

MEMORANDUM

TO: Paul Harris, Utilities Superintendent, City of Lakeport

FROM: Susan Robinson, Burdick & Company
Katie Burdick, Burdick & Company
Paul Rose, Rose Water System Management LLC

DATE: September 25, 2023

RE: Project Summary Report: City of Lakeport Water System Capital Improvement Needs and Funding Evaluation

BACKGROUND AND PURPOSE

Purpose of this Memorandum

In September 2021, Burdick & Company, a consulting firm based in Auburn, CA, contacted the City of Lakeport about developing a Capital Improvement Plan (CIP) for the City's drinking water system. This work was offered at no cost to the City, with funding provided through a Proposition 1 Integrated Regional Water Management Disadvantaged Community Involvement Grant for the Sacramento River Funding Area, administered by the Yuba Water Agency.

Paul Harris, the Utilities Superintendent, informed the consulting team that, while the City had recently developed a 10-year CIP (for fiscal years 2021 – 2030), he was interested in having an asset inventory and condition assessment performed, and in learning more about potential funding opportunities. The purpose of this Memorandum is to summarize that process along with the outcomes.

Water System Overview

The City of Lakeport's water system (PWS ID# CA1710004) provides water to a population of approximately 4,762 through 1,818 residential and 496 commercial connections. The City's water supply is derived from both groundwater and surface water sources. The City relies primarily on groundwater; surface water is a supplemental source, providing redundancy and increased reliability.

Groundwater comes from four wells located at Scotts Creek and Green Ranch. The two Green Ranch wells operate all year; the two Scotts Creek wells operate normally from July to November. The Scotts Creek wells are located in the middle of a seasonal creek bed. The State Water Resources Control Board has imposed mandatory use restrictions during the wet season due to the lack of an annular seal and the potential for surface water influence without corresponding treatment. The surface water supply comes from Clear Lake. Normal operation of the Surface Water Treatment Plant is March through August.

The City owns two welded steel storage tanks, 1.5 MG and 1.0 MG, both of which are located on the northside of the city. The City's water distribution system includes approximately 201,000 linear feet (LF) of pipeline. Customers are individually metered. The City utilizes a SCADA System, which is scheduled for replacement this year.

10-Year Capital Improvement Plan and Rate Study

In 2021, the City of Lakeport conducted a water and wastewater rate study in compliance with Proposition 218. The previous utility rate study had been conducted in 2012. Rate studies are typically conducted for water and wastewater systems every five years in order to enable the system to keep up with increasing operating and capital costs. To support the 2021 utility rate study, the City developed a 10-year Capital Improvement Plan to better understand the anticipated costs related to water and wastewater infrastructure replacement needs.

In October 2021, City Council adopted the proposed rate increases for water and wastewater. The City also approved issuance of a \$5.9 million bond to implement the 10-year CIP for water system improvements. Projects to be completed include the replacement of nearly two miles of water lines, groundwater well enhancements, and water treatment upgrades. These projects are scheduled to be designed and bid in 2023-24.

ASSET INVENTORY AND CONDITION ASSESSMENT EXERCISE

The asset inventory and condition assessment exercise was initiated for the City in December 2021. Burdick & Company staff provided Paul Harris and the City's GIS/Asset Management Technician, Connie Warthen, with an asset inventory template in Excel. The asset inventory task involved cataloguing every major and minor component of the City's water system and notating each component's purchase date, the manufacturer's estimated useful life for the component, its current condition, and estimated cost of replacement. The exercise also involved assigning each component an impact of failure score (from insignificant to catastrophic) and a priority score.

Paul and Connie catalogued all of the assets into the asset inventory template (attached, as appendix) but decided against collecting the additional detailed information for each component due to the time-intensive nature of that task. Instead, they decided to group the components into projects. For example, instead of listing the individual components of "Package Unit #1" (production meter, buoyant media, filter media, turbidimeter) and the individual components for "Package Unit #2," all of those components were grouped into the project, "Filter Package Units (2)." For each project, Paul and Connie notated the project's condition, the service history, the estimated remaining lifespan and estimated year for repair or replacement, estimated replacement cost, and the likely funding source. They also assigned each project a priority number (1 – 5, with 1 being the highest), and provided a rationale for the priority rating. Table 1 on the following page shows the results of that exercise.

The asset inventory and condition assessment table looks very similar to the original 10-year CIP in terms of describing project needs. But while the 10-year CIP includes only the critical, near-term project needs, the asset inventory and condition assessment table shows all water system project needs, regardless of timing. Table 1 is color-coded to show: 1) which projects are included in the 2021 10-Year CIP; 2) which projects are not included in the 10-Year CIP either because they are considered operations and maintenance (O&M) or because they will not require replacement for many years (e.g., 30+ years); and 3) projects for which additional funding is needed in the near term.

