

Blue Ridge Resource Authority
Capital Improvements Plan

FY 2024-2028



Presented to the Blue Ridge Resource Authority
Board

April 10, 2023

The Blue Ridge Resource Authority Capital Improvements Plan For Fiscal Years 24-28



I am pleased to present to you the proposed FY24- FY28 Capital Improvements Program (CIP) for The BRRR. This CIP plan includes \$2,311,451 of capital improvements for the BRRR. The plan identifies \$2,226,451 of equipment procurements through planned lease-purchase agreements. This plan also includes \$45,000 for the purchase of a new slope mower which is due for replacement in FY 2024, and an additional \$40,000 for the purchase of a new leachate pump, also due for replacement in FY 2024.

This plan consists of equipment procurement in the form of 5 and 10 year lease agreements. These lease agreements represent a continued plan of financing the Authority put into place 14 years ago. We are currently into our second transition of equipment. Our Cat IT14 wheel loader is on a scheduled life cycle of 15 years. It was purchased used in 1994. This machine is used daily in our collection center to unload waste, supplies, manage our brush pile, and is also used for numerous tasks across our site. The replacement was scheduled for FY 2024; however, based on the current condition of the machine, staff has decided to postpone replacement until FY 2026. The projected replacement cost will be \$166,222.

The John Deere Track Loader (or equivalent), is on a scheduled life cycle of 5 years. This particular piece of equipment is used daily to push up waste. Construction debris is considered a harsh environment for this piece of equipment. The rate of replacement of the track loader is \$452,735. Replacement will be required in FY 2024.

The Al-Jon Compactor (or equivalent) is the most important piece of equipment to the landfill. Compaction provides efficiency by saving airspace. The compactor is a unique piece of equipment and is not readily available for rental should our unit breakdown. The estimated cost of replacement is \$802,500 and will be required in FY 2025. This unit has a 10 year life cycle. By FY 2025 the life cycle will have been extended to 12 years.

The Volvo EC350 Excavator (or equivalent) serves a vital role at the landfill. It is used daily for the excavation of cover soil and various other projects around our site. It has an expected life span of 10 years. It is currently scheduled to be replaced in FY 2026. The estimated cost of replacement is \$344,189.

The Volvo A30G Articulating truck (or equivalent) is required to support daily landfill activities such as transporting daily cover soil from the borrow area to the working face, and moving other various materials around the site. It has an estimated life cycle of 14 years. It is currently scheduled to be replaced in FY 2028. The estimated cost of replacement is \$460,805.

A handwritten signature in black ink, appearing to read "Fred Dudley", is written over a horizontal line.

Fred Dudley, Director BRRR

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Purchase of a Ventrac 4500Z Slope Mower (or equivalent)
Budget Line #:	4-19-19040-7002

Status: (mark with BOLD "X")		New Project		No change from prior year's plan	X	Changes Added
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Description: (Enter narrative to the right)	The BRRR is currently operating a Ventrac 4500Z slope mower which was purchased in December of 2012. Staff is requesting to replace this machine in FY 2024. This procurement plan assumes a 12-year life cycle.
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Justification: (Enter narrative to the right)	The Ventrac 4500Z slope mower is an essential machine for mowing of the landfill slopes and is also utilized for other necessary mowing operations on the property. The estimated replacement cost of the machine is \$45,000.00 and would be purchased through a cooperative procurement group or State contract. Staff is requesting that funding for this purchase be added to our FY 2024 budget.
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Performed by (mark applicable w/ BOLD "X"):	X	In-house		Contract
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Estimated Annual Impact on Operating Cost:	\$2,160
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$45,000	\$0	\$0	\$0	\$0	\$0	\$45,000
Total	\$45,000	\$0	\$0	\$0	\$0	\$0	\$45,000

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Purchase of a Wacker-Neuson 6" leachate pump (or equivalent)
Budget Line #:	4-19-19040-7002

Status: (mark with BOLD "X")	X	New Project		No change from prior year's plan		Changes Added
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Description: (Enter narrative to the right)	The BRRA is currently operating a Wacker Neuson, 6 inch trash pump which was purchased in February of 2017. Staff is requesting to replace this machine in FY 2024. This procurement plan assumes a 5-year life cycle.
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Justification: (Enter narrative to the right)	The leachate pump is a necessary tool that is used to pump leachate from the basin, into the tanker. The estimated replacement cost of the machine is \$40,000.00 and would be purchased through a cooperative procurement group or State contract. Staff is requesting that funding for this purchase be added to our FY 2024 budget.
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Performed by (mark applicable w/ BOLD "X"):	X	In-house		Contract
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Estimated Annual Impact on Operating Cost:	\$1,440
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000
Total	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Lease-Purchase of John Deere Track Loader (or equivalent)
Budget Line #:	4-19-19040-8002

