WILLOW BROOK METROPOLITAN DISTRICT

NOTICE AND AGENDA FOR A WORK SESSION

Board of Directors	Office	Term Expiration
Mat Sherwood	President	May 2027
EJ Olbright	Vice President	May 2027
Jim Hahn	Secretary/Treasurer	May 2027
Carl Oppedahl	Director	May 2029
Blake Shutler	Director	May 2029

DATE: **Thursday, November 12, 2026**
TIME: **2:00 PM**
PLACE: **Virtual Meeting via Zoom**

Join Zoom Meeting
https://us06web.zoom.us/j/83662684270?pwd=3N62OWtYzfu2p38261eRz4boNaX5SP.1

Meeting ID: 836 6268 4270
Passcode: 393412

One tap mobile
+17193594580,,83662684270# US
+17207072699,,83662684270# US (Denver)

NOTE: THERE WILL BE NO PUBLIC COMMENT OR BOARD ACTIONS TAKEN DURING THE WORK SESSION

DISTRICT INFORMATION AND PUBLIC DOCUMENTS ARE POSTED
ON THE DISTRICT'S WEBSITE AT: willowbrookmetro.org

I. ADMINISTRATIVE MATTERS:
   a. Call to Order
   b. Declaration of Quorum

II. WORK SESSION ITEM:
   a. Review Proposed 2027 Budget

III. ADJOURNMENT

The next meeting of the Board of Directors of the Willow Brook Metropolitan District will be held on December 11, 2026. Official notice of this meeting will be provided.

WILLOW BROOK METROPOLITAN DISTRICT
GENERAL FUND
2027 PROPOSED BUDGET
WITH 2025 ACTUAL, 2026 BUDGET, 2026 YTD ACTUAL AND 2026 ESTIMATED AMOUNTS
FOR THE YEARS ENDED AND ENDING DECEMBER 31,

	2025 Actual Modified Accrual	2026 Budget Modified Accrual	Actual 9/30/2026 Cash Basis	2026 Estimated Modified Accrual	2027 Proposed Modified Accrual
REVENUES					
Conservation trust fund	$ 586	$ 500	$ 444	$ 500	$ 500
Interest	8,673	6,000	5,862	6,000	4,000
Miscellaneous	86	-	20,114	20,114	-
Property taxes	397,374	414,894	414,383	414,894	438,827
Specific ownership taxes	18,761	31,200	16,755	22,340	32,500
Snow removal	19,750	24,000	8,943	20,000	20,000
Trash service fees	11,880	25,000	9,257	11,880	11,880
Total revenues	457,110	501,594	475,758	495,728	507,707
EXPENDITURES					
Administrative					
Audit	17,340	3,000	3,248	3,248	3,500
Construction fee reimbursement	-	-	20,000	20,000	-
County treasurer fees	22,442	31,200	23,504	31,200	32,500
District management and accounting	96,526	85,000	68,824	86,824	72,000
Election	16,169	-	-	-	20,000
GIS	-	3,500	-	3,500	3,500
Insurance and SDA dues	22,210	20,000	980	21,216	23,338
Legal	18,524	20,000	13,250	20,000	20,000
Miscellaneous	4,806	2,000	3,407	3,500	2,000
Signage design proposal/improvements	-	-	-	-	-
Trash removal	30,117	25,000	13,123	25,000	25,000
Utilities	13,720	18,000	9,997	18,000	18,000
Website and ADA compliance	-	1,800	1,580	4,248	4,250
Weeds	13,780	14,000	6,890	14,000	14,000
Emergency reserve contribution (3%)	-	14,700	-	-	13,000
Operations and maintenance					
Gate	442	1,200	396	1,200	1,200
Repairs and maintenance general	408	5,000	3,915	5,000	5,000
Ranch manager					
Salary	100,702	71,749	57,035	67,254	76,880
Payroll taxes	7,272	5,887	7,113	8,664	6,150
Benefits	18,704	21,066	15,561	18,561	16,240
Back-up support	675	3,883	677	1,000	1,000
Transition salary and expenses	-	31,334	11,945	11,945	-
Irrigation					
Irrigation/meadow management	-	10,000	-	10,000	10,000
Hay meadows and fencing					
Hay equipment	1,260	15,000	11,873	15,000	-
Meadow fencing & repairs	-	-	119	100	-
Roads					
Culverts	-	15,000	1,922	15,000	15,000
Equipment - Kubota Excavator	-	28,000	6,884	10,326	13,767
Groomer	4,318	4,318	4,318	4,318	-
Road improvements	-	10,000	2,263	10,000	10,000
Snow plowing salt and sand	-	1,500	-	1,500	1,500
Truck/accessories/gas/insurance	19,737	30,000	10,555	30,000	30,000
Stable - equestrian center					
Consulting fees	-	10,000	-	10,000	10,000
Stable maintenance & security	2,290	-	1,778	1,778	-
Total expenditures	411,442	502,137	301,157	472,382	447,825
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES	45,668	(543)	174,601	23,346	59,882
OTHER FINANCING SOURCES (USES)					
Transfer to capital projects fund	-	(27,500)	-	(27,500)	-
Total other financing sources (uses)	-	(27,500)	-	(27,500)	-
NET CHANGE (WITHOUT RESERVE)	45,668	(28,043)	174,601	(4,154)	59,882
BEGINNING FUND BALANCE (WITHOUT RESERVE)	(37,367)	85,426	(31,001)	8,301	4,147
ENDING FUND BALANCE (WITHOUT RESERVE)	**8,301**	**57,383**		**4,147**	**64,029**
GENERAL FUND RESERVE					
Property taxes for general fund reserve fees	53,267	58,108	58,037	58,108	60,684
General fund reserve interest	1,498	3,000	3,439	4,000	4,000
Transfer from stewareship fund	-	85,000	85,000	85,000	-

