

PRIORITY ITEM:	COST:	PRIORITY: S/T (ABC)	PRIORITY: L/T (ABC)	TIMELINE AND NOTES:	QUESTIONS and NEXT STEPS:
<b>Short Term Priorities:</b>  <b>1) AIR SUPPLY LINE to treatment unit:</b> Replace 250 ft. of 10" air supply pipe from blower room to treatment unit.	\$75,000 Estimate	6- month A-level	Needs to be replaced in 2021	-Material's estimate is \$20-25K 304/stainless schedule 10. -Contractor fabrication estimate is \$25,000 -Labor to excavate and install could be done in house. \$25K estimate if done by contractor  One estimate was provided by local contractor. Wahlund construction has expressed interest in the project. SHN is unable to provide cost estimate at this time.  -if over 25K project will need to go out to bid.  <b>Funding Ideas:</b> Most likely equipment reserves /LAIF fund. Further investigation could be done for small, state or local grants.	-Investigate total cost if work is done in house.  -Investigate RFP/bid process/time line.  -Investigate engineering time line and costs.
-One diffuser still needs replacement, one needs repair, one two need maintenance	\$5-10K	1-2 year B-level		-We have the material to repair, replace, and maintain the diffusers. We need to schedule a day for the crane operator, Mike Kelley, and Steve Acker to help.	
<b>2) OUTFALL:</b> Repairs. Nov 2020 report recommends replacing last 6 hold down brackets and continued annual inspections.	\$35-41K Total  \$5,475 bracket fabrication  \$20,000 bracket installation	1-Year A-level		-Divers have provided a quote for 3 separate jobs. Requires 1 dive to measure hold down rod lengths. Time needed to fabricate brackets, then a dive to install, maybe in August 2021.  <b>Funding Ideas:</b> Most likely equipment reserves /LAIF fund. Search state and local grant opportunities.	-Bring bid to board for discussion in March or April. Consider inclusion in 2021-22 budget. Schedule project for next fiscal year.  How vital are annual inspections?



	\$10-16K Annual inspection				
<p><b>3) CONFINED SPACES:</b> Reduction and/or elimination of confined spaces.</p> <p>a) moving two lift stations above ground, modernize equipment, and supply back up power sources.</p> <p>b) on-site (WWTP) 5 confined spaces are the top priority to eliminate/improve, by adding more access points and or moving equipment.</p> <p>Most cost effective fix to these 5 spaces is providing additional access points. 5 new, fixed ladders.</p>	<p>Unknown. Waiting on cost estimate from engineers for lift stations. Pre-fab or remodel existing?</p> <p>Ladder build and install estimate has been requested</p>	<p>2-year, A-Level</p>	<p>Needs to happen soon. Top District safety concern</p>	<p>-MCCSD does not have the staff, training, or equipment to safely conduct confined space entries to maintain equipment. -From a safety and liability stand point reducing and eliminating confined spaces is a level -A, top priority. -The lift stations function, but are almost 50 years old, and in need of both equipment upgrade and backup power, this can be accomplished while removing the confined space with modern design. -Unknown cost, design, and permitting time. Assumed to be less than 1.5 million. -Starting point is a request for qualification from the engineering firms, then look for funding sources, and discuss design. District may have to pay out of pocket for PER. Two years is sort of a minimum time line.</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants? Safety grant, or back up power grant? Rater payers, increase in service fees?</p>	<p>-Request qualifications from engineering firms to help with search for planning grants, design, project funding grants, and project admin. -Secure funding based on engineers estimates, and go out to bid. -What are other small WWTP's doing to address this problem and where is their funding source?</p>
<p><b>4) POND LINER:</b> for equalization basin.  The old liner is damaged and has multiple holes with weeds growing</p>	<p>\$50-150K</p>	<p>2-year B-Level</p>	<p>Level B priority for L/T</p>	<p>-The pond still functions as designed. 100% of effluent flows through this pond. The pond needs to be drained and cleaned to eliminate plant life. The current liner will likely not survive this cleaning process.</p>	<p>-See how realistic Phase II funding is. Can pond liner be included?</p>

