

Board of Water Supply  
Capital Improvement Program  
FY 2022

Summary by Categories	Operating Fund (1)	Operating Fund - SRF Eligible (2)	Special Expendable Fund (3)	Improvement Fund (4)	Total
<b>I. Research and Development</b>	8,900,000	-	-	-	8,900,000
<b>II. Renewal and Replacement</b>					
<b>A. Pumps</b>	5,565,000	10,000,000	-	25,500,000	41,065,000
<b>B. Reservoirs</b>	100,000	-	-	-	100,000
<b>C. Pipelines</b>	950,000	-	-	58,950,000	59,900,000
<b>D. Treatment</b>	2,500,000	-	-	-	2,500,000
<b>E. Facilities</b>	13,260,000	-	-	1,650,000	14,910,000
<b>Category II - sub-total</b>	22,375,000	10,000,000	-	86,100,000	118,475,000
<b>III. Capacity Expansion</b>					
<b>A. Pumps</b>	-	-	100,000	-	100,000
<b>B. Reservoirs</b>	-	-	-	-	-
<b>C. Pipelines</b>	-	4,300,000	-	-	4,300,000
<b>D. Treatment</b>	-	-	800,000	-	800,000
<b>E. Facilities</b>	-	-	18,000,000	-	18,000,000
<b>Category III - sub-total</b>	-	4,300,000	18,900,000	-	23,200,000
<b>Total - Categories I - III</b>	31,275,000	14,300,000	18,900,000	86,100,000	150,575,000
<b>Construction Cost Index Account</b>	2,421,000	1,430,000	1,700,000	7,250,000	12,801,000
<b>Contract Adjustment Account</b>	16,600,000	-	-	-	16,600,000
<b>Capital Improvement Program - Total</b>	50,296,000	15,730,000	20,600,000	93,350,000	179,976,000

(1) Operating Fund is defined as rate revenue or cash

(2) Operating Fund - SRF Eligible is defined as projects that are eligible for participation in the State of Hawaii, Department of Health State Revolving Fund (SRF) loan program.

(3) Special Expendable Fund is a restricted fund in which water system facilities charges are deposited and the funding reserved for water system capacity expansion projects

(4) Improvement Fund is defined as the proceeds of Water System Revenue Bonds

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b><u>I. Research and Development</u></b>								
<b>1. Kunia Wells IV Exploratory Wells</b>	Drill, case install, test pump and sample three exploratory wells (TMK 9-2-001:014 or TMK 9-4-003:010).	CP	Const	4,500,000	-	-	-	4,500,000
<b>2. Construction Management for Various BWS Construction Projects</b>	Provide construction management and training services for selected BWS construction projects.	CP/WR	P&E	2,000,000	-	-	-	2,000,000
<b>3. Newtown Ridge and Royal Summit Reliability Improvements</b>	Prepare Environmental Assessment and obtain Conservation District Use Permit and Public Infrastructure Map amendment.	WR	P&E	400,000	-	-	-	400,000
<b>3A. Halawa Valley Ground Water Monitoring Wells, Phase II</b>	Installation of two (2) monitoring wells in Halawa Valley near the Navy Red Hill Underground Bulk Fuel Storage Facility.	CP/WQ	Const	2,000,000	-	-	-	2,000,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

	Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>Total Category I - Research and Development</b>	<b>8,900,000</b>	-	-	-	<b>8,900,000</b>

Board of Water Supply  
 Capital Improvement Program  
 FY 2022

	Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
--	-------------------	-------------------------	-------------------------------	----------------------	-------

**II. Renewal and Replacement**

**A. Pumps**

<p><b>4. Waihee Line Booster: Replace Pumping Units</b></p>	<p>Remove all eight (8) booster pumps including pumps, motors, piping, valves, concrete supports, gauges, and all electrical components. Install two (2) new booster pumps and new free flow lines including piping, control valves, flow tubes, elevated steel platform, MCC, and appurtenant electrical equipment. Install new backfeed line connecting Waihee and Punaluu systems.</p>	<p>CP-ME</p>	<p>Const</p>	<p>-</p>	<p>-</p>	<p>-</p>	<p>5,100,000</p>	<p>5,100,000</p>
---	---	--------------	--------------	----------	----------	----------	------------------	------------------