Status: (mark with BOLD "X")		New Project		No change from prior year's plan	X	Changes Added
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Description: (Enter narrative to the right)	The BRRA is currently operating a 2018 John Deere 755K Track Loader. Staff is requesting to replace the equipment in FY 2024. This procurement plan assumes a 5 year life cycle for the current machine.
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Justification: (Enter narrative to the right)	It has been made clear through past operations and analysis of other landfill programs that scheduled replacement of key equipment will greatly reduce maintenance and repair costs, and will require lower rental expenses and/or downtime due to equipment failures. The benefit is to ensure regulatory compliance, maximize services, and minimize unscheduled costs. This piece of equipment is scheduled to be replaced in FY 2024. Staff anticipates a 5-year lease term at an interest rate of 7%. Principal value @ \$452,735; interest @ \$85,147 with a total of 5 annual payments @ \$107,576, for a total cost of \$537,882. The former equipment can be sold as surplus to recoup costs. Procurement will be made via an existing cooperative procurement contract.
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Performed by (mark applicable w/ BOLD "X"):		In-house	X	Contract
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Estimated Annual Impact on Operating Cost:	\$33,600
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$107,576	\$107,576	\$107,576	\$107,576	\$107,576	\$0	\$537,880
Total	\$107,576	\$107,576	\$107,576	\$107,576	\$107,576	\$0	\$537,880

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Lease-Purchase of Al-Jon Compactor (or equivalent)
Budget Line #:	4-19-19040-8002

Status: (mark with BOLD "X")		New Project		No change from prior year's plan	X	Changes Added
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Description: (Enter narrative to the right)	The BRRR is currently operating a 2013 AlJon ADV500 Landfill Compactor (put into service 2013). Staff is requesting to replace the equipment in FY 2025. This procurement plan assumes a 10-year life cycle for the current machine.
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Justification: (Enter narrative to the right)	The Al-Jon Compactor is scheduled to be replaced in FY 2025. An additional two years of service life is being added to the existing unit as staff believes the compactor has additional service life remaining. The additional two years will assist the BRRR in out-year budgeting to meet operational and closure/post-closure requirements. Staff anticipates a 10 year lease term at an interest rate of 7%. Principal value @ \$802,500; interest @ \$315,625 with a total of 10 annual payments @ \$111,813 for a total cost of \$1,118,127. The former equipment can be sold as surplus to recoup costs. Procurement will be made via an existing cooperative procurement contract.
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Performed by (mark applicable w/ BOLD "X"):		In-house	X	Contract
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Estimated Annual Impact on Operating Cost:	\$48,000
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$0	\$111,813	\$111,813	\$111,813	\$111,813	\$670,875	\$1,118,127
Total	\$0	\$111,813	\$111,813	\$111,813	\$111,813	\$670,875	\$1,118,127

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Lease Purchase of Volvo EC350 Excavator (or equivalent)
Budget Line #:	4-19-19040-8002

Status: (mark with BOLD "X")		New Project		No change from prior year's plan	X	Changes Added
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Description: (Enter narrative to the right)	The BRRR is currently operating a Volvo EC350EL Crawler Excavator. This machine was purchased in FY 2016. Staff is requesting to replace the equipment in FY 2026. This procurement plan assumes a 10-year life cycle for the current machine.
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Justification: (Enter narrative to the right)	It has been made clear through past operations and analysis of other landfill programs that scheduled replacement of key equipment will greatly reduce maintenance and repair costs, and will require lower rental expenses and/or downtime due to equipment failures. The benefit is to ensure regulatory compliance, maximize services, and minimize unscheduled costs. In FY 2026, staff anticipates a 5 year lease term at an interest rate of 7%. Principal value @ \$344,189; interest @ \$64,732 with a total of 5 annual payments @ \$81,784 for a total cost of \$408,921. The former equipment can be sold as surplus to recoup costs. Procurement will be made via an existing cooperative procurement contract.
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Performed by (mark applicable w/ BOLD "X"):		In-house	X	Contract
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Estimated Annual Impact on Operating Cost:	\$21,600
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$0	\$0	\$81,784	\$81,784	\$81,784	\$163,569	\$408,921
Total	\$0	\$0	\$81,784	\$81,784	\$81,784	\$163,569	\$408,921

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Lease-Purchase of a Hitachi ZW150PL Wheel Loader (or equivalent)
Budget Line #:	4-19-19040-8002