Table 1. City of Lakeport Water System: Asset Inventory and Condition Assessment

	Asset	Priority Rating (1-5)	Reasons for Priority Ranking	Condition	Service History	Remaining Age	Estimated Year for Repair	Funding Source	Replacement Cost	COMMENTS
Not included in 10-year CIP because replacement not needed for another 30+ years...	Intake Pumps (2)	5	No Issues	Good	No scheduled O&M. Maintain as needed	30 years to date. Minimal usage. Lifespan Unknown.	Undetermined	Rates/Expansion	\$80,000	
	Pre-Ozone Contactor	5	No Issues	Good	Requires O&M	30 years to date. Minimal usage. Lifespan Unknown.	Undetermined	Rates/Expansion	\$500,000	
	Raw Water Pumps (2)	5	No Issues	Good	Regularly scheduled O&M	30 years to date. Minimal usage. Lifespan Unknown.	Undetermined	Rates/Expansion	\$80,000	
	Filter Package Units (2)	4	Some corrosion occurring	Good	Costly O&M, regularly scheduled O&M	30 years. Life has increased with infrequent use	2025	Rates/Expansion	\$1,500,000	This is the replacement cost - in 2025 will be doing some maintenance. More like \$250K in 2025 to extend the life... Covered in the 10-year CIP to recoat the vessels and determine remaining life. Worth replacing with new media?
	Intermediate Pumps (2)	5	No Issues	Good	Regularly scheduled O&M	30 years to date. Minimal usage. Lifespan Unknown.	Undetermined	Rates/Expansion	\$80,000	
In 10-year CIP	GAC (Granular Activated Carbon Vessels (4))	3	Vessels 1&2 Age/Performance	Good	O&M required as needed. Check effectiveness of odor and taste (w/ other factors)	GAC Vessels 1 & 2 - Replacing 2022, GAC Vessels 3&4 - Replaced 3 years ago	2022	Rates/Expansion	\$180,000	This is replacement cost for 4 GAC Vessels. Covered in the 10-year CIP: Replace 2 vessels in 2023, 2 vessels in 2026/27, and 2029/30.
In 10-year CIP	Clearwell Tank (.136 MG)	2	Extreme Corrosion	Poor	No scheduled O&M. Clean as needed	Reaching end of life, Replacing scheduled 2023	2023	Rates/Expansion	\$200,000	In 10-year CIP.
Not included in 10-year CIP because replacement not needed for	Distribution Pumps (2)	5	No Issues	Good	Regularly scheduled O&M	30 years to date. Minimal usage. Lifespan Unknown.	Undetermined	Rates/Expansion	\$100,000	

	Asset	Priority Rating (1-5)	Reasons for Priority Ranking	Condition	Service History	Remaining Age	Estimated Year for Repair	Funding Source	Replacement Cost	COMMENTS
another 30+ years...										
In 10-year CIP	Ozone Generators (2)	2	Primary unit needs replacement	Poor	Replacement parts, which are difficult to obtain, were ordered	1-2 yrs (aging tech). Replacing primary unit 2023	2023	Rates/Expansion	\$200,000	
Not included in 10-year CIP because replacement not needed for 10+ years...	Air Sep Units (2)	5	No Issues	Good	Regularly scheduled O&M	Unknown	Serviced annually	Rates/Expansion	\$100,000	
	Air Compressors (2)	5	No Issues	Good	Regularly scheduled O&M	Replaced 2019/2020, 20 years remaining age	2040 - Serviced annually	Rates/Expansion	\$30,000	
	Backwash Pumps (2)	5	No Issues	Good	Not regularly used. Regularly scheduled O&M	Life has increased with infrequent use	Undetermined		\$100,000	
Not included in 10-year CIP because replacement not needed for another 100 years...	Backwash Holding Ponds (3)	5	No Issues	Good	Regularly scheduled O&M	100 years	Undetermined		\$1,500,000	
Seeking funds	Scotts Creek - 8" Well Pump	3	Pump 5 years old, back up to new 4" well	Poor	O&M as needed	End of life	2026	Seeking Grants	\$1,000,000	Identify grant funding?
In 10-year CIP	Scotts Creek - 4" Well Pump	2	Maintain sustainability, increase production	Poor	O&M as needed	End of life	2023	Rates/Expansion	\$1,000,000	In the 10-Year CIP.

	Asset	Priority Rating (1-5)	Reasons for Priority Ranking	Condition	Service History	Remaining Age	Estimated Year for Repair	Funding Source	Replacement Cost	COMMENTS
In 10-year CIP	Green Ranch East Well Pump	2	Maintain capacity	Poor	O&M as needed	Rehab scheduled 2022	2022	Rates/Expansion	\$25,000	In the 10-Year CIP under well rehab. Rehab will be implemented 2023 summer/fall, then will be assessed. Might need to replace the pump, but the pump are small (cost ~\$40K new).
In 10-year CIP	Green Ranch West Well Pump	2	Maintain capacity	Poor	O&M as needed	Rehab scheduled 2022	2022	Rates/Expansion	\$25,000	
Not included in 10-year CIP because replacement not needed for another 20+ years...	Welded Steel Storage Tank - 1.5 MG	5	Just inspected, next inspection in 3 years	Good	O&M as needed	Coated 2014, 20 years remaining age	2034 - But they'd actually probably be rehabbed again, not replaced		\$1,500,000	Not covered in 10-Year CIP. These were rehabbed in 2016, good for 20 years. These are essentially new tanks now.
	Welded Steel Storage Tank - 1.0 MG	5	Just inspected, next inspection in 3 years	Good	O&M as needed	Coated 2014, 20 years remaining age	2034 - But they'd actually probably be rehabbed again, not replaced		\$1,000,000	Not covered in 10-Year CIP. These were rehabbed in 2016, good for 20 years. These are essentially new tanks now.
In 10-year CIP	Water SCADA System	2	Outdated hardware, software, cyber security	Poor	Has PACE Engineering support when needed	Aging technology, replacement scheduled 2023	2024	Rates/Expansion	\$150,000	Covered in 10-Year CIP
In 10-year CIP - and seeking additional funds	Water Distribution System	3	Aging, leaks	Poor	Reactive on repairs needed	28% of pipeline is undersized for fire flow	Replacing over 9000 ft in 2023	Bond - Seeking additional funds	\$50,000,000	Remaining financial need after bond-funded work is completed: ~47M