<p>through. Replacement was cut from the most recent plant upgrade project due to funding.</p>			<p>-GHD Engineers looking to help MCCSD find funding for recycled water upgrades. Might be able to include this as part of Recycled Water Upgrade.</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community). Consult other small WWTP's.</p>	
<p><b>5) Drying Beds:</b> Rehabilitate two beds by pouring a concrete slab in two of the three old beds.</p> <p>-One of the three beds is the proposed site for the new 50,000 gal recycled water contact/holding tank.</p>	200K	2/3-year B/C-Level	<p>-All three (3) drying beds are permitted and usable as is. -Beds are how this plant operated from 1973-2003. -Beds are lined with sand and have a French-drain water collection system. -Neighbors strongly object to beds being used. -District has no desire to ever use drying beds again. -Beds are an essential emergency backup for plant operations. -If the belt press or dryer break, drying beds are the only real option to maintain plant operations until equipment is fixed. -Trucking wet sludge out of the area is not practical financially or with local resources. -Rehab of beds would reduce the chances of any potential contamination to a neighboring well. <b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community)</p>	<p>-Discussion with neighbors is a necessary first step. -Continue to explore alternative solutions. -Check how realistic phase II funding might be.</p>
<p><b>6) WATER SOURCE SEARCH:</b> Locate and Secure rights to a strong, dependable, and reliable source, or multiple sources.</p>	???	3/5 Year A/B Level	<p>-If we are going to have discussion or develop future plans for a community water system we need to start with finding a source and securing the right to that water. <b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants?</p>	

<p><b>7) AIR SUPPLY PIPING in Treatment Unit:</b> Top of treatment unit is a maze of metal air supply piping. The pipes are 47 years old. Some in worse shape than others, some valves are frozen or rusted. Will need replacement soon. Totally unknown cost. Estimated around 75K</p>	<p>\$75,000</p>	<p>5-7 Year A/B Level</p>	<p>-These pipes are old and rusting, staff does a lot of painting and preventative maintenance. Some may last two years and others a bit longer. -These air pipes, the belt press, and dryer are all essential pieces of equipment. It is hard to say one is a priority over another. If the airlines fail we have hours to repair before we have major operational problems. If the press or dryer fail we have maybe a week before needing to use the drying beds. <b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) Consider equipment replacement reserves, LAIF fund.</p>	
<p><b>8) SLUDGE BELT PRESS:</b> Replacement of the 31 year old sludge press.</p>	<p>\$200-400K</p>	<p>5-Year B-Level</p>	<p>The press machine was purchased in 1990. Company is out of business. Unit is 31 years old, parts are hard to find, technology has improved. The unit works ok at this point and is used one day per week. If it breaks we would be forced to use sludge drying beds. Problems with neighbors. <b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) Consider equipment replacement reserves, LAIF fund. Consider grouping it together as a larger project with the dryer, air piping, and or drying beds.</p>	
<p><b>9) SLUDGE Dryer:</b> Fenton Sludge Drying Unit added in 2003 Is 18 years old, still functional, used weekly, has some issues.</p>	<p>\$700-900K</p>	<p>5-Year B-Level</p>	<p>Unit is great but getting old, used two days per week. Company went out of business, no more service tech's. If something breaks we have about one week before we have to start using drying beds. Big problems with neighbors. Newer or more efficient options may be available.</p>	

C

D

D

<p><b>10) NEW ROOF:</b> for Office Building The roof is near the end of its useful life. Maybe 5 more years at most.</p>	<p>\$39K Estimate in 2020</p>	<p>5-Year B-Level</p>		<p><b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants?</p> <p>-Redwood Roofers observed the roof condition in summer of 2020. Stated it needs replacement and estimated the job.</p> <p>-If roof is being replaced it might be the time to explore solar installation and emergency independence.</p> <p>-MHRB issues?</p> <p>-Coastal Commission issues?</p> <p>-Engage Bruce at Mendo Solar to get preliminary assessment.</p>	
<p>-Good opportunity to add solar array or photo cell shingles. No current estimate on costs for solar</p>				<p><b>Funding Ideas:</b> Maybe LAIF/District reserves, or maybe included with a few other short term projects with access to USDA or State grants. State energy rebate funding?</p> <p>Consider combining short term projects, 7-10 into one mid-sized project with a goal of completion in 5 years.</p>	
<p><b>PROPOSAL:</b></p>	<p>\$ 1.5 Million</p>	<p>5-Year B-Level</p>			
<p><b>Short Term Equipment Needs</b></p> <p><b>1) Utility Pick Up Truck: ¾ ton or larger diesel pickup.</b> -Hoping to purchase with construction contingency funds.</p>	<p>\$50-70K</p>	<p>6 months A-level</p>		<p>-Current pickup is 2001, has multiple problems, is not safe to drive out of town.</p> <p>-Primary need is to trailer Biosolids to Novato once a month</p> <p>-Tow letter for annual sewer cleaning and video, dump runs, general utility use.</p> <p><b>Funding Ideas:</b> USDA Grant, current project contingency funds, or District equipment reserves/LAIF, or finance.</p>	<p>-Phase 1 of WWTP upgrade should finish in March of 2021. There will hopefully be \$50K remaining in contingency that can be used for equipment purchase.</p> <p>-Seek Board approval in March or April for purchase.</p>

