

**CITY OF KETCHIKAN, ALASKA**  
**2025 - 2029 KETCHIKAN PUBLIC UTILITIES**  
**CAPITAL IMPROVEMENT PROGRAM**

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**Ketchikan Public Utilities  
2025 - 2029 Capital Improvement Program  
2025 Capital Budget**

Department/Division/Project	Revenues/ Reserves	Grants	Other	Revenue Bonds	2025 Total
<b>Administration</b>					
Financial & Accounting Information System	20,000				20,000
<b>Administration Division Total</b>	<b>20,000</b>				<b>20,000</b>
<b>Sales, Marketing &amp; Customer Service</b>					
None					
<b>Electric Division</b>					
Silvis Road Repair	810,000				810,000
Ketchikan Lakes Project Relicensing	250,000				250,000
Whitman Dam Crack Repair	120,000				120,000
Whitman Tailrace Modification	1,500,000				1,500,000
Whitman Incubation Pipe Flow Meter	50,000				50,000
Ketchikan Lake Utilities	50,000				50,000
Beaver Falls Powerhouse Exterior	50,000				50,000
Transmission & Distribution Line Maintenance	500,000				500,000
Transformer Purchases	200,000				200,000
Beaver Falls Relicensing	50,000				50,000
Bailey Generator No. 4 Wartsila PLC Upgrade	140,000				140,000
Battery Systems & Chargers	50,000				50,000
Vehicles & Moving Equipment	60,000				60,000
Operating Equipment	300,000				300,000
AMI, Meters and Meter Replacement Parts	100,000				100,000
Additional Projects	164,000				164,000
<b>Electric Division Total</b>	<b>4,394,000</b>				<b>4,394,000</b>

**Ketchikan Public Utilities  
2025 - 2029 Capital Improvement Program  
2025 Capital Budget**

<b>Department/Division/Project</b>	<b>Revenues/ Reserves</b>	<b>Grants</b>	<b>Other</b>	<b>Revenue Bonds</b>	<b>2025 Total</b>
<b>Telecommunications Division</b>					
Normal Growth and Repair - Buildings	100,000				100,000
Normal Growth and Repair - CO Switching	50,000				50,000
Normal Growth and Repair - Copper Cable	20,000				20,000
Normal Growth and Repair - Fiber Cable	300,000				300,000
Normal Growth and Repair - CO Transmission	250,000				250,000
Normal Growth and Repair - Expansion	10,000				10,000
Normal Growth and Repair - Provisioning	20,000				20,000
Fiber to the Home	300,000				300,000
Remote Cabinets for Advanced Services	50,000				50,000
Core Network Upgrade	150,000				150,000
Server Environment	600,000				600,000
Multi-Dwelling Unit Project	75,000				75,000
Operating Equipment	100,000				100,000
PC Hardware & Software	75,000				75,000
Power Expansion/Reclamation	50,000				50,000
Visual Mapping Software	10,000				10,000
Network Monitoring	50,000				50,000
Security	60,000				60,000
4G/LTE	200,000				200,000
Hosted	80,000				80,000
Wi-Fi	50,000				50,000
Internet Expansion	150,000				150,000
KetchCan1 Subsea Cable Repair	676,500				676,500
<b>Telecommunications Division Total</b>	<b>3,426,500</b>				<b>3,426,500</b>

**Ketchikan Public Utilities  
2025 - 2029 Capital Improvement Program  
2025 Capital Budget**

<b>Department/Division/Project</b>	<b>Revenues/ Reserves</b>	<b>Grants</b>	<b>Other</b>	<b>Revenue Bonds</b>	<b>2025 Total</b>
<b>Water Division</b>					
Filtration Facility - Preliminary Preparation Tasks	390,000				390,000
Water Meters - Business & Commercial Customers				813,281	813,281
Replace Tongass Ave. Suspended Water Main	407,228				407,228
Replace Water St. Suspended Water Main	412,000				412,000
Valve Boxes - Repair of Surrounding Pavement	50,000				50,000
Water Distribution Grid Improvements	30,000				30,000
Water Service Upgrade Program	21,000				21,000
Backflow Prevention Program	15,000				15,000
Second Avenue Main Replacement	225,000				225,000
SCADA PLC Controllers	360,000				360,000
<b>Water Division Total</b>	<b>1,910,228</b>			<b>813,281</b>	<b>2,723,509</b>
<b>GRAND TOTAL</b>	<b>9,750,728</b>			<b>813,281</b>	<b>10,564,009</b>

<b>Ketchikan Public Utilities</b> <b>2025 - 2029 Capital Improvement Program</b> <b>Summary of Projects by Division - All Years</b>								
<b>Division/Project</b>	<b>Prior Years</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Five Year Total</b>	<b>Project Total</b>
<b>Administration</b>								
Financial & Accounting Information System Implementation	460,354	20,000					20,000	480,354
<b>Administration Total</b>	460,354	20,000					20,000	480,354
<b>Sales, Marketing &amp; Customer Service</b>								
None								
<b>Electric Division</b>								
Silvis Road Repair	22,150	810,000					810,000	832,150
Ketchikan Lakes Project Relicensing	300,000	250,000	600,000	600,000	250,000	50,000	1,750,000	2,050,000
Whitman Dam Crack Repair		120,000					120,000	120,000
Whitman Tailrace Modification	126,182	1,500,000					1,500,000	1,626,182
Whitman Incubation Pipe Flow Meter		50,000					50,000	50,000
Ketchikan Lakes Utilities	129,017	50,000	4,079,607				4,129,607	4,258,624
Beaver Falls Powerhouse Exterior	36,070	50,000	750,000				800,000	836,070
Transmission & Distribution Line Maintenance		500,000	1,000,000	1,000,000	100,000	500,000	3,100,000	3,100,000
Transformer Purchase		200,000	400,000	400,000	400,000	400,000	1,800,000	1,800,000
Beaver Falls Relicensing	670,000	50,000					50,000	720,000
Bailey Generator No. 4 Wartsilia PLC Upgrade		140,000					140,000	140,000
Battery Systems & Chargers	172,000	50,000	50,500	50,500	50,500	50,500	252,000	424,000
Vehicles & Moving Equipment		60,000	100,000	200,000	350,000	125,000	835,000	835,000
Operating Equipment		300,000	300,000	300,000	300,000	300,000	1,500,000	1,500,000
AMI, Meters and Meter Replacement Parts		100,000	125,000	125,000	125,000	125,000	600,000	600,000
Additional Projects		164,000	164,000	164,000	164,000	164,000	820,000	820,000
Watershed LiDAR Survey			250,000				250,000	250,000
Beaver Falls Switch Gear Replacement	105,000		1,375,000				1,375,000	1,480,000
Ketchikan International Airport & Pennock Island Upgrade	225,977		1,175,000				1,175,000	1,400,977
Bailey Mooring Dolphin Replacement			200,000				200,000	200,000
Port West Substation Reconfiguration & Site Mod.			175,000	950,000			1,125,000	1,125,000
Penstock Inspections			100,000				100,000	100,000
Feeder Protective Relay Upgrades	50,000		150,000	50,000	50,000	50,000	300,000	350,000
System Sectionalizers			100,000	100,000	100,000		300,000	300,000
Digital Radio Replacement	6,000		120,000				120,000	126,000
Spare Substation Class Transformer Refurbishment			65,000				65,000	65,000
Security Fencing and Gates			45,000				45,000	45,000
ESRI Trouble Ticket Solution			40,000				40,000	40,000
Bailey Generator Radiator Replacement			40,000	300,000			340,000	340,000
Bailey Fuel Tank Painting			100,000				100,000	100,000
Reimbursable Projects			25,000	25,000	25,000	25,000	100,000	100,000
Bailey Exhaust Stack Re-Coating			125,000				125,000	125,000
Electric Division Service Center			2,000,000	500,000	5,100,000		7,600,000	7,600,000
Silvis Tunnel Valve Replacement			440,000				440,000	440,000
Generator Rewind & Repair			650,000	650,000			1,300,000	1,300,000

<b>Ketchikan Public Utilities</b> <b>2025 - 2029 Capital Improvement Program</b> <b>Summary of Projects by Division - All Years</b>								
<b>Division/Project</b>	<b>Prior Years</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Five Year Total</b>	<b>Project Total</b>
<b>Electric Division (continued)</b>								
34.5 kV Breaker and Relay Spares			105,000				105,000	105,000
Beaver Falls Governor Rehabilitation			250,000				250,000	250,000
Silvis Shaft & Turbine Overhaul			750,000				750,000	750,000
Bailey Unit No. 1 Rehabilitation	11,921			850,000			850,000	861,921
Clam Cove 3-Phase Upgrade			500,000	2,475,000			2,975,000	2,975,000
Mountain Point Substation Replacement			750,000	7,600,000			8,350,000	8,350,000
Bailey Substation Replacement				1,500,000	15,300,000		16,800,000	16,800,000
Ward Cove Substation					800,000	8,100,000	8,900,000	8,900,000
Diesel Generator Replacement				4,125,000	40,750,000		44,875,000	44,875,000
Whitman Powerhouse Domestic Water Re-Plumb			50,000				50,000	50,000
Whitman Part 12 Comprehensive Assessment			200,000				200,000	200,000
Lower Silvis Lake Submarine Cable Replacement			50,000				50,000	50,000
<b>Electric Division Total</b>	<b>1,854,317</b>	<b>4,394,000</b>	<b>17,399,107</b>	<b>21,964,500</b>	<b>63,864,500</b>	<b>9,889,500</b>	<b>117,511,607</b>	<b>119,365,924</b>
<b>Telecommunications Division</b>								
Normal Growth and Repair - Buildings		100,000	100,000	100,000	100,000	100,000	500,000	500,000
Normal Growth and Repair - CO Switching		50,000	50,000	50,000	50,000	50,000	250,000	250,000
Normal Growth and Repair - Copper Cable		20,000	25,000	25,000	25,000	25,000	120,000	120,000
Normal Growth and Repair - Fiber Cable		300,000	250,000	300,000	325,000	350,000	1,525,000	1,525,000
Normal Growth and Repair - CO Transmission		250,000	275,000	300,000	325,000	350,000	1,500,000	1,500,000
Normal Growth and Repair - Expansion		10,000	15,000	15,000	15,000	20,000	75,000	75,000
Normal Growth and Repair - Provisioning		20,000	20,000	20,000	20,000	20,000	100,000	100,000
Fiber to the Home		300,000	250,000	300,000	325,000	300,000	1,475,000	1,475,000
Remote Cabinets for Advanced Services		50,000	75,000	75,000	50,000	50,000	300,000	300,000
Core Network Upgrade		150,000	1,000,000	1,000,000	750,000	500,000	3,400,000	3,400,000
Server Environment		600,000	100,000	100,000	100,000	200,000	1,100,000	1,100,000
Multi-Dwelling Unit Project		75,000	100,000	100,000	100,000	100,000	475,000	475,000
Operating Equipment		100,000	100,000	100,000	125,000	150,000	575,000	575,000
PC Hardware & Software		75,000	75,000	75,000	75,000	100,000	400,000	400,000
Power Expansion/Reclamation		50,000	100,000	100,000	100,000	100,000	450,000	450,000
Visual Mapping Software		10,000	20,000	20,000	20,000	20,000	90,000	90,000
Network Monitoring		50,000	100,000	100,000	100,000	150,000	500,000	500,000
Vehicle Acquisition			100,000	100,000	200,000	250,000	650,000	650,000
Security		60,000	75,000	100,000	125,000	125,000	485,000	485,000
4G/LTE		200,000	200,000	200,000	150,000	150,000	900,000	900,000
Hosted		80,000	100,000	100,000	200,000	400,000	880,000	880,000
Wi-Fi		50,000	75,000	100,000	100,000	125,000	450,000	450,000
Internet Expansion		150,000	100,000	150,000	600,000	150,000	1,150,000	1,150,000