As noted previously, the bond will cover all of the water system projects outlined in the 10-year CIP. The projects that are not covered by the bond but that require near-term funding include:

- 1) **Upsizing the Distribution System Piping to meet Fire Flow Needs:** The water distribution infrastructure is quite old; and 56,700 LF of the distribution piping (28%) is 4" or smaller, which is undersized for fire flow needs. The recently approved bond will fund replacement of approximately 9,000 LF of the total 201,000 LF of water main. While that is a good start, the City considers it high priority to replace aged system piping with new pipe, and to upsize the diameter where flow modeling indicates, to meet fire flow requirements.
- 2) **New 1 MG Storage Tank:** The City would like to construct a new 1 MG storage tank on the southside of the City. Currently, both of the City's storage tanks are located on the northside. Constructing an additional storage tank on the southside would increase water supply reliability, and increase fire flow and redundancy, should the pipeline between the existing tanks and the rest of the system fail for any reason.
- 3) **New Well:** The City would like to construct an additional Scotts Creek well to provide a back-up source. The system has four wells currently. The bond funding will pay for replacement of the Scotts Creek 4" Well Pump. That new well will produce adequate supply for the whole system, and will be able to pump year-round. The existing Scotts Creek 8" Well will act as back-up. If those wells were to go down in the summer time, the Green Ranch wells alone would be insufficient to produce adequate supply, though they could be supplemented with surface water (treatment, however, would increase the expense). Construction of an *additional* well would provide an extra layer of redundancy and increased water supply reliability.

GRANT AND LOAN RESOURCES

In October 2022, Burdick & Company provided the City with a Funding Memo that outlined potential grant and loan resources for the City's water and wastewater systems. This section updates that Funding Memo.

Overall Evaluation of Funding Opportunities for the City's Remaining CIP Needs

This section provides a general evaluation regarding the applicability of various grant and low-interest loan opportunities for the City's current capital improvement needs. While grants reduce the economic burden on taxpayers and are therefore the most desirable source of funding, it should be noted that grants are highly uncertain and should not be counted on as a source of funding for water or wastewater system improvements.

The City has a successful history of funding many of its capital needs through bonds, as it has done for the current water system improvement needs. Creating bonds is arguably a faster, more efficient, and less bureaucratic method of obtaining capital project funding than procuring loans. That said, many federal, state, and private lending sources offer very low-interest loans, which may at times make those opportunities more appealing.

This evaluation considers especially those near-term capital needs that will not be funded with the City's \$5.9 million bond. As discussed, those remaining asset needs include:

1. Replacing approximately 192,000 LF of distribution line

2. Construction of 1 MG storage tank (southside)
3. Construction of one additional well

The best source of grant funds for the items listed above is, most likely, **Community Development Block Grant (CDBG)** funds. CDBG grants can be used to buy, construct, or fix public facilities such as water or wastewater systems. The City's projects will be competitive for other grant opportunities to the extent that they address the program priorities of the individual grant program, such as drought resilience or fire risk reduction.

Most grants do not fund activities that are considered normal operations, maintenance, and replacement. Since upsizing the distribution pipeline from the existing 4" piping is urgently needed to meet fire flow needs, the **California Office of Emergency Services (CalOES) Hazard Mitigation Grant (HMGP)** might seem like a good funding source. Unfortunately, fire flow projects are not eligible under HMGP. Likewise, construction of an additional storage tank would not be eligible under HMGP if the primary purpose were to improve fire fighting capacity. FEMA's Hazard Mitigation Assistance Program and Policy Guide (updated September 22, 2023) lists the following as ineligible: "Development or enhancement of fire suppression capability through the purchase of equipment or resources (e.g., water supply or sources, dry hydrants, cisterns not related to water hydration systems, dip ponds)." See Wildfire Mitigation policies beginning on p. 461 of the Program and Policy Guide.

Water storage tanks can be mitigated for different hazards (according to a CalOES consultant in an email dated 9/22/23), but it cannot be framed in terms of fire mitigation.

USDA's Emergency Community Water Assistance Grant will fund transmission line-related projects (up to \$150,000) or source-related projects (up to \$1 million) in the event of a recent or imminent disruption in water service or decline in water quality due to drought, earthquake, or other disaster. This does not appear to include fire risk reduction projects. However, if drought should become a threat to Lakeport's water supply, then this grant might provide partial funding for construction of a new storage tank (up to \$150,000) or funding for a new well (up to \$1 million).

