

## Capital Improvement Plan



*Installation of recycled water pipeline in the Los Carneros Water District area*

## Capital Improvement Plan

### *Program Description*

The Capital Improvement Plan (CIP) is designed to identify capital expenditures for the next ten years and to plan appropriately for how to complete those projects within projected revenues and staffing capacity. The plan includes the replacement and rehabilitation of existing capital assets as well as the acquisition or construction of new capital assets.

### *Definition of Capital Expenditures*

Capital expenditures, or capital outlays, are cash outlays by the District that result in the acquisition or construction of a capital asset. A capital asset is any asset of significant value (over \$5,000) that has a useful life of over one year. Examples include land, buildings, machinery, vehicles and equipment. All capital assets acquired or constructed are included in the Capital Improvement Plan. Land is always considered a capital asset, regardless of value.

### *Capital Plan Development Process*

Annually, the District updates its Ten-Year Capital Improvement Plan. The plan undergoes several levels of review and alteration. First, a project is individually evaluated to determine whether it is necessary to do the project, or if a less expensive alternative is available. If the project is still the best alternative, then an evaluation is done to determine when the project should be done, based on the condition of the existing assets or the operational and maintenance needs for the project.

Management and supervisory staff also are provided an opportunity to identify new capital projects through the Project Charter process. New projects are proposed to the Capital Program Manager and the District Engineer who evaluate the projects and determine their need and level of priority. Once vetted through this process, new projects are added to the CIP as funding allows.

### *Vehicle Replacement Guidelines*

The District maintains a fleet of vehicles used solely for purposes related to the direct maintenance and operations of the District. When a vehicle is purchased, it is identified at that time how long that vehicle should continue to serve its intended function, provided that the vehicle is maintained properly. The replacement of that vehicle is then scheduled in the Capital Improvement Plan, to

ensure that the District has adequately planned for the replacement costs associated with the vehicle.

Every year, a team of District staff reviews the list of vehicles owned by the District and the replacement schedule. The team makes the following recommendations:

- Move vehicles back or forward on the replacement schedule based on the maintenance history of the vehicle and any current maintenance problems;
- Move vehicles back or forward on the schedule based on regulatory requirements (such as CARB requirements for diesel engines);
- Move vehicles between organizational units when the use of the vehicle changes;
- Identify whether a vehicle scheduled for replacement should be recommended for surplus, or when it could still be used effectively by another department; and
- Identify when service needs have changed that could necessitate that a vehicle be replaced by a different type of vehicle or not at all.

Senior management reviews the recommendations of the Fleet Team, accepts or rejects recommendations, and incorporates accepted changes into the Ten-Year Capital Improvement Plan. All decisions to declare a vehicle surplus and replace the vehicle are brought to the NSD Board of Directors for approval, in accordance with District procurement policy.

The replacement of fleet vehicles represents almost \$5.5 million, or 3.0% of the entire Ten-Year Capital Improvement Plan. All revenues collected from the sale of any vehicles declared surplus is used to offset the cost of new vehicles.



*The Dystor cover, which serves as the biogas holder, was replaced in FY 2013/14 due to a rip in the inner membrane.*

## ***Sources of Capital Expenditure Funding***

There are several sources of funding for capital projects. The District collects capacity charges on new development to pay for its share of expanding the collection and treatment systems. The District also collects sewer service charges revenue in excess of operational needs to pay for replacement and rehabilitation projects. The fees collected as part of development plan review are used for capital projects, as well as grant and intergovernmental revenue.

### ***Use of Capacity Charges for Expansion***

The District imposes a capacity charge on new development (see the Budget Summary section, [page 30](#), for more information on this revenue source).

In August 2009, the District completed a study of capacity charges. The study determined that from FY 1995/96 to FY 2007/08, there was significantly more money spent to provide new capacity (expansion) than there was capacity charge revenue collected. As of July 1, 2008, the expansion fund (capacity charges) was in deficit to existing ratepayers and the capital projects fund by \$12.6 million.

As new projects are completed, their benefit to existing users and to new development is evaluated, and a split of expenses between the two is assigned. At the end of the fiscal year, the deficit is adjusted based on the amount of revenue received in capacity charges and the amount of capital expenditure for expansion projects. The following represents a summary of this accounting:

#### FY 2008/09 Actual

Beginning Deficit (7/1/08)	(\$12,607,167)
Revenues	1,387,193
Expansion Projects	1,663,801

#### FY 2009/10 Actual

Beginning Deficit	(\$12,883,775)
Revenues	600,664
Expansion Projects	2,191,370

#### FY 2010/11 Actual

Beginning Deficit	(\$14,474,480)
Revenues	2,183,802
Expansion Projects	2,811,161

#### FY 2011/12 Actual

Beginning Deficit	(\$15,101,839)
Revenues	3,330,418
Expansion Projects	4,208,445

#### FY 2012/13 Actual

Beginning Deficit	(\$15,979,866)
Revenues	2,693,047
Expansion Projects	2,171,064

#### FY 2013/14 Actual

Beginning Deficit	(\$15,457,883)
Revenues	3,635,826
Expansion Projects	7,447,155

#### FY 2014/15 Actual

Beginning Deficit	(\$19,269,211)
Revenues	3,341,297
Expansion Projects	10,657,234

#### FY 2015/16 Estimated

Beginning Deficit	(\$26,585,149)
Revenues	2,998,000
Expansion Projects	3,328,700

#### FY 2016/17 Budget

Beginning Deficit	(\$26,915,849)
Revenues	5,512,000
Expansion Projects	2,438,200
Ending Deficit	(23,842,049)

A budget deficit and situation where expenses on expansion projects exceeds revenues means that the current ratepayers in the system are paying more than their allocated share of capital expenses, as the deficit is made up using sewer service charges and other revenues from operational sources.

A copy of the Capacity Charges Report for Fiscal Year 2014/15 can be found in Appendix F of this budget document.

## ***Changes from Prior CIP***

The CIP was amended by the Board several times during FY 2015/16, after initial adoption. The following is a summary of the significant changes made to the CIP during the last fiscal year, not counting carry forwards of uncompleted capital projects from the prior year:

- Established a new project for the replacement of the North Napa Siphon Cover to address odor issues (CIP #16718) with a budget of \$75,000.



- Decreased the budget for the Basin L I&I Reduction Project #4 (CIP 14701) by \$1,423,400 to match the final scope of work and to recognize lower than anticipated bids.
- Increased the budget for the I&I Reduction Program (CIP #13705) by \$17,000.
- Increased the budget for the Sarco Creek Pipeline Replacement being reimbursed by CalTRANS (CIP #15703) by \$205,000 based on bids received.
- Reduced the budget for the ACP CIPP Lining Project #1 (CIP #15721) by \$343,500 to match the final scope of work and bids received.
- Incorporated the Collection System Master Plan Amendment (CIP #16702) into the Browns Valley Road Sewer Interceptor project (CIP #14703).
- Created a new project for Manhole Portable Flowmeters (CIP #16720) as part of the I&I related projects that have an impact on chloride levels in recycled water (\$15,000).
- Increased the Phase 1 Recycled Water Expansion project (CIP #13714) by \$115,000 to meet estimated project costs.
- Increased the budget for the Aeration Basin Instrumentation and Control project (CIP #15713) by \$126,000.
- Created a new project for replacement of tractor tracks (CIP #16719) for \$20,000 and the purchase of a tractor attachment (CIP #16721) for \$7,000, related to biosolids application.

The net impact of the adjustments to the CIP was neutral; there was no increase or decrease in the total capital budget for FY 15/16.

### **Summary of FY 2015/16 Capital Projects**

The following is a summary of FY 2016/17 capital projects. **Dollar amounts noted are the amount budgeted for FY 2016/17, and not the entire amount of the project.** For complete financial information, see the table of projects that follows, starting on [page 81](#).