WILLOW BROOK METROPOLITAN DISTRICT
GENERAL FUND
2027 PROPOSED BUDGET
WITH 2025 ACTUAL, 2026 BUDGET, 2026 YTD ACTUAL AND 2026 ESTIMATED AMOUNTS
FOR THE YEARS ENDED AND ENDING DECEMBER 31,

	2025 Actual	2026 Budget	Actual 9/30/2026	2026 Estimated	2027 Proposed
Total general fund reserve	54,765	146,108	146,476	147,108	64,684
BEGINNING GENERAL FUND RESERVE BALANCE	4,988	61,718	59,752	59,753	206,861
ENDING GENERAL FUND RESERVE BALANCE	**59,753**	**207,826**	**206,228**	**206,861**	**271,545**
TOTAL NET CHANGE IN FUND BALANCE	100,433	118,065	321,077	142,954	124,566
TOTAL BEGINNING FUND BALANCE	(32,379)	147,144	28,751	68,054	211,008
TOTAL ENDING FUND BALANCE	**$ 68,054**	**$ 265,209**	**$ 349,828**	**211,008**	**$ 335,574**

WILLOW BROOK METROPOLITAN DISTRICT
CAPITAL PROJECTS FUND
2027 PROPOSED BUDGET
WITH 2025 ACTUAL, 2026 BUDGET, 2026 YTD ACTUAL AND 2026 ESTIMATED AMOUNTS
FOR THE YEARS ENDED AND ENDING DECEMBER 31,

	2025 Actual Modified Accrual	2026 Budget Modified Accrual	Actual 9/30/2026 Cash Basis	2026 Estimated Modified Accrual	2027 Proposed Modified Accrual
REVENUES					
Property taxes - Well #3	$ 50,002	$ 49,973	$ 49,567	$ 49,973	$ 52,188
Specific ownership taxes	2,094	2,500	1,396	1,861	2,700
Interest	163	-	64	100	-
Total revenues	52,259	52,473	51,027	51,934	54,888
EXPENDITURES					
County treasurer fees	2,486	2,499	2,477	2,499	2,609
Fuel reduction loan principal	50,000	-	-	-	-
Fuel reduction loan interest	2,563	-	-	-	-
Well #3	77,469	100,000	35,692	100,000	-
Total expenditures	132,518	102,499	38,169	102,499	2,609
EXCESS OF EXPENDITURES OVER (UNDER) REVENUES	(80,259)	(50,026)	12,858	(50,565)	52,279
OTHER FINANCING SOURCES (USES)					
Transfer from general fund	-	27,500	-	27,500	-
Total other financing sources (uses)	-	27,500	-	27,500	-
NET CHANGE (WITHOUT SRF LOAN)	(80,259)	(22,526)	12,858	(23,065)	52,279
BEGINNING FUND BALANCE (WITHOUT SRF LOAN)	105,326	22,707	40,924	25,067	2,002
ENDING FUND BALANCE (WITHOUT SRF LOAN)	**25,067**	**181**	**53,782**	**2,002**	**54,281**
SRF Loan - Projects					
Property taxes - SRF loan	101,766	43,651	43,298	43,651	45,585
Specific ownership taxes - SRF loan	4,262	2,183	1,444	1,925	2,279
Interest - SRF loan	9,617	8,000	5,919	7,000	7,000
County treasurer fees	(5,061)	(2,183)	(2,169)	(2,183)	(2,279)
SRF loan principal	(67,474)	(69,172)	(34,371)	(69,172)	(70,912)
SRF loan interest	(29,864)	(28,167)	(14,298)	(28,167)	(26,426)
Ending SRF loan - Projects	13,246	(45,688)	(177)	(46,946)	(44,753)
BEGINNING FUND BALANCE - SRF LOAN	207,624	246,227	220,879	220,870	173,924
ENDING FUND BALANCE - SRF LOAN	**220,870**	**200,539**	**220,702**	**173,924**	**129,171**
NET CHANGE IN FUND BALANCE	(67,013)	(68,214)	12,681	(70,011)	7,526
BEGINNING FUND BALANCE	312,950	268,934	261,803	245,937	175,926
ENDING FUND BALANCE	**$ 245,937**	**$ 200,720**	**$ 274,484**	**$ 175,926**	**$ 183,452**

WILLOW BROOK METROPOLITAN DISTRICT
WATER OPERATIONS FUND
2027 PROPOSED BUDGET
WITH 2025 ACTUAL, 2026 BUDGET, 2026 YTD ACTUAL AND 2026 ESTIMATED AMOUNTS
FOR THE YEARS ENDED AND ENDING DECEMBER 31,

