

Kirkwood Meadows Public Utility District
Operations Committee
REGULAR MEETING AGENDA

NOTICE IS HEREBY GIVEN that the Operations Committee of the Kirkwood Meadows Public Utility District has called a Regular Meeting of the Committee to be held on **Wednesday, April 24, 2019 at 3:30 p.m.** at the Kirkwood Meadows Public Utility District, Community Services Building, 33540 Loop Road, Kirkwood, CA 95646.

The Agenda for this Regular Meeting is:

1. **Performance Reporting.** Updated efficiencies and losses of each Department.
2. **Utilities Update/Issues.**
 - a. **Electric**
 - b. **Propane**
 - c. **Water**
 - d. **Wastewater**
 - e. **Solid Waste**
3. **2019/20 Capital Budget.** Discussion and possible action. **Pgs. 2-14**
4. **Future Topics.**
5. Next Meeting/Staff Recommendation: *Wednesday, May 29, 2019 - 3:30pm.*

Dated: April 19, 2019

Kirkwood Meadows PUD

The Kirkwood Meadows Public Utility District is an Equal Opportunity Provider and Employer.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the District at (209) 258-4444, by email to jgillies@kmpud.com. Requests must be made as early as possible, and at least two business days before the meeting.

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component							
Water	4,960,000	330,000	65,000	175,000	90,000	0	0
Wastewater	1,424,500	305,000	0	0	245,000	60,000	60,000
Employee Housing	2,100,000	0	0	0	0	0	0
Fire	1,574,500	62,500	0	0	0	62,500	12,000
Electric	1,500,000	0	0	0	0	0	0
Propane	312,000	225,000	0	0	0	225,000	0
Snow Removal	0	0	0	0	0	0	0
Cable	0	0	0	0	0	0	0
Parks and Rec	0	0	0	0	0	0	0
Solid Waste	0	0	0	0	0	0	0
Operations Shared	0	0	0	0	0	0	0
Total Capacity Expense	11,871,000	922,500	65,000	175,000	335,000	347,500	72,000
Replacement Component							
Water	942,000	242,000	60,000	31,000	60,000	63,500	27,500
Wastewater	5,329,000	3,601,000	405,500	448,500	1,075,000	982,000	690,000
Employee Housing	169,300	52,700	31,500	9,100	1,500	9,100	1,500
Fire	2,500,000	110,200	6,900	13,200	21,200	65,700	3,200
Electric	1,027,750	677,750	177,750	260,000	51,500	94,000	94,500
Propane	1,454,250	716,250	205,250	216,000	166,000	91,000	38,000
Snow Removal	3,167,100	798,100	292,000	73,000	181,500	50,100	201,500
Cable	77,000	11,000	7,000	1,000	1,000	1,000	1,000
Parks and Rec	120,500	27,500	11,000	1,500	0	15,000	0
Solid Waste	175,000	25,000	5,000	5,000	5,000	5,000	5,000
Operations Shared	345,400	208,000	75,000	63,000	51,500	11,000	7,500
Total Replacement Expense	15,307,300	6,469,500	1,276,900	1,121,300	1,614,200	1,387,400	1,069,700
Total Capital Expense	27,178,300	7,392,000	1,341,900	1,296,300	1,949,200	1,734,900	1,141,700

