# Rancho Murieta CSD

FISCAL YEAR 2020–21
PROPOSED BUDGET PRESENTATION
CAPITAL IMPROVEMENT
CAPITAL REPLACEMENT
PLANS
MAY 20, 2020





### PROJECT TITLE: MURIETA VILLAGE DISTRIBUTION SYSTEM – REPLACEMENT



**CAPITAL PLAN** Water – Replacement Reserves

**CRP #** 21-01-1

**PROJECT BASIS:** Replace aging schedule 40 PVC water infrastructure running

under Murieta Village residential units.

**DESCRIPTION:** Route new water distribution system within streets and

Murieta Village right of ways that avoid running under the units within the Murieta Village. Provide new piping system for long term viability of water supply to the Murieta village and an increased level of safety for the residents of the Village by abandoning nearly 50 year old PVC water mains that run under residential units. Project aims to avoid potential liability to the District and its rate payers from potential claims should distribution system break under

residential units within the Murieta Village.

**ENVIRONMENTAL OR** This project would require a filing of a Notice of Exemption-

**REGULATORY ISSUES:** public right-of-way.

RISK ASSESSMENT: High.

PROJECT BUDGET: \$877,000

BASIS OF COST EST: Estimates for engineering design, bidding, contractor,

material, project management, and outreach.



## PROJECT TITLE: WATER TREATMENT PLANT CHLORINE GAS TO BLEACH CONVERSION - IMPROVEMENT FUND



Ton cylinders of chlorine gas

**CAPITAL PLAN** Water Improvement Reserves

**CIP** # 21-02-1

**PROJECT** System Conversion to bleach for water disinfection

**BASIS:** 

**DESCRIPTION:** Eliminate the use of chlorine gas at the Water Plant for potable

water disinfection by converting to using industrial strength

sodium hypochlorite (bleach).

REGULATORY

**ISSUES:** 

Safer product for staff; Substantially less regulatory oversight and required staff training; Mitigates risk to community from transport, storage and use of chlorine gas. Filing of a Management of Change with Sacramento County Environmental Management Department

will be required.

RISK

ASSESSMENT:

Provides a safer alternative for the neighboring community vs the potential of a catastrophic chlorine gas leak and chlorine gas

deliveries through community and neighboring roadways.

PROJECT

\$352,940 (2017 figure)

**BUDGET:** 

**BASIS OF** 

**COST EST:** 

Cost estimates are from the 2017 Coastland Capital Improvement fee study, based on removal of gas feed system, procurement and installation of chemical feed skids for bleach injection; engineering for design, plans, bid packet, submittal review and as-builts; contractor procurement and placement of tanks, building tank pads, and installing piping and feed equipment appurtenances.

https://www.ranchomurietacsd.com/files/c82d2d87d/agenda+11 +c+Ord+2017-02+Fee+Study+Report+%28Final+110817%29.pdf



#### PROJECT TITLE: RIO OSO PUMP STATION GENERATOR - REPLACEMENT



CAPITAL PLAN Water – Replacement Reserves

CRP # 21-03-1

PROJECT BASIS: Replace existing 1980 tier 0 generator with a tier 4 diesel or

propane generator to comply with California air quality standards as well as to provide reliable back-up power at

this critical pump station.

**DESCRIPTION:** The Rio Oso booster pump station provides continuous

pumping of water to meet the water pressure and supply demands of Units 3, 3b, and 4 in the North. The generator and electrical switchgear there allow the station to continue

to operate in the event of power outages.

ENVIRONMENTAL OR No REGULATORY ISSUES:

No issues, simple updating of air quality permit for site.

RISK ASSESSMENT: Medium

PROJECT BUDGET: \$65,000 estimated

BASIS OF COST EST: Budgetary estimate from generator vendor, estimate for

electrical services for disconnects and connections.



### PROJECT TITLE: RIO OSO PUMP STATION VFD PANEL - CAPITAL REPLACEMENT



CAPITAL PLAN Water – Replacement Reserves

**CRP #** 21-04-1

PROJECT BASIS: Replace 1994 variable frequency drives (VFDs) and

appurtenances that modulate power to the booster pumps to maintain water pressure. Replacements would ensure long term reliability at this critical site that cannot

experience any failure.

**DESCRIPTION:** The Rio Oso booster pump station provides continuous

pumping of water to meet the water pressure and supply demands of Units 3, 3b, and 4 in the North. The VFDs control the speed of the booster pumps by modulating power to the pump motors through feedback from a pressure gauge and the sites programmable logic controller

(PLC).