<p><b>2) Auto Sampler: 2</b> portable composite sample units.</p>	<p>\$10,000</p>	<p>6 months A-Level</p>		<p>-Currently the district has one composite sampling machine. It is old and worn. Our State Discharge Permit requires both influent and effluent weekly composite samples testing. Our permit makes it necessary to have this equipment, and maintain it in good working order.</p> <p><b>Funding Ideas:</b> USDA Grant, current project contingency funds, or District equipment reserves/LAIF.</p>	<p>-Phase 1 of WWTP upgrade should finish in March of 2021. There will hopefully be \$50K remaining in contingency that can be used for equipment purchase.</p> <p>-Seek Board approval in March or April for purchase.</p>
<p><b>3) Cabinets and counter for Lab:</b> Quote in hand, just need approval.</p>	<p>\$6,000</p>	<p>6 Month A-Level</p>		<p>We just completed a new lab building but it has not sink, no cabinets, or counter. This is a necessary expense.</p> <p><b>Funding Ideas:</b> USDA Grant, current project contingency funds, or District equipment reserves/LAIF, or donation.</p>	<p>-Seek Board approval in March or April to purchase cabinets from current budget.</p>
<p><b>Long Term Priorities List</b></p> <p><b>1) OUTFALL:</b> A new outfall to the ocean. -Top priority long term project, based on reported condition. -996ft Pipe -Cost estimate is rough</p>	<p>\$ 8-10 Million</p>	<p>S/T Repair only</p>	<p>8-10 year A-Level</p>	<p>-8 to 10 years for planning, design, funding , permitting, ENV review -Consider horizontal boring. -Already spent \$280K on inspections and repairs since 2006 -Funding and permitting are top concerns -SHN engineers estimated replacement at \$5 million in 2018, per Mike Kelley, but can't locate estimate. -Could be combined with a new treatment unit as larger project</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants?</p>	

C

D

D

<p><b>2) SECONDARY/NEW TREATMENT UNIT:</b> Construction of the second treatment unit as originally designed, to replace/supplement our 47-year-old unit.</p>	<p>10-12 million at last estimate</p>	<p>Short term N/A</p>	<p>10 Year A-level</p>	<p>-WWTP are typically designed with 200-300% redundancy. MCCSD doesn't have this. Current treatment unit was designed to operate for 30 years, we are almost 20 years past life expectancy. If something breaks we can divert flow for 3-5 days. Not much time to repair. A second unit would allow for maintenance to old unit, provide a backup in the event of problems, likely more efficient.</p> <p>-Can or should the outfall replacement and a new treatment unit be combined into one large project? -Unsure of best location on property for the new unit.</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants?</p>	
<p><b>3) RECYCLED WATER SYSTEM UPGRADE:</b> Phase two of the WWTP upgrade, recycled water system improvement (about \$2 million per SHN engineer's last estimate). -Good P.R. good for the community -Reduces discharge into the ocean.</p>	<p>\$2 million</p>	<p>If GHD can secure funding this could become a high priority short term project</p>	<p>10 Year B-level</p>	<p>Roughly 5-10% of treated water is currently recycled... big challenges on water quality. <b>Phase two project is tied to school upgrade and fire suppression.</b> Potential to help recharge aquifer but serious challenges. Total outflow averages about 33 million gal. per year.</p> <p>-Currently consulting with GHD engineering on funding sources and a project timeline. -GHD says we need to put out a RFQ (request for qualifications) GHD believes MCCSD may qualify as a DAC (disadvantaged community) allowing up to 75% grant funding).</p>	