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
<i>Distribution</i>									
Water Model	40,000	40,000		1	40,000				
Well 6	200,000	200,000		1	25,000	175,000			
Pressure Reducing Stations (2)	90,000	90,000		2			90,000		
Well Transmission Mains to Upper Zones	250,000	0		2					
<i>Storage</i>									
Tanks (1.4 Mgal additional)	3,500,000	0	When storage requirements exceed 950,000 gallons	4					
<i>Water Rights</i>									
Caples Lake Water Rights	880,000	0	When demand exceeds 324,000 gallons per day	5					
Total Water Capacity Expense	4,960,000	330,000			65,000	175,000	90,000	0	0
Replacement Component									
Well Pumps	90,000	15,000	Two Years	1	5,000		5,000		5,000
Treatment Building Power Replacement	10,000	10,000	One-Time	1	10,000				
Wells 2, 3 & 5 Telemetry & Controls	50,000	20,000	Five Years	1	20,000				
Distribution System Valve Replacement	425,000	115,000	Annual	2	25,000	25,000	25,000	25,000	15,000
Fire Hydrant Replacements	102,000	12,000	Two Years	3		6,000		6,000	
Remote Read Meter Replacement	75,000	15,000	Twenty Years	4				7,500	7,500
Vehicle Purchase (Split with Wastewater)	150,000	30,000	Ten Years	4			30,000		
Commercial Remote Read Water Meters	30,000	15,000	Twenty Years	4				15,000	
Mountain Club Water Meter Relocation	10,000	10,000	One-Time	5				10,000	
Total Water Replacement Expense	942,000	242,000			60,000	31,000	60,000	63,500	27,500
Total Water Capital Expense	5,902,000	572,000			125,000	206,000	150,000	63,500	27,500

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component									
<i>Collection</i>				Scale 1~5 1=Critical					
<i>Treatment</i>									
EQ Tank Replacement (50% Capacity)	582,500	245,000		3			245,000		
Aeration Blower (2@ \$60,000)	120,000	120,000	When air-flow requirements exceed 1,130 SCFM	4				60,000	60,000
Membranes Upgrade Koch (Option 4)	702,000	0	As Needed	5					
<i>Disposal</i>									
Effluent Pumps	20,000	0	When effluent flows exceed 288,000 gal/day	5					
Total Wastewater Capacity Expense	1,424,500	365,000			0	0	245,000	60,000	60,000
Replacement Component									
<i>Collection</i>									
Collection System Infiltration/Inflow Repairs	280,000	200,000	Annual for 10 Years	1	40,000	40,000	40,000	40,000	40,000
Jetter Camera	25,000	25,000	One Time	1	25,000				
East Lift Controls Moved from Vault	120,000	120,000	One Time	2		120,000			
Pumps, Main Lift	112,000	14,000	Two Years	2		7,000		7,000	
<i>Treatment</i>									
WWTP Refurbish Conditioned Space	200,000	200,000	One Time	1		200,000			
WWTP Process Basin Area Exhaust Fans	70,000	70,000	One Time	1		70,000			
WWTP Roof/Wall Repair	310,000	310,000	One Time	1	310,000				
New Sludge Bins (2)	20,000	20,000	One Time	1	20,000				
Aluma Valve	31,500	10,500	Fifteen Years	2	10,500				
Centrifuge Replacement	650,000	650,000	One Time	3			650,000		
Electrical Upgrades	110,000	110,000	One Time	3			110,000		
EQ Tank Replacement (50% Replacement)	245,000	245,000	One Time	3			245,000		
Hycore Brush Replacement	10,500	1,500	Five Years	3		1,500			
MBR Pneumatic Valve Replacement	120,000	120,000	One Time	4				120,000	
New Headworks Screen / Hycore Repair	430,000	430,000	One Time	4				430,000	
SCADA/PLC/Controls System Replacement	375,000	375,000	One Time	4				375,000	
Instrumentation Upgrades	25,000	25,000	One Time	5					25,000
Membrane Replacement	540,000	90,000	Five Years	5					90,000
Replace Anoxic / MBR Recirc / Filtrate Pumps	565,000	460,000	One Time	5					460,000
Replace Chemical Feed Pumps	300,000	75,000	Ten Years	5					75,000
CIP Tank Canopy	95,000	0	One Time	5					

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Demolish Clarifier, EQ Tanks & Exchanger	245,000	0	One Time	5					
WWTP UPS	15,000	0	One Time	5					
<i>Disposal</i>									
Pumps/Controls, Absorption Beds	45,000	0	Ten Years	1					
VFD Replacement	170,000	20,000	Two Years	3		10,000		10,000	
Effluent Disposal Line	25,000	0	One Time	5					
<i>General</i>									
Vehicle Purchase (Split with Water)	165,000	30,000	Ten Years	4			30,000		
Lift Equipment	30,000	0	Ten Years	5					
Total Wastewater Replacement Expense	5,329,000	3,601,000			405,500	448,500	1,075,000	982,000	690,000
Total Wastewater Capital Expense	6,753,500	3,966,000			405,500	448,500	1,320,000	1,042,000	750,000