<b>Ketchikan Public Utilities</b> <b>2025 - 2029 Capital Improvement Program</b> <b>Summary of Projects by Division - All Years</b>								
<b>Division/Project</b>	<b>Prior Years</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>Five Year Total</b>	<b>Project Total</b>
<b>Telecommunications Division (continued)</b>								
KetchCan1 Subsea Cable Repair		676,500					676,500	676,500
<b>Telecommunications Division Total</b>		<b>3,426,500</b>	<b>3,305,000</b>	<b>3,530,000</b>	<b>3,980,000</b>	<b>3,785,000</b>	<b>18,026,500</b>	<b>18,026,500</b>
<b>Water Division</b>								
Filtration Facility - Preliminary Preparation Tasks	1,047,666	390,000		5,113,000			5,503,000	6,550,666
Water Meters - Business & Commercial Customers	436,719	813,281	150,000				963,281	1,400,000
Replace Tongass Ave. Suspended Water Main		407,228					407,228	407,228
Replace Water St. Suspended Water Main		412,000					412,000	412,000
Valve Boxes - Repair of Surrounding Pavement		50,000	100,000	100,000	100,000	100,000	450,000	450,000
Water Distribution Grid Improvements		30,000	30,000	30,000	30,000	30,000	150,000	150,000
Water Service Upgrade Program		21,000	21,000	21,000	21,000	21,000	105,000	105,000
Backflow Prevention Program		15,000	15,000	15,000	15,000	15,000	75,000	75,000
Second Avenue Main Replacement		225,000		160,000		990,000	1,375,000	1,375,000
SCADA PLC Controllers		360,000					360,000	360,000
Pump Station Switchgear Improvements	81,250		45,000				45,000	126,250
Replace ClorTec Generating Cells	130,000		50,000	50,000			100,000	230,000
Fiber-optic Communications Switches			25,000				25,000	25,000
Peterson Street Utility Improvements			350,000				350,000	350,000
Harris St. Utility Improvements			125,000	750,000			875,000	875,000
Park Ave. Utility Improvements			125,000	1,950,000			2,075,000	2,075,000
Utility Vehicles			155,000	180,000	85,000		420,000	420,000
Additional Projects			50,000	50,000	50,000	50,000	200,000	200,000
Skyline Water Main Replacement			70,000	390,000			460,000	460,000
West Fairy Chasm Replacement			87,000		593,000		680,000	680,000
Hillside Road Water Main Replacement	19,440		60,000		644,000		704,000	723,440
Ketchikan Lakes Road Water Main Replacement	21,035		700,000				700,000	721,035
Highlands Reservoir Property Acquisition				400,000			400,000	400,000
Ktn. Lakes Alternative Raw Water Supply Piping						12,000,000	12,000,000	12,000,000
Thomas Basin Water Main Replacement			70,000	300,000			370,000	370,000
<b>Water Division Total</b>	<b>1,736,110</b>	<b>2,723,509</b>	<b>2,228,000</b>	<b>9,509,000</b>	<b>1,538,000</b>	<b>13,206,000</b>	<b>29,204,509</b>	<b>30,940,619</b>
<b>TOTAL</b>	<b>4,050,781</b>	<b>10,564,009</b>	<b>22,932,107</b>	<b>35,003,500</b>	<b>69,382,500</b>	<b>26,880,500</b>	<b>164,762,616</b>	<b>168,813,397</b>

**Ketchikan Public Utilities**  
**2025 - 2029 Capital Improvement Program**  
**Summary of Projects by Funding Source - All Years**

Division/Project	Prior Years	Revenue Generating Fund	Grants	Other	Revenue Bonds	State Drinking Water Loan Fund	Total
<b>Administration</b>							
Financial & Accounting Information System Implementation	460,354	20,000					480,354
<b>Administration Total</b>	460,354	20,000					480,354
<b>Sales, Marketing &amp; Customer Service</b>							
None							
<b>Electric Division</b>							
Silvis Road Repair	22,150	810,000					832,150
Ketchikan Lakes Project Relicensing	300,000	1,750,000					2,050,000
Whitman Dam Crack Repair		120,000					120,000
Whitman Tailrace Modification	126,182	1,500,000					1,626,182
Whitman Incubation Pipe Flow Meter		50,000					50,000
Ketchikan Lakes Utilites	129,017	4,129,607					4,258,624
Beaver Falls Powerhouse Exterior	36,070	800,000					836,070
Transmission & Distribution Line Maintenance		3,100,000					3,100,000
Transformer Purchases		1,800,000					1,800,000
Beaver Falls Relicensing	670,000	50,000					720,000
Bailey Generator No. 4 Wartsila PLC Upgrade		140,000					140,000
Battery Systems & Chargers	172,000	252,000					424,000
Vehicles & Moving Equipment		835,000					835,000
Operating Equipment		1,500,000					1,500,000
AMI, Meters and Meter Replacement Parts		600,000					600,000
Additional Projects		820,000					820,000
Watershed LiDAR Survey		250,000					250,000
Beaver Falls Switch Gear Replacement	105,000	1,375,000					1,480,000
Ketchikan International Airport & Pennock Island Upgrade	225,977	1,175,000					1,400,977
Bailey Mooring Dolphin Replacement		200,000					200,000
Port West Substation Reconfiguration & Site Mod.		1,125,000					1,125,000
Feeder Protective Relay Upgrades	50,000	300,000					350,000
System Sectionalizers		300,000					300,000
Digital Radio Replacement	6,000	120,000					126,000
Spare Substation Class Transformer Refurbishment		65,000					65,000
Security Fencing and Gates		45,000					45,000
ESRI Trouble Ticket Solution		40,000					40,000
Bailey Generator Radiator Replacement		340,000					340,000
Bailey Fuel Tank Painting		100,000					100,000



**Ketchikan Public Utilities**  
**2025 - 2029 Capital Improvement Program**  
**Summary of Projects by Funding Source - All Years**

Division/Project	Prior Years	Revenue Generating Fund	Grants	Other	Revenue Bonds	State Drinking Water Loan Fund	Total
<b>Electric Division (continued)</b>							
Penstock Inspections		100,000					100,000
Reimbursable Projects		100,000					100,000
Bailey Exhaust Stack Re-Coating		125,000					125,000
Electric Division Service Center					7,600,000		7,600,000
Silvis Tunnel Valve Replacement		440,000					440,000
Generator Rewind & Repair		1,300,000					1,300,000
34.5 kV Breaker and Relay Spares		105,000					105,000
Beaver Falls Governor Rehabilitation		250,000					250,000
Silvis Shaft & Turbine Overhaul		750,000					750,000
Bailey Unit No. 1 Rehabilitation	11,921	850,000					861,921
Clam Cove 3-Phase Upgrade		2,975,000					2,975,000
Mountain Point Substation Replacement					8,350,000		8,350,000
Bailey Substation Replacement					16,800,000		16,800,000
Ward Cove Substation					8,900,000		8,900,000
Diesel Generator Replacement					44,875,000		44,875,000
Whitman Powerhouse Domestic Water Re-Plumb		50,000					50,000
Whitman Part 12 Comprehensive Assessment		200,000					200,000
Lower Silvis Lake Submarine Cable Replacement		50,000					50,000
<b>Electric Division Total</b>	<b>1,854,317</b>	<b>30,986,607</b>			<b>86,525,000</b>		<b>119,365,924</b>
<b>Telecommunications Division</b>							
Normal Growth and Repair - Buildings		500,000					500,000
Normal Growth and Repair - CO Switching		250,000					250,000
Normal Growth and Repair - Copper Cable		120,000					120,000
Normal Growth and Repair - Fiber Cable		1,525,000					1,525,000
Normal Growth and Repair - CO Transmission		1,500,000					1,500,000
Normal Growth and Repair - Expansion		75,000					75,000
Normal Growth and Repair - Provisioning		100,000					100,000
Fiber to the Home		1,475,000					1,475,000
Remote Cabinets for Advanced Services		300,000					300,000
Core Network Upgrade		3,400,000					3,400,000
Server Environment		1,100,000					1,100,000
Multi-Dwelling Unit Project		475,000					475,000
Operating Equipment		575,000					575,000
PC Hardware & Software		400,000					400,000
Power Expansion/Reclamation		450,000					450,000
Visual Mapping Software		90,000					90,000
Network Monitoring		500,000					500,000

**Ketchikan Public Utilities**  
**2025 - 2029 Capital Improvement Program**  
**Summary of Projects by Funding Source - All Years**

Division/Project	Prior Years	Revenue Generating Fund	Grants	Other	Revenue Bonds	State Drinking Water Loan Fund	Total
<b>Telecommunications Division (continued)</b>							
Vehicle Acquisition		650,000					650,000
Security		485,000					485,000
4G/LTE		900,000					900,000
Hosted		880,000					880,000
Wi-Fi		450,000					450,000
Internet Expansion		1,150,000					1,150,000
KetchCan1 Subsea Cable Repair		676,500					676,500
<b>Telecommunications Division Total</b>		18,026,500					18,026,500
<b>Water Division</b>							
Filtration Facility - Preliminary Preparation Tasks	1,047,666	5,503,000					6,550,666
Water Meters - Business & Commercial Customers	436,719	150,000				813,281	1,400,000
Replace Tongass Ave. Suspended Water Main		407,228					407,228
Replace Water St. Suspended Water Main		412,000					412,000
Valve Boxes - Repair of Surrounding Pavement		450,000					450,000
Water Distribution Grid Improvements		150,000					150,000
Water Service Upgrade Program		105,000					105,000
Backflow Prevention Program		75,000					75,000
Second Avenue Main Replacement		385,000	495,000			495,000	1,375,000
SCADA PLC Controllers		360,000					360,000
Pump Station Switchgear Improvements	81,250	45,000					126,250
Replace ClorTec Generating Cells	130,000	100,000					230,000
Fiber-optic Communications Switches		25,000					25,000
Peterson Street Utility Improvements		350,000					350,000
Harris St. Utility Improvements		125,000	375,000			375,000	875,000
Park Ave. Utility Improvements		125,000	975,000			975,000	2,075,000
Utility Vehicles		420,000					420,000
Additional Projects		200,000					200,000
Skyline Water Main Replacement		70,000	195,000			195,000	460,000
West Fairy Chasm Replacement		87,000	296,500			296,500	680,000
Hillside Road Water Main Replacement	19,440	60,000	322,000			322,000	723,440
Ketchikan Lakes Road Water Main Replacement	21,035	700,000					721,035
Highlands Reservoir Property Acquisition			200,000			200,000	400,000
Ktn. Lakes Alternative Raw Water Supply Piping			6,000,000			6,000,000	12,000,000
Thomas Basin Water Main Replacement		70,000	150,000			150,000	370,000
<b>Water Division Total</b>	1,736,110	10,374,228	9,008,500			9,821,781	30,940,619
<b>TOTAL</b>	<b>4,050,781</b>	<b>59,407,335</b>	<b>9,008,500</b>		<b>86,525,000</b>	<b>9,821,781</b>	<b>168,813,397</b>

**Ketchikan Public Utilities  
2025 - 2029 Capital Improvement Program**

**Division: General Manager**

Project Title	Priority	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Financial & Accounting Information System Implementation	1	460,354	13,638	6,362	20,000					480,354
<b>Total</b>		460,354	13,638	6,362	20,000					480,354
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		460,354	13,638	6,362	20,000					480,354
<b>Total</b>		460,354	13,638	6,362	20,000					480,354

**Department: KPU General Manager**

**Priority Number:** 1

**Project Title:** Financial & Accounting Information System  
Implementation

**Start Date:** 01/07

**End Date:** 12/25

**Description:**

The City awarded a contract to New World Systems for the acquisition of new financial and accounting information system and began implementation in September 2011. Finance is requesting that remaining funds that have been appropriated for this project be carried over to 2025. Funds will be used for hardware and software contingencies and New World resources to supplement the Finance Department's efforts during critical phases of the continuing implementation process. Scheduled for completion in 2025 is financial reporting, electronic personnel action forms and e-suites. The cost of this project is being funded equally by General Government and KPU.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art									
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Consultation	51,975								51,975
Equip, Software & Implementation Service	392,879	13,638	6,362	20,000					412,879
Other - Training	15,500								15,500
<b>Total</b>	460,354	13,638	6,362	20,000					480,354

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		460,354	13,638	6,362	20,000					480,354
<b>Total</b>		460,354	13,638	6,362	20,000					480,354

