pink = completed in-house blue = needed for future planning orange = critical project green = continuation of approved projects purple = energy savings grey = paid for by others

FY 2017/18:

FY 2017/18:

FY 2017/18:

FY 2017/18:

\$91.800

\$74,500

\$90,000

\$207,000

COLLECTION SYSTEM

13701 Mainline Sewer Rehabilitation

Ongoing program to conduct spot repairs to damaged sewer lines using NapaSan crews or an outside contractor, extending the useful life of these assets.

13702 Manhole Raising / Rehabilitation

FY 2017/18: \$206,000 Ongoing program to fund the raising of manhole rims in streets that have been resurfaced. NapaSan replaces or rehabilitates damaged manholes in this program.

13703 Lateral Replacement / Rehabilitation

Ongoing program to rehabilitate street laterals as required using NapaSan crews or an outside contractor.

13704 Cleanout Installation / Rehabilitation

Ongoing program using NapaSan crews to install lateral clean-outs at the property line where one does not exist.

13705 Inflow & Infiltration (I&I) Reduction Program

This program conducts flow monitoring and field reconnaissance for I&I reduction projects. A consultant and NapaSan staff will analyze the effectiveness of the I&I reduction projects.

I&I Smoke Testing Project Total: \$100,000 FY 2017/18: \$100,000

Smoke testing is used to determine whether there is inflow from roof leaders, area drains, or other sources in areas with high inflow and infiltration.

Collection System Asset Management Software Project Total: \$350,000 FY 2017/18: \$350,000 This replaces the existing asset management software in the collection system that is inadequate to meet the current data-

driven decision making needs for sewer system asset management.

17702 Upper Lateral Rehabilitation - Basin L (Pilot #2) \$160,300 **Project Total:** FY 2017/18: \$155,300

This pilot project will replace residential private sewer lateral pipes in a portion of Basin L.

Upper Lateral Rehabilitation - Basin L (Pilot #3) \$165,700 FY 2017/18: \$5,000 **Project Total:**

This pilot project will replace residential private sewer lateral pipes in a portion of Basin L.

Manhole Rehab - Nipak - Basin H **Project Total:** \$284,600 FY 2017/18: \$284,600

The project will rehabilitate existing manholes to decrease groundwater infiltration into the collection system.

17705 Soscol Ave (8th to Oil Company Road) **Project Total: \$1,450,000** FY 2017/18: \$950,000

The project will rehabilitate existing large diameter reinforced concrete pipe that is degraded and nearing the end of its useful life.

14703 Browns Valley Truck Interceptor **Project Total: \$17,038,756** FY 2017/18: \$9,237,000

The project will intercept sewage from the Browns Valley area and bypass it around the downtown area. The project goal is to convey increased flows in the sewer system and to decrease the potential for overflows.

FY 2017/18: \$2,942,000 17708 Summer 2017 Sewer Rehabilitation **Project Total: \$5,322,000**

This collection system rehabilitation project will be designed and constructed to reduce I&I in Basin G (Browns Valley Area) and other high priority areas.

Summer 2018 Sewer Rehabilitation Project Total: \$4,250,000 FY 2017/18: \$1,650,000

This collection system rehabilitation project will be designed and constructed to reduce I&I in various high priority areas.

pink = completed in-house
blue = needed for future planning
orange = critical project
green = continuation of approved projects
purple = energy savings
grey = paid for by others

Summer 2019 Sewer Rehabilitation

Project Total: \$4,779,200

FY 2017/18:

\$20,000

This collection system rehabilitation project will be designed and constructed to reduce I&I in various high priority areas.

COLLECTION SYSTEM EQUIPMENT

Locatable Mini-camera #2 Replacement Project Total: \$11.100 FY 2017/18: \$11.100

This project will replace this equipment with consistent mechanical problems.

Manhole Smart Covers (4) Project Total: \$25,000 FY 2017/18: \$25,000

This project will purchase level sensing equipment for installation in collection system manholes to monitor high flows during wet-weather conditions.

Vehicle 504 - TV Truck Project Total: \$270,000 FY 2017/18: \$270,000

This project will purchase new CCTV equipment for the existing TV truck.

LIFT STATIONS

There are no Lift Station projects in FY 2017/18.

TREATMENT

13745 Pond 1 Dredge Project Total: \$3,400,000 FY 2017/18: \$400,000

This project will install a dredge in the Pond 1 Oxidation Pond, to remove solids after treatment in the pond, for incorporation into the fields at Jameson.

TREATMENT - EQUIPMENT

13735 Duel Fuel Boiler Burner Project Total: \$155,300 FY 2017/18: \$155,300

Replace the existing boiler to enable processing of digester gas and natural gas. The existing boiler does not meet existing air regulations.

13741 Secondary PS Pump Rebuild (3) Project Total: \$118,500 FY 2017/18: \$38,800

 $This\ equipment\ is\ at\ the\ end\ of\ its\ useful\ life\ and\ needs\ to\ be\ replaced.$

17713 Secondary PS VFD Replacement (3) Project Total: \$166,400 FY 2017/18: \$55,400

This equipment is at the end of its useful life and needs to be replaced.

13743 Residual Analyzers (Deox) Replacements Project Total: \$25,000 FY 2017/18: \$5,000

This equipment is at the end of its useful life and needs to be replaced.

3W Pipeline - Soscol PS to Plant - Rehab Project Total: \$33,300 FY 2017/18: \$33,300

Rehabilitate existing pipeline between recycled water reservoirs and plant 3W system to allow tertiary treated water for plant utility water use This project add redundancy to the 3W system.

3W Strainer Project Total: \$83,200 FY 2017/18: \$83,200

Add strainer to the 3W system to protect pumps that use 3W for seal water.