	2025 Actual Modified Accrual	2026 Budget Modified Accrual	Actual 9/30/2026 Cash Basis	2026 Estimated Modified Accrual	2027 Proposed Modified Accrual
REVENUES					
Water service charges	$ 64,250	$ 183,000	$ 78,289	$ 183,000	$ 183,000
Miscellaneous	216	-	256	200	-
Tap fees	-	-	71,050	71,050	-
Total revenues	64,466	183,000	149,595	254,250	183,000
EXPENDITURES					
Maintenance contract (basic services)	31,042	35,000	26,400	35,000	35,000
Ranch manager salary	-	38,545	31,127	38,545	19,220
Payroll taxes	-	-	-	-	1,538
Benefits	-	-	-	-	4,060
New meter installation	152	-	-	-	-
Annual fire hydrant maintenance	-	720	-	720	720
Repairs and maintenance	32,661	25,000	72,732	75,000	25,000
Tap agreement expense	-	-	9,476	9,476	-
Utilities - Town of Silverthorne	218	205	(13)	100	150
Utility billing	3,000	3,000	2,250	2,250	-
Water testing	875	7,000	-	7,000	7,000
Total expenditures	67,948	109,470	141,972	168,091	92,688
NET CHANGE (WITHOUT RESERVE)	(3,482)	73,530	7,623	86,159	90,312
BEGINNING FUND BALANCE (WITHOUT RESERVE)	(34,904)	444	13	(38,386)	47,773
ENDING FUND BALANCE (WITHOUT RESERVE)	**(38,386)**	**73,974**	**7,636**	**47,773**	**138,085**
PROJECT FUND RESERVE					
Project reserve fee ($75/month)	47,708	49,500	39,217	49,500	50,400
Project reserve interest	1,434	500	2,513	2,600	2,500
GWUDI Assessment (Well No 1-R)	(1,001)	-	(360)	-	-
Total project fund reserve	48,141	50,000	41,370	52,100	52,900
BEGINNING PROJECT FUND RESERVE BALANCE	37,116	67,077	85,529	85,257	137,357
ENDING PROJECT FUND RESERVE BALANCE	**85,257**	**117,077**	**126,899**	**137,357**	**190,257**
NET CHANGE IN FUND BALANCE	44,659	123,530	48,993	138,259	143,212
BEGINNING FUND BALANCE	2,212	67,521	85,542	46,871	185,130
ENDING FUND BALANCE	**$ 46,871**	**$ 191,051**	**$ 134,535**	**$ 185,130**	**$ 328,342**

WILLOW BROOK METROPOLITAN DISTRICT
ROAD PAVING FUND
2027 PROPOSED BUDGET
WITH 2025 ACTUAL, 2026 BUDGET, 2026 YTD ACTUAL AND 2026 ESTIMATED AMOUNTS
FOR THE YEARS ENDED AND ENDING DECEMBER 31,

	2025 Actual Modified Accrual	2026 Budget Modified Accrual	Actual 9/30/2026 Cash Basis	2026 Estimated Modified Accrual	2027 Proposed Modified Accrual
REVENUES					
Property taxes - road paving	$ 58,177	$ 75,541	$ 74,926	$ 75,541	$ 50,974
Specific ownership taxes	2,513	3,800	2,062	2,749	2,600
Interest	5,233	2,500	2,367	3,000	3,000
Total revenues	65,923	81,841	79,355	81,290	56,574
EXPENDITURES					
County treasurer fees	2,984	3,800	3,766	3,800	2,600
Loan principal	55,000	55,000	100,000	155,000	65,000
Loan interest	15,306	8,800	7,788	8,800	6,600
Total expenditures	73,290	67,600	111,554	167,600	74,200
NET CHANGE IN FUND BALANCE	(7,367)	14,241	(32,199)	(86,310)	(17,626)
BEGINNING FUND BALANCE	111,799	51,397	104,587	104,432	18,122
ENDING FUND BALANCE	**$ 104,432**	**$ 65,638**	**$ 72,388**	**$ 18,122**	**$ 496**

WILLOW BROOK METROPOLITAN DISTRICT
STEWARDSHIP FUND
2027 PROPOSED BUDGET
WITH 2025 ACTUAL, 2026 BUDGET, 2026 YTD ACTUAL AND 2026 ESTIMATED AMOUNTS
FOR THE YEARS ENDED AND ENDING DECEMBER 31,

	2025 Actual Modified Accrual	2026 Budget Modified Accrual	Actual 9/30/2026 Cash Basis	2026 Estimated Modified Accrual	2027 Proposed Modified Accrual
REVENUES					
Property taxes	$ -	$ 149,920	$ 148,702	$ 149,920	$ 149,998
Interest income	-	500	951	1,000	700
Donations	47,500	-	-	-	-
Total revenues	47,500	150,420	149,653	150,920	150,698
EXPENDITURES					
Resiliency/Conservation Planning:					
County treasurer fees	-	-	7,432	7,500	7,500
Consulting services	-	50,000	11,207	47,500	50,000
Legal	11,441	15,000	-	10,000	15,000
Total expenditures	11,441	65,000	18,639	65,000	72,500
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES	36,059	85,420	131,014	85,920	78,198
OTHER FINANCING SOURCES					
Transfer to/from general fund reserve	-	(85,000)	(85,000)	(85,000)	-
Total other financing uses	-	(85,000)	(85,000)	(85,000)	-
TOTAL NET CHANGE IN FUND BALANCE	36,059	420	46,014	920	78,198
TOTAL BEGINNING FUND BALANCE	-	27,500	34,939	36,059	36,979
TOTAL ENDING FUND BALANCE	**$ 36,059**	**$ 27,920**	**$ 80,953**	**$ 36,979**	**$ 115,177**