Ketchikan Public Utilities 2025 - 2029 Capital Improvement Program Division: Electric										
Project Title	Priority	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- riated	New Funding	Total	2026	2027	2028	2029	
Silvis Road Repair	1	22,150	360,000	450,000	810,000					832,150
Ketchikan Lakes Project Relicensing	2	300,000		250,000	250,000	600,000	600,000	250,000	50,000	2,050,000
Whitman Dam Crack Repair	3		50,000	70,000	120,000					120,000
Whitman Tailrace Modification	4	126,182	110,000	1,390,000	1,500,000					1,626,182
Whitman Incubation Pipe Flow Meter	5		50,000		50,000					50,000
Ketchikan Lakes Utilites	6	129,017		50,000	50,000	4,079,607				4,258,624
Beaver Falls Powerhouse Exterior	7	36,070	50,000		50,000	750,000				836,070
Transmission & Distribution Line Maintenance	8			500,000	500,000	1,000,000	1,000,000	100,000	500,000	3,100,000
Transformer Purchases	9			200,000	200,000	400,000	400,000	400,000	400,000	1,800,000
Beaver Falls Relicensing	10	670,000		50,000	50,000					720,000
Bailey Generator No. 4 Wartsila PLC Upgrade	11			140,000	140,000					140,000
Battery Systems & Chargers	12	172,000		50,000	50,000	50,500	50,500	50,500	50,500	424,000
Vehicles & Moving Equipment	13			60,000	60,000	100,000	200,000	350,000	125,000	835,000
Operating Equipment	14			300,000	300,000	300,000	300,000	300,000	300,000	1,500,000
AMI, Meters and Meter Replacement Parts	15			100,000	100,000	125,000	125,000	125,000	125,000	600,000
Additional Projects	16			164,000	164,000	164,000	164,000	164,000	164,000	820,000
Spare Substation Class Transformer Refurbishment	17					65,000				65,000
Security Fencing and Gates	18					45,000				45,000
ESRI Trouble Ticket Solution	19					40,000				40,000
Bailey Generator Radiator Replacement	20					40,000	300,000			340,000
Bailey Fuel Tank Painting	21					100,000				100,000
Penstock Inspections	22					100,000				100,000
Beaver Falls Switch Gear Replacement	23	105,000				1,375,000				1,480,000
Watershed LiDAR Survey	24					250,000				250,000
Reimbursable Projects	25					25,000	25,000	25,000	25,000	100,000
Ketchikan International Airport & Pennock Island Upgrade	26	225,977				1,175,000				1,400,977
Bailey Mooring Dolphin Replacement	27					200,000				200,000
Feeder Protective Relay Upgrades	28	50,000				150,000	50,000	50,000	50,000	350,000
System Sectionalizers	29					100,000	100,000	100,000		300,000
Digital Radio Replacement	30	6,000				120,000				126,000
Port West Substation Reconfiguration & Site Mod.	31					175,000	950,000			1,125,000
Bailey Exhaust Stack Re-Coating	32					125,000				125,000
Electric Division Service Center	33					2,000,000	500,000	5,100,000		7,600,000
Silvis Tunnel Valve Replacement	34					440,000				440,000
Generator Rewind & Repair	35					650,000	650,000			1,300,000
34.5 kV Breaker and Relay Spares	36					105,000				105,000
Beaver Falls Governor Rehabilitation	37					250,000				250,000
Silvis Shaft & Turbine Overhaul	38					750,000				750,000
Bailey Unit No. 1 Rehabilitation	39	11,921					850,000			861,921
Clam Cove 3-Phase Upgrade	40					500,000	2,475,000			2,975,000
Mountain Point Substation Replacement	41					750,000	7,600,000			8,350,000
Bailey Substation Replacement	42						1,500,000	15,300,000		16,800,000
Ward Cove Substation	43							800,000	8,100,000	8,900,000
Diesel Generator Replacement	44						4,125,000	40,750,000		44,875,000
Whitman Powerhouse Domestic Water Re-Plumb	45					50,000				50,000
Whitman Part 12 Comprehensive Assessment	46					200,000				200,000
Lower Silvis Lake Submarine Cable Replacement	47					50,000				50,000
Total		1,854,317	620,000	3,774,000	4,394,000	17,399,107	21,964,500	63,864,500	9,889,500	119,365,924
Source of Funds		Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- riated	New Funding	Total	2026	2027	2028	2029	
KPU Revenue/Reserves - Public Art										
Revenue Generating Fund		1,854,317	620,000	3,774,000	4,394,000	14,649,107	8,239,500	1,914,500	1,789,500	32,840,924
Bond Funding						2,750,000	13,725,000	61,950,000	8,100,000	86,525,000
Total		1,854,317	620,000	3,774,000	4,394,000	17,399,107	21,964,500	63,864,500	9,889,500	119,365,924

Division: Electric

Project Title: Silvis Road Repair

Description:

Priority Number: 1

Start Date: 01/22

End Date: 12/25

The Silvis Access Road has suffered increasing erosion at the high-point along Lower Silvis Lake due to drainage challenges and avalanches. Initial project scoping and surveying were begun in 2022 when the erosion was only a minor issue, however after the snow melted in late-spring 2023, the roadway was found to be eroded to an extent that prevents highway vehicles from transiting through to Silvis Powerhouse. A geotechnical engineer conducted a field inspection during summer 2023, providing a report with conceptual solutions, orders of magnitude costs, as well as possible grant funding opportunities. KPU will pursue grant funding options, but until awarded, this project must be funded out of KPU reserves. In 2024, KPU requested proposals for a detailed design of the road repai. Actual constructionis slated to take place during the summer of 2025.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art	22,150								22,150
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction		360,000	450,000	810,000					810,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
Total	22,150	360,000	450,000	810,000					832,150

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		22,150	360,000	450,000	810,000					832,150
Total		22,150	360,000	450,000	810,000					832,150



<b>Division: Electric</b>					<b>Priority Number:</b> 3				
<b>Project Title:</b> Whitman Dam Crack Repair					<b>Start Date:</b> 01/25				
					<b>End Date:</b> 12/25				
<b>Description:</b>  Whitman Dam has several significant leaks, cracks and spalled areas, which, though not an immediate dam safety concern, need to be repaired to prevent deterioration over time. Repairs are being designed by a Professional Engineer and must be approved by FERC prior to implementation.									

  

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other		50,000	70,000	120,000					120,000
<b>Total</b>		50,000	70,000	120,000					120,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund			50,000	70,000	120,000					120,000
<b>Total</b>			50,000	70,000	120,000					120,000



**Division: Electric**

**Priority Number:** 4

**Project Title:** Whitman Tailrace Modification

**Start Date:** 01/20

**End Date:** 12/25

**Description:**

The Whitman Hydroelectric Project powerhouse tailrace channel is constructed of rock riprap in which fish are stranded during a unit shutdown. As operational adjustments have not been adequate to eliminate fish stranding, KPU has agreed to regrade the channel to a lower elevation and construct a concrete plunge pool. This will keep the channel watered and allow fish to move in and out at all flows and tides. The modified tailrace design has received approval by fisheries management agencies and FERC.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- riated	New Funding	Total	2026	2027	2028	2029	
Public Art	36,291								36,291
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction	89,891	110,000	1,390,000	1,500,000					1,589,891
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>	126,182	110,000	1,390,000	1,500,000					1,626,182

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- riated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		126,182	110,000	1,390,000	1,500,000					1,626,182
<b>Total</b>		126,182	110,000	1,390,000	1,500,000					1,626,182

<b>Division: Electric</b>					<b>Priority Number:</b> 5					
<b>Project Title:</b> Whitman Incubation Pipe Flow Meter					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/25					
<b>Description:</b>  The FERC license for the Whitman Lake Hydroelectric project requires installation of a flow meter to measure the quantity of water delivered to the SSRAA fish hatchery. This project includes purchase and installation of the flow meter, excavation and earthwork, SCADA connection, coordination with the hatchery.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappropriated	New Funding	Total	2026	2027	2028	2029		
Public Art										
Design		10,000		10,000					10,000	
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction										
Vehicles/Moving Equipment										
Operating Equipment		40,000		40,000					40,000	
Environmental/Other Studies										
Other										
<b>Total</b>		50,000		50,000					50,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund			50,000		50,000					50,000
<b>Total</b>			50,000		50,000					50,000



**Division: Electric**

**Priority Number:** 7

**Project Title:** Beaver Falls Powerhouse Exterior

**Start Date:** 1/13

**End Date:** 12/26

**Description:**

The exterior of the Beaver Falls Powerhouse, which was built in 1954, contains asbestos coating that is failing. Signs of water intrusion into the concrete walls and structure are apparent. This project will entail an engineering evaluation of the building structure, an environmental evaluation, creation of plans and specifications for asbestos removal and disposal, concrete/structural repairs, a new coating system and required contractual work.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art	36,070	50,000		50,000	750,000				86,070	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction										
Vehicles/Moving Equipment										
Operating Equipment										
Environmental/Other Studies										
Other										
Total	36,070	50,000		50,000	750,000				836,070	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		36,070	50,000		50,000	750,000				836,070
Total		36,070	50,000		50,000	750,000				836,070





<b>Division: Electric</b>					<b>Priority Number:</b> 10					
<b>Project Title:</b> Beaver Falls Relicensing					<b>Start Date:</b> 01/18					
					<b>End Date:</b> 12/25					
<b>Description:</b>  The Beaver Falls Hydroelectric Project is licensed through the Federal Energy Regulatory Commission (FERC) for a term of 30 years. KPU's current license expires in 2024. To initiate the FERC license renewal process KPU filed its Notice of Intent (NOI) and Preliminary Application Document (PAD) in 2019. Following NEPA and tribal consultations, and completion of resource studies, a final license application was filed in 2022. FERC is expected to issue a final Environmental Assessment (EA) and project license in late 2024 or 2025. Following license issuance, it is expected that KPU will be required to implement various resource management plans for which professional services are necessary.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other	670,000		50,000	50,000					720,000	
<b>Total</b>	670,000		50,000	50,000					720,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		670,000		50,000	50,000					720,000
<b>Total</b>		670,000		50,000	50,000					720,000





**Division: Electric**

**Priority Number:** 12

**Project Title:** Battery Systems and Chargers

**Start Date:** 01/20

**End Date:** 12/29

**Description:**

There are ten battery systems and chargers throughout the KPU Electric system within powerhouses and substations. Eight will be approaching end of life over the next ten (10) years. A battery system and charger failure will compromise system reliability. This project will start systematically replacing these systems. 2025 funding will replace one of these systems.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other	172,000		50,000	50,000	50,500	50,500	50,500	50,500	424,000
<b>Total</b>	172,000		50,000	50,000	50,500	50,500	50,500	50,500	424,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		172,000		50,000	50,000	50,500	50,500	50,500	50,500	424,000
<b>Total</b>		172,000		50,000	50,000	50,500	50,500	50,500	50,500	424,000

<b>Division: Electric</b>					<b>Priority Number:</b> 13				
<b>Project Title:</b> Vehicles & Moving Equipment					<b>Start Date:</b> 01/25				
<b>Description:</b>					<b>End Date:</b> 12/29				
<u>Purchase</u> 2025, 1/2 Ton pickup to replace SCADA vehicle 185-56 \$60,000 2026, Utility Pole Rock Drill - \$100,000									
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			60,000	60,000	100,000	200,000	350,000	125,000	835,000
<b>Total</b>			60,000	60,000	100,000	200,000	350,000	125,000	835,000
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements			
			Reappro- priated	New Funding	Total	2026	2027	2028	2029
Revenue Generating Fund				60,000	60,000	100,000	200,000	350,000	125,000
<b>Total</b>				60,000	60,000	100,000	200,000	350,000	125,000







<b>Division: Electric</b>					<b>Priority Number:</b> 17					
<b>Project Title:</b> Spare Substation Class Transformer Refurbishment					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/25					
<b>Description:</b>  The 5 MVA 34.5kV - 12.47kV station-class transformer replaced during from Bethe Substation upgrade project in 2012 has been stored at Point Higgins Substation. A third-party conducted a physical inspection and completed electrical testing on the unit in 2023. The unit was found to be in good working order, but in need of paint and corrosion mitigation. Funding provides for this work to be completed in 2024, after which KPU will locate a suitable long-term storage option, keeping this transformer as a high-value critical spare and/or for use in a future substation upgrade project.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappropriated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					65,000				65,000	
<b>Total</b>					65,000				65,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						65,000				65,000
<b>Total</b>						65,000				65,000

**Division: Electric**

**Priority Number:** 18

**Project Title:** Security Fence and Gates

**Start Date:** 01/25

**End Date:** 01/25

**Description:**

To increase security at the Electric Division warehouse at 1065 and 1029 Fair Street by installing higher fencing and rolled gates for access in and out of the facilities.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					45,000				45,000
<b>Total</b>					45,000				45,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						45,000				45,000
<b>Total</b>						45,000				45,000

<b>Division: Electric</b>					<b>Priority Number:</b> 19					
<b>Project Title:</b> ESRI Trouble Ticket Solution					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/25					
<b>Description:</b>  The Division will implement an ESRI-based work order/trouble ticket management web application, integrating with the existing geographical information system (GIS) and utilizing both desktop work stations and mobile devices in the field. This will provide a clear transfer of information to work crews when trouble calls are logged by Bailey Operations, as well as a better tracking and prioritizing for service calls during high-volume events such as storms.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					40,000				40,000	
<b>Total</b>					40,000				40,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						40,000				40,000
<b>Total</b>						40,000				40,000



<b>Division: Electric</b>					<b>Priority Number:</b> 20				
<b>Project Title:</b> Bailey Generator Radiator Replacement					<b>Start Date:</b> 01/25				
					<b>End Date:</b> 12/26				
<b>Description:</b>  The exterior radiators for Bailey Generator No. 3 (BAG3) and No. 4 (BAG4) continually develop leaks in the core, requiring cutting and removing parts of the radiator system. Increased generator usage and subsequent increased maintenance of the cooling system may result in the eventual need for complete replacement/upgrade of the radiators and cooling systems. It may be possible to design a more cost effective solution in lieu of complete replacement. 2024 funding allows for inspections, review of replacement options, and development of replacement specifications (if necessary).									
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art					40,000				40,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction						60,000			60,000
Vehicles/Moving Equipment									
Operating Equipment						240,000			240,000
Environmental/Other Studies									
Other									
<b>Total</b>					40,000	300,000			340,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						40,000	300,000			340,000
<b>Total</b>						40,000	300,000			340,000