The **US Bureau of Reclamation WaterSMART Drought Resiliency Grant** could potentially fund construction of a new well or storage tank. WaterSMART grants are extremely competitive; the City would need to provide strong justification for drought resiliency. Drought-related needs may be difficult to justify, given the system's excellent redundancy in terms of water supply source (both groundwater and surface water) and facilities (with four functioning wells and surface water intake and treatment).

Any of these projects – pipeline replacement, construction of an additional storage tank or of a new well – could also potentially be covered by a **State Revolving Fund (SRF)** or **USDA Water and Waste Disposal Grant** or partial grant/low-interest loan, if the City of Lakeport were to meet income eligibility requirements. Up until this past year, the City of Lakeport has been considered either a disadvantaged community (DAC) or a severely disadvantaged community (SDAC) based on US Census Bureau American Community Survey (ACS) income data. According to the latest ACS 5-year data, the City of Lakeport no longer qualifies as DAC. Therefore, the City is (most likely) ineligible for grant funds through SRF or USDA Water and Waste Disposal Grant and Loan Program at the current time. Please see further discussion in the sub-section, Grant Funding for Low-Income and Economically Disadvantaged Communities.

The section below provides short descriptions of these and other potentially relevant grant and loan resources for the City of Lakeport.

List of Potential Grant and Loan Resources

General Grant Opportunities

CalOES/FEMA Hazard Mitigation Grant Program: The Hazard Mitigation Grant Program (HMGP) is a federal grant program administered by the California Office of Emergency Services. HMGP funds plan development and hazard mitigation measures to reduce the long-term risk of loss of life and property from future natural hazards and disasters. The applicant must have a FEMA-approved Local Hazard Mitigation Plan (LHMP); plans are valid for 5 years. The HMGP program is specifically intended to provide better protection (hardening of facilities) for any facility that has not been damaged in a declared disaster. NOT ELIGIBLE: Projects constructing new buildings or facilities; or projects that address operation, deferred or future maintenance, repairs, or replacement. Cost share: 25% non-fed match requirement, some exceptions. For more information, visit the [CalOES Hazard Mitigation Grant Program website](#).

USDA Rural Development – Emergency Community Water Assistance Grant: This program helps eligible communities prepare, or recover from, an emergency that threatens the availability of safe, reliable drinking water. Includes: Drought or flood, earthquake, disease outbreak, chemical spill, leak or seepage, other disasters. A federal disaster declaration is not required. Funds may be used for: Water transmission line grants up to \$150,000 to construct waterline extensions, repair breaks or leaks in existing water distribution lines, and address related maintenance necessary to replenish the water supply (storage tanks are typically considered part of distribution). Water source grants up to \$1M to construct a water source, intake or treatment facility. Applicants must show that a major decline in quantity or quality of water occurred within two years of the date of the application. Grants are also awarded when a significant decline in quality and quantity of water is imminent. Eligibility: Rural areas and towns with populations of 10,000 or less. The area to be served must also have a median household income (MHI) less-than the state's MHI for non-metropolitan areas. Match is encouraged but not required. For more information, visit [USDA Rural Development's website](#).

US Bureau of Reclamation's WaterSMART Drought Resiliency Grant: Funding is for projects that will build long-term resilience to drought and reduce the need for emergency response actions. This grant program supports projects that will increase the reliability of water supplies, improve water management, and provide benefits for fish, wildlife, and the environment to mitigate impacts caused by drought. Eligible projects include (among others):

- A. Developing alternative sources of water supply including water treatment: Constructing wells to provide back-up water supplies during times of drought.
- B. Storing water and/or recharging groundwater supplies.
 - Installing water towers and storage tanks to store water for municipal and domestic use.
 - Constructing extraction wells at groundwater banks to improve extraction and return capabilities during dry years.

Wells are to be used for supplemental supplies during times of drought, to serve communities that are or are potentially facing a public health crisis due to a lack of potable water, or to recover previously recharged/stored water. Water meters and water conservation projects are not eligible under this

program. Projects must be beyond routine water management activities; e.g., replacing pipeline would not be eligible unless doing so somehow improves system flexibility. There are currently three funding tiers: up to \$500,000 for a two-year grant, up to \$2 million for a three-year grant, or up to \$5 million for a three-year grant. The grant requires a 50% non-federal match. Projects should generally be in the final design stage; environmental and cultural resources compliance should be initiated or already completed; and the non-federal funding, necessary permits, and other required approvals should be secured. Proposed projects that are supported by an existing drought plan are prioritized. For more information, visit the [Drought Resiliency Grant Program website](#).

US Bureau of Reclamation – WaterSMART Water and Energy Efficiency Grant (WEEG): The City will be replacing individual meters throughout the system this year, using bond funds. A potential future funding source for replacement of AMI (Advanced Metering Infrastructure) meters is the WEEG program. The WEEG grant program funds AMI meter replacement as well as irrigation measures including turf removal, smart irrigation controllers and high-efficiency nozzles, i.e., sprinkler heads; the irrigation measures are typically promoted by water entities through rebates or direct-install programs. There are currently three funding tiers: up to \$500,000 for a two-year grant, up to \$2 million for a three-year grant, or up to \$5 million for a three-year grant. A 50% non-federal match is required. Visit the [WEEG website](#) for more information.