**ENVIRONMENTAL OR REGULATORY ISSUES:** 

No issues, simple updating of air quality permit for site.

RISK ASSESSMENT: Medium

**PROJECT BUDGET:** \$60,000 estimated

BASIS OF COST EST: Budgetary estimate from generator vendor, estimate for

electrical services for disconnects and connections.



### PROJECT TITLE: WATER PLANT COMPRESSORS – CAPITAL REPLACEMENT



Water - Replacement Reserves CAPITAL PLAN

21-05-1 CRP#

PROJECT BASIS: Replace two compressors that were installed in 2015 as part

> of the water treatment plant expansion. Since that time the compressors have sustained damage from chemical vapors present within the room in which they reside. A separate room will be created for them to prevent this from

happening again.

These compressors supply air to various pneumatic valves DESCRIPTION:

and the membranes for integrity testing.

**ENVIRONMENTAL OR** None

REGULATORY ISSUES:

RISK ASSESSMENT: Medium

PROJECT BUDGET: \$25,000 estimated

Budgetary estimate from vendors. BASIS OF COST EST:



# PROJECT TITLE: WATER METER REPLACEMENTS, COMMERCIAL, UNIT 1 & UNIT 2 – CAPITAL REPLACEMENT





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**CAPITAL PLAN** Water – Replacement Reserves

CRP # 21-06-1

**PROJECT BASIS:** Replace 275 older water meters with mechanically moving

parts, which are at the end of their intended life cycle, with

new solid-state electromagnetic water meters.

**DESCRIPTION:** Water meters track the water usage which is used for billing

at the usage rate and for water accounting. Meters with mechanical parts wear out over time and loose accuracy until complete failures bring them to staff's attention. Proactively searching out the older mechanical meters based on their serial numbers that are tracked in the billing system, will allow the District to replace these older meters sooner. This will result in a more accurate account of water being used through the new meters and therefore a slight increase in revenue and more accurate water use data for the District showing less water loss. The new meters also have built in data tracking that may be downloaded by staff utilizing existing vendor software, and a 10 year full rated

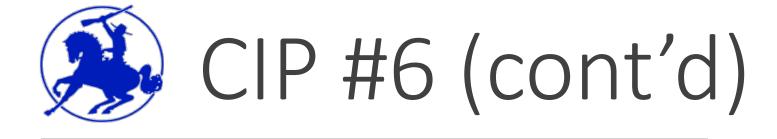
warranty, with another 10 year pro-rated warranty.

ENVIRONMENTAL OR REGULATORY ISSUES:

None

Low

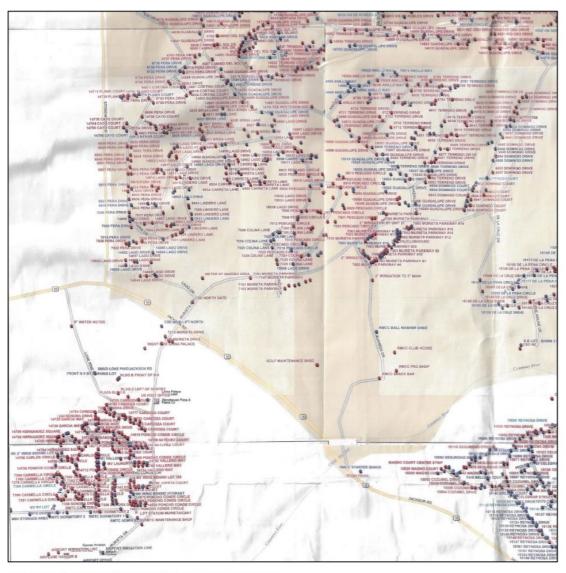
RISK ASSESSMENT:



**PROJECT BUDGET:** \$60,000 estimated

BASIS OF COST EST: Current cost from vendor and meters amounts. Costs do

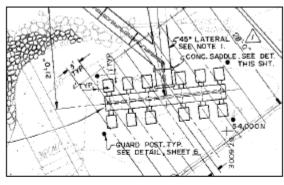
not factor in District staff time, only material costs.



Example of water meter locations throughout District



### PROJECT TITLE: GRANLEES DIVERSION INTAKE - CAPITAL REPLACEMENT





CAPITAL PLAN Water – Replacement Reserves

CRP # 21-07-1

PROJECT BASIS: Replace potentially failing components as a pro-active step

towards preventing future failures that could delay the District from diverting river water to our storage reservoirs.

