks

Strategic Goal:

Continue implementation of an asset-management program to improve system reliability by replacing existing aging infrastructure before its failure in an effort to avoid service disruptions and property damage.

Operating Impacts:

On-going investments in administrative facilities and systems is critical to maintain overall reliable and efficient operation.

Projects Cost:

Fiscal Year 2018-19 Expenditures:	\$275,000
Total Capital:	\$275,000



Water Capital Projects	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Pipelines and Valve Replacement Projects by District	\$681,936	\$755,000	\$655,000	\$655,000	\$655,000	\$655,000	\$755,000	\$655,000
Pipeline Replacement Projects by Contractors	\$1,237,650	\$1,683,888	\$683,760	\$613,275	\$613,275	\$910,200	\$3,389,200	\$399,600
Deluz ID Projects	\$90,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Pump Stations	\$500,000	\$515,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Meter Replacement	\$425,500	\$700,000	\$675,000	\$675,000	\$600,000	\$50,000	\$20,000	\$20,000
Pressure Reducing Stations	\$70,000	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0
Red Mountain Reservoir Improvements	\$105,000	\$70,000	\$80,000	\$40,000	\$40,000	\$350,000	\$50,000	\$90,000
Steel Reservoir Improvements	\$1,264,697	\$786,000	\$531,000	\$8,000	\$68,000	\$10,000	\$10,000	\$450,000
Santa Margarita Conjunctive Use Project	\$100,000	\$12,095,000	\$36,285,000	\$220,000	\$200,000	\$200,000	\$200,000	\$200,000
Vehicles and Heavy Equipment	\$698,500	\$616,000	\$533,500	\$546,000	\$428,500	\$303,500	\$368,500	\$468,500
District Yard Improvements	\$99,000	\$110,000	\$0	\$0	\$50,000	\$0	\$50,000	\$50,000
SCADA Upgrades/ Security/Telemetry	\$144,000	\$144,000	\$130,000	\$130,000	\$95,000	\$90,000	\$85,000	\$105,000
Total Water Capital Projects	\$5,416,283	\$17,644,888	\$39,723,260	\$3,037,275	\$2,899,775	\$2,718,700	\$5,077,700	\$2,588,100

Recycled Water Capital Projects	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Recycled Water Improvements	\$65,000	\$580,000	\$660,000	\$214,000	\$214,000	\$214,000	\$214,000	\$214,000
Total Recycled Water Capital Projects	\$65,000	\$580,000	\$660,000	\$214,000	\$214,000	\$214,000	\$214,000	\$214,000

Waste Water Capital Projects	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
WRP Improvements	\$200,000	\$200,000	\$150,000	\$150,000	\$200,000	\$200,000	\$950,000	\$750,000
Collection System Improvements	\$1,725,000	\$1,115,000	\$790,000	\$1,035,000	\$856,000	\$612,000	\$388,000	\$390,000
Outfall Improvements	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$50,000	\$50,000	\$50,000
Total Waste Water Capital Projects	\$2,005,000	\$1,395,000	\$1,020,000	\$1,265,000	\$1,136,000	\$862,000	\$1,388,000	\$1,190,000

Administrative Capital Projects	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Administrative Upgrades	\$354,000	\$30,000	\$20,000	\$23,000	\$15,000	\$25,000	\$425,000	\$25,000
Engineering and Operations Information Systems	\$15,000	\$155,000	\$155,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Facility Improvements/Upgrades/Security	\$80,000	\$90,000	\$50,000	\$25,000	\$25,000	\$85,000	\$25,000	\$25,000

ADMINISTRATION DEPARTMENT
Capital Budget
 Project Detail

Project Title:

Engineering and Operations Information Systems

Description:

The District has developed a survey accurate GIS database for District Assets. The GIS database is the backbone of future improvements in information management for engineering and operations. The District is now in the process of implementing a CMMS system and Asset Management System to better track District Assets and allocation of resources

<u>Title</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>2022-23</u>	<u>2023-24</u>	<u>2024-25</u>
<u>GIS/CMMS Projects</u>												
GIS Upgrade Implementation	15,000	15,000	30,000	5,000	15,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
CMMS Implementation						150,000	150,000	25,000	25,000	25,000	25,000	25,000
Totals	\$15,000	\$15,000	\$30,000	\$5,000	\$15,000	\$155,000	\$155,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000

M E M O

TO: Fiscal Policy and Insurance Committee
FROM: Jack Bebee, General Manager, JAB
Dave Shank AGM/CFO
DATE: October 12, 2018
SUBJECT: Modification to Article 15 of the Administrative Code

Purpose

The Fiscal Policy and Insurance Committee has requested staff develop recommended language that would require specific Board approval for withdrawal of funds from reserves.