**Collection System** – Collection System projects represent routine replacement or rehabilitation of existing pipeline or equipment. These projects are designed to replace or improve assets to extend their useful lives or to improve their function by reducing how rainwater and groundwater can enter the collection system. Major projects beginning or continuing this year include the Browns Valley

Sewer Interceptor project, the fifth I&I Reduction project in Basin , an I&I reduction project in Basin G (Browns Valley), an ACP CIPP Lining project, and several smaller rehabilitation projects. Collection system projects for the fiscal year total \$8,991,600.

**Collection System Equipment** – The Collection Department will be replacing its water truck and one of its cleaning eels. Total replacement cost is \$213,300.

**Lift Stations** – Lift stations are pump stations within the sewer collection system. FY 2016/17 includes the beginning of improvements to the West Napa Pump Station, which is associated with the Browns Valley Road Sewer Interceptor project. Cost is \$1,750,000.

**Treatment** – FY 2016/17 includes work to replace odor control equipment in the headworks and primary clarifiers. Capital costs in this area total \$20,000 for this fiscal year.

**Treatment – Equipment** – These projects include a number of equipment replacements, most notable of which are replacement of the aeration basin panels and implementation and control replacements (\$1,200,000), stationary gas detectors (\$140,000), and overhaul of the cogeneration engine's bottom end (\$75,000) and the purchase and installation of a new strain press as part of the Fats, Oil and Grease (FOG) system (\$200,000). The total FY 2016/17 expenditure is \$2,096,800.

**Treatment Plant – Structures** – There are a few projects associated with the structures at the treatment plant. The most significant are the two roof repair projects. The total FY 2016/17 expenditure is \$195,000.

#### **Ten-Year CIP Summary**

	<b><u>FY 2016/17</u></b>	<b><u>10-Year CIP</u></b>
Collection System	\$8,991,600	\$81,493,400
Collection System Equipment	213,300	3,476,500
Lift Stations	1,750,000	3,356,900
Treatment	20,000	5,722,700
Treatment Equipment	2,096,800	8,051,500
Treatment Structures	195,000	24,936,800
SCADA	0	1,073,700
Recycling-District	1,637,200	5,262,100
Recycling-Expansion	2,045,000	42,775,400
Other	231,800	5,655,900
<b>Total</b>	<b>\$17,180,700</b>	<b>\$181,804,900</b>

**SCADA** – SCADA is the hardware and software that is used to operate the treatment plant. In FY 2016/17, there are no SCADA projects.

**Recycling-District** – This section includes projects and equipment necessary for the District to maintain its fields, distribute recycled water, and land apply biosolids. FY 2016/17 includes lining the existing two recycled water reservoirs to increase their holding capacity (\$1,320,000) and replacement of a tractor (\$200,000) among other projects. The total FY 2016/17 expenditure is \$1,637,200.

**Recycling-Expansion** – This section includes projects to expand the recycled water distribution system into the community, or expand the treatment capabilities at the plant. Expenses here include continued efforts through the North Bay Water Reuse Project to apply for and manage federal and state grants (\$845,000) and the extension of the recycled water distribution pipeline into the MST (\$1,200,000).

**Other** – Development technical support (\$231,800) is the capitalization of staff time spent reviewing the plans and inspections associated with contributed capital.

### ***Partner-Funded Projects***

The District has partnered with a company to develop a 1.0 Megawatt photo-voltaic (PV) solar power system. The District has entered into a Power Purchase Agreement whereby the solar provider will build, operate and maintain the PV solar system on District-owned property. The provider will sell electricity to the District at a rate lower than its current rate for grid power. The project is expected to save the District over \$2.8 million NPV over 25 years. As part of the project, the District has negotiated to retain ownership of the environmental attributes of the project. The District has the option to purchase the PV solar system in the 6<sup>th</sup> year of the agreement. The construction for this project is expected to be completed in September 2016.

### ***Unfunded or Delayed Projects***

The Capital Improvement Plan includes projects that have been clearly identified and programmed. It also includes some “placeholder” projects, where the specific project has not been identified but there is money allocated nonetheless. These placeholders are included in the plan to recognize that there is the

need to plan for future replacement and rehabilitation projects, even though the specific projects have not yet been scoped and planned. Providing a placeholder for these future projects will ensure that there are adequate resources to pay for these projects once they are known.

A number of projects that were slated to begin in FY 2016/17 in last year’s CIP have been pushed out to begin in future years. This was done after it was determined that only critical CIP project would be started in FY 2016/17, based on the sewer service charge increase set as part of the Proposition 218 process and the 10-Year Financial Forecast. These delays allowed the District to present a capital budget for FY 2016/17 that did not exceed available resources. They include:

- Deferred replacement of Collection System Asset Management Software by one year
- Deferred replacement of a Collection System maintenance truck by two years
- Deferred installation of a redundant 12kV electrical line to the recycled water pump station by two years
- Deferred correction of the transfer structure between Pond 2 and Pond 4 by two years
- Deferred installation of variable frequency drives (VFDs) at the Jameson recycled water pump station by two years
- Deferred replacement of the pull flair chopper used for biosolids incorporation by one year
- Deferred replacement of the pipe dolly by five years

Staff believes that these delays will not result in deferred maintenance scenarios, nor will they delays pose an unreasonable risk for system failure or permit violation.

### ***Impact of Projects on Operating Budget***

Many of the capital projects planned for FY 2016/17 are replacements and rehabilitations of existing capital assets, so it is not expected that these capital projects will have an impact on future operating budgets. However, some the FY 2016/17 capital projects will have a significant impact on the current and future operations and maintenance budgets of the District.

The I&I Reduction projects in the Collection System (Basin L #5 and Basin G #1) are designed to decrease the amount of rainwater and groundwater

that get into the system. This reduces future costs by reducing the need to build bigger pipes as well as reduces the amount of influent that the plant needs to treat. It also reduces the need for cleaning and root removal maintenance activities. The immediate, short-term savings have not been calculated, but should have a positive effect on the operating budget.

The Browns Valley Trunk Sewer Interceptor project (CIP #14703) will increase the amount of sewer main that will need to be maintained in the Collection System. However, it is not significant enough in size to impact the staffing levels or other direct expenses in the Collection System operating budget.

The Odor Control VFD (CIP #17717) and the LED Pole/Arm Mounted Fixtures (CIP #17718) are both energy projects that will result in increased energy efficiency in the treatment plant. An audit by PG&E estimated the savings from these projects at \$14,100 annually for CIP #17717 and \$10,400 for CIP #17718.

Lining the existing recycled water reservoirs (CIP #16716) will increase the operating efficiency of the recycled water system and allow more water to be stored. However, there are no increased or decreased operating costs expected with this project.

The new FOG strain press (SIP #17716) will increase electricity consumption, but not significantly. The increased quality of FOG into the digester will offset these costs through increased energy generation in the cogeneration engine.

The expansion of the MST recycled water pipeline (CIP #17737) will lead to increased maintenance and operating costs for those pipelines over time. These costs, including rehabilitation projects for all of the recycled water pipelines, are expected in future years and included in the CIP. The operating budget for

this project once completed in FY 17/18 will need to recognize an additional \$22,000 in treatment costs, although these costs will be offset by increased recycled water sales revenue.

The project to replace the aeration basin diffusers and install better instrumentation and controls to manage dissolved oxygen levels (CIP #15713) is estimated by PG&E to save the District \$27,400 once fully operational.