<b>Division: Electric</b>					<b>Priority Number:</b> 21					
<b>Project Title:</b> Bailey Fuel Tank Painting					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 01/25					
<b>Description:</b> Bailey 210,000 gallon fuel tank pressure wash, prep and painting. The tank is approximately 32 feet tall and 30' in diameter.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					100,000				100,000	
<b>Total</b>					100,000				100,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						100,000				100,000
<b>Total</b>						100,000				100,000

<b>Division: Electric</b>					<b>Priority Number:</b> 22					
<b>Project Title:</b> Penstock Inspections					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/25					
<b>Description:</b> Inspection Plan and performance of exterior and interior inspections of the c. 1947 – 1957 Ketchikan Lakes and Beaver Falls steel penstocks.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro-priated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					100,000				100,000	
<b>Total</b>					100,000				100,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						100,000				100,000
<b>Total</b>						100,000				100,000



<b>Division: Electric</b>					<b>Priority Number:</b> 24					
<b>Project Title:</b> Watershed LiDAR Survey					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/25					
<b>Description:</b>  FERC is requiring KPU to collect LiDAR data of the Ketchikan Lakes watershed by early 2024, prior to the next Part 12D inspection (correspondence dated 8/24/2023). As we expect that LiDAR data of the Whitman Lake and Silvis Lakes watersheds will soon be required, it is more cost efficient to obtain data for all three watersheds concurrently.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappropriated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					250,000				250,000	
<b>Total</b>					250,000				250,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						250,000				250,000
<b>Total</b>						250,000				250,000

<b>Division: Electric</b>					<b>Priority Number:</b> 25					
<b>Project Title:</b> Reimbursable Projects					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/29					
<b>Description:</b>  This capital account represents funds for materials for work that the division will be called upon to perform at the request of outside agencies and customers. Examples of reimbursable projects are new line extensions and damage repairs to the electrical system resulting from accidents, negligence and vandalism. The division's expectation is that such work will be reimbursed 100%. This CIP provides a means for warehouse inventory and transformer accounts to be replenished due to customer projects.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					25,000	25,000	25,000	25,000	100,000	
<b>Total</b>					25,000	25,000	25,000	25,000	100,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						25,000	25,000	25,000	25,000	100,000
<b>Total</b>						25,000	25,000	25,000	25,000	100,000



<b>Division: Electric</b>					<b>Priority Number:</b> 27				
<b>Project Title:</b> Bailey Mooring Dolphin Replacement					<b>Start Date:</b> 01/25				
					<b>End Date:</b> 12/25				
<b>Description:</b>  Fuel is delivered to the Bailey Power Plant by barge. One of the mooring dolphins used to secure the barge is of wood pile construction and at the end of its useful life. This project will replace it with a steel pile cluster. Project costs include installation of the new dolphin, removal of the old wood piles, design, permitting and other associated costs.									
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappropriated	New Funding	Total	2026	2027	2028	2029	
Public Art					50,000				50,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction					150,000				150,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					200,000				200,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						200,000				200,000
<b>Total</b>						200,000				200,000



**Division: Electric**

**Priority Number:** 28

**Project Title:** Feeder Protective Relay Upgrades

**Start Date:** 01/22

**End Date:** 12/29

**Description:**

Feeder protective relays are at end-of-life and are in need of upgrades. Feeder protective relays provide line protection, fault locating, event analysis, and other system protection. This project will include design, engineering, equipment, installation, and testing for twenty-two (22) relays.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art	10,000				30,000	10,000	10,000	10,000	70,000	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management	40,000				120,000	40,000	40,000	40,000	280,000	
Construction										
Vehicles/Moving Equipment										
Operating Equipment										
Environmental/Other Studies										
Other										
Total	50,000				150,000	50,000	50,000	50,000	350,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		50,000				150,000	50,000	50,000	50,000	350,000
Total		50,000				150,000	50,000	50,000	50,000	350,000



Division: Electric

Project Title: Digital Radio System Upgrades

Description:

Priority Number: 30

Start Date: 01/24

End Date: 12/25

KPU Electric utilizes an island-wide radio system; it is an important safety tool when maintaining utility equipment. This project will update the existing Motorola radio system. The existing system has coverage issues and uses multiple channels for communication. The upgraded system will improve island-wide coverage and migrate to a single use channel.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art	6,000				10,000				16,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment									
Operating Equipment					100,000				100,000
Environmental/Other Studies					10,000				10,000
Other									
Total	6,000				120,000				126,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund		6,000				120,000				126,000
Total		6,000				120,000				126,000

**Division: Electric**

**Priority Number:** 31

**Project Title:** Port West Feeder Reconfiguration & Site Modification

**Start Date:** 01/25

**End Date:** 12/26

**Description:**

The Port West Substation reached end-of-life and has been partially removed from service. The substation will be reconfigured, loads sectionalized, and added to Bethe Substation as a new feeder, feeder No. 3.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art					20,000				20,000	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction					40,000	950,000			990,000	
Vehicles/Moving Equipment										
Operating Equipment					90,000				90,000	
Environmental/Other Studies										
Other					25,000				25,000	
Total					175,000	950,000			1,125,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						175,000	950,000			1,125,000
Total						175,000	950,000			1,125,000

**Division: Electric**

**Priority Number:** 32

**Project Title:** Bailey Exhaust Stack Re-Coating

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

This project is to sandblast and paint all four Bailey diesel generator exhaust stacks with a proper high-heat anti-corrosion coating. These efforts will mitigate further corrosion that may otherwise lead to eventual high cost repairs and/or replacement. Work in development of detailed scope, specifications, and a more refined estimate to undertake the work in 2025.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art					25,000				25,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction					100,000				100,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					125,000				125,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						125,000				125,000
<b>Total</b>						125,000				125,000



<b>Division: Electric</b>					<b>Priority Number:</b> 34				
<b>Project Title:</b> Silvis Tunnel Valve					<b>Start Date:</b> 01/25				
					<b>End Date:</b> 12/26				
<b>Description:</b>  The Silvis tunnel valve leaks badly and is no longer capable of shutting off water to the penstock and Silvis Powerhouse. This has implications for project safety and the ability to maintain the plant. Given the location of the valve in a tunnel at the top of a steep slope, this will be a challenging project.									

  

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art					40,000				40,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction					400,000				400,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					440,000				440,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						440,000				440,000
<b>Total</b>						440,000				440,000





<b>Division: Electric</b>					<b>Priority Number:</b> 36				
<b>Project Title:</b> 34.5 kV Breaker Relay Spares					<b>Start Date:</b> 01/25				
					<b>End Date:</b> 12/25				
<b>Description:</b> 34.5kV (38kV) recloser with control cables and controller are used in the transmission system and substation. These are critical components for system sectionalizing and isolation.									

  

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art					5,000				5,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment					100,000				100,000
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					105,000				105,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						105,000				105,000
<b>Total</b>						105,000				105,000











Division: Electric

Priority Number: 42

Project Title: Bailey Substation Replacement

Start Date: 01/27

End Date: 12/28

Description:

Bailey Substation serves as both the SEAPA delivery point into the KPU system, and the main diesel generation delivery point. It last saw substation work in the late-1990's when Bailey Genenerator No. 4 (BAG4) was installed in the adjoining Bailey Powerhouse; prior to that was the early 1980's when the 115kV Swan Lake transmission line was brought into the station. Scoping and design work will be highly dependent on a second SEAPA delivery point being brought online, without which cost estimates will be significantly greater due to the challenges associated with maintaining hydro imports to KPU while conducting work within Bailey Substation. Work is anticipated to include replacement of diesel generator transformers, grounding transformer, 34.5kV breakers, bus work, gang-switches, grounding, conductors, communications, oil containment, and fencing.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art						1,500,000			1,500,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements							300,000		300,000
Construction Management							15,000,000		15,000,000
Construction									
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
Total						1,500,000	15,300,000		16,800,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund							1,500,000	15,300,000		16,800,000
Bond Funding										
Total							1,500,000	15,300,000		16,800,000





Division: Electric

Project Title: Diesel Generator Replacement

Description:

Priority Number: 44

Start Date: 01/27

End Date: 12/28

Ketchikan does not currently have an adequate level of back-up/emergency generation to supply the community in the event of a loss of Southeast Alaska Power Agency's (SEAPA) 115kV transmission line, particularly during cold winter months. Future load growth projections will dramatically exacerbate the matter. KPU currently owns six (6) diesel generators: 4 (four) at Bailey Powerhouse, with one unit, one (1) of the two (2) 3.5MW 1964 Worthington units out of commission; and two (2) units at the North Point Higgins Substation. Conceptually, both of the Worthington generators at Bailey will be replaced by a large co-generation (co-gen) turbine unit with secondary steam generation, in the order of magnitude of 25MW. Extensive work to the powerhouse structure, fuel tank farm and delivery system, exhaust & cooling system, control & communication systems, and adjoining Bailey Substation electrical equipment (see Bailey Substation Replacement CIP), will be required.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art						4,000,000			4,000,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements							750,000		750,000
Construction Management							40,000,000		40,000,000
Construction									
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies						125,000			125,000
Other									
Total						4,125,000	40,750,000		44,875,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund							4,125,000	40,750,000		44,875,000
Bond Funding										
Total							4,125,000	40,750,000		44,875,000

**Division: Electric**

**Priority Number:** 45

**Project Title:** Whitman Powerhouse Domestic Water Re-Plumb

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

The galvanized piping for the cooling water was replaced with stainless steel. This is needed to finish the project and replace the galvanized pipes for the domestic water with copper.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					50,000				50,000
<b>Total</b>					50,000				50,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						50,000				50,000
<b>Total</b>						50,000				50,000

<b>Division: Electric</b>					<b>Priority Number:</b> 46				
<b>Project Title:</b> Whitman Part 12 Comprehensive Assessment					<b>Start Date:</b> 1/26				
					<b>End Date:</b> 12/26				
<b>Description:</b>									
Whitman Part 12 Comprehensive Assessement									

  

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					200,000				200,000
<b>Total</b>					200,000				200,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						200,000				200,000
<b>Total</b>						200,000				200,000



Ketchikan Public Utilities 2025 - 2029 Capital Improvement Program										
Division: Telecommunications										
Project Title	Priority	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
<b><u>REGULATED</u></b>										
Normal Growth and Repair - Buildings	1			100,000	100,000	100,000	100,000	100,000	100,000	500,000
Normal Growth and Repair - CO Switching	2			50,000	50,000	50,000	50,000	50,000	50,000	250,000
Normal Growth and Repair - Copper Cable	3			20,000	20,000	25,000	25,000	25,000	25,000	120,000
Normal Growth and Repair - Fiber Cable	4			300,000	300,000	250,000	300,000	325,000	350,000	1,525,000
Normal Growth and Repiar - CO Transmission	5			250,000	250,000	275,000	300,000	325,000	350,000	1,500,000
Normal Growth and Repair - Expansion	6			10,000	10,000	15,000	15,000	15,000	20,000	75,000
Normal Growth and Repair - Provisioning	7			20,000	20,000	20,000	20,000	20,000	20,000	100,000
Fiber to the Home	8			300,000	300,000	250,000	300,000	325,000	300,000	1,475,000
Remote Cabinets for Advanced Services	9			50,000	50,000	75,000	75,000	50,000	50,000	300,000
Core Network Upgrade	10			150,000	150,000	1,000,000	1,000,000	750,000	500,000	3,400,000
Server Environment	11			600,000	600,000	100,000	100,000	100,000	200,000	1,100,000
Multi-Dwelling Unit Projects	12			75,000	75,000	100,000	100,000	100,000	100,000	475,000
Operating Equipment	13			100,000	100,000	100,000	100,000	125,000	150,000	575,000
PC Hardware & Software	14			75,000	75,000	75,000	75,000	75,000	100,000	400,000
Power Expansion/Reclamation	15			50,000	50,000	100,000	100,000	100,000	100,000	450,000
Visual Mapping Software	16			10,000	10,000	20,000	20,000	20,000	20,000	90,000
Network Monitoring	17			50,000	50,000	100,000	100,000	100,000	150,000	500,000
Vehicle Acquisition	18					100,000	100,000	200,000	250,000	650,000
Security	19			60,000	60,000	75,000	100,000	125,000	125,000	485,000
<b><u>NON-REGULATED</u></b>										
4G/LTE	20			200,000	200,000	200,000	200,000	150,000	150,000	900,000
Hosted	21			80,000	80,000	100,000	100,000	200,000	400,000	880,000
WiFi	22			50,000	50,000	75,000	100,000	100,000	125,000	450,000
Internet Expansion	23		150,000		150,000	100,000	150,000	600,000	150,000	1,150,000
KetchCan1 Subsea Cable Repair	24		676,500		676,500					676,500
<b>Total</b>			826,500	2,600,000	3,426,500	3,305,000	3,530,000	3,980,000	3,785,000	18,026,500
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund			826,500	2,600,000	3,426,500	3,305,000	3,530,000	3,980,000	3,785,000	18,026,500
<b>Total</b>			826,500	2,600,000	3,426,500	3,305,000	3,530,000	3,980,000	3,785,000	18,026,500