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
Lava Rock II	2,100,000	0	When Staff needs exceed available housing	5					
Total Employee Housing Capacity Expense	2,100,000	0			0	0	0	0	0
Replacement Component									
Concrete Coring/Venting	25,000	25,000	One Time	1	25,000				
Concrete Paving for Snow Removal	5,000	5,000	One Time	1	5,000				
Dishwashers	6,500	1,000	Two Years (Until all 8 Replaced, then 10 Years)	1		500		500	
Roof Repairs	0	0	One Time	1					
Flooring	20,800	3,200	Two Years (Until all 8 Replaced, then 10 Years)	2		1,600		1,600	
Hot Water Heaters	78,000	12,000	Two Years (Until Remaining 6 Replaced, then 10 Years)	2		6,000		6,000	
Washers/ Dryers	21,000	4,500	Two Years (Until Remaining 6 Replaced, then 10 Years)	2	1,500		1,500		1,500
Refrigerators	13,000	2,000	Two Years (Until Remaining 6 Replaced, then 10 Years)	3		1,000		1,000	
Total Employee Housing Replacement Expense	169,300	52,700			31,500	9,100	1,500	9,100	1,500
Total Employee Housing Capital Expense	2,269,300	52,700			31,500	9,100	1,500	9,100	1,500

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1-5 1=Critical					
110" Ladder Truck	1,500,000	0	20 years	5					
Light Rescue/ Command Vehicle	62,500	62,500	15 years	5				62,500	
Personal Protective Gear (2)	12,000	12,000	5 years	5					12,000
Total Fire Capacity Expense	1,574,500	74,500			0	0	0	62,500	12,000
Replacement Component									
Hose Replacement	52,500	7,500	Annual	1	1,500	1,500	1,500	1,500	1,500
Radio Reprogramming	12,500	2,500	Annual	1	500	500	500	500	500
SCBA's (7,000 per unit + spare cylinder)	255,700	3,700	10 years	1	3,700				
Structure Gear / PPE	28,800	6,000	Annual	1	1,200	1,200	1,200	1,200	1,200
Extrication Equipment	10,000	10,000	15 years	3		10,000			
SCBA Air Station	18,000	18,000	One Time	4			18,000		
Ladder Replacement	30,000	0	10 years	5					
Quick Attack/Mini Pumper Vehicle	192,500	62,500	15 years	5				62,500	
Type 1 Fire Truck	1,900,000	0	20 years	5					
Total Fire Replacement Expense	2,500,000	110,200			6,900	13,200	21,200	65,700	3,200
Total Fire Capital Expense	4,074,500	184,700			6,900	13,200	21,200	128,200	15,200

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
Upgrades the PH/ future capacity (8MW)	1,500,000	0	When peak demand reaches 5MW	5					
Total Electric Capacity Expense	1,500,000	0			0	0	0	0	0
Replacement Component									
T1 Line Antifreeze Gel Project	75,000	75,000	10 years	1	75,000				
Ammonia Tank Relocation	25,000	25,000	One Time	1	25,000				
Transformer Retaining Walls	6,000	6,000	One Time	1	6,000				
Gate Replacement	6,000	6,000	One Time	1	6,000				
Mountain Club Transformer	30,000	30,000	One Time	1	30,000				
OV Cabinet Replacement	80,000	50,000	15 years	1		50,000			
Riser Vaults (8)	40,000	40,000	Annual for 4 years	1	10,000	10,000	10,000	10,000	
Rugged Laptop (Split with Propane)	1,750	1,750	One Time	1	1,750				
Snowmaking Compressor Transformer	20,000	20,000	One Time	1	20,000				
Service Lines	72,000	12,000	Two Years	1	4,000		4,000		4,000
Powerhouse Radiator Roof	290,000	215,000	One Time	2		200,000			15,000
Distribution System FCIs	12,500	12,500	One Time	3			12,500		
Powerhouse Relay Programming	25,000	25,000	One Time	3			25,000		
Caples Lake Transformer Containment	10,000	10,000	One Time	4				10,000	
Meadow line replacement	74,000	74,000	One Time	4				74,000	
Fremont / Dangburg Line Replacement	7,500	7,500	One Time	5					7,500
Backside meter cabinet	68,000	68,000	One Time	5					68,000
Phase 3 Loop Road Project	95,000	0	One Time	5					
Service Truck (Split with Propane)	90,000	0	Ten Years	5					
Total Electric Replacement Expense	1,027,750	677,750			177,750	260,000	51,500	94,000	94,500
Total Electric Capital Expense	2,527,750	677,750			177,750	260,000	51,500	94,000	94,500