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WILLOW BROOK METRO DISTRICT
ASSESSED VALUATION - SUMMIT COUNTY

	2024	2025	2026	Preliminary 2027
Assessed Valuation	$ 10,574,190	$ 10,576,618	$ 11,621,670	$ 12,136,710
MILL LEVY				
General Fund	28.763	37.300	35.700	35.700
General Fund Reserve	5.000	5.000	5.000	5.000
Abatements	0.000	0.000	0.000	0.457
Contractual Obligations -SRF Loan	9.623	9.623	3.756	3.756
Fuel Reduction	10.482	0.000	0.000	0.000
Stewardship Fund	0.000	0.000	12.900	12.359
Well #3	0.000	4.727	4.300	4.300
Road Improvements	9.254	5.500	6.500	4.200
Total Mill Levy	63.122	62.150	68.156	65.772
				Capital levy
PROPERTY TAXES				
General Fund	$ 304,145.43	$ 394,507.85	$ 414,893.62	$ 433,280.55
General Fund Reserve	52,870.95	52,883.09	58,108.35	60,683.55
Abatements	-	-	-	5,546.48
Contractual Obligations - SRF Loan	101,755.43	101,778.80	43,650.99	45,585.48
Fuel Reduction Loan	110,838.66	-	-	-
Well #3	-	49,995.67	49,973.18	52,187.85
Stewardship Fund	-	-	149,919.54	149,997.60
Road Improvements	97,853.55	58,171.40	75,540.86	50,974.18
Total Property Taxes	$ 667,464.02	$ 657,336.81	$ 792,086.54	$ 798,255.69
PROPERTY TAXES w/ ABATEMENT				
General Fund	$ 304,145.43	$ 394,507.85	$ 414,893.62	$ 438,827.03
General Fund Reserve	52,870.95	52,883.09	58,108.35	60,683.55
Contractual Obligations	101,755.43	101,778.80	43,650.99	45,585.48
Fuel Reduction Loan	110,838.66	-	-	-
Well #3	-	49,995.67	49,973.18	52,187.85
Stewardship Fund	-	-	149,919.54	149,997.60
Road Paving Fund	97,853.55	58,171.40	75,540.86	50,974.18
Total Property Taxes w/ abatement	$ 667,464.02	$ 657,336.81	$ 792,086.54	$ 798,255.69

Director Hahn's Feedback on Debt & Reserves for Work Session

Thoughts on debt items in the budget for discussion at the work session:

Road Fund – The Road Fund debt is proposed to be paid off in 2027. After some corrections, the mill levy to accomplish this should be reviewed at the meeting. (est 5.2 mils). In any event, the mill levy will be less than the 6.5 mills in 2026 and will end after 2027. Aggressively managing the Road Debt (using the reserve and paying off the debt early) will save the district over $21,000 compared to the original debt schedule at the revised interest rate of 7.08%.

Stewardship Fund – The General Fund transferred approximately $150,000 to the Stewardship fund in conjunction with the Lowe ranch. These funds were to be reimbursed with $85,000 paid in 2026 and the balance paid in subsequent years. As a policy matter, the General Fund Reserve requirement is $500,000. We should discuss what if any should be transferred from the Stewardship Fund to the General Fund Reserve in 2027 and later years

Capital Projects Fund / SRF Loan – The annual debt service on the SRF loan is $97,388. The Reserve Fund Policy for the SRF loan requires a balance equal to two years maximum annual debt service ($194,000). In 2026, we recognized that the SRF reserve was over funded and budgeted a one-time reduction in the mill levy for the SRF loan to utilize those excess reserve funds. Absent a policy discussion, the 2027 budget should reflect a mill levy that covers the full debt service obligation on the SRF loan.

Attached for your review is the 2024 resolution summarizing the WBMD Reserve Policies and an analysis of the Road Fund Debt savings.

Carlos please include this email and attachments in any updated board package and have available for the zoom call.

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE WILLOW BROOK METROPOLITAN DISTRICT
CONCERNING THE ESTABLISHMENT OF RESERVE POLICIES

WHEREAS, the Board of Directors ("Board) of the Willow Brook Metropolitan District (the "District") is to perform certain tasks on a recurring basis in the operation and maintenance of the District infrastructure; and

WHEREAS, the Board of the Willow Brook Metropolitan District reviews the finances of the District on a bi-monthly basis; and

WHEREAS, and Board adopts an annual budget pursuant to statute ; and

WHEREAS, it is the desire of the Board to establish various Reserve Policies for the District.

NOW, THEREFORE, BE IT RESOLVED by the Willow Brook Metropolitan District, Summit County, Colorado, as follows:

The Board hereby establishes the following Reserve Policies:

General Fund Reserve Policy

The Board hereby establishes the following General Fund Reserve Policy:

The intent of the General Fund Reserve is to utilize the voter-approved annual mill levy of not to exceed 5 mills to build a reserve balance of not less than the lesser of $500,000, or two times the annual General Fund Tax Revenue, and to maintain said Reserve, such revenues to be collected, retained and spent for the purposes of funding District operations and maintenance, improvement projects, and any other lawful District purpose as approved by the Board.