**Division: Telecommunications****Priority Number:** 1**Project Title:** Normal Growth and Repair - Buildings**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for improvements to existing buildings including HVAC improvements, replacement of lighting fixtures and installation of building alarms or related security items. Additionally, the division will make significant repairs to the truck barn due to leaks in the roof and rusted and end of life siding. Some additional office space is needed for KPU-Tel as well as some power redundancy to the building.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			100,000	100,000	100,000	100,000	100,000	100,000	500,000
<b>Total</b>			100,000	100,000	100,000	100,000	100,000	100,000	500,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				100,000	100,000	100,000	100,000	100,000	100,000	500,000
<b>Total</b>				100,000	100,000	100,000	100,000	100,000	100,000	500,000

**Division: Telecommunications****Priority Number:** 2**Project Title:** Normal Growth and Repair - Central Office Switching**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for reliability upgrades and additional capacity equipment required for the division's telecommunications switching and voice over Internet protocol network. Included are funds to enhance least cost routing and fraud detection, as well as to ensure that features work with all residential lines.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			50,000	50,000	50,000	50,000	50,000	50,000	250,000
<b>Total</b>			50,000	50,000	50,000	50,000	50,000	50,000	250,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				50,000	50,000	50,000	50,000	50,000	50,000	250,000
<b>Total</b>				50,000	50,000	50,000	50,000	50,000	50,000	250,000

**Division: Telecommunications****Priority Number:** 3**Project Title:** Normal Growth and Repair - Copper Cable**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the replacement of deteriorated cables and construction of minor cable projects, including line extensions. This capital account also funds cable, cross arms and miscellaneous hardware required to reconnect to poles replaced by the Electric Division. The copper plant, while decreasing in importance, is aging and will need maintenance work to keep functioning optimally over the next 10 years. This capital account will also fund the systematic reduction and removal of existing portions of the copper plant as services are phased to fiber.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			1,000	1,000	1,000	1,000	1,000	1,000	5,000	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			15,000	15,000	10,000	10,000	10,000	10,000	55,000	
Vehicles/Moving Equipment										
Operating Equipment			4,000	4,000	14,000	14,000	14,000	14,000	60,000	
Environmental/Other Studies										
Other										
Total			20,000	20,000	25,000	25,000	25,000	25,000	120,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				20,000	20,000	25,000	25,000	25,000	25,000	120,000
Total				20,000	20,000	25,000	25,000	25,000	25,000	120,000



**Division: Telecommunications****Priority Number:** 4**Project Title:** Normal Growth and Repair - Fiber Cable**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for growing the FTTH/FTTB business and for the continued maintenance of our existing fiber plant. This capital account also includes materials and labor for continued installation of fiber service drops for customers who order high bandwidth services. As circuits reach 1Gbps and beyond to 10Gbps copper circuits will no longer be a feasible option for internet customers.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			5,000	5,000	5,000	5,000	5,000	5,000	25,000	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			150,000	150,000	137,500	162,500	175,000	187,500	812,500	
Vehicles/Moving Equipment										
Operating Equipment			145,000	145,000	107,500	132,500	145,000	157,500	687,500	
Environmental/Other Studies										
Other										
Total			300,000	300,000	250,000	300,000	325,000	350,000	1,525,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				300,000	300,000	250,000	300,000	325,000	350,000	1,525,000
Total				300,000	300,000	250,000	300,000	325,000	350,000	1,525,000

**Division: Telecommunications****Priority Number:** 5**Project Title:** Normal Growth and Repair - CO Transmission**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the purchase and installation of additional intelligent Network Interface Devices (NIDS) and Optical Network Terminals (ONTs) required to deliver service to customers served via fiber optic cable; internal network fiber ports; network transmission electronics necessary to serve business customers with new private line services including digital data service, optical wide area network, T1s, etc.; finishing the migration off the division's legacy platforms, which are no longer supported, to the standard Adtran platforms for both Optical and VDSL services.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art										
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			20,000	20,000	22,000	24,000	26,000	28,000	120,000	
Vehicles/Moving Equipment										
Operating Equipment			230,000	230,000	253,000	276,000	299,000	322,000	1,380,000	
Environmental/Other Studies										
Other										
Total			250,000	250,000	275,000	300,000	325,000	350,000	1,500,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				250,000	250,000	275,000	300,000	325,000	350,000	1,500,000
Total				250,000	250,000	275,000	300,000	325,000	350,000	1,500,000

**Division: Telecommunications****Priority Number:** 6**Project Title:** Normal Growth and Repair - Expansion**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding to upgrade, maintain and expand the division's "off island" connections, ensuring reliable services are provided to underserved, outlying areas. This project utilizes both wireless, fiber, and satellite technologies to provide services to remote areas.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art									
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction			2,000	2,000	3,000	3,000	3,000	4,000	15,000
Vehicles/Moving Equipment									
Operating Equipment			8,000	8,000	12,000	12,000	12,000	16,000	60,000
Environmental/Other Studies									
Other									
<b>Total</b>			10,000	10,000	15,000	15,000	15,000	20,000	75,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				10,000	10,000	15,000	15,000	15,000	20,000	75,000
<b>Total</b>				10,000	10,000	15,000	15,000	15,000	20,000	75,000

**Division: Telecommunications****Priority Number:** 7**Project Title:** Normal Growth and Repair - Provisioning**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the introduction, upgrade, automation and integration of systems necessary to promote the enhancement of the customer service and support experience. In the future, efforts will begin to attempt to replace the division's trouble ticketing software with a new up-to-date system.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design			5,400	5,400	5,400	5,400	5,400	5,400	27,000
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment									
Operating Equipment			2,200	2,200	2,200	2,200	2,200	2,200	11,000
Environmental/Other Studies									
Other			12,400	12,400	12,400	12,400	12,400	12,400	62,000
<b>Total</b>			20,000	20,000	20,000	20,000	20,000	20,000	100,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				20,000	20,000	20,000	20,000	20,000	20,000	100,000
<b>Total</b>				20,000	20,000	20,000	20,000	20,000	20,000	100,000

**Division: Telecommunications****Priority Number:** 8**Project Title:** Fiber to the Home**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for contract labor to deploy fiber cable and terminals necessary to bring fiber to homes, businesses and multi-dwelling units throughout Ketchikan. This capital account will also fund materials, equipment and contractor labor for replacing insufficient and non-expandable fiber facilities with fiber overlays. Additionally, this project will allow the division to look into providing fiber into outlying, underserved areas.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design			2,000	2,000	2,500	3,000	3,250	3,000	13,750
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction			90,000	90,000	87,500	90,000	97,500	90,000	455,000
Vehicles/Moving Equipment									
Operating Equipment			208,000	208,000	160,000	207,000	224,250	207,000	1,006,250
Environmental/Other Studies									
Other									
<b>Total</b>			300,000	300,000	250,000	300,000	325,000	300,000	1,475,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				300,000	300,000	250,000	300,000	325,000	300,000	1,475,000
<b>Total</b>				300,000	300,000	250,000	300,000	325,000	300,000	1,475,000

**Division: Telecommunications****Priority Number:** 9**Project Title:** Remote Cabinets for Advanced Services**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the maintenance and/or replacement of remote switching cabinets (RSC). This project also equips RSC's with remote monitoring sensors, ensuring technicians can remotely detect proper operation prior to failure. This account also funds the out-of-band network back to the Central Office. Over the next few years several remote cabinets need to be replaced. In some cases power or batteries to the remote cabinet need to be replaced.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design			1,250	1,250	1,875	1,875	1,250	1,250	7,500
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction			3,750	3,750	5,625	5,625	3,750	3,750	22,500
Vehicles/Moving Equipment									
Operating Equipment			45,000	45,000	67,500	67,500	45,000	45,000	270,000
Environmental/Other Studies									
Other									
<b>Total</b>			50,000	50,000	75,000	75,000	50,000	50,000	300,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				50,000	50,000	75,000	75,000	50,000	50,000	300,000
<b>Total</b>				50,000	50,000	75,000	75,000	50,000	50,000	300,000

**Division: Telecommunications****Priority Number:** 10**Project Title:** Core Network Upgrade**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the expansion of the existing core to add additional resiliency and diversity to key components. The current core of the network reaches end-of-life 2024-2025 depending on various types of hardware, and there is an effort in 2026 to move the network from a 10G to a 100G backbone.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art										
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction										
Vehicles/Moving Equipment			142,100	142,100	947,500	947,500	710,625	473,750	3,221,475	
Operating Equipment										
Environmental/Other Studies										
Other			7,900	7,900	52,500	52,500	39,375	26,250	178,525	
Total			150,000	150,000	1,000,000	1,000,000	750,000	500,000	3,400,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				150,000	150,000	1,000,000	1,000,000	750,000	500,000	3,400,000
Total				150,000	150,000	1,000,000	1,000,000	750,000	500,000	3,400,000

**Division: Telecommunications****Priority Number:** 11**Project Title:** Server Environment**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the growth, expansion and upgrade of the division's data storage and virtualized server environment. This allows the division to standardize its server infrastructure, while collapsing the physical footprint and reducing overall power consumption. Additionally, this project allows for the deployment of VM technology to supplement the division's hosted datacenter service offerings and offer cloud based services. In August of 2025 our primary data center cluster's 4 hosts go end of life and need to be replaced. In order to add more redundancy to the project a 5th host will be added. The project will provide processing power to our new Netsapiens Class V softswitch which is utilizing more horsepower than anticipated due to the increased workload of encrypting voice traffic.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art									
Design			15,000	15,000	2,500	2,500	2,500	5,000	27,500
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction			15,000	15,000	2,500	2,500	2,500	5,000	27,500
Vehicles/Moving Equipment									
Operating Equipment			570,000	570,000	95,000	95,000	95,000	190,000	1,045,000
Environmental/Other Studies									
Other									
<b>Total</b>			600,000	600,000	100,000	100,000	100,000	200,000	1,100,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				600,000	600,000	100,000	100,000	100,000	200,000	1,100,000
<b>Total</b>				600,000	600,000	100,000	100,000	100,000	200,000	1,100,000



**Division: Telecommunications****Priority Number:** 12**Project Title:** Multi-Dwelling Unit Project**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the purchase of multi-dwelling unit (MDU) electronics, enabling provision of triple-play services to the 40% of KPU customers residing in apartment buildings, via a single fiber (eliminating the need to run multiple fibers into multi-dwelling units). This project will eliminate the corresponding need to install and maintain the per each fiber electronics required for multiple fiber installations.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			1,875	1,875	2,500	2,500	2,500	2,500	11,875	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			1,875	1,875	2,500	2,500	2,500	2,500	11,875	
Vehicles/Moving Equipment										
Operating Equipment			71,250	71,250	95,000	95,000	95,000	95,000	451,250	
Environmental/Other Studies										
Other										
Total			75,000	75,000	100,000	100,000	100,000	100,000	475,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				75,000	75,000	100,000	100,000	100,000	100,000	475,000

**Division: Telecommunications****Priority Number:** 13**Project Title:** Operating Equipment**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the test equipment utilized by KPU technicians to test, repair and install high speed data and voice circuits, particularly as it relates to KPU's expanded fiber optic network and 4G networks. A higher expenditure in 2025 involves pre-qualifying subsea fiber circuits the division might sell to a larger customer that would expect proof of capability. As the division sells more capacity over our subsea fiber expectations are that KPU will need to invest more in high-end test equipment.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			100,000	100,000	100,000	100,000	125,000	150,000	575,000
<b>Total</b>			100,000	100,000	100,000	100,000	125,000	150,000	575,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				100,000	100,000	100,000	100,000	125,000	150,000	575,000
<b>Total</b>				100,000	100,000	100,000	100,000	125,000	150,000	575,000

**Division: Telecommunications**

**Priority Number:** 14

**Project Title:** PC Hardware and Software

**Start Date:** 01/25

**End Date:** 12/29

**Description:**

This capital account funds replacement of outdated computers and purchases of new pc hardware for Private Branch Exchange (PBX, business phone), Outside Plant, Central Office Network Technicians, and administrative staff.