Summary

The District currently holds reserves in short term liquidity accounts (Operating fund, money market fund, LAIF and County Pool). The funds allow transfer in and out at any time without liquidating investments. In addition, the District also holds funds in a longer term managed Portfolio, which is managed by an outside investment firm (PFM). Attached is the treasurer's report for September as well as a proposed updated treasurer's report which shows the ending balances for each fund as well as District total ending reserves by category.

Each year with the budget adoption the District passes a resolution which sets expenditure levels in accordance with the budget. The budget also established the expected draw from reserves for the Fiscal Year. Any anticipated draw for the Fiscal Year should be held outside of the managed portfolio. Over the last decade, the District has been drawing from reserves to help fund additional capital improvements with a long term plan to increase the capital improvement charge and rates so that over time the District can begin to recover reserves. With the bulk of District funds invested in the managed portfolio, this has resulted in a draw from this account. By next fiscal year, this trend should reverse and it will not be necessary to continue to draw from reserves based on budget projection.

Staff recommends that as part of the adoption of the annual budget that the expected reserve draw should be identified for Board approval and any variance from this adopted resolution would require subsequent Board approval. This would be in addition to the current language in the budget resolution that establishes expenditure levels (see attached).

The proposed additional language would be added to Section 15 of the administrative code and is copied below:

Sec 15.10 Annual Budget Resolution

The Board shall approve an annual budget resolution that established total appropriation for the fiscal year based on the following budget categories:

1. Administration, operations, maintenance.
2. Water purchases, and contingencies.
3. Capital improvements, and equipment.
4. Revenue Bonds, State Revolving Fund, interest and principal.

In addition the budget resolution shall identify any anticipated net withdrawal of District reserves for the Fiscal Year.

Any spending above the established appropriations or additional withdrawal of reserves shall require Board approval.

Recommended Action

That the Fiscal Policy and Insurance Committee support the proposed additional language related to adoption of the District's annual budget that will establish expenditure levels and any expected draw from District reserves.

M E M O

TO: Board of Directors
FROM: David Shank, Assistant General Manager/CFO
DATE: September 18, 2018
SUBJECT: Treasurer's Report

Purpose

Provide the August 31, 2018 Treasurer's Report. Confirm that the District's investment portfolio is in compliance with the Investment Policy and that the District is able to meet the expenditure requirements for the next 6-months. Because the year-end process is not yet completed, these balances are subject to change.

Summary

Treasurer's Report Aug 31, 2018

Operations Summary

Disbursements	\$	7,576,365
Receipts	\$	7,525,793
Net change	\$	(50,572)

Account	Begning Market Value	Ending Market Value	Change in Value	(Withdrawals)/ Deposits	Yield	Percent of Total Investments
Operating Fund	\$ 250,533	\$ 16,504	\$ (234,029)		0.4%	0.1%
Money Market	\$ 1,266,704	\$ 1,551,305	\$ 284,600	\$ 600,000	0.4%	9.6%
LAIF	\$ 227,597	\$ 227,597	\$ -	\$ -	2.0%	1.4%
County Pool	\$ 14,861	\$ 14,908	\$ 47	\$ -	1.8%	0.1%
Managed Portfolio	\$ 12,522,050	\$11,939,014	\$ (583,036)	\$ (600,000)	2.8%	73.9%
PARS (OPEB & Pension Trust)*	\$ 2,371,548	\$ 2,401,564	\$ 30,016	\$ -	6.7%	14.9%
Accounts Total	\$ 16,653,294	\$16,150,891	\$ (502,402)	\$ -	3.1%	100.0%

*Funds are restricted.