3W VFD Project Total: \$62,100 FY 2017/18: \$62,100

Install a new VFD for the existing second 3W pump at the treatment plant. This project adds redundancy to the 3W system.

pink = completed in-house blue = needed for future planning orange = critical project green = continuation of approved projects purple = energy savings grey = paid for by others

17714 WWTP MP - 3W System Improvements **Project Total:** \$500,000 FY 2017/18: \$440,000 Replace valves and address corrosion in the 3W system at the treatment plant. 17715 Turbidimeters (7) Tertiary Replacements FY 2017/18: \$20,000 **Project Total:** \$43,000 This equipment is at the end of its useful life and needs to be replaced. **Primary Influent Pipe - East Gallery Project Total:** \$250,000 FY 2017/18: \$250,000 Replace or rehabilitate a section of pipe within the treatment plant that is corroded and leaking. **Lab - Distillation System Project Total:** \$6,000 FY 2017/18: \$6,000 Purchase new lab equipment to provide access to additional information. Lab - Muffle Furnace Replacement **Project Total:** \$15,000 FY 2017/18: \$15,000 Replace existing equipment in the lab that is at the end of its useful life. Main - Rotork Actuator Replacement **Project Total:** \$91.800 FY 2017/18: \$91,800 This project will replace existing valves actuators in the treatment plant. **Main - Septage Card Reader Replacement Project Total:** \$21,400 FY 2017/18: \$21,400 Replace the existing card reader for the septage receiving station. \$50,000 Main - Secondary Clarifier Mech/Structure Rehab **Project Total:** \$400,000 FY 2017/18: Evaluate condition of existing secondary clarifiers. If necessary, in the future years, repair or rehabilitate existing steel and/or concrete components. FY 2017/18: Main - Filter Flow Control - Rotork Valves **Project Total:** \$46,600 \$46,600 Add new valves to the filter structure to control filter influent. Main - Neuros Blowers Rebuilt **Project Total:** FY 2017/18: \$62,100 \$126,400 Hire a contractor to rebuild the existing blowers as part of scheduled maintenance. Main - CCB #3 Effluent Gate **Project Total:** \$5,000 FY 2017/18: \$5,000 Repair or replace existing gate. **Main - FOG Station Water Heater** \$5,000 **Project Total:** \$5,000 FY 2017/18: Install a larger water heater at the FOG station for increased maintenance of the FOG system. Main - Pond 4 Pump Station - Repair Leak **Project Total:** FY 2017/18: \$24,000 \$24,000 Repair a discharge pipe leak below the pump station. Main - Filter 1-4 Air Valve \$10,000 FY 2017/18: \$10,000 **Project Total:** Provide isolation valves to air lifts at filter cells 1-4 to provide individual air control to each filter cell.

TREATMENT - STRUCTURES

Main - Belt Press Hydraulic Actuator Replacement

Replace existing actuators that are at the end of their useful life.

17726 Headworks Equipment Rehab/Replacement Project Total: \$2,060,000 FY 2017/18: \$250,000

Project Total:

\$20,000

FY 2017/18:

\$20,000

pink = completed in-house blue = needed for future planning orange = critical project green = continuation of approved projects purple = energy savings grey = paid for by others

OPS Building HVAC and Lab Ventilation

Project Total: \$500,000 FY 2017/18:

\$500,000

Fixes various deficiencies in the HVAC and electrical systems of building and resolves a ventilation safety issue in the lab.

Earthquake Repair - Digester Tower

Project Total: \$300,000 FY 2017/18:

\$300,000

Repairs damage to the digester bridge off the digester tower cause by the 2014 earthquake.

Roof Replacement-Solids Handling/Digester Tower

Project Total:

\$232,900 FY 2017/18:

\$232,900

Replace existing roof that is leaking and at the end of its useful life.

SCADA

SCADA MP Project #1 - Network Monitoring

Project Total:

\$210,700 FY 2017/18: \$50,000

This project increases the network monitoring of the SCADA system.

RECYCLING - DISTRICT

16716 Line Recycled Water Reservoirs

Project Total: \$2,146,600

FY 2017/18: \$1.800.000

This project will install a non-permeable liner on the bottom of the existing recycled water reservoirs used for daily storage and equalization. The project will increase the storage capacity of the existing ponds by approximately 50%.

Jameson 24" Flow Meter Rehab

Project Total:

\$6,200

FY 2017/18:

\$6,200

Rehabilitate/replace existing master recycled water flow meter serving Jameson Ranch, Eagle Vines, Chardonnay and Kirkland Ranch.

Coombsville Truck Fill Station

Project Total:

\$100,000

FY 2017/18:

\$100,000

Install a recycled water truck fill station in the MST area off of Coombsville Road.

RECYCLING - EXPANSION

13727 North Bay Water Reuse Project

FY 2017/18:

This is the cost of program development, project management, and environmental analysis associated with the expansion of recycled water production and delivery, and seeking federal and state grant revenues in support of recycled water.

17734 MST RW Pipeline Extension

Project Total: \$3,999,300

FY 2017/18: \$2,800,000

This project, financed by Napa County through WaterSmart grants and an SRF loan, will design and construct a recycled water pipeline in Coombsville Road from 2nd Avenue to Terrace Drive.

OTHER

Development Technical Support 13729

FY 2017/18:

\$239,900

District staff reviews and comments on development plans involving sewer and recycled water facilities and contributed capital.

Box Culvert - Fugundes Emergency Access

Project Total:

\$105,000

FY 2017/18:

\$5,000

Reconstruct a culvert on the Fugundes property, near the airport, to provide emergency access to the treatment plant.

GPS Handheld

Project Total:

\$15,000

FY 2017/18:

\$15,000

Purchase equipment for the purpose of documentation of as-built conditions of new assets.