#### Impacts of Capital Projects on Operating Budget

<u>CIP #</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>
17717	(7,000)	(14,500)	(14,900)
17718	(5,200)	(11,700)	(12,100)
17737	0	22,000	22,600
14727	0	(28,200)	(29,100)
<b>Total</b>	<b>(\$12,200)</b>	<b>(\$34,400)</b>	<b>(\$33,500)</b>



*New Administration Building under construction in 2013*

## FY 2016/17 CIP Project Descriptions

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

### COLLECTION SYSTEM

<b>13701 Mainline Sewer Rehabilitation</b>	<b>FY 2016/17:</b>	<b>\$88,700</b>
<i>Ongoing program to conduct spot repairs to damaged sewer lines using NSD crews or an outside contractor, extending the useful life of these assets.</i>		
<b>13702 Manhole Raising / Rehabilitation</b>	<b>FY 2016/17:</b>	<b>\$198,900</b>
<i>Ongoing program to fund the raising of manhole rims in streets that have been resurfaced. NSD crews replace damaged manholes in this program.</i>		
<b>13703 Lateral Replacement / Rehabilitation</b>	<b>FY 2016/17:</b>	<b>\$72,000</b>
<i>Ongoing program to rehabilitate street laterals as required using NSD crews or an outside contractor.</i>		
<b>13704 Cleanout Installation / Rehabilitation</b>	<b>FY 2016/17:</b>	<b>\$87,000</b>
<i>Ongoing program using NSD crews to install lateral clean-outs at the property line where one does not exist.</i>		
<b>13705 Inflow &amp; Infiltration (I&amp;I) Reduction Program</b>	<b>FY 2016/17:</b>	<b>\$200,000</b>
<i>This program conducts smoke testing and flow monitoring for I&amp;I reduction projects. A consultant will conduct an analysis to evaluate the effectiveness of the I&amp;I reduction projects.</i>		
<b>16701 Basin L - I&amp;I Reduction Project 5</b>	<b>Project Total: \$2,200,000</b>	<b>FY 2016/17: \$1,400,000</b>
<i>Project 5 will be designed and constructed to reduce I&amp;I in Basin L (north of Imola Avenue, south of Napa Creek, and west of the Napa River).</i>		
<b>17701 ACP CIPP Lining Project #2</b>	<b>Project Total: \$1,200,000</b>	<b>FY 2016/17: \$350,000</b>
<i>The project will rehabilitate existing asbestos cement pipes (ACP). The ACP mains are degrading and were determined to be in immediate need of rehabilitation.</i>		
<b>17702 Upper Lateral Rehabilitation - Basin L (Pilot #2)</b>	<b>Project Total: \$160,300</b>	<b>FY 2016/17: \$5,000</b>
<i>This pilot project will replace residential private sewer lateral pipes in a portion of Basin L.</i>		
<b>17703 Manhole Rehab - Nipak</b>	<b>Project Total: \$90,000</b>	<b>FY 2016/17: \$90,000</b>
<i>The project will rehabilitate existing manholes to decrease groundwater infiltration into the collection system.</i>		
<b>17704 Infiltration Rehab - SSMH and Pipelines (CI-)</b>	<b>Project Total: \$400,000</b>	<b>FY 2016/17: \$400,000</b>
<i>The project will rehabilitate existing pipelines and manholes to decrease infiltration of groundwater with high salt content.</i>		
<b>17705 Soscol Ave (8th to Oil Company Road)</b>	<b>Project Total: \$1,017,500</b>	<b>FY 2016/17: \$500,000</b>
<i>The project will rehabilitate existing large diameter reinforced concrete pipe that is degraded and nearing the end of its useful life.</i>		
<b>15703 Sarco Creek Pipeline Replacement - CalTRANS</b>	<b>Project Total: \$1,151,850</b>	<b>FY 2016/17: \$1,050,000</b>
<i>This project, funded by CalTRANS, will relocate sewer main pipe adjacent to Silverado Trail that crosses Sarco creek. The relocation is needed for a CalTRANS bridge project.</i>		
<b>14703 Browns Valley Truck Interceptor</b>	<b>Project Total: \$15,488,450</b>	<b>FY 2016/17: \$2,800,000</b>
<i>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 to decrease the potential for overflows.</i>		

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**17706 Rehab - Ranch De Los Robles** **Project Total: \$1,600,000** **FY 2016/17: \$400,000**  
*This collection system rehabilitation project will be designed and constructed to reduce I&I in Basin L (north of Imola Avenue, south of Napa Creek, and west of the Napa River).*

**17707 66-inch Trunk CCTV Inspection** **Project Total: \$150,000** **FY 2016/17: \$150,000**  
*This project will evaluation the condition of the existing trunk main from Oil Company Road to the treatment plant.*

**17708 Basin G - I&I Reduction Project 1** **Project Total: \$2,442,000** **FY 2016/17: \$1,200,000**  
*This collection system rehabilitation project will be designed and constructed to reduce I&I in Basin G (Browns Valley Area).*

**COLLECTION SYSTEM EQUIPMENT**

**17709 Eel Replacement 1** **Project Total: \$5,400** **FY 2016/17: \$5,400**  
*This project will replace the old and outdated eel used in Collections to clean laterals and to remove debris.*

**17710 Vehicle 510 - Water Truck** **Project Total: \$207,900** **FY 2016/17: \$207,900**  
*This project will purchase a new water truck. The existing water truck will be transferred to the Recycling department for use at Jameson Ranch for dust control.*

**LIFT STATIONS**

**17711 West Napa PS-Rehab** **Project Total: \$3,050,000** **FY 2016/17: \$1,750,000**  
*The project will rehabilitate existing assets at the pump station and increase the firm capacity to convey peak wet-weather flows.*

**TREATMENT**

**17712 Headworks & Primary - Odor Control** **Project Total: \$20,000** **FY 2016/17: \$20,000**  
*The project will replace existing odor control blower unit shrouds, screens, and seismic pedestals that are rusted and corroded.*

**TREATMENT - EQUIPMENT**

**13741 Secondary PS Pump Rebuild (3)** **Project Total: \$111,300** **FY 2016/17: \$37,500**  
*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 2016/17: \$53,600**  
*This equipment is at the end of its useful life and needs to be replaced.*

**17714 WWTP MP - 3W System Improvements** **Project Total: \$441,700** **FY 2016/17: \$60,000**  
*Replace valves and address corrosion in the 3W system at the treatment plant.*

**17715 Turbidimeters (7) Tertiary Replacements** **Project Total: \$11,800** **FY 2016/17: \$11,800**  
*This equipment is at the end of its useful life and needs to be replaced.*

**17716 FOG - Strain Press** **Project Total: \$200,000** **FY 2016/17: \$200,000**  
*Purchase and install equipment that will remove blockage causing debris at the FOG receiving station.*

**17717 Energy Audit - Odor Control VFD** **Project Total: \$51,700** **FY 2016/17: \$51,700**  
*Purchase and install a VFD for the primary clarifier exhaust fans that will result in annual energy savings.*