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FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1-5 1=Critical					
Propane Tank, 30,000 gallon (3/4 of cost)	225,000	225,000	When peak use is ≥ 7,500 gal/day	4				225,000	
Regulators	15,000	0	When current vaporizers cannot maintain system pressure	5					
	0	0	One Time	5					
Vaporizer	72,000	0	When current vaporizers cannot maintain system pressure	5					
Total Propane Capacity Expense	312,000	225,000			0	0	0	225,000	0
Replacement Component									
Install Curbstops	300,000	300,000	Two Years	2		150,000	150,000		
Meter Replacment (Commercial)	334,000	40,000	10% a year	1	8,000	8,000	8,000	8,000	8,000
Meter Replacment (Residential)	334,000	40,000	10% a year	1	8,000	8,000	8,000	8,000	8,000
Propane Tank Roof	100,000	100,000	One Time	1	100,000				
Propane Tank Shed - Lava Rock and WWTP	3,500	3,500	One Time	1	3,500				
Propane Tank, Repiping & Valving	80,000	80,000	One Time	1	80,000				
Rugged Laptop (Split with Electric)	1,750	1,750	One Time	1	1,750				
Vaporizer Roof	50,000	50,000	One Time	1		50,000			
Air Line Replacement	4,000	4,000	One Time	1	4,000				
Leak Survey	70,000	10,000	Five Years	3					10,000
Propane Tank, 30,000 gallon (1/4 of cost)	75,000	75,000	One Time	4				75,000	
CSB/Employee Housing Hook-Up	12,000	12,000	One Time	5					12,000
Service Truck (Split with Electric)	90,000	0	Ten Years	5					
Total Propane Replacement Expense	1,454,250	716,250			205,250	216,000	166,000	91,000	38,000
Total Propane Capital Expense	1,766,250	941,250			205,250	216,000	166,000	316,000	38,000

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
[No Capital Capacity Improvements]									
Total Snow Removal Capacity Expense	0	0			0	0	0	0	0
Replacement Component									
924G 12' Blade	51,000	17,000	Fifteen Years	1	17,000				
924G Tires	84,000	12,000	Five Years	1	12,000				
950GC RPM Controls	7,500	7,500	One Time	1	7,500				
950F Front Axle/Motor/Transmission Rebuild	140,000	35,000	Ten Years	1	35,000				
Chain Rack	8,000	8,000	One Time	1	8,000				
Diesel Fill Station (Powerhouse)	25,000	25,000	One Time	1	25,000				
Loader Chains	262,500	37,500	Annual	1	7,500	7,500	7,500	7,500	7,500
Snow Stake Storage Container	6,000	6,000	One Time	1	6,000				
Trackless Chains	140,000	20,000	Annual	1	4,000	4,000	4,000	4,000	4,000
Trackless Tires	25,500	3,000	Two Years	1		1,500		1,500	
Trackless Replacement	2,040,000	510,000	Alternate Years w/10 year spacing	1	170,000		170,000		170,000
Trackless Reconditioning	180,000	80,000	At >6,000 Hours	2		60,000		20,000	
Gantry Crane	5,000	5,000	One Time	5					5,000
950F & 950GC Tires	90,000	15,000	Five Years	5					15,000
RPM Rebuild	102,600	17,100	Five Years	5				17,100	
Total Snow Removal Replacement Expense	3,167,100	798,100			292,000	73,000	181,500	50,100	201,500
Total Snow Removal Capital Expense	3,167,100	798,100			292,000	73,000	181,500	50,100	201,500