In order to remain competitive KPU will be rolling out symmetrical 2.5Gbps and 5Gbps and managed wifi 7 services which provide more than 1Gbps over wireless. And KPU will continue to resell WebEx services in 2025 which will require our PBX staff to support and maintain both windows and apple ecosystems fluently.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			75,000	75,000	75,000	75,000	75,000	100,000	400,000
<b>Total</b>			75,000	75,000	75,000	75,000	75,000	100,000	400,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				75,000	75,000	75,000	75,000	75,000	100,000	400,000
<b>Total</b>				75,000	75,000	75,000	75,000	75,000	100,000	400,000

**Division: Telecommunications****Priority Number:** 15**Project Title:** Power Expansion/Reclamation**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the expansion of power facilities via new AC/DC filtering or reclamation of existing usage via more efficient equipment.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			1,250	1,250	2,500	2,500	2,500	2,500	11,250	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			1,250	1,250	2,500	2,500	2,500	2,500	11,250	
Vehicles/Moving Equipment										
Operating Equipment			47,500	47,500	95,000	95,000	95,000	95,000	427,500	
Environmental/Other Studies										
Other										
Total			50,000	50,000	100,000	100,000	100,000	100,000	450,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				50,000	50,000	100,000	100,000	100,000	100,000	450,000
Total				50,000	50,000	100,000	100,000	100,000	100,000	450,000

**Division: Telecommunications****Priority Number:** 16**Project Title:** Visual Mapping Software**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding to enhance the division's documentation and ability to automate and distribute inside and outside plant design at the physical and logical levels. Future funding procures enhancements and labor to ensure the system is properly audited and meeting the needs of division customers. This capital account also provides funding for data migration and for database connectivity and relationships support among visual mapping systems, as well as required training in visual mapping software.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art									
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction			3,000	3,000	2,400	2,400	2,400	2,400	12,600
Vehicles/Moving Equipment			3,700	3,700	7,400	7,400	7,400	7,400	33,300
Operating Equipment			3,300	3,300	10,200	10,200	10,200	10,200	44,100
Environmental/Other Studies									
Other									
<b>Total</b>			10,000	10,000	20,000	20,000	20,000	20,000	90,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				10,000	10,000	20,000	20,000	20,000	20,000	90,000
<b>Total</b>				10,000	10,000	20,000	20,000	20,000	20,000	90,000

**Division: Telecommunications****Priority Number:** 17**Project Title:** Network Monitoring**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the purchase of hardware and software critical to enhancing the monitoring and complete visibility of the KPU network for the purposes of resolving customer issues quickly and putting the network in a place where a variety of monitoring products can be deployed to identify threats.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art									
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment			17,500	17,500	35,000	35,000	35,000	52,500	175,000
Operating Equipment			32,500	32,500	65,000	65,000	65,000	97,500	325,000
Environmental/Other Studies									
Other									
<b>Total</b>			50,000	50,000	100,000	100,000	100,000	150,000	500,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				50,000	50,000	100,000	100,000	100,000	150,000	500,000
<b>Total</b>				50,000	50,000	100,000	100,000	100,000	150,000	500,000

**Division: Telecommunications**

**Priority Number:** 18

**Project Title:** Vehicle Acquisition

**Start Date:** 01/25

**End Date:** 12/29

**Description:**

This capital account funds replacement of aging vehicles to prevent excessive maintenance costs and breakdowns affecting KPU Telecom's ability to meet customer demands.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					100,000	100,000	200,000	250,000	650,000
<b>Total</b>					100,000	100,000	200,000	250,000	650,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund						100,000	100,000	200,000	250,000	650,000
<b>Total</b>						100,000	100,000	200,000	250,000	650,000

**Division: Telecommunications****Priority Number:** 19**Project Title:** Security**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the development of efforts to secure the network from internal and external threats in detecting and preventing the division and its customers from unauthorized intrusions or denial of service. Detecting and responding to cyberattacks in real-time requires a specialized set of analytical software to protect the network. Security is increasingly an issue in the network world and the division's costs will increase to protect the network when the division moves to a 100G backbone.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			6,600	6,600	8,250	11,000	13,750	13,750	53,350	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			53,400	53,400	66,750	89,000	111,250	111,250	431,650	
Vehicles/Moving Equipment										
Operating Equipment										
Environmental/Other Studies										
Other										
Total			60,000	60,000	75,000	100,000	125,000	125,000	485,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund			60,000	60,000	75,000	100,000	125,000	125,000	485,000	
Total			60,000	60,000	75,000	100,000	125,000	125,000	485,000	



**Division: Telecommunications****Priority Number:** 20**Project Title:** 4G/LTE**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides continued funding to construct and maintain KPU's 4G/LTE Mobile network. The future of the division's 4G/LTE network is unclear but future estimates include the replacement of existing nodes based upon a potential 5G future. This years summer tourist season placed more demand on the cellular network than ever before and funds are needed to improve service downtown.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			2,000	2,000	2,000	2,000	1,500	1,500	9,000	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			30,000	30,000	30,000	30,000	22,500	22,500	135,000	
Vehicles/Moving Equipment										
Operating Equipment			168,000	168,000	168,000	168,000	126,000	126,000	756,000	
Environmental/Other Studies										
Other										
Total			200,000	200,000	200,000	200,000	150,000	150,000	900,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				200,000	200,000	200,000	200,000	150,000	150,000	900,000
Total				200,000	200,000	200,000	200,000	150,000	150,000	900,000

**Division: Telecommunications****Priority Number:** 21**Project Title:** Hosted**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding to upgrade, maintain and expand business offerings on the division's Hosted PBX Platforms. Legacy switches across the network need to be replaced to meet our customer's desire to move beyond 1Gbps.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art									
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment			24,000	24,000	30,000	30,000	60,000	120,000	264,000
Operating Equipment			56,000	56,000	70,000	70,000	140,000	280,000	616,000
Environmental/Other Studies									
Other									
<b>Total</b>			80,000	80,000	100,000	100,000	200,000	400,000	880,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				80,000	80,000	100,000	100,000	200,000	400,000	880,000
<b>Total</b>				80,000	80,000	100,000	100,000	200,000	400,000	880,000

**Division: Telecommunications****Priority Number:** 22**Project Title:** WiFi**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account funds the ability for KPU to deploy WiFi in strategic locations in town; to support free and paid WiFi services for local and transient customers. This account also funds efforts to make WiFi available to residential customers who are difficult to serve using wired connectivity. WiFi is a fast growing technology and to keep pace with the industry the division will need to respond with an increase in KPU's investment in these products to provide the best service including managed WiFi.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art			1,250	1,250	1,875	2,500	2,500	3,125	11,250	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction			10,000	10,000	15,000	20,000	20,000	25,000	90,000	
Vehicles/Moving Equipment										
Operating Equipment			38,750	38,750	58,125	77,500	77,500	96,875	348,750	
Environmental/Other Studies										
Other										
Total			50,000	50,000	75,000	100,000	100,000	125,000	450,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund				50,000	50,000	75,000	100,000	100,000	125,000	450,000
Total				50,000	50,000	75,000	100,000	100,000	125,000	450,000

**Division: Telecommunications****Priority Number:** 23**Project Title:** Internet Expansion**Start Date:** 01/25**End Date:** 12/29**Description:**

This capital account provides funding for the growth and change of the Internet distribution systems and off-island transport networks providing broadband to the division's non-regulated customers. As the division sells subsea fiber circuits and capacity to migrate the internet links to 100G, subsea fiber optical equipment maintenance and growth will be necessary in the future. In 2028, we will likely need to upgrade our coherent optical switching platform at Mountain Point.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Public Art		14,000		14,000	9,000	14,000	56,000	14,000	107,000	
Design										
Land/Property Acquisition (ROW)										
Land/Property Improvements										
Construction Management										
Construction		17,000		17,000	11,000	17,000	68,000	17,000	130,000	
Vehicles/Moving Equipment										
Operating Equipment		119,000		119,000	80,000	119,000	476,000	119,000	913,000	
Environmental/Other Studies										
Other										
Total		150,000		150,000	100,000	150,000	600,000	150,000	1,150,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund			150,000		150,000	100,000	150,000	600,000	150,000	1,150,000
Total			150,000		150,000	100,000	150,000	600,000	150,000	1,150,000

**Division: Telecommunications**

**Priority Number:** 24

**Project Title:** KetchCan1 Subsea Cable Repair

**Start Date:** 01/25

**End Date:** 12/29

**Description:**

This capital account provides funding for the emergency repair of the KetchCan1 Subsea Cable should the cable become damaged. The North America Zone Maintenance Authority Agreement was approved by the City Council in 2022 and authorizes this annual appropriation. Funds will be used only as needed during an emergency; unexpended funds will be reappropriated each budget year.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other		676,500		676,500					676,500
<b>Total</b>		676,500		676,500					676,500

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Fund			676,500		676,500					676,500
<b>Total</b>			676,500		676,500					676,500

<p style="text-align: center;"><b>Ketchikan Public Utilities</b>  <b>2025 - 2029 Capital Improvement Program</b></p> <p style="text-align: center;"><b>Division: Water</b></p>										
Project Title	Priority	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Filtration Facility - Preliminary Preparation Tasks	1	1,047,666		390,000	390,000		5,113,000			6,550,666
Water Meters - Business & Commercial Customers	2	436,719	813,281		813,281	150,000				1,400,000
Replace Tongass Ave. Suspended Water Main	3			407,228	407,228					407,228
Replace Water St. Suspended Water Main	4			412,000	412,000					412,000
Valve Boxes - Repair of Surrounding Pavement	5			50,000	50,000	100,000	100,000	100,000	100,000	450,000
Water Distribution Grid Improvements	6			30,000	30,000	30,000	30,000	30,000	30,000	150,000
Water Service Upgrade Program	7			21,000	21,000	21,000	21,000	21,000	21,000	105,000
Backflow Prevention Program	8			15,000	15,000	15,000	15,000	15,000	15,000	75,000
Second Avenue Main Replacement	9			225,000	225,000		160,000		990,000	1,375,000
SCADA PLC Controllers	10			360,000	360,000					360,000
Pump Station Switchgear Improvements	11	81,250				45,000				126,250
Replace ClorTec Generating Cells	12	130,000				50,000	50,000			230,000
Fiber-optic Communications Switches	13					25,000				25,000
Peterson Street Utility Improvements	14					350,000				350,000
Harris St. Utility Improvements	15					125,000	750,000			875,000
Park Ave. Utility Improvements	16					125,000	1,950,000			2,075,000
Utility Vehicles	17					155,000	180,000	85,000		420,000
Additional Projects	18					50,000	50,000	50,000	50,000	200,000
Skyline Water Main Replacement	19					70,000	390,000			460,000
West Fairy Chasm Replacement	20					87,000		593,000		680,000
Hillside Road Water Main Replacement	21	19,440				60,000		644,000		723,440
Ketchikan Lakes Road Water Main Replacement	22	21,035				700,000				721,035
Highlands Reservoir Property Acquisition	23						400,000			400,000
Ktn. Lakes Alternative Raw Water Supply Piping	24								12,000,000	12,000,000
Thomas Basin Water Main Replacement	25					70,000	300,000			370,000
<b>Total</b>		1,736,110	813,281	1,910,228	2,723,509	2,228,000	9,509,000	1,538,000	13,206,000	30,940,619
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
KPU Reserves - Public Art		1,299,391		1,910,228	1,910,228	2,228,000	5,719,000	301,000	216,000	11,673,619
Revenue Generating Funds										
SFY 2025 Funding Request										
Revenue Bonds - ADWF Loan		436,719	813,281		813,281		1,895,000	618,500	6,495,000	10,258,500
Proposed 50% State Municipal Assistance Funding							1,895,000	618,500	495,000	3,008,500
Proposed Dam Safety Hydropower Grant									6,000,000	6,000,000
<b>Total</b>		1,736,110	813,281	1,910,228	2,723,509	2,228,000	9,509,000	1,538,000	13,206,000	30,940,619

Division: Water

Priority Number: 1

Project Title: Filtration Facility - Preliminary Preparation Tasks

Start Date: 01/20

End Date: 12/27

Description:

While EPA Region 10 deliberations are continuing on the merits of granting Ketchikan a Limited Alternative to Filtration (LAF), significant progress has been achieved and it is entirely conceivable that a LAF may be granted before the end of 2024. KPU anticipates this LAF will require additional disinfection treatment as another layer of continued public health protection, similar to Seattle’s Cedar water treatment requirements and will likely include future anticipated tasks that will be necessary for compliance. The State of Alaska will publish draft LAF regulations after the EPA approval is granted and KPU will follow the State's compliance schedule (estimated to be 3 to 5 years). During that period, KPU will implement the ADEC permit requirements and prepare grant and loan applications for the anticipated capital improvements. To begin the process, in February 2024, KPU authorized the preliminary design for a third UV Reactor in February 2024 in Amendment No. 6 to Contract 19-44 with Jacobs Engineering. Once the final terms of Ketchikan's LAF are known, their work will continue completing the design and KPU will begin seeking construction funding through State of Alaska Drinking Water Loans.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art	1,047,666		390,000	390,000		5,113,000			1,437,666
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment									
Operating Equipment									5,113,000
Environmental/Other Studies									
Other									
Total	1,047,666		390,000	390,000		5,113,000			6,550,666

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds		1,047,666		390,000	390,000		5,113,000			6,550,666
Total		1,047,666		390,000	390,000		5,113,000			6,550,666

Division: Water

Project Title: Water Meters - Business & Commercial Customers

Description:

Priority Number: 2

Start Date: 01/24

End Date: 12/25

As it stands now, achieving the original goal of having all of the remaining approximately 225 unmetered businesses, commercial buildings, and large residential apartment complexes fully metered before the end of 2024 is simply no longer feasible and as a result, completion of this project is now very likely delayed into late 2025. A total of 210 meters are now fully functional and reporting. The final water meter installation contract is planned for 2025 that will install meters in the remainder of Ketchikan's approximately 225 unmetered businesses, commercial buildings, and large residential apartment complexes.