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<b>17718</b>	<b>Energy Audit - LED Pole/Arm Mounted Fixtures</b> <i>Replace LED pole/arm mounted fixtures that will result in annual energy savings.</i>	<b>Project Total:</b>	<b>\$78,100</b>	<b>FY 2016/17:</b>	<b>\$78,100</b>
<b>17719</b>	<b>Lab - Sampler 4700 - Pretreatment</b> <i>This equipment is at the end of its useful life and needs to be replaced.</i>	<b>Project Total:</b>	<b>\$7,500</b>	<b>FY 2016/17:</b>	<b>\$7,500</b>
<b>17720</b>	<b>Lab - Sampler 4700 - Pretreatment</b> <i>This equipment is at the end of its useful life and needs to be replaced.</i>	<b>Project Total:</b>	<b>\$7,500</b>	<b>FY 2016/17:</b>	<b>\$7,500</b>
<b>17721</b>	<b>Lab - Chlorophyll A Analyzer - Pond Water</b> <i>Purchase equipment needed for receiving water and pond monitoring.</i>	<b>Project Total:</b>	<b>\$5,400</b>	<b>FY 2016/17:</b>	<b>\$5,400</b>
<b>17722</b>	<b>Main - Stationary Gas Detector Replacement Ph 2</b> <i>Stationary gas detectors are required in the treatment plant to sense hydrogen sulfide and explosive limits of combustible gases which provide for a safe working environment. Existing gas monitoring equipment is old and requires frequent replacement of parts. This project will replace existing equipment.</i>	<b>Project Total:</b>	<b>\$140,000</b>	<b>FY 2016/17:</b>	<b>\$140,000</b>
<b>17723</b>	<b>Main - Rotork Actuator Replacement</b> <i>This project will replace existing valves actuators in the treatment plant.</i>	<b>Project Total:</b>	<b>\$88,700</b>	<b>FY 2016/17:</b>	<b>\$88,700</b>
<b>15712</b>	<b>Main - Rehab Pond 1 Storage Structure</b> <i>Repair the existing storage structure near Pond 1 at the treatment plant to create a storage area for spare parts and equipment that is protected from the weather.</i>	<b>Project Total:</b>	<b>\$30,000</b>	<b>FY 2016/17:</b>	<b>\$25,000</b>
<b>17724</b>	<b>Main - Primary Clarifier Exhaust Fan Replacement</b> <i>This equipment is at the end of its useful life and needs to be replaced.</i>	<b>Project Total:</b>	<b>\$5,000</b>	<b>FY 2016/17:</b>	<b>\$5,000</b>
<b>15713</b>	<b>Main - AB Diffusers/Instrumentation and Control</b> <i>Replace the existing diffusers panels in the aeration basins and install instrumentation and control improvements to create annual energy savings.</i>	<b>Project Total:</b>	<b>\$1,249,850</b>	<b>FY 2016/17:</b>	<b>\$1,200,000</b>
<b>16713</b>	<b>Main - Buried Metallic Pipe Evaluation and Rehab</b> <i>This project will rehabilitate existing piping within the Plant. The work in FY16/17 will assess existing damage and scope a future rehabilitation project.</i>	<b>Project Total:</b>	<b>\$250,000</b>	<b>FY 2016/17:</b>	<b>\$40,000</b>
<b>16715</b>	<b>Main - Cogen Bottom End Overhaul</b> <i>This is a major maintenance project that is necessary to extend the useful life of the cogeneration engine used to produce electricity and heat for the plant.</i>	<b>Project Total:</b>	<b>\$225,000</b>	<b>FY 2016/17:</b>	<b>\$75,000</b>
<b>17725</b>	<b>Main - Sump #3 Modification</b> <i>Modify drainage pumping in the gallery area of the treatment plant to address existing inefficiency.</i>	<b>Project Total:</b>	<b>\$10,000</b>	<b>FY 2016/17:</b>	<b>\$10,000</b>
<b><u>TREATMENT - STRUCTURES</u></b>					
<b>17726</b>	<b>Headworks Equipment Rehab/Replacement</b> <i>Purchase and install equipment for the headworks building to replace equipment that is at the end of its useful life.</i>	<b>Project Total:</b>	<b>\$544,100</b>	<b>FY 2016/17:</b>	<b>\$10,000</b>
<b>17727</b>	<b>Roof Replacement - Digester 2nd Floor</b> <i>Replace existing roof that is leaking and at the end of its useful life.</i>	<b>Project Total:</b>	<b>\$125,000</b>	<b>FY 2016/17:</b>	<b>\$125,000</b>

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<b>17728 Roof Replacement - AB/Blower Building</b>	<b>Project Total:</b>	<b>\$40,000</b>	<b>FY 2016/17:</b>	<b>\$40,000</b>
<i>Replace existing roof that is leaking and at the end of its useful life.</i>				

<b>17729 DAF Access Opening</b>	<b>Project Total:</b>	<b>\$20,000</b>	<b>FY 2016/17:</b>	<b>\$20,000</b>
<i>Modify access to the DAF and DAF pad for safety and operations benefits.</i>				

**SCADA***There are no SCADA projects in FY 2016/17***RECYCLING - DISTRICT**

<b>16716 Line Recycled Water Reservoirs</b>	<b>Project Total:</b>	<b>\$1,365,000</b>	<b>FY 2016/17:</b>	<b>\$1,320,000</b>
<i>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%.</i>				

<b>15717 Isolation Valve on Kirkland Line (Devlin Road)</b>	<b>Project Total:</b>	<b>\$63,850</b>	<b>FY 2016/17:</b>	<b>\$49,200</b>
<i>Install an inline valve to create an additional isolation point for operational benefits of the south pipeline.</i>				

<b>17730 Jameson Solids Pad Dump Bay</b>	<b>Project Total:</b>	<b>\$15,000</b>	<b>FY 2016/17:</b>	<b>\$15,000</b>
<i>Install a concrete pad at Jameson Ranch for biosolids management and processing.</i>				

<b>17731 Jameson Office Trailer Replacement</b>	<b>Project Total:</b>	<b>\$25,000</b>	<b>FY 2016/17:</b>	<b>\$25,000</b>
<i>Replace the existing office trailer that is at the end of its useful life.</i>				

<b>17732 Vehicle 710 - 8830 Tractor</b>	<b>Project Total:</b>	<b>\$200,000</b>	<b>FY 2016/17:</b>	<b>\$200,000</b>
<i>Replace existing tractor that is at the end of its useful life.</i>				

<b>17733 Vehicle 172 - Ford F150</b>	<b>Project Total:</b>	<b>\$28,000</b>	<b>FY 2016/17:</b>	<b>\$28,000</b>
<i>Replace existing truck that is at the end of its useful life.</i>				

**RECYCLING - EXPANSION**

<b>13727 North Bay Water Reuse Project</b>			<b>FY 2016/17:</b>	<b>\$845,000</b>
<i>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.</i>				

<b>17734 MST RW Pipeline Extension</b>	<b>Project Total:</b>	<b>\$1,900,000</b>	<b>FY 2016/17:</b>	<b>\$1,200,000</b>
<i>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.</i>				

**OTHER**

<b>13729 Development Technical Support</b>			<b>FY 2016/17:</b>	<b>\$231,800</b>
<i>District staff reviews and comments on development plans involving sewer and recycled water facilities and contributed capital.</i>				