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>5. Makaha Shaft Tunnel Rehabilitation</b>	Replacement of all MCC, SCADA system, and all electrical components and appurtenances; replacement of pump units and associated piping, valves and appurtenances; replacement of ventilation system, plumbing system, and inclined elevator; replacement of 8-inch waterline and appurtenances; rehabilitation and expansion of the portal building; and replacement of the perimeter fencing.	CP-S	Const	-	-	-	7,500,000	7,500,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>6. Kaamilo Booster and Kaamilo Wells Renovation</b>	Replace Well Pump No. 1 MCC and motor starter, and relocate MCC inside the existing building. Replace telecommunication/ instrumentation box and install disconnect switch at the well pump. Replace isolation valve at reservoir. Cap well No. 2. Eliminate drop ceiling in building and relocate lighting to concrete ceiling.	CP-ME	Const	-	4,000,000	-	-	4,000,000
<b>7. Waipio Heights Wells and Wells I Renovation</b>	Replace two well pumps at each of two well sites; replace MCC, SCADA system, and all electrical components and appurtenances at each facility; and limited control building upgrades.	CP-ME	Const	-	6,000,000			6,000,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>8. Waialae Iki Booster No. 1 Relocation</b>	Relocate booster station to the Waialae Iki 180 Reservoir site. Install 12-inch mains and appurtenances along the Waialae Iki 180 Reservoir access road; and along Laukahi Street, from the Waialae Iki 180 Reservoir access road to Kamole Street - approx. 2,000 lin. ft.	CP-ME	Const	-	-	-	9,500,000	9,500,000
<b>9. Kamaile Wells Renovation, Drainage Improvements and Control Building Repairs, and Kamaile Plantation Wells Sealing</b>	Replace the existing two (2) pumps, MCC, electrical wiring, chlorination system, and related work. Install drainage improvements, renovate pump building and install security fencing. Seal up to thirteen (13) unused plantation wells around Kamaile Wells Station.	CP-S	Const	-	-	-	3,400,000	3,400,000
<b>10. Pump Renewal and Replacement</b>	Renewal and replacement of various BWS pumps and plant facilities.	CP-ME	Const	3,500,000	-	-	-	3,500,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>11. Hawaii Loa Booster No. 2 Pump and MCC Replacement</b>	Replace booster pump; replace MCC, SCADA system, and all electrical components and appurtenances; and limited control building upgrades.	CP-ME	P&E	580,000	-	-	-	580,000
<b>12. Waiiau Booster No. 2 Electrical Upgrades</b>	Replace MCC, SCADA system, and all electrical components and appurtenances, and limited control building upgrades.	CP-ME	P&E	555,000	-	-	-	555,000



Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>13. Waipio Heights Wells II Pump Replacement and Electrical Upgrades</b>	Replace Pump Unit no. 1, replace MCC including all motor starters, repair pavement, address well seal issue at pump sole plate and concrete base for pump unit no. 2, address well insufficient height clearance issue for pump units no. 1 & 2. Investigate motor phase current imbalance for pump unit no. 2, replace corroded strut supports for pump unit no. 1 disconnect switch, replace sequence timers with PLCs, clean up wiring in wall mounted junction boxes.	CP-ME	P&E	510,000	-	-	-	510,000
<b>14. Pearl City Booster No. 3 MCC Replacement</b>	Replace MCC, SCADA system, and all electrical components and appurtenances.	CP-ME	P&E	320,000	-	-	-	320,000
<b>15. Pump Renewal and Replacement</b>	Renewal and replacement of various BWS pumps and plant facilities.	CP-ME	P&E	100,000	-	-	-	100,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>Pumps Total</b>				<b>5,565,000</b>	<b>10,000,000</b>	<b>-</b>	<b>25,500,000</b>	<b>41,065,000</b>
<b>B. Reservoirs</b>								
<b>16. Wahiawa 1361 Reservoir No. 1 Demolition</b>	Demolish existing concrete reservoir and appurtenances.	CP-D	P&E	100,000	-	-	-	100,000
<b>Reservoirs Total</b>				<b>100,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100,000</b>