<p>-Could supply recycled water for fire hydrants in town, increased athletic field irrigation, and more recycled water for school district use, thus reducing the school's need to pump so much potable water up Little Lake Road.</p>				<p>Recycled water use is good for the school, and can help with fire suppression resources.</p> <p><a href="https://casaweb.org/renewable-resources/water-recycling/">https://casaweb.org/renewable-resources/water-recycling/</a></p> <p><a href="https://www.jpdc.org/blog/californias-growing-demand-for-recycled-water-has-ripple-effects/">https://www.jpdc.org/blog/californias-growing-demand-for-recycled-water-has-ripple-effects/</a></p> <p><a href="https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_0al.pdf">https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_0al.pdf</a></p> <p>-Recycled water transfers create a lot of extra work and liability for the District, testing, reporting, and managing. Providing recycled water increases District expenses and liabilities for limited benefits. I love the concept, but the board should be aware of the concerns.</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants?</p>	
<p><b>4) COLLECTIONS SYSTEM REPLACEMENT:</b></p> <p>Current collections system is in decent condition. A few areas need repair.</p> <p>System is 47+ years old, at some point it</p>	<p>Unknown</p>		<p>10-30 Year B-Level</p>	<p>Update video inspection with annual sewer main cleaning.</p> <p>-Short term, 2-5 years a few section of the collection system will need to be replaced. Long term most of the system should last another 20 years barring no significant disasters.</p> <p>-Evergreen St.; Little Lake between HW1 and Lansing; and a section of Main st.; need to be replaced.</p>	



<p>will need to be replaced.</p>				<p>-County repaving schedule has nothing in town scheduled prior 2036.</p> <p>-This could be basis of comprehensive plan over 10-30 years to redo the whole system...and perhaps tie in Municipal potable water system....</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants?</p>	
<p><b>5) COMMUNITY WATER SYSTEM:</b> The current system of GWM is not perfect but it works for the majority of customers.</p> <p>District has limited financial resources, and many higher priority projects. Still no good water source. Current customers to be surveyed through 2050 Climate changes needs to be considered.</p>	<p>Unknown</p>	<p>S/T Low Priority</p>	<p>Long Term 20-30 Year, B or C level</p>	<p>MCCSD Looked into creating a municipal water system in the 1990's. It was cost prohibitive, politically divisive, and no great water source located.</p> <p><b>Problems:</b> No good water source was found or secured. Very political, "water wars" many private properties have good wells and don't want to pay for a municipal system. No current funding for design or source search. How do you force all members to join and pay for water? Water use would still be restricted during drought years.</p> <p><b>Process:</b> survey, have the majority of users deem it a priority. Locate and secure a source. Find funding for preliminary engineering. Develop a plan, design storage and infrastructure, search for construction funding. Secure funding, secure permitting. RFP's, go out to bid. Begin construction.</p> <p>Raises key questions of do we proceed bit by bit or explore and pursue a comprehensive plan... Big issue is exploratory, planning funding in \$2-5 million then \$40-</p>	



				<p>100 million to upgrade whole thing with potable water or some other solution to groundwater issues...long-term big approach...I think worth discussion and some estimates on timing and costs... could be tied to a replacement of collections system.</p> <p><b>Funding Ideas:</b> State grants, USDA Grants/Loan (SHN states we are eligible for 45% USDA Grant funding) (GHD believe we may qualify for 75% Grand Funding as a disadvantaged community) CA Dept. of Water Resources Grants? Loans with State matching funds.</p>	
<b>Proposals: 1</b>	\$25 million		10- Year A-level	-Consider combining long term projects one and two (outfall replacement, secondary treatment unit) into one large project with a 10 year goal of completion.	
<b>Proposal: 2</b>	\$40 million ???		30-Year B-level	-Consider combining long term projects four and five (new collections system, and community water system) into one large project with a 30 year goal of completion.	
<b>Proposal: 3</b>	\$2 million			-Project 3, recycled water upgrades is closely tied to the school project. With assistance to funding it becomes a priority short term project, with difficult funding it becomes a long term project. Further discussion with GHD engineering will help determine potential funding sources and work load for the District, resulting in how the project is prioritized.	

C

D

D