**FY 2016/17 Capital Project Schedule**  
**Allocation of Capacity Charges**

#	Name	FY 16/17	% Funded by Capacity Charges	% Funded by Other Revenue	Total Capacity Charges	Total Other Revenue
<b><u>COLLECTION SYSTEM</u></b>						
13701	Main Line Sewer Rehab	88,700		100.0%	-	88,700
13702	Manhole Raising/Rehab	198,900		100.0%	-	198,900
13703	Lateral Replacement/Rehab	72,000		100.0%	-	72,000
13704	Cleanouts Installation/Rehab	87,000		100.0%	-	87,000
13705	I&I Reduction Program	200,000	39.4%	60.6%	78,800	121,200
14703	Browns Valley Rd & First St	2,800,000	39.4%	60.6%	1,103,200	1,696,800
15703	Sarco Creek Pipeline Replacement - CalTRANS	1,050,000		100.0%	-	1,050,000
16701	Basin L - I&I Reduction Project 5	1,400,000	39.4%	60.6%	551,600	848,400
17701	ACP CIPP Lining Project #2	350,000		100.0%	-	350,000
17702	Upper Lateral Rehabilitation - Basin L (Pilot #2)	5,000		100.0%	-	5,000
17703	Manhole Rehab - Nipak	90,000		100.0%	-	90,000
17704	Infiltration Rehab - SSMH and Pipelines (CI-)	400,000		100.0%	-	400,000
17705	Soscol Ave (8th to Oil Company Road)	500,000		100.0%	-	500,000
17706	Rehab - Ranch De Los Robles	400,000		100.0%	-	400,000
17707	66-inch Trunk CCTV Inspection	150,000		100.0%	-	150,000
17708	Basin G - I&I Reduction Project #1	1,200,000	39.4%	60.6%	472,800	727,200
<b><u>COLLECTION SYSTEM - EQUIPMENT</u></b>						
17709	Eel Replacment 1	5,400		100.0%	-	5,400
17710	Vehicle 510 - Water Truck	207,900		100.0%	-	207,900
<b><u>LIFT STATIONS</u></b>						
17711	West Napa PS - Rehab	1,750,000		100.0%	-	1,750,000
<b><u>TREATMENT</u></b>						
17712	Headworks & Primary - Odor Control	20,000		100.0%	-	20,000
<b><u>TREATMENT - EQUIPMENT</u></b>						
13741	Secondary PS Pump Rebuild (3)	37,500		100.0%	-	37,500
15712	Rehabilitate Pond 1 Storage Structure	25,000		100.0%	-	25,000
15713	Aeration Basin Instrumentation and Control	1,200,000		100.0%	-	1,200,000
16713	Buried Metallic Piping (eval/rehab)	40,000		100.0%	-	40,000
16715	Cogen Bottom End Overhaul	75,000		100.0%	-	75,000
17713	Secondary PS VFD Replacement (3)	53,600		100.0%	-	53,600
17714	WWTP MP - 3W System Improvements	60,000		100.0%	-	60,000
17716	FOG - Strain Press	200,000		100.0%	-	200,000
17717	Energy Audit - Odor Control VFD	51,700		100.0%	-	51,700
17718	Energy Audit - LED Pole/Arm Mounted Fixtures	78,100		100.0%	-	78,100
17719	Lab - Smpler 4700 - Pretreatment	7,500		100.0%	-	7,500
17720	Lab - Smpler 4700 - Pretreatment	7,500		100.0%	-	7,500
17721	Lab - Chlorophyll A Analyzer - Pond Water	5,400		100.0%	-	5,400
17722	Main - Stationary Gas Detector Replacment Ph 2	140,000		100.0%	-	140,000
17723	Main - Rotork Actuator Replacment	88,700		100.0%	-	88,700
17724	Main - Primary Clarifier Exhaust Fan Replacment	5,000		100.0%	-	5,000
17725	Main - Sump #3 Modification	10,000		100.0%	-	10,000
<b><u>TREATMENT - STRUCTURES</u></b>						
17726	Headworks Equipment Rehab/Replacment	10,000		100.0%	-	10,000
17727	Roof Replacement - Digester 2nd Floor	125,000		100.0%	-	125,000
17728	Roof Replacement - AB/Blower Building	40,000		100.0%	-	40,000
17729	DAF Access Opening	20,000		100.0%	-	20,000
<b><u>RECYCLING - DISTRICT</u></b>						
15717	Isolation Valve on Kirkland Line (Devlin Rd)	49,200		100.0%	-	49,200
16716	Line Recycled Water Reservoir	1,320,000		100.0%	-	1,320,000
17730	Jameson Solids Pad Dump Bay	15,000		100.0%	-	15,000
17731	Jameson Office Trailer Replacment	25,000		100.0%	-	25,000
17732	Vehicle 710 - 8830 Tractor	200,000		100.0%	-	200,000
17733	Vehicle 172 - Ford F150	28,000		100.0%	-	28,000
<b><u>RECYCLING - EXPANSION</u></b>						
13727	North Bay Wate Reuse Project	845,000		100.0%	-	845,000
17734	MST RW Pipeline Extension	1,200,000		100.0%	-	1,200,000
<b><u>OTHER</u></b>						
13729	Development Technical Support	231,800	100.0%	0.0%	231,800	-
<b>TOTAL</b>		<b>17,180,700</b>			<b>\$2,438,200</b>	<b>\$14,742,500</b>

Napa Sanitation District  
FY 2016/17 Budget

		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
#	Name	Proposed	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
COLLECTION SYSTEM											
1	13701 Mainline Sewer Rehab	88,700	91,800	95,000	98,300	101,800	105,300	109,000	112,900	116,800	120,900
2	13702 Manhole Raising / Rehab	198,900	205,900	213,100	220,500	228,200	236,200	244,500	253,100	261,900	271,100
3	13703 Lateral Replacement / Rehab	72,000	74,500	77,100	79,800	82,600	85,500	88,500	91,600	94,800	98,100
4	13704 Cleanout Installation / Rehab	87,000	90,000	93,200	96,500	99,800	103,300	106,900	110,700	114,600	118,600
5	13705 I&I Reduction Program	200,000	207,000	-	-	-	-	-	-	-	-
6	16701 Basin L - I&I Reduction Project 5	1,400,000	-	-	-	-	-	-	-	-	-
7	Collection System Master Plan	-	-	860,600	-	-	-	-	-	-	-
8	Collection System Asset Management Software	-	100,000	-	-	-	-	-	-	-	-
9	ACP CIPP Lining Project #2	350,000	500,000	350,000	-	-	-	-	-	-	-
10	Upper Lateral Rehab - Basin L (Pilot) #2	5,000	155,300	-	-	-	-	-	-	-	-
11	Upper Lateral Rehab - Basin L (Pilot) #3	-	5,000	160,700	-	-	-	-	-	-	-
12	Manhole Rehab - Nipak	90,000	-	-	-	-	-	-	-	-	-
13	Infiltration Rehab - SSMH and Pipelines (CI-)	400,000	-	-	-	-	-	-	-	-	-
14	Soscol Ave (8th to Oil Company Rd)	500,000	517,500	-	-	-	-	-	-	-	-
15	15703 Sarco Creek Pipeline Replacement - Caltrans	1,050,000	-	-	-	-	-	-	-	-	-
16	14703 Browns Valley Trunk	2,800,000	9,237,000	2,049,000	-	-	-	-	-	-	-
18	Rehab - Rancho De Los Robles	400,000	1,200,000	-	-	-	-	-	-	-	-
19	66-inch Trunk CCTV Inspection	150,000	-	-	-	-	-	-	-	-	-
20	Basin G - I&I Reduction Project 1	1,200,000	1,242,000	-	-	-	-	-	-	-	-
21	Sewer System Inflow/Infiltration 2018	-	1,759,500	1,821,100	-	-	-	-	-	-	-
22	Sewer System Rehab/Replacement 2019	-	-	10,000	1,053,300	-	-	-	-	-	-
23	Sewer System Inflow/Infiltration 2019	-	-	1,821,100	1,884,800	-	-	-	-	-	-
24	Sewer System Rehab/Replacement 2020	-	-	-	1,053,300	1,090,100	-	-	-	-	-
25	Sewer System Inflow/Infiltration 2020	-	-	-	1,884,800	1,950,800	-	-	-	-	-
26	Sewer System Rehab/Replacement 2021	-	-	-	-	1,090,100	1,128,300	-	-	-	-
27	Sewer System Inflow/Infiltration 2021	-	-	-	-	1,950,800	2,019,100	-	-	-	-
28	Sewer System Rehab/Replacement 2022	-	-	-	-	-	1,128,300	1,167,800	-	-	-
29	Sewer System Inflow/Infiltration 2022	-	-	-	-	-	2,019,100	2,089,700	-	-	-
30	Sewer System Rehab/Replacement 2023	-	-	-	-	-	-	1,167,800	1,208,700	-	-
31	Sewer System Inflow/Infiltration 2023	-	-	-	-	-	-	2,089,700	2,162,900	-	-
32	Sewer System Rehab/Replacement 2024	-	-	-	-	-	-	-	1,208,700	1,251,000	-
33	Sewer System Inflow/Infiltration 2024	-	-	-	-	-	-	-	2,162,900	2,238,600	-
34	Sewer System Rehab/Replacement 2025	-	-	-	-	-	-	-	-	1,251,000	1,294,800
35	Sewer System Inflow/Infiltration 2025	-	-	-	-	-	-	-	-	2,238,600	2,316,900
36	Sewer System Rehab/Replacement 2026	-	-	-	-	-	-	-	-	-	1,294,800
37	Sewer System Inflow/Infiltration 2026	-	-	-	-	-	-	-	-	-	2,316,900
COLLECTION SYSTEM - EQUIPMENT											
39	16706 Locatable Mini-Camera #1 Replacement	-	-	-	-	-	-	-	13,600	-	-
40	Locatable Mini-Camera #2 Replacement	-	11,100	-	-	-	-	-	-	-	14,600
41	Locatable Mini-Camera #3 Replacement	-	-	-	11,900	-	-	-	-	-	-
42	Locatable Mini-Camera #4 Replacement	-	-	-	-	-	12,700	-	-	-	-
43	Eel Replacement #1	5,400	-	-	-	-	-	-	-	7,100	-
44	Eel Replacement #2	-	-	-	5,900	-	-	-	-	-	-
45	Eel Replacement #3	-	-	-	-	-	-	6,600	-	-	-
46	Eel Replacement #4	-	-	-	-	-	-	-	-	-	7,300
47	13711 Vehicle 711 - Kubota	-	-	-	-	-	-	-	50,800	-	-
48	13712 Vehicle 173 - Plugup Truck - Secondary	-	-	-	-	-	-	-	-	81,800	-
49	Vehicle 185 - Plugup Truck - Primary	-	-	-	-	-	-	-	-	-	74,400
50	Vehicle 180 - Ford Ranger	-	-	-	-	-	34,100	-	-	-	-
51	15705 Vehicle 154 - Ford Ranger	-	-	-	-	-	-	-	-	44,300	-
52	Vehicle 015 - Water Trailer	-	-	-	-	10,500	-	-	-	-	-
53	Vehicle 166 - Ford F-350	-	-	39,700	-	-	-	-	-	-	-
54	Vehicle 706 - 410 Backhoe	-	-	-	-	-	195,000	-	-	-	-
55	Vehicle 510 - Water Truck	207,900	-	-	-	-	-	-	-	-	-