All investments have been made in accordance with the District's Annual Statement of Investment Policy.



David Shank
 September 19, 2018

Treasurer's Report Aug 31, 2018

Operations Summary

Disbursements	\$	7,576,365
Receipts	\$	7,525,793
Net change	\$	(50,572)

District Reserves*

Liquidity	\$	1,810,314
PFM Portfolio	\$	11,939,014
Net change	\$	(532,418)

Account	Begning Market Value	Ending Market Value	Change in Value	(Withdrawals)/Deposits	Yield	Percent of Total Investments
Operating Fund	\$ 250,533	\$ 16,504	\$ (234,029)		0.4%	0.1%
Money Market	\$ 1,266,704	\$ 1,551,305	\$ 284,600	\$ 600,000	0.4%	9.6%
LAIF	\$ 227,597	\$ 227,597	\$ -	\$ -	2.0%	1.4%
County Pool	\$ 14,861	\$ 14,908	\$ 47	\$ -	1.4%	0.1%
PFM Managed Portfolio	\$ 12,522,050	\$ 11,939,014	\$ (583,036)	\$ (600,000)	2.6%	73.9%
PARS (OPEB & Pension Trust)*	\$ 2,371,548	\$ 2,401,564	\$ 30,016	\$ -	5.4%	14.9%
Accounts Total	\$ 16,653,294	\$ 16,150,891	\$ (502,402)	\$ -	2.8%	100.0%

*Funds are held in a trust and excluded from District Reserves.

All investments have been made in accordance with the District's Annual Statement of Investment Policy.

Dave Shank
September 14, 2018

RESOLUTION NO. 4935

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE FALLBROOK PUBLIC UTILITY DISTRICT APPROVING AND ESTABLISHING THE DISTRICT'S FISCAL YEAR 2018-19 BUDGET FOR OPERATIONS, MAINTENANCE, WATER PURCHASES, CAPITAL IMPROVEMENTS, EQUIPMENT, DEBT SERVICE AND APPROPRIATING \$50,274,314 CONSISTENT WITH THE APPROVED BUDGET

* * * * *

WHEREAS, the Fiscal Policy and Insurance Committee has reviewed and considered the Recommended Fiscal Year 2018-19 Budget during publicly noticed meetings on April 30, 2018, May 15, 2018 and June 13, 2018; and

WHEREAS, the Board has reviewed and considered the Recommended Fiscal Year 2018-19 Budget during publicly noticed meetings on May 29, 2018 and June 19, 2018;

NOW, THEREFORE, BE IT RESOLVED BY the Board of Directors of the Fallbrook Public Utility District as follows:

- 1. The District's Fiscal Year 2018-19 Budget, as presented to the Board of Directors at the publically noticed meeting on June 19, 2018, is hereby approved.
2. Expenditure under the District's approved Fiscal Year 2018-19 Budget is hereby appropriated as follows:

Table with 2 columns: Description and Amount. Rows include: For administration, operations, maintenance: \$12,918,544; For water purchases: \$14,700,863; For capital improvements, and equipment: \$19,894,888; For Revenue Bonds, State Revolving Fund, interest and principal: \$ 2,760,019; TOTAL: \$50,274,314

- 3. Expenditure of appropriated funds shall be consistent with the approved Budget. Except as provided in this Resolution, no increases or decreases to the Budget shall occur execept upon prior approval by the Board.

4. Notwithstanding the total appropriations, set forth herein, the General Manager is authorized subject only to the total appropriations to exceed the expenditure amount designated in the approved Budget for water purchases to meet the District's water demands. The Board will be notified of any water purchases appropriations exceedances.

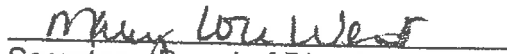
PASSED AND ADOPTED by the Board of Directors of the Fallbrook Public Utility District at a special meeting of the Board held on the 19th day of June, 2018, by the following vote:

AYES: Directors Davies, DeMeo, Gebhart, McDougal, and Wolk
NOES: None
ABSTAIN: None
ABSENT: None



President, Board of Directors

ATTEST:



Secretary, Board of Directors