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
[No Capital Capacity Improvements]									
Total Cable Capacity Expense	0	0			0	0	0	0	0
Replacement Component									
Channel 19 Equipment/ Education	35,000	5,000	Annual	1	1,000	1,000	1,000	1,000	1,000
Cable Equipment	42,000	6,000	Five Years	2	6,000				
Total Cable Replacement Expense	77,000	11,000			7,000	1,000	1,000	1,000	1,000
Total Cable Capital Expense	77,000	11,000	0		7,000	1,000	1,000	1,000	1,000

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FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
[No Capital Capacity Improvements]									
Total Parks and Rec Capacity Expense	0	0			0	0	0	0	0
Replacement Component									
Playground Equipment Certification	31,000	1,000	Ten Years	1	1,000				
Playground & ADA Improvements	10,000	10,000	One Time	1	10,000				
Playground Equipment	79,500	16,500	Two Years Repair/Ten Years Replace	2		1,500		15,000	
Total Parks and Rec Replacement Expense	120,500	27,500			11,000	1,500	0	15,000	0
Total Parks and Rec Capital Expense	120,500	27,500			11,000	1,500	0	15,000	0

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
[No Capital Capacity Improvements]									
Total Solid Waste Capacity Expense	0	0			0	0	0	0	0
Replacement Component									
Dumpsters	85,000	10,000	Two Years	1		5,000		5,000	
Recycling	90,000	15,000	Two Years	2	5,000		5,000		5,000
Total Solid Waste Replacement Expense	175,000	25,000			5,000	5,000	5,000	5,000	5,000
Total Solid Waste Capital Expense	175,000	25,000			5,000	5,000	5,000	5,000	5,000

**Kirkwood Meadows Public Utility District
FY 19/20 Capital Improvement Projects**

Expense	35 Yr Total	5 Yr Total	Cycle	Priority	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Capacity Component				Scale 1~5 1=Critical					
[No Capital Capacity Improvements]									
Total Operations_Shared Capacity Expense	0	0			0	0	0	0	0
Replacement Component									
416C Backhoe - Quick Coupler & Compactor	12,000	12,000	One Time	1	12,000				
416C Tires	4,200	0	Nine Years	1					
Computer	27,000	9,000	Every Year for 5 / Then Biannually	1	3,000	1,500	1,500	1,500	1,500
Concrete Paving for Snow Removal	5,000	5,000	One Time	1	5,000				
CSB Windows	15,000	0	Ten Years	1					
Hose Reel Oil/Hydro/Air	5,000	5,000	One Time	1	5,000				
Fall Protection	11,700	1,500	Five Years	1					1,500
Office Equipment	18,000	3,000	Two Years	1		1,500		1,500	
Concrete Floor & Pallet Racks	10,000	10,000	One Time	1	10,000				
Digital Radio & Antenna (1st Year)	40,000	25,000	10 Years	1	25,000				
Shoring	15,000	0	Fifteen Years	1					
Rugged Laptop	3,500	3,500	One Time	1	3,500				
Material Handling Unit	5,000	5,000	One Time	2	5,000				
Road Barriers (4)	1,500	1,500	One Time	2	1,500				
Vehicle Tires	21,000	3,000	Five Years	2		3,000			
10 Wheel Dump Truck	50,000	50,000	One Time	3		50,000			
Equipment Trailer	20,000	20,000	One Time	3			20,000		
Scaffolding	5,000	2,000	Ten Years	3		2,000			
Facilities Network Connectivity	25,000	25,000	One Time	4			25,000		
10,000lb Truck/Trackless Lift	8,000	8,000	One Time	5				8,000	
Security	30,000	15,000	Ten Years	5	5,000	5,000	5,000		
Tire Machine and Balancer	13,500	4,500	Fifteen Years	5					4,500
Total Operations_Shared Replacement Expens	345,400	208,000			75,000	63,000	51,500	11,000	7,500
Total Operations_Shared Capital Expense	345,400	208,000			75,000	63,000	51,500	11,000	7,500