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		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
#	Name	Proposed	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
56	Vehicle 175 - Hybrid Escape	-	-	-	37,600	-	-	-	-	-	-
57	Vehicle 504 - TV Truck	-	250,000	-	-	-	-	-	500,000	-	-
58	Vehicle 100 - Backhoe Trailer	-	-	-	-	25,300	-	-	-	-	-
59	Vehicle 512 - Rodder	-	-	-	180,000	-	-	-	-	-	-
60	Vehicle 18 - Cement Trailer	-	-	-	34,900	-	-	-	-	-	-
61	Vehicle 16 - 18ft Trailer	-	-	9,400	-	-	-	-	-	-	-
62	Vehicle 205 - Forklift	-	-	-	-	40,300	-	-	-	-	-
63	Vehicle 179 - Mini-Dump	-	-	-	-	-	62,000	-	-	-	-
64	Vehicle 182 - Mini-Dump	-	-	-	-	-	62,000	-	-	-	-
65	Vehicle 514 - 10 Yard Dump	-	-	-	-	-	-	-	-	-	252,600
66	Vehicle 528 - Mini-Vactor	-	-	-	-	-	-	528,900	-	-	-
67	Vehicle 529 - Vactor	-	-	-	-	-	592,100	-	-	-	-
68	Vehicle 183 - Repair Truck	-	-	-	-	-	-	66,700	-	-	-
69	<b>LIFT STATIONS</b>										
70	West Napa PS - Rehab	1,750,000	1,300,000	-	-	-	-	-	-	-	-
71	Main - Stonecrest Pump Rebuild	-	-	45,000	-	-	-	-	-	-	-
72	Lift Station Equipment Renewal & Replacement	-	-	-	40,000	-	-	-	-	-	-
73	Lift Station Equipment Renewal & Replacement	-	-	-	-	41,400	-	-	-	-	-
74	Lift Station Equipment Renewal & Replacement	-	-	-	-	-	42,800	-	-	-	-
75	Lift Station Equipment Renewal & Replacement	-	-	-	-	-	-	44,300	-	-	-
76	Lift Station Equipment Renewal & Replacement	-	-	-	-	-	-	-	45,900	-	-
77	Lift Station Equipment Renewal & Replacement	-	-	-	-	-	-	-	-	47,500	-
78	<b>TREATMENT</b>										
79	13745 Pond 1 Dredge	-	598,700	2,993,500	-	-	-	-	-	-	-
80	WWTP Master Plan	-	-	-	1,781,500	-	-	-	-	-	-
81	Siloxane Filter - Venturi	-	-	214,200	-	-	-	-	-	-	-
82	Headworks & Primary - Odor Control	20,000	-	-	-	-	-	-	-	-	-
83	Headworks - Biofilter	-	-	-	-	114,800	-	-	-	-	-
84	<b>TREATMENT - EQUIPMENT</b>										
85	13735 Dual Fuel Boiler Burner	-	-	-	-	-	-	-	-	-	109,500
86	13741 Secondary PS Pump Rebuild (3)	37,500	38,800	-	-	-	-	-	-	-	-
87	Secondary PS VFD Replacement (3)	53,600	55,400	57,400	-	-	-	-	-	-	-
88	13743 Residual Analyzers (Deox) Replacements	-	-	-	71,300	-	-	-	-	-	87,600
89	15707 DAFT Overflow Pumps (2) Cornell	-	11,100	11,500	-	-	-	-	-	-	-
90	3W Pipeline - Soscol PS to Plant - Rehab	-	33,300	-	-	-	-	-	-	-	-
91	3W Strainer	-	83,200	-	-	-	-	-	-	-	-
92	WWTP MP - 3W System Improvements	60,000	381,700	-	-	-	-	-	-	-	-
93	15708 Turbidimeters (7) Tertiary Replacements	11,800	-	-	-	-	-	-	-	-	-
94	MLE Recirculation Pumps (2) - Nutrient Opt	-	-	-	237,500	-	-	-	-	-	-
95	Portable Pumps 10" (2)	-	-	172,100	-	-	-	-	-	-	-
96	Sodium Bisulfite Tank #2	-	-	68,900	-	-	-	-	-	-	-
97	Marsh-to-Pond Pump Station Upgrade	-	-	-	88,700	-	-	-	-	-	-
98	FOG - Strain Press	200,000	-	-	-	-	-	-	-	-	-
99	Energy Audit - Odor Control VFD	51,700	-	-	-	-	-	-	-	-	-
100	Energy Audit - LED Pole/Arm Mounted Fixtures	78,100	-	-	-	-	-	-	-	-	-
101	Ops - SBS Flash Mixers	-	-	85,700	-	-	-	-	-	-	-
102	Ops - RAS System Flow Meter	-	-	-	11,100	-	-	-	-	-	-
103	Lab - Upgrade Project	-	-	-	-	-	477,100	-	-	-	-
104	Lab - Lab Grade Dishwasher Replacement	-	-	-	-	-	-	-	-	12,700	-
105	Lab - Refrigerator/Freezer Replacement	-	-	5,500	-	-	-	-	-	-	-
106	15710 Lab - Amperometric Titrator Replacement	-	-	-	-	-	-	-	-	-	7,300
107	Lab - Microscope Replacement	-	-	-	53,000	-	-	-	-	-	-
108	14731 Lab - Balance Replacement	-	-	-	-	-	-	-	-	-	22,700
109	Lab - Autoclave Replacement	-	-	-	-	-	-	11,000	-	-	-
110	Lab - UV Spectrophotometer Replacement	-	25,000	-	-	-	-	-	-	-	-