In addition, before this entire project becomes fully operational in 2025, the 2016 Water/ Wastewater Rate Study will need to be updated or a new study commissioned as well as amendments made to the Ketchikan Municipal Code.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art	436,719	813,281		813,281	150,000				1,250,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment									
Operating Equipment									
Rate Study								150,000	
Other									
Total	436,719	813,281		813,281	150,000				1,400,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Bonds - ADWF Loan		436,719	813,281		813,281	150,000				1,250,000
KPU Revenue										
Total		436,719	813,281		813,281	150,000				1,400,000





**Division: Water**

**Priority Number:** 4

**Project Title:** Replace Water Street Suspended Water Main

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

A Greater Ketchikan Community Request for Fiscal Year 2025 State Funding has been submitted in the amount of \$1.15-million for the replacement of 2260 feet of failing 12-inch & 28-inch ductile iron water main hanging beneath the DOT's Water Street viaduct between 425 Water Street and extending to Pump Station No. 3 (Kennedy Street). This water main serves as the primary water transmission main for Ketchikan's West End area of the community by supplying potable water and fire protection. Installed in 1993, it has been submerged in salt water twice a day for over 30 years and is severely corroded. The mechanical fastenings are failing and the entire main and services need replacement with new 24-inch & 16-inch non-corrodable high density, polyethylene (HDPE) pipe. A design proposal has been received from StephI Engineering who are already working with the DOT&PF on other facets of this project.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			412,000	412,000					412,000
<b>Total</b>			412,000	412,000					412,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds				412,000	412,000					412,000
<b>Total</b>				412,000	412,000					412,000



**Division: Water**

**Priority Number:** 6

**Project Title:** Water Distribution Grid Improvements

**Start Date:** 01/25

**End Date:** 12/29

**Description:**

Each year in conjunction with the work of other agencies, the Water Division is presented with opportunities to undertake repairs to improve the municipal water system. This account provides the funding for such improvements.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			30,000	30,000	30,000	30,000	30,000	30,000	150,000
<b>Total</b>			30,000	30,000	30,000	30,000	30,000	30,000	150,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds				30,000	30,000	30,000	30,000	30,000	30,000	150,000
<b>Total</b>				30,000	30,000	30,000	30,000	30,000	30,000	150,000

**Division: Water**

**Priority Number:** 7

**Project Title:** Water Service Upgrade Program

**Start Date:** 01/25

**End Date:** 12/29

**Description:**

The water service upgrade program was initiated in 1997, and has been an ongoing division initiative to allow a number of residents to upgrade their individual water services. The division proposes to continue offering this program in 2025. Numerous water services, from the main to the residence, are in need of replacement to KPU standards. After completion of the work and inspection by the division, this program allows the customer to provide cost documentation and receive a grant-in-aid. In addition, as a result of homeowners participating in this program, KPU will assume full responsibility for future repairs within the right-of-way as long as they are not caused by negligence on the part of the property owner. The \$1,000 is available for work undertaken on private property and up to \$6,000 is available for work undertaken within the right-of-way.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			21,000	21,000	21,000	21,000	21,000	21,000	105,000
<b>Total</b>			21,000	21,000	21,000	21,000	21,000	21,000	105,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds				21,000	21,000	21,000	21,000	21,000	21,000	105,000
<b>Total</b>				21,000	21,000	21,000	21,000	21,000	21,000	105,000

Division: Water

Project Title: Backflow Prevention Program

Description:

This grant-in-aid program was established in 1995, and has been an ongoing division initiative to encourage businesses to install backflow preventers to help protect the municipal water system. This program is part of ADEC's mandated cross-connection control regulations which require the Utility to be responsible for system-wide protection. Until 2001, Ketchikan's lack of adoption and enforcement of the Uniform Plumbing Code allowed many substandard installations to be constructed within the City. Older sprinkler systems with just a single check are a particular problem. They cannot be tested and they leak contaminated water into the municipal system any time the adjacent water main is isolated and drained for repairs. Currently at least 19 systems, all installed before Ketchikan adopted the 2012 Uniform Plumbing Code which made backflow protection mandatory, are in need of backflow preventers. Participation is voluntary and the last time any business took advantage of the program was 2017. To encourage business owners to become compliant and protect the City's water system, reimbursement to the property owner is 50% of the installed cost of the backflow preventer, or \$3,000, whichever is the lesser.

Priority Number: 8

Start Date: 01/25

End Date: 12/29

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other			15,000	15,000	15,000	15,000	15,000	15,000	75,000
Total			15,000	15,000	15,000	15,000	15,000	15,000	75,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds				15,000	15,000	15,000	15,000	15,000	15,000	75,000
Total				15,000	15,000	15,000	15,000	15,000	15,000	75,000

Division: Water

Project Title: Second Avenue Main Replacement

Description:

Priority Number: 9

Start Date: 01/25

End Date: 12/29

In the aftermath of the Third Avenue Landslide which also destroyed a portion of Second Avenue's asphalt roadway between White Cliff to 2034 2nd Avenue, KPU Water in conjunction with Public Works, proposes to use this opportunity to replace about 310 feet of the existing 6-inch cast iron main with 8-inch HDPE pipe in 2025.

In addition, Second Avenue's cast-iron water mains were originally installed in a number of segments between 1956 and 1958. Only the failing water and sewer portions between Madison and Adams Streets were replaced in 2001. There have been four further failures in the 1275-foot portion between Adams and White Cliff of this fragile, old 6-inch cast-iron water main which is long overdue for replacement with non-corrodible 8-inch HDPE polyethylene pipe. Should Municipal Assistance Funding ever become available again, this would be another prime project that is already designed along with the Skyline, West Fairy Chasm, and Hillside projects and would have received ADEC approval for maximum points. Proposed for design in 2027 and construction in 2029

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other									
2025 Design & Construction			225,000	225,000					225,000
2027 Design & 2029 Construction						160,000		990,000	1,150,000
Total			225,000	225,000		160,000		990,000	1,375,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds				225,000	225,000		160,000			385,000
Proposed 50% State Municipal Assistance Funding									495,000	495,000
Revenue Bonds - ADWF Loan									495,000	495,000
Total				225,000	225,000		160,000		990,000	1,375,000

Division: Water

Project Title: SCADA PLC Controllers

Description:

Project Priority: 10

Start Date: 01/24

End Date: 12/25

Collectively, KPU has three Allen-Bradley Programmable Logic Controllers (PLCs) installed at the UV Facility, the Chlorination Plant, and the Ammonia Addition Facility. They are each providing continuous supervisory control over specific critical components within KPU's complex, computer-controlled, disinfection process. As identified in Contract 21-03 - Cyber Security Evaluation, this version of Allen Bradley PLCs, which were introduced in 2005, have ceased receiving any further factory support. This includes no longer maintaining any inventory of spare parts or the necessary input/output (I/O) modules. All of these critical PLC's must quickly migrate to the modern Allen-Bradley ControlLogix PLC platform before KPU's supply of replacement modules and spare parts is exhausted. Due to the world-wide effect of the coronavirus pandemic on material deliveries, the upgrade to the Water Treatment UV Facility's (CP-100) PLC wasn't completed until the summer of 2023. A contract has also been approved in 2023 to upgrade the PLC located in the Old Chlorination Building (CP-300) that will be installed in 2024. The third and final contract to upgrade PLC in the Ammonia Building (CP-400) will be issued in 2024 with its installation in 2025.

Project Cost Category	Prior Years	Adopted 2024			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2025	2026	2027	2028	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other	596,500		360,000	360,000					956,500
Total	596,500		360,000	360,000					956,500

  

Source of Funds	Fund No.	Prior Years	Adopted 2024			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2025	2026	2027	2028	
KPU Revenues/Reserves		596,500		360,000	360,000					956,500
Total		596,500		360,000	360,000					956,500



**Division: Water**

**Priority Number:** 11

**Project Title:** Pump Station Switchgear Improvements

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

Each pump station will be upgraded individually in order of highest concern to lowest concern which began in 2022 with the Baranof Zone, the Confidence Zone in 2023, and the Highlands Zone in 2024. The Carlanna Zone is fourth and final pump station that was originally installed in 1987, 37 years ago. As with our earlier pump station upgrades, the replacement motor and pump will be equipped with a modern, solid-state soft starter. Solid-state soft motor starters have a smooth acceleration to full speed, have no moving components, minimal reactive power losses, and cost about half as much as a mechanical motor starters formerly used.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other	81,250				45,000				126,250
<b>Total</b>	81,250				45,000				126,250

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds		81,250				45,000				126,250
<b>Total</b>		81,250				45,000				126,250

Division: Water

Project Title: Replace ClorTec Generating Cells

Description:

Since September 16, 2002, KPU has been using proprietary ClorTec titanium generating cells to manufacture a 0.8% sodium hypochlorite disinfection solution. This process involves electrolytic separation by impressing a controlled amount of direct current (DC) electricity onto the titanium electrodes submerged in a saturated salt brine solution. A certain amount of degradation also occurs to the titanium generating cells themselves during their operation and they have an expected service life of about 7 years. Fortunately, Ketchikan’s water is very soft with minimal hardness and buffering with the result in initial cells serving for 12 years, much longer than expected before being replaced in 2015. The Two-Point Chlorination Facility, which also uses the same design ClorTec generating cells, began service in 2016. These two facilities with 4 machines have a total of 10 cells in service that are being replaced as required. Beginning in 2023 with the two older 3-cell machines, KPU began building sufficient cell inventory that will allow one ClorTech machine to be re-equipped every year followed by the 2-cell machines. Each cell is estimated to cost about \$24,000 in 2025 with a 2.5% inflation allowance for the final purchase made during 2025.

Priority Number: 12

Start Date: 01/23

End Date: 12/26

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other	130,000				50,000	50,000			230,000
Total	130,000				50,000	50,000			230,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds		130,000				50,000	50,000			230,000
Total		130,000				50,000	50,000			230,000

**Division: Water**

**Priority Number:** 13

**Project Title:** Fiber-optic Switches

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

As noted in the Operating Budget Changes narration for 2025, an installed fiber-optic link is now capable of providing redundant direct communication and control between the UV Disinfection Facility, the Two-Point Chlorination Facility, the Ammonia Addition Facility and the Chlorination Plant. Telecommunications has designed this system and installed the new fiber-optic cable. To create the fully operational system, it also requires the purchase by Telecommunications of four Cisco Meraki switches and their installation at the termination points within the facilities.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					25,000				25,000
<b>Total</b>					25,000				25,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						25,000				25,000
<b>Total</b>						25,000				25,000

**Division: Water**

**Priority Number:** 14

**Project Title:** Peterson St. Water Main Rebuild

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

During January 2022, Peterson Street's flawed cast-iron water main froze and broke. Installed in 1962 in a substandard manner with only 2-feet depth of cover, it depended on the adjacent residences using bleeders during the winter to not only keep their water services unfrozen but to also protect the cast-iron main. Two of these residences had been destroyed earlier due to fire and when another frozen service occurred at the end of the street, the Peterson Street main also froze. Public Works has completed a design of the Peterson Street Utility Improvement Project for both water and sewer replacement with non-corrodible plastic pipe for the entire 280-foot length and proposes to begin construction in 2025.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappropriated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					350,000				350,000
<b>Total</b>					350,000				350,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						350,000				350,000
<b>Total</b>						350,000				350,000

Division: Water

Project Title: Harris Street Utility Improvements

Description:

Priority Number: 15

Start Date: 01/25

End Date: 12/27

Harris Street's 855 feet of cast-iron water mains extending from Park Avenue to the end at 833 Harris were originally installed in 1956 and 1969. Since then, there has been no further progress replacing this fragile, old 6-inch cast-iron water main with 8-inch HDPE pipe. Including the corrugated metal sewer pipe, both are long overdue for replacement with non-corrodible plastic pipe. This will be a joint venture between Public Works and KPU Water Division and the design of the Harris Street Utility Improvement Project will begin in 2025. In addition, Public Works is proposing to replace the Harris Street stacked rock retaining wall alongside Ketchikan Creek with a concrete structure. Should should Municipal Assistance Funding ever become available again, this would be a prime project to have already designed, submitted for ADEC approval, and gain maximum points. A preliminary cost estimate of construction is included.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art					125,000				125,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction						750,000			750,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
Total					125,000	750,000			875,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						125,000				125,000
Proposed 50% State Municipal Assistance Funding							375,000			375,000
Revenue Bonds - ADWF Loan							375,000			375,000
Total						125,000	750,000			875,000

**Division: Water****Priority Number:** 16**Project Title:** Park Avenue Utility improvements**Start Date:** 01/25**End Date:** 12/27**Description:**