**DESCRIPTION:** The intake system is located on the north side of the

Cosumnes River. It is used to draw water from the Cosumnes river for the community's potable water storage. For this project we would evaluate intake piping, screening, and compressor and air piping that is utilized for backflushing the screens, and replace any necessary

components to prolong the life of the water intake system.

ENVIRONMENTAL OR REGULATORY ISSUES:

None

RISK ASSESSMENT: Medium

PROJECT BUDGET: \$85,000 estimated

BASIS OF COST EST: Stainless steel fasteners, piping, compressor for

backflushing, and possible pipe repairs. If pipe replacement is needed, cost will be significantly higher, therefore two

costs are shown.



### PROJECT TITLE: MAIN LIFT NORTH SEWER PUMP STATION GENERATOR — REPLACEMENT



CAPITAL PLAN Sewer – Replacement Reserves

CRP # 21-08-2

PROJECT BASIS: Replace existing tier 0, 338 HP generator with a tier 3 diesel

or propane generator to comply with California air quality standards as well as to provide reliable back-up power at

this critical sewer pump station.

**DESCRIPTION:** The Main Lift North sewer pump station is the largest sewer

pumping station in the District. It collects and pumps sewer from Units 1, 2, 3, 3b, and 4 in the North and all commercial and Murieta Village areas south of Highway 16 north of the river. The generator and electrical switchgear there allow the station to continue to operate in the event of power

outages.

ENVIRONMENTAL OR REGULATORY ISSUES:

Updating of air quality permit for site required. Site power is shared with Sacramento Metro Fire Station 59 under an

agreement and will need coordination with them.

RISK ASSESSMENT: Medium

PROJECT BUDGET: \$125,000 estimated

BASIS OF COST EST: Budgetary estimate from generator vendor, for a fixed tier 3

generator, transfer switch, start-up and testing.



### PROJECT TITLE: SECURITY LICENSE PLATE READER REPLACEMENT







CAPITAL PLAN Security Reserves

**CRP #** 21-09-03

**PROJECT BASIS:** Upgrade the existing North Gate License Plate Reader (LPR)

management system to new system with increased storage

and additional capabilities.

**DESCRIPTION:** Currently the LPR camera systems at the North Gate record

and save video for approximately 25-30 days. We will upgrade the system to add capacity to allow for 90-day storage of video. The current system is also near end of life

and no longer reliable.

ENVIRONMENTAL OR

**REGULATORY ISSUES:** 

None

RISK ASSESSMENT: Low

PROJECT BUDGET: \$3,500.00 estimated

**BASIS OF COST EST:** Budgetary estimate from camera vendor



### PROJECT TITLE: SECURITY CAMERA STORAGE REPLACEMENT









CAPITAL PLAN

Security Reserves

CRP#

21-10-03

PROJECT BASIS:

Replace existing gate camera memory systems to longer

term memory.

DESCRIPTION:

Currently the camera systems at the North and South Gates record and save video for approximately 25-30 days. We will upgrade the hard drive memory systems so we will get 90-day storage of video. The current memory storage is also aged and not reliable.

ENVIRONMENTAL OR

None

**REGULATORY ISSUES:** 

RISK ASSESSMENT: Low

PROJECT BUDGET: \$18,000.00 estimated

BASIS OF COST EST: Budgetary estimate from camera vendor



### FINANCIAL SYSTEM REPLACEMENT RFP - ADMIN REPLACEMENT RESERVES



CAPITAL PLAN Administrative Replacement Reserves

CRP # 21-11-4
PROJECT BASIS: Replace.

**DESCRIPTION:** The reasons why it is time for the District to move to a

new ERP system:

 The District has been using Dynamics GP since 1995 and outgrown its capacity. Staff often find themselves wrestling with bottlenecks and complications with the system.

- Dynamics GP does not have specific module to handle fund accounting which is much needed by the District.
- Dynamics GP does not offer a fully cloud-based business solution.
- There has been a lot of controversy surrounding the future of Dynamics GP for the Public Sector.
- Dynamics GP is losing its robust partner ecosystem. The pool of partners and the Dynamics professionals is set to shrink as GP professionals retire or move on to products which have a longer shelf-life

ENVIRONMENTAL None REGULATORY ISSUES:

RISK ASSESSMENT: Medium

PROJECT BUDGET: \$25,000 estimated

**BASIS OF COST EST:** Budgetary estimate from vendors