Napa Sanitation District  
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		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
#	Name	Proposed	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
111	Lab - BOD Incubator Replacement	-	-	-	-	9,300	-	-	-	-	-
112	Lab - BOD System Replacement	-	-	-	-	-	53,400	-	-	-	-
113	Lab - Sampler 4700 Replacement	-	-	-	-	-	-	8,000	-	-	-
114	Lab - Sampler 4700 Replacement	-	-	-	-	-	-	8,000	-	-	-
115	Lab - Sampler 4700 Replacement	-	-	-	-	-	-	8,000	-	-	-
116	Lab - Sampler 4700 Replacement	-	-	-	-	-	-	-	8,300	-	-
117	Lab - Sampler 4700 Replacement	-	-	-	-	-	-	-	8,300	-	-
118	Lab - Sampler 4700 - Pretreatment	7,500	-	-	-	-	-	-	-	-	-
119	Lab - Sampler 4700 - Pretreatment	7,500	-	-	-	-	-	-	-	-	-
120	Lab - Centrifuge Replacement	-	-	-	-	-	-	7,500	-	-	-
121	Lab - ICP OES	-	-	114,800	-	-	-	-	-	-	-
122	Lab - FIA IC Unit	-	-	-	106,900	-	-	-	-	-	-
123	Lab - Chlorophyll A Analyzer - Pond Water	5,400	-	-	-	-	-	-	-	-	-
124	Lab - Liquid ID Station	-	-	-	94,200	-	-	-	-	-	-
125	Main - Stationary Gas Detector Replacement Ph 2	140,000	-	-	-	-	-	-	-	-	-
126	Main - Rotork Actuator Replacement	88,700	-	-	-	-	-	-	-	-	-
127	Main - Rotork Actuator Replacement	-	91,800	-	-	-	-	-	-	-	-
128	Main - Rotork Actuator Replacement	-	-	95,000	-	-	-	-	-	-	-
129	Main - Rotork Actuator Replacement	-	-	-	-	101,800	-	-	-	-	-
130	Main - Rotork Actuator Replacement	-	-	-	-	-	-	109,000	-	-	-
131	Main - Rotork Actuator Replacement	-	-	-	-	-	-	-	-	116,800	-
132	15712 Main - Rehab Pond 1 Storage Structure	25,000	-	-	-	-	-	-	-	-	-
133	Main - Septage Pump & Motor Replacement	-	26,800	-	-	-	-	-	-	-	-
134	Main - Septage Card Reader Replacement	-	21,400	-	-	-	-	-	-	-	-
135	16712 Main - Primary Clarifier Mech/Struct Rehabilitation	-	150,000	312,900	323,800	-	-	-	-	-	-
136	Main - Primary Clarifier Exhaust Fan Replacement	5,000	-	-	-	-	-	-	-	-	-
137	Main - Secondary Clarifier Mech/Struct Rehabilitation	-	-	-	-	175,000	175,000	-	-	-	-
138	Main - Flocc Clarifier Recoating	-	-	-	118,800	-	-	-	-	-	-
139	15713 Main - AB Diffusers/Instrumentation and Control	1,200,000	-	-	-	-	-	-	-	-	-
140	Main - Polymer Tanks (3) replacement	-	150,000	-	-	-	-	-	-	-	-
141	16713 Main - Buried Metallic Piping (eval/rehab)	40,000	200,000	-	-	-	-	-	-	-	-
142	Main - 12kV Redundant Line (to RW sta)	-	-	53,600	-	-	-	-	-	-	-
143	16715 Main - Cogen Bottom End Overhaul	75,000	-	-	-	-	-	-	-	-	-
144	Main - Sump #3 Modification	10,000	-	-	-	-	-	-	-	-	-
145	Main - Filter Flow Control - Rotork Valves	-	-	-	33,300	-	-	-	-	-	-
146	Main - Magmeter Replacement (5)	-	-	32,100	-	-	-	-	-	-	-
147	Main - Dewatering Polymer Injection Mixers - Relocatic	-	-	-	33,300	-	-	-	-	-	-
148	Main - Plant Door Replacement - Phase 1	-	-	-	22,200	-	-	-	-	-	-
149	Main - Plant Door Replacement - Phase 2	-	-	-	-	23,000	-	-	-	-	-
150	Main - Plant Door Replacement - Phase 3	-	-	-	-	-	23,800	-	-	-	-
151	Main - Plant Door Replacement - Phase 4	-	-	-	-	-	-	24,600	-	-	-
152	Main - Plant Door Replacement - Phase 5	-	-	-	-	-	-	-	25,400	-	-
153	13722 Vehicle 132 - Ford F-150	-	-	-	-	-	-	-	-	42,800	-
154	14723 Vehicle 162 - Ford F-250 Diesel (replace with F-150)	-	-	35,600	-	-	-	-	-	-	-
155	Vehicle 165 - Ford F-350	-	-	-	57,800	-	-	-	-	-	-
156	Vehicle 178 - Ford F-350 SRW	-	-	-	-	-	49,000	-	-	-	-
157	Vehicle 158 - Ford F-250 Diesel	-	-	-	61,400	-	-	-	-	-	-
158	Vehicle 176 - Escape Hybrid	-	-	-	37,600	-	-	-	-	-	-
159	Vehicle 28-39 - Electric Truck	-	-	-	17,100	-	-	-	-	-	-
160	Vehicle 204 - Forklift	-	-	-	41,700	-	-	-	-	-	-
161	Vehicle 513 - 10 Yard Dump	-	-	-	-	-	178,100	-	-	-	-
162	Vehicle 206 - Forklift TH103	-	-	-	-	188,800	-	-	-	-	-
163	Vehicle 184 - Ford F-550 EM Truck	-	-	-	-	-	-	66,700	-	-	-
164	Vehicle 131 - Ford F-250	-	-	-	-	-	-	48,400	-	-	-
165	Vehicle 302 - Boat	-	-	-	-	-	6,400	-	-	-	-