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>C. Pipelines</b>								
<b>17. Keolu Hills Water System Improvements, Part II</b>	Install 12-inch mains and appurtenances along Keolu Drive, from Akumu Street to Nanialii Street; along Akumu Street, from Keolu Drive to Alahaki Street; along Iana Street, from Keolu Drive to FH W00766; and along Keolu Drive, from Kanapuu Drive to Akalani Loop - approx. 3,580 lin. ft. Install 8-inch mains and appurtenances along Akumu Street, from Alahaki Street to Holoholo Street; along Keolu Drive, from Akalani Loop to Akahai Street; along Akahai Street, from Keolu Drive to Akamai Street; along Akaiki Street, from Akahai Street to Akamai Street; and along Halula Place, from Akumu Street to end - approx. 4,270 lin. ft.	CP-D	Const	-	-	-	8,500,000	8,500,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

		Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>17. Keolu Hills Water System Improvements, Part II (cont.)</b>	Install 4-inch mains and appurtenances along Akumu Place, from Akumu Street to end; along Akiu Place, from Akumu Street to end; and along Akalei Place from Akumu Street to end - approx. 540 lin. ft.					

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>18. North School Street Water System Improvements</b>	Install 16-inch mains and appurtenances along North School Street, from Kamehameha IV Road to Houghtailing Street - approx. 4,510 lin. ft. Install 8-inch mains and appurtenances along Ahonui Street, from North School Street to Linapuni Street; along Hulali Place, from Ahonui Street to end; along North School Street, from Amelia Street to Leilani Street; along North School Street, from Likelike Highway to Houghtailing Street; along Amelia Street, from North School Street to Waikoa Road; along Waikoa Road, from Amelia Street to Martin Street; along Martin Street,	CP-D	Const	-	-	-	11,500,000	11,500,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

	Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<p><b>18. North School Street Water System Improvements (cont.)</b></p>	<p>from North School Street to Waikoa Road; along Kapalama Avenue, from North School Street to Peter Buck Street; and along Brigham Street, from Kapalama Avenue to Kapalama Avenue - approx. 8,330 lin. ft. Install 4-inch mains and appurtenances along Palapala Place, from Kapalama Avenue to end - approx. 205 lin. ft.</p>				

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>19. Kalama Valley Water System Improvements, Part II</b>	Install 12-inch mains and appurtenances along Kealahou Street, from 661 Kealahou Street to Papalalo Place - approx. 2,305 lin. ft. Install 8-inch mains and appurtenances along Wawau Street, from Honokahua Street to Kaeleku Street; along Honokahua Street, from Kaeleku Street to end; along Kealahou Street, from Papalalo Place to end; along Nakalele Street, from Kealahou Street to Pihana Street; along Pihana Street, from 45 feet north of FH M06514 to end; and along Ipuai Street, from Kealahou Street to Honokahua Street - approx. 4,135 lin. ft.	CP-D	Const	-	-	-	11,200,000	11,200,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

		Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>19. Kalama Valley Water System Improvements, Part II (cont.)</b>	Install 8- and 4-inch mains and appurtenances along Kalina Place, from Kealahou Street to end; along Maloo Place, from Honokahua Street to end; along Ohina Place, from Honokahua Street to end; along Honokahua Place, from Honokahua Street to end; along Kiaala Place, from Kealahou Street to end; and along Papalalo Place, from Kealahou Street to end - approx. 2,040 lin. ft. Install service laterals and appurtenances along Kaeleku Street, from Honokahua Street to end; along Honokahua Street, from Kahului Street to Kepaniwai Street;					