Status: (mark with BOLD "X")		New Project		No change from prior year's plan	X	Changes Added
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Description: (Enter narrative to the right)	The BRRA is currently operating a CAT IT14 Wheel Loader purchased in August of 1994. The current machine has 10,000 hours on it. Staff is requesting to replace the current machine in FY 2026. This procurement plan assumes a 17 year life cycle.
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Justification: (Enter narrative to the right)	It has been made clear through past operations and analysis of other landfill programs that scheduled replacement of key equipment will greatly reduce maintenance and repair costs, and will require lower rental expenses and/or downtime due to equipment failures. This machine is essential to the efficient operation of the Authority. It's used to load and unload materials, supplies and waste. It is also used to load commingle material, manage the brush pile, and complete numerous other maintenance projects across the site. This piece of equipment is scheduled to be replaced in FY 2026. Staff anticipates a 5-year lease term at an interest rate of 7%. Principal value @ \$166,222; interest @ \$31,261 with a total of 60 payments @ \$3,291 for a total cost of \$197,484. The former equipment can be sold as surplus to recoup costs. Procurement will be made via an existing cooperative procurement contract.
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Performed by (mark applicable w/ BOLD "X"):		In-house	X	Contract
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Estimated Annual Impact on Operating Cost:	\$3,000
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$0	\$0	\$39,497	\$39,497	\$39,497	\$78,994	\$197,484
Total	\$0	\$0	\$39,497	\$39,497	\$39,497	\$78,994	\$197,484

CAPITAL IMPROVEMENT PLAN REQUEST
FISCAL YEARS ENDING (FYE 2024 - 2028)



Requesting Organization:	Blue Ridge Resource Authority
Project Title:	Lease-Purchase of Volvo A30G Artic Truck (or equivalent)
Budget Line #:	4-19-19040-8002

Status: (mark with BOLD "X")		New Project		No change from prior year's plan	X	Changes Added
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Description: (Enter narrative to the right)	The BRRR is currently operating a Volvo A30G Artic Truck. This machine was purchased in FY 2016. Staff is requesting to replace the equipment in FY 2028. This procurement plan assumes a 14-year life cycle for the current machine.
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Justification: (Enter narrative to the right)	It has been made clear through past operations and analysis of other landfill programs that scheduled replacement of key equipment will greatly reduce maintenance and repair costs, and will require lower rental expenses and/or downtime due to equipment failures. The benefit is to ensure regulatory compliance, maximize services, and minimize unscheduled costs. The Articulated Truck will be replaced in FY 2028. Staff anticipates a 5-year lease term at an interest rate of 7%. Principal value @ \$460,805; interest @ \$86,529, with a total of 5 annual payments @ \$109,323 for a total cost of \$547,334. The former equipment can be sold as surplus to recoup costs. Procurement will be made via an existing cooperative procurement contract.
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Performed by (mark applicable w/ BOLD "X"):		In-house	X	Contract
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Estimated Annual Impact on Operating Cost:	\$24,000
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Fund Source	FYE 2024	FYE 2025	FYE 2026	FYE 2027	FYE 2028	Not Yet Programmed	Total
Op Revenues	\$0	\$0	\$0	\$0	\$109,323	\$438,011	\$547,334
Total	\$0	\$0	\$0	\$0	\$109,323	\$438,011	\$547,334

BRRR Debt Service FY24-28



FY 2024

Account	Purpose	Company	Due Date	Principal	Interest	Total
4-19-19040-8002	John Deere Track Loader		Monthly	\$ 71,626	\$ 27,016	\$ 98,642
4-19-19040-9902	Transfer Station	VRA	10/1/23	\$ 30,000	\$ 10,028	\$ 40,028
4-19-19040-9902	Transfer Station	VRA	4/1/24	\$ -	\$ 9,259	\$ 9,259
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	10/1/23	\$ 90,000	\$ 49,722	\$ 139,722
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	4/1/24	\$ -	\$ 47,416	\$ 47,416
4-19-19080-XXXX	Cell-2	VRA	10/1/23	\$ 360,000	\$ 89,047	\$ 449,047
4-19-19080-XXXX	Cell-2	VRA	4/1/24		\$ 79,822	\$ 79,822
4-19-19040-9900	Closure & Post Closure			\$ 355,000		\$ 355,000
Total FY 2024				\$ 906,626	\$ 312,310	\$ 1,218,936

FY2025

Account	Purpose	Company	Due Date	Principal	Interest	Total
4-19-19040-8002	John Deere Track Loader		Monthly	\$ 83,545	\$ 24,031	\$ 107,576
4-19-19040-8002	Aljon Compactor		Monthly	\$ 52,515	\$ 49,980	\$ 102,495
4-19-19040-9902	Transfer Station	VRA	10/1/24	\$ 35,000	\$ 9,259	\$ 44,259
4-19-19040-9902	Transfer Station	VRA	4/1/25	\$ -	\$ 8,363	\$ 8,363
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	10/1/24	\$ 95,000	\$ 47,416	\$ 142,416
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	4/1/25	\$ -	\$ 44,981	\$ 44,981
4-19-19080-XXXX	Cell-2	VRA	10/1/24	\$ 380,000	\$ 79,822	\$ 459,822
4-19-19080-XXXX	Cell-2	VRA	4/1/25		\$ 70,084	\$ 70,084
4-19-19040-9900	Closure & Post Closure			\$ 363,875		\$ 363,875
Total FY 2025				\$ 1,009,935	\$ 333,936	\$ 1,343,871