US Bureau of Reclamation’s WaterSMART Small-Scale Water Efficiency Grant: The Small-Scale Water Efficiency Grant is similar to WEEG but funds up to \$100,000 per applicant. The grant covers municipal metering, SCADA, landscape Irrigation measures, high-efficiency indoor appliances and fixtures, and other projects. The grant requires a 50% non-federal match. Total project costs should generally be \$225,000 or less. For more information, visit the [Small-Scale Water Efficiency Grant website](#).

Small Community Drought Relief Grant: The Small Community Drought Relief grant program, administered by the California Department of Water Resources (DWR), closed in early 2023. This program was open to communities that are not served by an Urban Water Supplier. The Small Community Drought Relief Grant program covered such projects as fixing or replacing leaking water lines, construction of an additional well, additional water storage facilities and tanks. The City of Lakeport was awarded \$22,500 for an intake modification in Clear Lake from this funding source. The City submitted another application in December 2021 requesting \$1M to replace the Scotts Creek 4” Well, which had run dry due to drought, but was not successful in receiving a second grant. Though the Small Community Drought Relief Grant program is now closed, it is worth checking [DWR’s website](#) from time to time to learn if this program is re-funded, or if similar programs are released.

Grant Opportunities for Economically Disadvantaged Communities

Water systems that have economically disadvantaged community status are eligible – and prioritized – for certain grant and low-interest loan programs, including State Revolving Fund (SRF) grants/loans administered by the State Water Resources Control Board, USDA Rural Development Water and Wastewater Program grants/loans, CDBG funds administered by the State Department of Housing and Community Development, amongst others. Each state and federal agency has their own methodology for determining income eligibility for grant and low-interest loan programs. Most utilize US Census American Community Survey (ACS) data as a basis for determining household income, and most consider “disadvantaged” status to mean less than 80% of the statewide median household income (MHI).

As noted previously, up until this past year, the City of Lakeport has met either disadvantaged community (DAC) status, having an MHI lower than 80% of the statewide MHI, or severely disadvantaged community (SDAC) status, having an MHI lower than 60% of the statewide MHI. According to the latest 5-year ACS data for the years 2017-2021, the City of Lakeport no longer meets the DAC income threshold. While that may be good news for the residents of Lakeport, it is not good news in terms of grant eligibility. See the City’s MHI trends in Table 2 (source: ACS 5-year data).

Table 2. City of Lakeport Median Household Income Trends 2015 - 2021

Year	California MHI (\$)	Lakeport MHI (\$)	DAC Threshold (\$)	SDAC Threshold (\$)
2021	84,097	75,155	67,278	50,458
2020	78,672	49,908	62,938	47,203
2019	75,235	58,967	60,188	45,141
2018	71,228	52,774	56,982	42,737
2017	67,169	39,578	53,735	40,301
2016	63,783	37,576	51,026	38,270
2015	61,818	39,605	49,454	37,091

The California Department of Housing and Community Development utilizes a slightly different methodology for determining eligibility for Community Development Block Grant (CDBG) funds. According to their methodology, the City of Lakeport does meet income qualification for CDBG grants.

Below is a summary of potential grant and loan resources that may be relevant for the City of Lakeport’s water system capital improvement needs, should the City meet DAC or low-moderate income eligibility.

Community Development Block Grant (CDBG): The CDBG program is administered by the California Department of Housing and Community Development for non-entitlement areas. Non-entitlement areas include those units of general local government that do not receive CDBG funds directly from the US Department of Housing and Urban Development. Non-entitlement areas are cities with populations of less than 50,000 (except cities that are designated principal cities of Metropolitan Statistical Areas), and counties with populations of less than 200,000. Lakeport is considered a non-entitlement area.

CDBG grants can be used to buy, construct, or fix public facilities such as water or wastewater systems. CDBG also funds studies and plans for housing, public works, and community facilities that meet CDBG national objectives and provide principal benefit to low-income persons. A project must address one of three national objectives:

1. Provide benefit to low- and moderate-income persons,
2. Aid in the prevention or elimination of slums and blight, or
3. Meet an urgent need.

Activities may qualify for CDBG assistance if the activity will benefit all the residents of a primarily residential area where at least 51% of the residents are low- and moderate-income persons. According to the [State’s low-moderate income \(LMI\) map](#), which is based on 2011-2015 ACS data, the LMI percentage for Lakeport is 51.44 – which is higher than 51%. Therefore, the City is eligible for CDBG grant funds.

For more information about CDBG, visit the [State’s CDBG website](#). The California Housing and Community Development representative for Lake County is: Shekinah Echols, (916) 500-3905, Shekinah.Echols@hcd.ca.gov.

Technical Assistance Funding Program: The California State Water Resources Control Board provides free technical assistance (TA) through their Office of Sustainable Water Solutions. TA is available to help small DACs develop, fund, and implement eligible drinking water, wastewater, stormwater, or groundwater needs. TA include but is not limited to coordination and development of capital improvement projects, facilitation of operation and maintenance, engineering and environmental analysis, legal assistance, leak detection/water audits, compliance audits, financial analysis, technical managerial and financial (TMF) assessments, and board or operator training. For more information, visit the [TA Funding Program website](#).