Board of Water Supply  
Capital Improvement Program  
FY 2022

		Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<p><b>19. Kalama Valley Water System Improvements, Part II (cont.)</b></p>	<p>along Napoko Place, from Kealahou Street to end; along Kamaomao Place, from Kealahou Street to end; along Puumahoe Place, from Kealahou Street to end; along Muolea Place, from Kealahou Street to end; along Olowalu Place, from Kealahou Street to end; along Olowalu Way, from Olowalu Place to end; along Huialoha Street, from Kealahou Street to Kahului Street; along Kealahou Street, from Huialoha Street to FH no. M06314; along Inuwai Place, from Kealahou Street to end; along Kahului Street, from Kaeleku Street to FH no. M06477; along Pihana Street, from Kahului Street to FH no. M06514; along Inuwai Way, from Inuwai Place to end; and along Eaea Place, from Kealahou Street to end - approx. 199 service laterals.</p>					

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>20. Palolo Water System Improvements, Part III</b>	Install 16-inch mains and appurtenances along Palolo Avenue, from Carlos Long Street to Palolo Place; and along 10th Avenue, from Palolo Place to Makanui Place - approx. 1,410 lin. ft. Install 12-inch mains and appurtenances along Palolo Avenue, from Kiwila Street to Palolo Place; and along 10th Avenue, from Palolo Place to Waiomao Road - approx. 7,000 lin. ft. Install 8-inch mains and appurtenances along Palolo Avenue, from Kauhana Street to Carlos Long Street; along Kaalani Place, from 10th Avenue to end; along Kaululoa Place, from Palolo Avenue	CP-D	Const	-	-	-	10,500,000	10,500,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>20. Palolo Water System Improvements, Part III (cont.)</b>	along Makanui Place, from 10th Avenue to end; along Holomua Place, from Makanui Place to end; and along 10th Avenue Place from 10th Avenue to end – approx. 3,470 lin. ft. Install 4-inch mains and appurtenances along Palolo Place, from FH M00899 to end – approx. 30 lin. ft.							
<b>21. Puiwa Road 12-Inch and Dowsett Avenue 8-Inch Mains</b>	Install 12-inch mains and appurtenances along Puiwa Road, from 24 Puiwa Road to Puiwa Lane - approx. 500 lin. ft. Install 8-Inch mains and appurtenances along Dowsett Avenue, from fire hydrant M03678 to Alika Avenue - approx. 1,000 lin. ft. Install 8-inch main and fire hydrant along the lane near 3964 Old Pali Road, from Old Pali Road to end - approx. 510 lin. ft.	CP-D	Const	-	-	-	2,000,000	2,000,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>22. Waiomao Homestead Road 8-Inch Main</b>	Install 8-inch mains and appurtenances along Waiomao Homestead Road, from Waiomao Road to Palolo Chlorinator - approx. 700 lin. ft.	CP-D	Const	-	-	-	1,300,000	1,300,000
<b>23. Kailua Road 8-Inch Main</b>	Install 8-inch and 2-inch mains and appurtenances along 1005 Kailua Road from Kailua Road to end - approx. 685 lin. ft.	CP	Const	-	-	-	600,000	600,000
<b>24. Water Sampling Stations at Various Locations</b>	Install water sampling stations at various locations.	CP-S	Const	500,000	-	-	-	500,000
<b>25. New Service Lateral Installations at Various Location</b>	Install new service laterals at various locations.	FO	Const	-	-	-	-	-
		FO	P&E	-	-	-	-	-
<b>26. Water Main Installation &amp; Replacement</b>	Install and replace water mains at various locations.	CP	Const	100,000	-	-	-	100,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>27. Nuuanu Pali Drive and Old Pali Road Area Water System Improvements</b>	Install 12-inch mains and appurtenances along Nuuanu Pali Drive, from Pali Highway to Old Pali Road; along Old Pali Road, from Nuuanu Pali Drive to Paris Place; along Waokanaka Street, from Pali Highway (near Nuuanu Booster No. 2) to FH M07711; and along Waokanaka Street, from 3666 Waokanaka Street to Waokanaka Place - approx. 3,175 lin. ft. Install 8-inch mains and appurtenances along 3742 Old Pali Road, from Old Pali Road to end; along Palimalu Drive, from Old Pali Road to end; along Nakele Street, from Nuuanu Pali Drive to end; and along Hakumele Place, from Nuuanu Pali Drive to end - approx. 1,895 lin. ft.	CP	P&E	-	-	-	750,000	750,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>28. Thomas Square 20-Inch Main Relocation</b>	Install 20-inch mains and appurtenances along S. Hotel Street, from Kealamakai Street to Ward Avenue; along Ward Avenue, from S. Hotel Street to S. Beretania Street; along S. Beretania Street, from Ward Avenue to Victoria Street; and along Victoria Street from S. Beretania Street to Young Street - approx. 1,950 lin. ft. Install 12-inch main and appurtenances along Victoria Street from S. Beretania Street to Young Street - approx. 370 lin. ft.	CP-D	P&E	-	-	-	600,000	600,000
<b>29. Water System Improvements at Various Locations</b>	Install mains and appurtenance to replace high risk water mains at various locations throughout the island.	CP-D	P&E	-	-	-	12,000,000	12,000,000
<b>30. Service Lateral Replacement at Various Locations</b>	Topographic Survey for the service lateral replacement at various locations.	CP-S	P&E	150,000	-	-	-	150,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

					Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>31. Galvanized Pipeline Replacement</b>	Replace galvanized mains at various locations.	WQ	P&E		100,000	-	-	-	100,000
<b>32. Water Main Installation &amp; Replacement</b>	Install and replace water mains at various locations.	CP	P&E		100,000	-	-	-	100,000
<b>Pipelines Total</b>					<b>950,000</b>	<b>-</b>	<b>-</b>	<b>58,950,000</b>	<b>59,900,000</b>
<b>D. Treatment</b>									
<b>33. GAC Interior Corrosion Control at Various Locations</b>	Perform interior corrosion control of selected BWS GAC facilities. CM services funding included for this project.	WSO	Const		2,000,000	-	-	-	2,000,000
			P&E		500,000	-	-	-	500,000
<b>Treatment Total</b>					<b>2,500,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,500,000</b>

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>E. Facilities</b>								
<b>34. Beretania IT Data Center Renovation</b>	Renovate and install workstation layout changes to the Data Center to more effectively utilize the floor space following decommissioning and removal of the server racks. Reposition/relocate equipment racks and update power and HVAC systems. Renovate women's restroom and IT breakroom.	CP-S	Const	1,500,000	-	-	-	1,500,000
<b>35. Storm Water Management Plan Improvements at Beretania Complex and Heeia Corporation Yard</b>	Install improvements to eliminate pollutant runoff from the Beretania Complex and Heeia Corporation Yard.	CP-S	Const	1,000,000	-	-	-	1,000,000
<b>36. Beretania Public Service Building 4th Floor Renovation</b>	Renovate the 4th floor to create multipurpose rooms.	CP-S	Const	1,000,000	-	-	-	1,000,000



Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>37. Piliuka PRV Replacement</b>	Replace and relocate PRVs, along Waianae Valley Road near FH L06812, to above ground within new building. Restore power, communications and supervisory controls.	CP-D	Const	600,000	-	-	-	600,000
<b>38. Pump Station Instrumentation &amp; Controls and SCADA Upgrade</b>	Upgrade instrumentation and controls equipment at various pump stations and revamp SCADA system to provide smarter functionality.	WSO	Const	-	-	-	1,400,000	1,400,000
	Project planning, design, and management services.	WSO	P&E	-	-	-	250,000	250,000
<b>39. Honouliuli Water Recycling Facility Reroofing</b>	Reroofing of the Honouliuli Water Recycling Facility Buildings.	WR	Const	260,000	-	-	-	260,000
<b>40. Facility Repair and Renovation</b>	Repair, renovation, reroofing, fencing and repainting of selected BWS facilities.	CP-S	Const	5,000,000	-	-	-	5,000,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>41. Security Improvements at Various Locations</b>	Security improvements and enhancements includes, but not limited to fencing, doors and windows, vegetation setbacks and access control systems at various BWS locations.	CP-S	Const	1,500,000	-	-	-	1,500,000
<b>42. Waimanalo Tunnel I And II and Waianae Plantation Tunnel III Renovation</b>	Install improvements to stabilize entrance to tunnels.	CP	P&E	350,000	-	-	-	350,000
<b>43. Pipeline Tunnel Inspection</b>	Inspect pipeline tunnels at various locations.	CP	P&E	200,000	-	-	-	200,000
<b>44. Facility Repair and Renovation</b>	Repair, renovation, reroofing, fencing and repainting of selected BWS facilities.	CP-S	P&E	1,500,000	-	-	-	1,500,000
<b>45. Monitoring Well Assessment and Repair</b>	Provide well condition assessment and associated repair services for monitor wells.	WR	P&E	50,000	-	-	-	50,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>46. Professional Services for BWS Projects</b>	Obtain services of archaeologists, botanists, environmental engineers, water quality labs, planners, government agencies and others.	CP	P&E	300,000	-	-	-	300,000
<b>Facilities Total</b>				<b>13,260,000</b>	<b>-</b>	<b>-</b>	<b>1,650,000</b>	<b>14,910,000</b>
<b>Total Category II - Renewal and Replacement</b>				<b>22,375,000</b>	<b>10,000,000</b>	<b>-</b>	<b>86,100,000</b>	<b>118,475,000</b>
<b><u>III. Capacity Expansion</u></b>								
<b>A. Pumps</b>								
<b>47. Pacific Heights Booster No. 1</b>	Land acquisition for new Pacific Heights Booster No. 1 to eliminate cross-country water main between Jack Lane and the Pacific Heights 578 Reservoir.	Land	Land	-	-	100,000	-	100,000
<b>Pumps Total</b>				<b>-</b>	<b>-</b>	<b>100,000</b>	<b>-</b>	<b>100,000</b>