BRRR Debt Service FY24-28



FY 2026

Account	Purpose	Company	Due Date	Principal	Interest	Total
4-19-19040-8002	John Deere Track Loader		Monthly	\$ 89,585	\$ 17,991	\$ 107,576
4-19-19040-8002	Aljon Compactor		Monthly	\$ 61,254	\$ 50,559	\$ 111,812
4-19-19040-8002	Volvo Excavator		Monthly	\$ 54,453	\$ 20,516	\$ 74,969
4-19-19040-8002	Hitachi ZW150PL Wheel Loader		Monthly	\$ 26,298	\$ 9,908	\$ 36,205
4-19-19040-9902	Transfer Station	VRA	10/1/25	\$ 35,000	\$ 8,363	\$ 43,363
4-19-19040-9902	Transfer Station	VRA	4/1/26	\$ -	\$ 7,466	\$ 7,466
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	10/1/25	\$ 100,000	\$ 44,981	\$ 144,981
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	4/1/26	\$ -	\$ 42,569	\$ 42,569
4-19-19080-XXXX	Cell-2	VRA	10/1/25	\$ 400,000	\$ 70,084	\$ 470,084
4-19-19080-XXXX	Cell-2	VRA	4/1/26		\$ 59,834	\$ 59,834
4-19-19040-9900	Closure & Post Closure			\$ 372,972		\$ 372,972
Total FY 2026				\$ 1,139,561	\$ 332,270	\$ 1,471,831

FY 2027

Account	Purpose	Company	Due Date	Principal	Interest	Total
4-19-19040-8002	John Deere Track Loader		Monthly	\$ 96,061	\$ 11,515	\$ 107,576
4-19-19040-8002	Aljon Compactor		Monthly	\$ 65,682	\$ 46,130	\$ 111,812
4-19-19040-8002	Volvo Excavator		Monthly	\$ 63,515	\$ 18,269	\$ 81,784
4-19-19040-8002	Hitachi ZW150PL Wheel Loader		Monthly	\$ 30,674	\$ 8,823	\$ 39,497
4-19-19040-9902	Transfer Station	VRA	10/1/26	\$ 35,000	\$ 7,466	\$ 42,466
4-19-19040-9902	Transfer Station	VRA	4/1/27	\$ -	\$ 6,669	\$ 6,669
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	10/1/26	\$ 105,000	\$ 42,569	\$ 147,569
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	4/1/27	\$ -	\$ 40,028	\$ 40,028
4-19-19080-XXXX	Cell-2	VRA	10/1/26	\$ 420,000	\$ 59,834	\$ 479,834
4-19-19080-XXXX	Cell-2	VRA	4/1/27		\$ 49,072	\$ 59,834
4-19-19040-9900	Closure & Post Closure			\$ 382,296	\$ -	\$ 382,296
Total FY 2027				\$ 1,198,228	\$ 290,376	\$ 1,499,366

BRRR Debt Service FY24-28



FY 2028

Account	Purpose	Company	Due Date	Principal	Interest	Total
4-19-19040-8002	John Deere Track Loader		Monthly	\$ 103,005	\$ 4,571	\$ 107,576
4-19-19040-8002	Aljon Compactor		Monthly	\$ 70,430	\$ 41,382	\$ 111,812
4-19-19040-8002	Volvo Excavator		Monthly	\$ 68,106	\$ 13,678	\$ 81,784
4-19-19040-8002	Hitachi ZW150PL Wheel Loader		Monthly	\$ 32,891	\$ 6,606	\$ 39,497
4-19-19040-8002	Volvo Artic Truck		Monthly	\$ 72,789	\$ 27,424	\$ 100,213
4-19-19040-9902	Transfer Station	VRA	10/1/27	\$ 40,000	\$ 6,669	\$ 46,669
4-19-19040-9902	Transfer Station	VRA	4/1/28	\$ -	\$ 5,794	\$ 5,794
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	10/1/27	\$ 110,000	\$ 40,028	\$ 150,028
4-19-19040-XXXX	Cell-1 & Infrastructure	VRA	4/1/28	\$ -	\$ 37,509	\$ 37,509
4-19-19080-XXXX	Cell-2	VRA	10/1/27	\$ 445,000	\$ 49,072	\$ 494,072
4-19-19080-XXXX	Cell-2	VRA	4/1/28	\$ -	\$ 37,669	\$ 37,669
4-19-19040-9900	Closure & Post Closure			\$ 391,854	\$ -	\$ 391,854
Total FY 2028				\$ 1,334,075	\$ 270,401	\$ 1,626,642