Drinking Water State Revolving Fund (DWSRF): The DWSRF is administered by the California State Water Resources Control Board. Funds are available for both planning and construction to address water system needs. DACs are potentially eligible to receive up to 100% grant or principal forgiveness (PF) for Category A – F projects (table below) or for consolidation. The State Water Resources Control Board prioritizes small DACs and SDACs over other applicants with similar needs.

Table 3. SRF Category A – F Project Descriptions

Priority Ranking	Description
Category A	Immediate health risk
Category B	Untreated at-risk sources
Category C	Compliance or shortage
Category D	Inadequate reliability
Category E	Secondary risks
Category F	Other projects

Since the City of Lakeport’s MHI is currently higher than the DAC threshold, the City is (most likely) ineligible to receive grant funds. The State Water Resources Control Board does utilize an alternative method for determining eligibility for communities whose MHI is close to, but higher than, the DAC threshold level. Unfortunately, the City still does not meet DAC eligibility even with this alternative method. However, it is worth a conversation with the State Water Board’s Division of Financial Assistance staff to inquire whether they might consider the City’s DAC status from previous years. The table on the following page, from Appendix E of the DWSRF 2023/24 Intended Use Plan, summarizes grant/PF eligibility and maximum grant amounts for this funding source.

The State Water Board may also award a combination of grant and low-interest loan, or offer 100% low-interest loan. The loan interest rate is updated annually on the first of the year. The standard interest rate for DWSRF financing is 50% of California’s average general obligation bond rate obtained by the State Treasurer for the previous calendar year, rounded up to the next highest ten basis points (0.10%). The DWSRF loan interest rate as of January 1, 2023 is 2.1%. Visit the State Water Resources Control Board’s website for more information about the [DWSRF Program](#).

APPENDIX E: Construction Project Grant and PF Limitations for an Eligible PWS

Maximum PF, Grant or Combination Thereof Per Construction Project 39, 40				
Type of Community ⁴¹	Residential Water Rates as a Percentage of MHI ⁴²	Percentage of Total Eligible Project Cost	Maximum Amount Per Connection ^{43,44, 45}	
Category A – D and/or Consolidation Projects⁴⁶				
Small DAC/SDAC; Eligible NTNC ⁴⁷ That Serves a Small DAC/SDAC; Expanded Small DAC/SDAC; or Small Non-DAC ⁴⁸ with MHI < 150% of Statewide MHI	N/A	up to 100%	\$60,000 ⁴⁸	
Category A – C and/or Consolidation Projects⁴⁶				
Medium DAC/SDAC; ⁴⁹	N/A	up to 100%	\$60,000 ⁴⁸	
Category E – F Projects				
Small DAC/SDAC or Eligible NTNC That Serves a Small DAC/SDAC	N/A	up to 100%	\$45,000 ⁵⁰	
Expanded Small DAC/SDAC	>=1.5%			
	<1.5%	Not Eligible for PF, Grant or Combination Thereof		
Repayable Construction Financing Terms				
Type of Community	Residential Water Rates as a Percentage of MHI	Interest Rate	Maximum Financing Term ⁵¹	Local Cost Share ⁵²
Small SDAC or Eligible NTNC That Serves a Small DAC	N/A	0%	40 Years	Waived
Small DAC or Expanded Small DAC/SDAC	>=1.5%			
	<1.5%			
SDACs and DACs may be eligible for Prop. 1 GWGP drinking water treatment grants. For GWGP grants, the funding maximums provided above apply in addition to the limit for grant/PF from other funding sources. SDACs of any size may be eligible for GWGP grant funds regardless of water rates, and DACs of any size may be eligible for GWGP grant funds if residential water rates as a percentage of MHI ≥ 1.5%. For GWGP grants, DACs and SDACs of any size, including large DACs, are subject to the grant limits specified for Small DACs in the table above. No local match is required.				

Clean Water State Revolving Fund (CWSRF): CWSRF is administered by the State Water Resources Control Board for projects that address wastewater, stormwater, and recycled water system needs. The table below shows the construction grant/PF limitations for eligible systems.

Wastewater Construction Grant/Principal Forgiveness Eligibility

Community	Wastewater Rates as a % of MHI	% of Total Eligible Project Cost	Max Grant/PF Per Project	Max Grant/PF Per Household*
Small Non-DAC (MHI ≤ 150% Statewide MHI)	≥4%	50%	N/A	\$45,000** Or \$125,000 (septic-to-sewer)**
Small DAC/SDAC	N/A	100%		
Septic-to-sewer only: Large DAC or Small Non-DAC	≥1.5%	50%	\$25 million	\$75,000
* The Deputy Director of DFA may approve financing for construction projects with a total eligible project cost up to \$6 M regardless of the amount per connection. ** Deputy Director of DFA can approve up to \$60,000 or \$175,000, respectively, for good cause.				

The State Water Board's standard interest rate for CWSRF (repayable) planning and construction financing is generally 50% of the rate obtained by the State Treasurer for California's most recent general obligation bond sale, rounded up to the next highest multiple of 10 basis points. The standard repayment term for repayable planning financing is five or ten years, at the applicant's option. The standard repayment term for repayable construction financing is the lesser of 30 years or the useful life of the financed facilities. The interest rate for CWSRF loans as of September 12, 2023 is 2.1%. Interest rates may change frequently; [visit this website to see the most current rate](#). Visit the State Water Resource Control Board's website for more information about the [CWSRF Program](#).