State Revolving Fund (SRF) Loan Reserve Policy

The Board hereby establishes the following SRF Reserve Policy:

The intent of the SRF Loan Reserve is to build and maintain a reserve balance of not less than two times the maximum annual debt service on the SRF loan that was used for the water improvements project, utilizing voter-approved ad valorem property taxes collected by the District but not utilized to pay debt service on a current basis. Amounts held in the SRF Loan Reserve will be held solely for the purpose of paying future principal of, premium if any, and interest on the District's current SRF loan.

Road Paving Loan Reserve Policy

The Board hereby establishes the following Road Paving Loan Reserve Policy:

The intent of the Road Paving Loan Reserve is to build and maintain a reserve balance of not less than two times the maximum annual debt service on the current InBank loan utilizing voter-approved ad valorem property taxes collected by the District but not utilized to pay debt service on a current basis. Amounts held in the Road Paving Fund Loan Reserve will be held solely for the purpose of paying future principal of, premium if any, and interest on the District's current Road Paving loan.

Water Utility Fund Reserve

The Board hereby establishes the following Water Utility Fund Reserve Policy:

The intent of the Water Utility Fund Reserve is to build and maintain a minimum reserve balance of $500,000 utilizing the District imposed Project Reserve Fees (currently $75/month per owner) and other funds approved by the Board, such revenues to be collected, retained and spent for the purpose of funding the District's Water Utility Fund Reserve for operations and maintenance and improvement projects for the water system and any other lawful District purpose approved by the Board.

This Resolution rescinds any previously Board adopted reserve policies.

Adopted and approved this 28th day of June, 2024.

WILLOW BROOK METROPOLITAN DISTRICT

By: /s/ EJ Olbright, President

ATTEST:

By: /s/Michael Good, Secretary

Original Debt @ 4.0%

	Interest @	Principal	Balance	Annual Payment
	4.00%			
12/1/2026			220,000.00	
6/1/2026	4,400.00		220,000.00	
12/1/2026	4,400.00	55,000.00	165,000.00	63,800.00
6/1/2027	3,300.00		165,000.00	
12/1/2027	3,300.00	55,000.00	110,000.00	61,600.00
6/1/2028	2,200.00		110,000.00	
12/1/2028	2,200.00	55,000.00	55,000.00	59,400.00
6/1/2029	1,100.00		55,000.00	
12/1/2029	1,100.00	55,000.00	-	57,200.00
Total				242,000.00

Revised Interest Rate Debt

	Interest @	Principal	Balance	Annual Payment
	7.08%			
12/1/2026			220,000.00	
6/1/2026	7,788.00	-	220,000.00	
12/1/2026	7,788.00	55,000.00	165,000.00	70,576.00
6/1/2027	5,841.00		165,000.00	
12/1/2027	5,841.00	55,000.00	110,000.00	66,682.00
6/1/2028	3,894.00		110,000.00	
12/1/2028	3,894.00	55,000.00	55,000.00	62,788.00
6/1/2029	1,947.00		55,000.00	
12/1/2029	1,947.00	55,000.00	-	58,894.00
Total				258,940.00

Paydown $100k June 2026 / Payoff 2027

	Interest @	Principal	Balance	Annual Payment
	7.08%			
12/1/2026			220,000.00	
6/1/2026	7,788.00	100,000.00	120,000.00	
12/1/2026	4,248.00	55,000.00	65,000.00	167,036.00
6/1/2027	2,301.00		65,000.00	
12/1/2027	2,301.00	65,000.00	-	69,602.00
6/1/2028	-		-	
12/1/2028	-	-	-	-
6/1/2029	-		-	
12/1/2029	-	-	-	-
Total				236,638.00

Ruby Ranch Road Maintenance Program

Adding an annual grading, drainage and stabilization program, with loader patching as the fix in between