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>B. Reservoirs</b>								
<b>Reservoirs Total</b>				-	-	-	-	-
<b>C. Pipelines</b>								
<b>48. Honouliuli WWTP Expansion 16-Inch Main</b>	Install 16-inch mains and appurtenances along Roosevelt Avenue from Renton Road to Geiger Road and Kamakana Street - approx. 4,500 lin. ft.	WR	Const	-	4,300,000			4,300,000
<b>Pipelines Total</b>				-	4,300,000	-	-	4,300,000
<b>D. Treatment</b>								
<b>49. Mililani Wells II GAC Installation</b>	Install two (2) new GAC vessels, backwash tank system, including pump and filter setup, chlorinator infrastructure and piping.	CP	P&E	-	-	800,000	-	800,000
<b>Treatment Total</b>				-	-	800,000	-	800,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

				Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>E. Facilities</b>								
<b>50. Kalaeloa Sea Water Desalination Facility</b>	Design-Build-Operate-Maintain (DBOM) contract for a 1.7 MGD desalination facility with limited oversizing for future expansion. Install 16-inch transmission main along the project boundary from desalination facility to Olai Street, along Olai Street from end to Kalaeloa Boulevard, along Kalaeloa Boulevard from Olai Street to the existing 16-inch main near the Northern end of TMK 9-1-031:022- approx. 4,800 lin. ft.	WR	Const	-	-	17,000,000	-	17,000,000
	Provide project management services to monitor DBOM progress, plans review and RFI response.	WR	P&E	-	-	1,000,000	-	1,000,000
<b>Facilities Total</b>				-	-	18,000,000	-	18,000,000
<b>Total Category III - Capacity Expansion</b>				-	4,300,000	18,900,000	-	23,200,000

Board of Water Supply  
Capital Improvement Program  
FY 2022

	Operating Fund	Operating Fund - SRF	Special Expendable Fund	Improvement Funds	Total
<b>Total Categories I - III</b>	<b>31,275,000</b>	<b>14,300,000</b>	<b>18,900,000</b>	<b>86,100,000</b>	<b>150,575,000</b>
<b>Construction Cost Index Adjustment</b>	<b>2,421,000</b>	<b>1,430,000</b>	<b>1,700,000</b>	<b>7,250,000</b>	<b>12,801,000</b>
<b>Contract Adjustment Account</b>	<b>16,600,000</b>	-	-	-	<b>16,600,000</b>
<b>FY 2022 Capital Improvement Program Total</b>	<b>50,296,000</b>	<b>15,730,000</b>	<b>20,600,000</b>	<b>93,350,000</b>	<b>179,976,000</b>