US Department of Agriculture Rural Development (USDA RD) Water and Waste Disposal Loan and Grant Program: This program funds water and wastewater projects for rural areas and towns with populations of 10,000 or less. DACs and SDACs are eligible for grants and reduced interest rate loans. USDA RD loan interest rates are [adjusted quarterly](#). The "poverty rate" currently is 2.125%, the "intermediate rate" is 2.875%, and the market rate is 3.625% (fourth quarter FY2023, effective July 1, 2023). DACs may also qualify for planning grant funds to support the development of USDA Rural Development Water and Waste Disposal applications. Predevelopment Planning Grants (PPR) are available to communities with populations at or below 10,000. PPR grants pay up to \$30,000 with a 25% match requirement. See USDA RD's website for more information about the [Water and Waste Disposal Loan and Grant Program](#).

Below-market Loan Programs

In addition to the low-interest loan programs noted above, several other agencies and lending institutions offer below-market interest rates to fund water and wastewater infrastructure projects, including (among others):

- [California Infrastructure and Economic Development Bank](#): I-Bank provides up to 30-year loans for projects ranging from \$1M - \$65M.
- [California Municipal Public Financing Authority](#): CalMuni PFA is statutorily authorized to issue water revenue bonds on a stand-alone or pooled basis.
- [CSDA Finance Corporation](#): CSDA Finance Corporation facilitates financings for special districts and other local government agencies.
- [Co-Bank](#): Provides loans for communities with populations less than 20,000.
- [US Environmental Protection Agency Water Infrastructure Finance and Innovation Act \(WIFIA\) Loans](#): WIFIA loans can provide up to 49% of financing for projects that are eligible for Drinking Water or Clean Water SRF. Minimum project size for communities with populations less than 25,000 is \$5 million.

APPENDICES

The Appendices section includes the following tables:

- 1) City of Lakeport 10-year Capital Improvement Plan: Developed by the City of Lakeport Public Works Department. All projects included in this CIP will be funded through rates with upfront costs provided via the 2022 \$5.9 million bond.
- 2) Asset Inventory Template (with the asset list preliminarily completed)

APPENDICES

City of Lakeport Water System: 10-Year Capital Improvement Plan (in \$)

WATER PROJECTS	Justification	Amount	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2029/30	2030/2031	2031/2032	Total
Replace Scotts Creek Wells	Substandard/Limited Volume/2008 MP	1,000,000			1,000,000								1,000,000
Ozone Generators - SWTP	Aged Equipment/Process Control/DPD	220,000		110,000			110,000						220,000
Replace GAC - SWTP 2 Vessels	Odor Control/DPD	240,000	80,000					80,000		80,000			240,000
Replace HVAC - SWTP	Undersized/Inefficient	35,000	35,000										35,000
Replace Clearwell - SWTP	Coat vs. Replacement - South Side Volume	160,000			10,000	150,000							160,000
Filter Media	Replace Multi Media	100,000			100,000								100,000
Green Ranch Rehab	Column Replacements/Casing Repair	50,000	50,000										50,000
Replace Roof Tank Site	Existing is Rotting/Falling apart	20,000	20,000										20,000
SCADA Upgrades - Software/Hardware	Operational Improvements/Hardware Updates	150,000			150,000								150,000
Replace SWTP Roof	30+ Years Old	60,000			60,000								60,000
Crew Room Upgrade - Corporation Yard	Effective Operations/Communication	110,000	10,000	100,000									110,000
Meters	Aged Meters	75,000								25,000	25,000	25,000	75,000
Water Truck Replacement (3-Way)	Aged Equipment/Carb Compliance	50,000		50,000									50,000
Dump Truck Replacement (3-Way)	Aged Equipment/Carb Compliance	50,000			50,000								50,000
Flat Bed (3-Way)	Aged Equipment/Carb Compliance	50,000	50,000										50,000
Generators	Water Back Up	100,000	100,000										100,000
PW Foreman Vehicle (3-Way)	Replacement	20,000	20,000										20,000
Master Plan	Next 20 Year Plan	100,000				100,000							100,000
Misc. Valve Installs - N. Main (Internal)	Lack of/Failing Valves Prior to Road Project	15,000		15,000									15,000
Misc. Valve Installs - Forbes Internal	Lack of/Failing Valves Prior to Road Project	25,000		25,000									25,000
Main Replacement Lupoyoma Circle Loop 1,200'	Undersized/Leaks/No Fire Protection	45,000		45,000									45,000

WATER PROJECTS	Justification	Amount	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2029/30	2030/2031	2031/2032	Total
Main Replacement-Lakeport Blvd (Bevins-Main) 2,560	Undersized/Aged/Road Project	1,150,000		1,150,000									1,150,000
Main Replacement - Harry St. (Central Park to 5th) Internal	Undersized/Aged/Road Project	45,000			45,000								45,000
Main Replacement Armstrong (Berry to Smith) 983'	Undersized/Aged	442,350			442,350								442,350
Main Replacement Lakeshore Blvd (Beach to Ashe) 2866'	Undersized/Dead Ends/Leaks	1,289,700			1,289,700								1,289,700
	Annual Totals		365,000	1,495,000	3,147,050	250,000	110,000	80,000	-	105,000	25,000	25,000	