Napa Sanitation District  
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		FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
#	Name	Proposed	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
166	Vehicle 40 - Cushman 1200X	-	-	-	-	-	-	12,700	-	-	-
167	Vehicle 41 - Cushman 1200X	-	-	-	-	-	-	12,700	-	-	-
168	Vehicle 42 - Cushman 1200X	-	-	-	-	-	-	12,700	-	-	-
169	<b>TREATMENT - STRUCTURES</b>										
170	Headworks Equipment Rehab/Replacement	10,000	534,100	-	-	-	-	-	-	-	-
171	WWTP MP - Second Digester	-	-	-	-	693,500	2,080,500	13,869,700	-	-	-
172	WWTP MP - Aeration Basin Expansion	-	-	-	-	255,500	766,500	5,109,900	-	-	-
173	Building HVAC and Lab Ventilation	-	379,600	-	-	-	-	-	-	-	-
174	WWTP Site Paving	-	-	-	-	-	-	-	500,000	-	-
175	15714 WWTP MP - Pond Imp - Ph 2 - Trans Struct 2 to 4	-	-	5,000	229,500	-	-	-	-	-	-
176	Roof Replacement - Digester 2nd Floor	125,000	-	-	-	-	-	-	-	-	-
177	Roof Replacement - AB/Blower Building	40,000	-	-	-	-	-	-	-	-	-
178	Roof Replacement - Plant Building(s)	-	-	-	55,400	-	-	-	-	-	-
179	Roof Replacement - Plant Building(s)	-	-	-	-	57,400	-	-	-	-	-
180	Roof Replacement - Plant Building(s)	-	-	-	-	-	59,400	-	-	-	-
181	Roof Replacement - Plant Building(s)	-	-	-	-	-	-	61,500	-	-	-
182	Roof Replacement - Plant Building(s)	-	-	-	-	-	-	-	63,600	-	-
183	Oil Storage Pad Cover	-	20,700	-	-	-	-	-	-	-	-
184	DAF Access Opening	20,000	-	-	-	-	-	-	-	-	-
185	<b>SCADA</b>										
186	SCADA MP Phase 5 / Security Study	-	-	250,000	-	-	-	-	-	-	-
187	SCADA MP Project #1	-	-	-	200,000	-	-	-	-	-	-
188	SCADA MP Project #2	-	-	-	-	200,000	-	-	-	-	-
189	SCADA MP Project #3	-	-	-	-	-	200,000	-	-	-	-
192	SCADA Server Replacement	-	-	-	16,000	-	-	-	-	-	-
193	SCADA Server Replacement	-	-	-	-	-	25,000	-	-	-	-
194	SCADA Server Replacement	-	-	-	-	-	-	-	16,000	-	-
195	<b>RECYCLING - DISTRICT</b>										
196	16716 WWTP MP - Line Recycled Water Reservoir	1,320,000	-	-	-	-	-	-	-	-	-
197	Recycled Water Reservoir - Sump Pump Replacement	-	88,700	91,800	-	-	-	-	-	-	-
198	15717 Isolation Valve on Kirkland Line (Devlin Road)	49,200	-	-	-	-	-	-	-	-	-
199	Jameson 24" Flow Meter Rehab	-	6,200	-	-	-	-	-	-	-	-
200	Kirkland Recycled Water Pipeline Rehabilitaton	-	-	-	-	737,600	-	-	-	-	-
201	Jameson Solids Pad Rehabilitation	-	-	-	-	36,900	-	-	-	-	-
202	Jameson Solids Pad Dump Bay	15,000	-	-	-	-	-	-	-	-	-
203	Jameson PS VFD	-	-	68,900	-	-	-	-	-	-	-
204	Jameson Office Trailer Replacement	25,000	-	-	-	-	-	-	-	-	-
205	Jameson Sprinkler Replacement - Field A	-	-	-	88,700	-	-	-	-	-	-
206	Jameson Sprinkler Replacement - Field B	-	-	-	-	91,800	-	-	-	-	-
207	Jameson Sprinkler Replacement - Field C	-	-	-	-	-	95,000	-	-	-	-
208	Jameson Sprinkler Replacement - Field D	-	-	-	-	-	-	98,300	-	-	-
209	Jameson Sprinkler Replacement - Field E	-	-	-	-	-	-	-	101,800	-	-
210	Equipment/Rehabs	-	-	-	175,000	-	-	-	-	-	-
211	Soscol RW Pump Replacement	-	-	-	-	150,000	-	-	-	-	-
212	Equipment/Rehabs	-	-	-	-	-	200,000	-	-	-	-
213	Soscol RW Pump Replacement	-	-	-	-	-	-	150,000	-	-	-
214	Equipment/Rehabs	-	-	-	-	-	-	-	225,000	-	-
215	Soscol RW Pump Replacement	-	-	-	-	-	-	-	-	150,000	-
216	Equipment/Rehabs	-	-	-	-	-	-	-	-	-	250,000
217	Pull Flail Chopper Replacement	-	31,900	-	-	-	-	-	-	-	-
218	Vehicle 710 - 8830 Tractor	200,000	-	-	-	-	-	-	-	-	-
219	Vehicle 172 - Ford F-150	28,000	-	-	-	-	-	-	-	-	-
220	14725 Vehicle 723 - Yanmar Tractor	-	-	-	-	-	-	-	104,400	-	-

Napa Sanitation District  
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#	Name	FY 16/17 Proposed	FY 17/18 Projected	FY 18/19 Projected	FY 19/20 Projected	FY 20/21 Projected	FY 21/22 Projected	FY 22/23 Projected	FY 23/24 Projected	FY 24/25 Projected	FY 25/26 Projected
221	Vehicle 723/720 - Attachments/Implements	-	-	28,700	-	-	-	-	-	-	-
222	Vehicle 171 - Ford F-350	-	-	-	-	64,900	-	-	-	-	-
223	Vehicle 174 - Ford F-350 SB	-	-	-	105,700	-	-	-	-	-	-
224	Vehicle 311 - Kubota	-	-	-	-	23,900	-	-	-	-	-
225	Vehicle 312 - Kubota	-	-	-	-	23,900	-	-	-	-	-
226	Vehicle 721 - John Deer 8430T Tractor	-	-	-	-	334,000	-	-	-	-	-
227	Vehicle 17 - 18ft Trailer	-	-	-	-	-	-	-	-	-	11,000
229	Vehicle 720 - KubotaTractor Loader	-	-	-	-	-	-	-	-	74,500	-
230	Vehicle 013 - Pipe Dolly	-	-	-	-	-	16,300	-	-	-	-
231	<b>RECYCLING - EXPANSION</b>										
232	13727 North Bay Water Reuse Project	845,000	405,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	-
233	MST RW Pipeline Extension	1,200,000	700,000	-	-	-	-	-	-	-	-
234	NBWRA - Jameson Storage - 600 AF	-	-	-	-	-	-	346,000	1,730,000	15,224,000	-
235	NBWRA - 3rd Reservoir	-	-	-	-	-	-	58,000	290,000	2,552,000	-
236	NBWRA - RW Expansion Ph 2	-	-	-	-	-	-	44,000	220,000	1,936,000	-
237	NBWRA - MST RW Pipeline - North Loop	-	-	-	-	-	-	200,000	1,000,000	8,800,000	-
238	NBWRA - MST RW Pipeline - East Extension	-	-	-	-	-	-	76,000	380,000	3,344,000	-
239	RW Soscol Pump Station Upgrade	-	-	-	-	2,375,400	-	-	-	-	-
240	<b>OTHER</b>										
241	13729 Development Technical Support	231,800	239,900	248,300	257,000	266,000	275,300	284,900	294,900	305,200	-
242	Solar Purchase Buy Out	-	-	-	-	-	2,458,500	-	-	-	-
243	Generator / Micro Fuel Cell	-	-	-	573,800	-	-	-	-	-	-
244	14728 Vehicle 161 - Ford C-Max	-	-	-	-	-	-	-	46,500	-	-
245	Vehicle 177 - Ford Escape Hybrid	-	-	-	49,800	-	-	-	-	-	-
246	14729 Vehicle 133 - Ford F-150	-	-	-	-	-	-	-	42,300	-	-
247	Vehicle 011 - CSET Trailer	-	-	-	24,500	-	-	-	-	-	-
248	14730 Vehicle 607 - Ford Taurus	-	-	-	-	24,000	-	-	-	-	-
249	Vehicle 130 - Ford F150	-	-	-	-	-	-	33,200	-	-	-
250											
251	<b>PROJECT TOTALS</b>	<b>\$17,180,700</b>	<b>\$21,244,900</b>	<b>\$12,740,500</b>	<b>\$11,798,200</b>	<b>\$12,809,200</b>	<b>\$15,115,100</b>	<b>\$28,662,900</b>	<b>\$13,128,300</b>	<b>\$40,456,000</b>	<b>\$8,669,100</b>
252	<b>Cumulative Total (FY 16/17 - FY 25/26)</b>	<b>\$17,180,700</b>	<b>\$38,425,600</b>	<b>\$51,166,100</b>	<b>\$62,964,300</b>	<b>\$75,773,500</b>	<b>\$90,888,600</b>	<b>\$119,551,500</b>	<b>\$132,679,800</b>	<b>\$173,135,800</b>	<b>\$181,804,900</b>