WBMD Road Findings · Ranch Manager Update · 2027 Budget Planning

At a glance

4.12

miles of ranch road

4%

design cross-slope vs. 0–1% today
½” per foot; full 4% needs new road base

5–10 yr

phased improvement plan
starting with high-volume roads

The problem

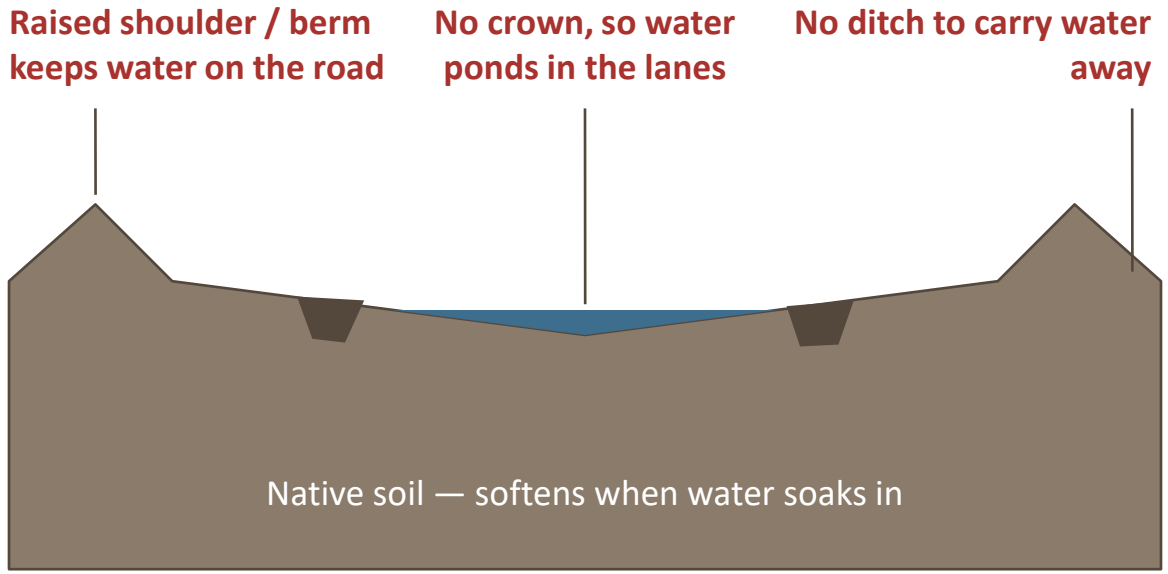
- Years with no annual grading and no binders wore away our crown, drainage and material
- That is why today's fix needs more new material and costs more
- Without regular grading, loader patching can only treat the symptoms

The proposal

- An annual program with an outside contractor: grading, drainage, compaction, dust control
- Fix the main roads first, then work through the rest over 5–10 years
- Yearly maintenance from here on means lower capital costs in the future

WBMD findings: current road conditions

- Shoulders built up with rock lost from the road
- Ditches shallow, filled in, or missing
- Water collecting on and running down the driving surface
- Washboarding and potholes that keep coming back
- Road base / RAP is thin; sub-grade rock is showing through the surface
- Recycled asphalt that has bound into slabs and is breaking into potholes
- Fine material lost to dust, leaving loose rock
- Loader patching only, with no regular grading



Typical cross-section today (not to scale)

Water that can't leave the road ends up in it.

Why our shoulders are higher than the road

Without a binder, the road loses the fine material that holds it together

1



Fines turn to dust

Traffic grinds the small particles that bind the road into dust. It coats cars, homes, trees and plants, reducing photosynthesis.

2



Rock is left loose

With no fines to hold it, the rock sits loose on the surface. Washboard and potholes follow.

3



Rock washes off

Rain, traffic and plows push the loose rock off the road and into the ditches and shoulders.

4



Water is trapped

The shoulders build up higher than the road, so water stays on it and soaks in. The cycle repeats.

The fix: the grader pulls the rock back from the shoulders and re-mixes it with fines to rebuild the crown. A binder then keeps the fines in the road.

Field photos: current conditions



Raised shoulder, missing ditch
Rock pushed to the edge with no ditch to take water