Park Avenue's 1170 feet of ductile-iron water main extending from Freeman Street to the intersection of Bawden Street was originally installed in 1988. Although it has remained trouble-free for the past 35 years, not so the wastewater main which Public Works proposes to begin replacement design in 2025, continue into 2026, and construct in 2027. There is no present funding available for its replacement but if there were, it will be a joint venture between Public Works and the Water Division to replace the ductile iron water main and services with 12-inch non-corrodible HDPE polyethylene pipe. However, should Municipal Assistance Funding ever become available again, this would be a prime project to have already designed, submitted for ADEC approval, and gain maximum points. A preliminary cost estimate of construction is included.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art					125,000				125,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction						1,950,000			1,950,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					125,000	1,950,000			2,075,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						125,000				125,000
Proposed 50% State Municipal Assistance Funding							975,000			975,000
Revenue Bonds - ADWF Loan							975,000			975,000
<b>Total</b>						125,000	1,950,000			2,075,000

**Division: Water**

**Priority Number:** 17

**Project Title:** Utility Vehicles

**Start Date:** 01/25

**End Date:** 12/27

**Description:**

The division requests approval of \$155,000 for the 2025 purchase of a replacement for the Kubota rubber tracked backhoe with transport trailer. Jointly shared by the divisions, it was purchased in 2007 and is supremely useful in tight situations where a large, rubber-tired backhoe won't fit. However, it is reaching the end of its useful service life and now requires significant repairs to the drive system. Vehicle 185-66, the single axle dump truck jointly shared by the Electric and Water Divisions was purchased in 2003. Already 22 years old, it too is reaching the end of its useful service life with substantial mechanical issues. Replacement of this dump truck will be about \$180,000 and will be replaced in 2026. The oldest service truck in the fleet is Vehicle 185-95 which was purchased in 2011. It will be 16 years old when it is replaced in 2027 and will cost about \$85,000.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					155,000	180,000	85,000		420,000
<b>Total</b>					155,000	180,000	85,000		420,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						155,000	180,000	85,000		420,000
<b>Total</b>						155,000	180,000	85,000		420,000

**Division: Water****Priority Number:** 18**Project Title:** Additional Projects**Start Date:** 01/25**End Date:** 12/29**Description:**

This account provides for the cost of fire hydrants and other related materials, which are provided by the Utility in water line extensions and are then incorporated into the municipal water system. This account also provides a source of funds for repair or installing new valve boxes in City streets when Public Works' annual repaving projects occur. Asphalt paving costs and the associated work performed by the contractor have continued to increase during 2024. Although specific streets have not yet been selected for asphalt paving in 2025, there will be paving scheduled for next year. This project has been an ongoing initiative of the division to make incremental improvements in cooperation with Public Works Department projects and other community projects.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other					50,000	50,000	50,000	50,000	200,000
<b>Total</b>					50,000	50,000	50,000	50,000	200,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						50,000	50,000	50,000	50,000	200,000
<b>Total</b>						50,000	50,000	50,000	50,000	200,000



**Division: Water****Priority Number:** 19**Project Title:** Skyline Water Main Replacement**Start Date:** 01/25**End Date:** 12/27**Description:**

The 560-foot ductile-iron 8-inch water line serving Skyline Condominiums is an unusual proposition. It is not installed in a dedicated right-of-way but rather through a series of easements that begin by passing through the side yard of 1111 Jackson, then across Skyline Condominium's property, and finally connecting to Carlanna Lake Road. Installed in 1983, it too is continuing to fail due to electrolytic corrosion, most recently in August 2021, and is overdue for replacement with non-corrodible 10-inch HDPE polyethylene pipe. Designs for this, West Fairy Chasm, Hillside and Second Avenue would be issued as a combined design contract with a single firm. Should Municipal Assistance Funding ever become available again, this would be a prime project that is already designed and has received ADEC approval for maximum points.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappropriated	New Funding	Total	2026	2027	2028	2029	
Public Art					70,000				70,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction						390,000			390,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					70,000	390,000			460,000

  

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						70,000				70,000
Proposed 50% State Municipal Assistance Funding							195,000			195,000
Revenue Bonds - ADWF Loan							195,000			195,000
<b>Total</b>						70,000	390,000			460,000

Division: Water

Project Title: West Fairy Chasm Main Replacement

Description:

Priority Number: 20

Start Date: 01/25

End Date: 12/28

This 8-inch ductile iron main was installed in 1981. The portion replaced in 2007 failed in a different manner than usually occurs. Unlike electrolytic corrosion that usually creates fairly small pits along the bottom of the pipe where the soils are moist and most conductive; in this case, the entire surface of the pipe was badly pitted. There is a possibility that the ductile iron pipe was bedded using rock that contains quite a bit of iron pyrite (fools gold) which is actually iron disulfide. Pyrites reacting with oxygen and water will form *Thiobacillus* bacteria which generate their energy through oxidizing the iron with a side effect of producing sulfuric acid, which chemically corrodes the iron pipe. Subsequent repairs made in 2017 and 2022 near the Black Bear intersection have shown similar pitting and the ductile iron sewer mains are very likely in the same condition. If the Proposition to issue KPU Revenue Obligations in a principal amount of \$5-million is approved in the forthcoming October's General Election, funding will be available for its replacement. The entire 720 foot section should be replaced with non-corrodible HDPE plastic pipe. Should Municipal Assistance Funding ever become available again, this would be another prime project that is already designed along with Skyline, Second Avenue, and Hillside projects and would have received ADEC approval for maximum points.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Public Art					87,000				87,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction							593,000		593,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
Total					87,000		593,000		680,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro-priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						87,000				87,000
Proposed 50% State Municipal Assistance Funding								296,500		296,500
Revenue Bonds - ADWF Loan								296,500		296,500
Total						87,000		593,000		680,000

Division: Water

Project Title: Hillside Road Water Main Replacement

Description:

Priority Number: 21

Start Date: 01/25

End Date: 12/28

Installed in 1973, this 50-year old ductile iron main water main has reached the end of its reliable service life and is overdue for replacement with non-corrodible 8-inch HDPE polyethylene pipe. In just this single 32-foot segment of its entire 847-foot length, numerous pitting failures were discovered this March that have been caused by severe electrolytic corrosion along the bottom of the pipe. Ductile iron pipe with a 6-inch diameter only has a wall thickness of 5/16-inch and some of the pits are already over 1/8-inch deep in this 50-year old pipe which indicates further failures are likely to occur in the near future. Overall, Hillside Road's water main is another example of the need to replace our old and failing infrastructure with corrosion-resistant HDPE plastic pipe before it reaches the failure point.

This project is a joint venture between KPU Water and Public Works who have hired R&M Engineering in 2024 to prepare the 65% design. A further expenditure will be needed to create a bid-ready 95% design. Should Municipal Assistance Funding ever become available again, this would be another prime project that is already designed along with the Skyline, West Fairy Chasm, and Second Avenue projects and would have received ADEC approval for maximum points.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art	19,440				60,000		644,000		79,440
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction									
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies								644,000	
Other									
Total	19,440				60,000		644,000		723,440

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project	
			Reappro- priated	New Funding	Total	2026	2027	2028	2029		
Revenue Generating Funds		19,440				60,000				79,440	
Proposed 50% State Municipal Assistance Funding									322,000		322,000
Revenue Bonds - ADWF Loan									322,000		322,000
Total		19,440				60,000		644,000		723,440	

**Division: Water**

**Priority Number:** 22

**Project Title:** Ketchikan Lakes Road - between Deermount to 1234 Ktn. Lakes

**Start Date:** 01/25

**End Date:** 12/25

**Description:**

Like Hillside Road, KPU is experiencing failures in Ketchikan Lakes Road's 12-inch ductile iron water main segment, particularly in the 220-foot segment between the Deermount and Lotus Streets intersection. There have been three adjacent failures within an 11-foot length in 2023 and this segment of the 41-year old ductile iron water main has reached the end of its reliable service life. Of the failed segment that was removed, the thinnest wall thickness along the cut edge was only 0.068-inch (a little more than 1/16<sup>th</sup> inch remains). The initial 600-foot portion of this ductile iron main was installed in 1983, 41 years ago, and is overdue for replacement.

Although Public Work's only has storm drains to replace in this segment, this project is another joint venture between KPU Water and Public Works who have hired R&M Engineering in 2024 to prepare the 95% design for its replacement with 600 feet of 16-inch HDPE pipe.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art	21,035								21,035
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction					700,000				700,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>	21,035				700,000				721,035

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds		21,035				700,000				721,035
Revenue Bonds - ADWF Loan										
<b>Total</b>		21,035				700,000				721,035

<b>Division: Water</b>					<b>Priority Number:</b> 23					
<b>Project Title:</b> Highlands Reservoir Property Acquisition					<b>Start Date:</b> 01/25					
					<b>End Date:</b> 12/27					
<b>Description:</b> Ketchikan is located in Earthquake Seismic Zone 3 (major damage). The Highlands Reservoir provides modest fire protection for the surrounding residential area including the State Jail, the Library, and other commercial buildings on Copper Ridge Lane. Ketchikan's last remaining wood-stave reservoir built in 1982 will not survive a significant earthquake, nor can it be economically retrofitted with additional shear protection. <b>If damaged, there are no remaining sources of wood-stave repair parts to be found anywhere.</b> The individual wooden staves are only held together by friction, and when they collapse during a severe earthquake, they will suddenly release 300,000 gallons of water causing significant damage downstream. Although discussions began in 2015 to acquire the necessary adjacent property at the same elevation needed to construct a modern, much larger reservoir, the sale was never completed at the proposed price of \$270,000. Once purchased, site investigations should begin in 2025 before beginning the construction of a large, modern 650,000 gallon reservoir. The design and construction funding will take at least another 8-10 years before the project is complete, and construction would begin around 2028 with an expected cost of about \$5 - 8 million.										
Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project	
		Reappropriated	New Funding	Total	2026	2027	2028	2029		
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other						400,000			400,000	
<b>Total</b>						400,000			400,000	
Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappropriated	New Funding	Total	2026	2027	2028	2029	
Proposed 50% State Municipal Assistance Funding Revenue Bonds - ADWF Loan							200,000 200,000			200,000 200,000
<b>Total</b>							400,000			400,000

**Division: Water****Priority Number:** 24**Project Title:** Ketchikan Lakes Alternative Raw Water Supply Piping**Start Date:** 01/25**End Date:** 12/29**Description:**

Currently, raw water from Ketchikan Lakes travels via tunnels and penstocks downhill to the existing hydro-electric power plant and water treatment plant. This project will construct new raw water supply piping along an alternative route separate from the existing system. This will allow for a long overdue inspection of the existing tunnel system (constructed in the 1920s), and much needed repair or replacement of the three existing 36" penstock gate valves without impacting the water supply for the city. The new water supply route would allow for improved raw water quality, increased hydro-electric production, and critical infrastructure redundancy. The existing tunnel system could still be utilized as a back-up water supply route as needed once inspected and repaired. After Statements of Qualifications were received from qualified professionals, the design work was awarded to Jacobs Engineering on September 19th. Negotiations for the cost of the design will begin including establishing if a lake tap rather than tapping into the penstocks is even financially feasible. If approved, design would begin in 2025, followed by procurement of construction funding via applying for an Alaska Drinking Water Fund loan and for Dam Safety Hydropower grants starting in 2026. Construction would begin in 2029. Until this design is completed, the estimated construction cost is unknown but the initial estimate is at least \$12-million.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art Design Land/Property Acquisition (ROW) Land/Property Improvements Construction Management Construction Vehicles/Moving Equipment Operating Equipment Environmental/Other Studies Other								12,000,000	12,000,000
<b>Total</b>								12,000,000	12,000,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds										
Revenue Bonds - ADWF Loan									6,000,000	6,000,000
Proposed Dam Safety Hydropower Grant									6,000,000	6,000,000
<b>Total</b>									12,000,000	12,000,000

**Division: Water**

**Priority Number:** 25

**Thomas Street Water Main Replacement**

**Start Date:** 01/25

**End Date:** 12/26

**Description:**

The existing 450-feet of 6-inch ductile iron water main was installed in Thomas Street in 1988. Like the water mains under the Water Street and Tongass Avenue viaducts, it too is suspended underneath Thomas Street and has been submerged in salt water twice a day for 36 years and is now severely corroded. The mechanical fastenings are failing and the entire main and services need replacement with new 8-inch non-corrodable high density, polyethylene (HDPE) pipe.

Project Cost Category	Prior Years	Adopted 2025			Projected Requirements				Total Project
		Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Public Art					70,000				70,000
Design									
Land/Property Acquisition (ROW)									
Land/Property Improvements									
Construction Management									
Construction						300,000			300,000
Vehicles/Moving Equipment									
Operating Equipment									
Environmental/Other Studies									
Other									
<b>Total</b>					70,000	300,000			370,000

Source of Funds	Fund No.	Prior Years	Adopted 2025			Projected Requirements				Total Project
			Reappro- priated	New Funding	Total	2026	2027	2028	2029	
Revenue Generating Funds						70,000				70,000
Proposed 50% State Municipal Assistance Funding							150,000			150,000
Revenue Bonds - ADWF Loan							150,000			150,000
<b>Total</b>						70,000	300,000			370,000