TOTALS 5,602,050

**5 Year
Total = 5,367,050**

**5 Year
Total = 235,000**

City of Lakeport: Asset Inventory Template

Asset Name	Asset Location	Asset Type	Asset Quantity	Model and/or Serial Number	Purchase Date	Acquisition Cost	Service Start Date	Manufacturer's Estimated Useful Life	Replacement or Repair Cost	Condition Score (1 - 5)	Impact of Failure Score (1 - 5)	Priority Score	Priority Number
Raw Intake		Booster Pump #1											
		Booster Pump #2											
		Vacuum Pump #1											
		Vacuum Pump #2											
		MMC											
Surface Plant	Raw Water Pump Station	Raw Water Booster#1											
		Raw Water Booster #2											
		Raw Water Meter											
Package Unit #1		Production Meter P1											
		Buoyant Media P1											
		Filter Media P1											
		Turbidimeter P1											
Package Unit #2		Production Meter P2											
		Buoyant Media P2											
		Filter Media P2											
		Turbidimeter P2											
Backwash System		Backwash Pump #1											
		Backwash Pump #2											
		Backwash Meter											
		Backwash Return Pump #1											

Asset Name	Asset Location	Asset Type	Asset Quantity	Model and/or Serial Number	Purchase Date	Acquisition Cost	Service Start Date	Manufacturer's Estimated Useful Life	Replacement or Repair Cost	Condition Score (1 - 5)	Impact of Failure Score (1 - 5)	Priority Score	Priority Number
		Backwash Return Pump #2											
		Pond #1											
		Pond #2											
		Pond #3											
Intermediate Pump Station		Intermed Pump #1											
		Intermed Pump #2											
		GAC Vessel #1											
		GAC Vessel #2											
		GAC Vessel #3											
		GAC Vessel #4											
		GAC Production Meter 1&2											
		GAC Production Meter 3&4											
Clear Well		Clearwell Tank											
		Baffles											
Air Supply		Air Compressor #1											
		Air Compressor #2											
		Air Dryer #1											
		Air Dryer #2											
Ozone		O3 Generator 1											
		O3 Generator 2											
		Air Sep #1											
		Air Sep #2											

Asset Name	Asset Location	Asset Type	Asset Quantity	Model and/or Serial Number	Purchase Date	Acquisition Cost	Service Start Date	Manufacturer's Estimated Useful Life	Replacement or Repair Cost	Condition Score (1 - 5)	Impact of Failure Score (1 - 5)	Priority Score	Priority Number
		Hi Conc. Gas Monitor											
		Low Conc. Gas Monitor											
		Pre O3 Residual Monitor											
		Post O3 Residual Monitor											
		Gas Sensor/ Alarm											
Chlorine		C12 Regulator #1 WTP											
		C12 Regulator #2 WTP											
		Automatic Crossover WTP											
		Ejector WTP											
		Automatic Feeder											
		C12 Leak Detector											
		C12 Scrubber											
Finished Booster System		Finished Booster #1											
		Finished Booster #2											
		Finished Meter											
MCC		MCC											
WQ Monitoring		Finished C12 Analyzer											
		System C12 Analyzer											
		Finished Ph Meter											

Asset Name	Asset Location	Asset Type	Asset Quantity	Model and/or Serial Number	Purchase Date	Acquisition Cost	Service Start Date	Manufacturer's Estimated Useful Life	Replacement or Repair Cost	Condition Score (1 - 5)	Impact of Failure Score (1 - 5)	Priority Score	Priority Number
		Finished Turbidimeter											
Chemical Feed		Primary Coag Pump #1											
		Primary Coag Pump #2											
		Coag Aid Pump #1											
		Coag Aid Pump #2											
		Coag Failure Alarm											
Tanks		1.5 MG Tank											
		1.5 Inlet Meter											
		1.5 Outlet Meter											
		1.0 MG Tank											
		1.0 Inlet Meter											
		1.0 Outlet Meter											
Chlorine		C12 Regulator #1 Tank Site											
		C12 Regulator #2 Tank Site											
		C12 Auto Crossover Tank site											
		C12 Ejector Tank Site											
		C12 Booster pump											
Caustic		Caustic Pump											
		Caustic Tank											
Monitoring Equipment		Turbidimeter											

Asset Name	Asset Location	Asset Type	Asset Quantity	Model and/or Serial Number	Purchase Date	Acquisition Cost	Service Start Date	Manufacturer's Estimated Useful Life	Replacement or Repair Cost	Condition Score (1 - 5)	Impact of Failure Score (1 - 5)	Priority Score	Priority Number
		Chlorine Analyzer Inlet											
		Chlorine Analyzer Outlet											
4" Well	Scotts Creek	4" Well Pump											
		4" Production Meter											
		MCC											
8" Well	Scotts Creek	8" Well Pump											
		8" Production Meter											
Green Ranch	Green Ranch East	GR East Well Pump											
		GR East Meter											
	Green Ranch West	GR West Well Pump											
		GR West Well Meter											