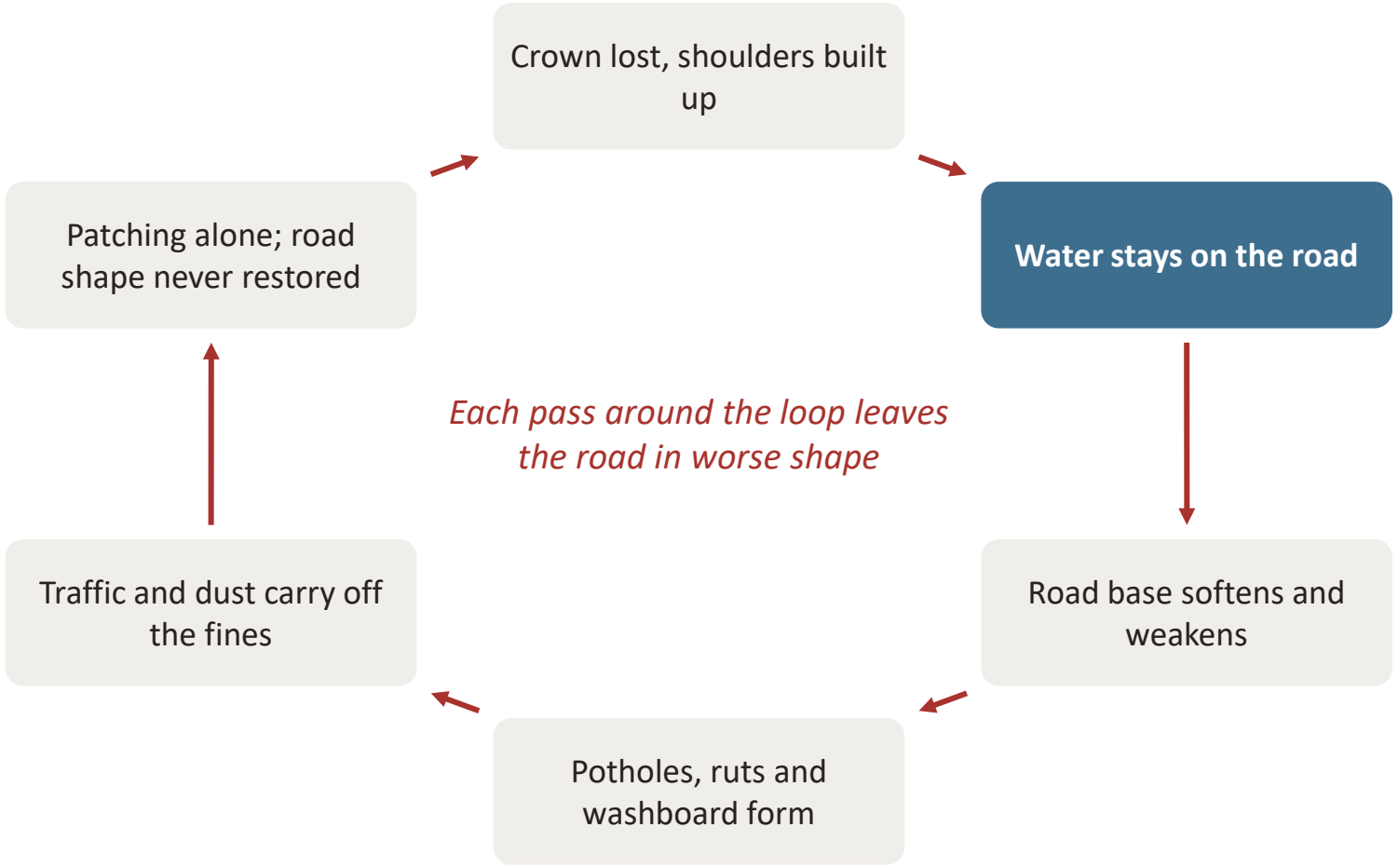


Sub-grade rock showing through
Not enough road base left on the surface



Potholes in bound recycled asphalt
Hard RAP crust breaking apart

Why bad roads get worse, faster



Breaking the cycle

Years without annual grading or binders are why we now need more material.

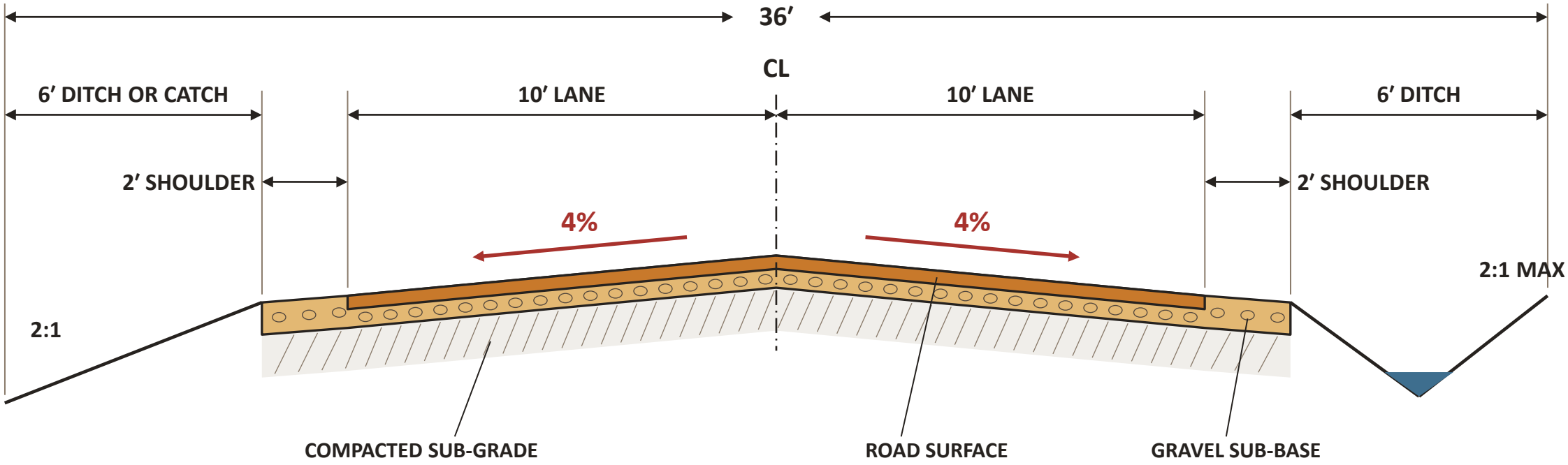
Yearly maintenance stops the loss and lowers future capital costs.

Today vs. federal gravel road guidelines

	Today on Ruby Ranch	FHWA gravel road guidelines
Road shape	Flat or dished; crown has been lost	Crown ½" per foot (≈4%), straight like a roof, max 6%
Shoulders	Built up higher than road; trap water	Slope directly away from the road; no high shoulder
Ditches	Shallow, filled in, or missing	A ditch to carry water away from the road
Water	Ponds and runs down the driving lanes	Drains off quickly, before it softens the roadbed
Surface	Thin base/RAP; sub-grade rock showing through	Adequate layer of good surface gravel, compacted
Dust	Fines blow away; washboard follows	Fines kept in the road; stabilizer where needed
Maintenance	Loader patching only, no regular grading	Regular grading to keep crown and shape

Guidelines: FHWA Gravel Roads Construction & Maintenance Guide (2015); PASER Gravel Roads rating manual (UW–Madison).

Design plan: typical road cross-section



Grading restores the best crown the existing material allows. A full 4% crown comes with new road base (capital budget).

Two 10′ lanes · 4% cross-slope (½″ per foot) · 2′ shoulders · 6′ ditches, 2:1 max · 36′ total

Based on the MIRO Ruby Ranch Roadway Report (Job 18103, 2018), typical sections Sheet CSK-4.0: cross-slope raised from 2% to 4%, 8′ trail removed. Vertical scale exaggerated.

Grader for the long term, loader in between

Loader: the in-between fix

- Fills potholes and soft spots quickly
- Keeps roads in shape between grader visits
- Temporary: can't rebuild the crown or cut ditches

Motor grader: the long-term fix

- Reshapes the whole road cross-section
- Pulls good material back from the shoulders and opens ditches
- Mixes rock and fines evenly so the surface compacts

Grader maintenance process

1. **Scarify** — Loosen the surface where needed
2. **Reclaim** — Pull usable material back from shoulders
3. **Reshape** — Mix and rebuild crown and drainage
4. **Compact** — Add water and compact the surface
5. **Stabilize** — Dust control where it makes sense

Our recycled asphalt: a new approach

Today: RAP on top of RAP

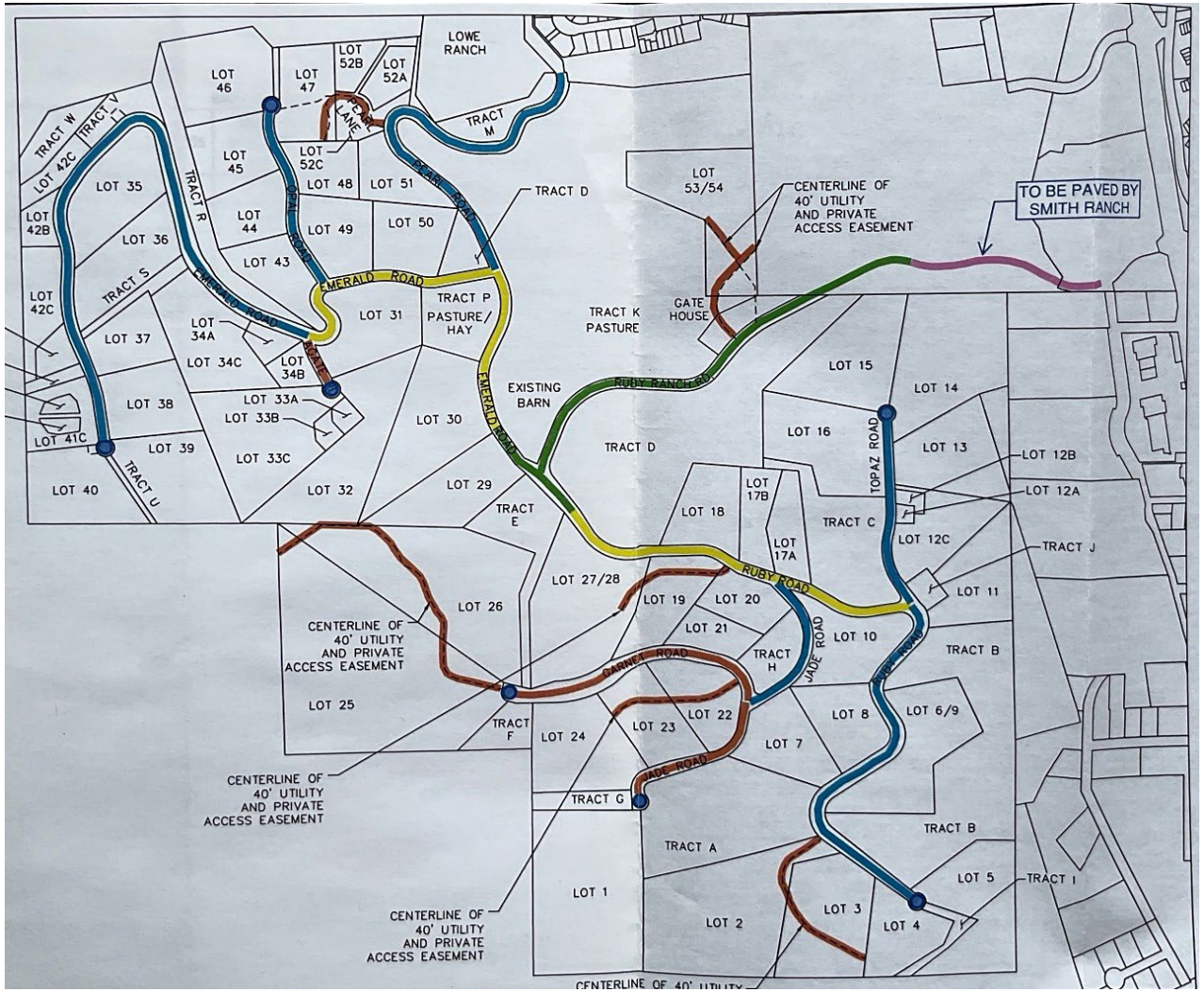
- Binds together into a hard crust
- Potholes need grinding or major rehab
- Can't be maintained with normal grading
- New layers hide the problem instead of fixing it

Proposed: break up and blend

- Break up existing RAP, blend with new road base
- Durable, and still gradable with standard equipment
- Puts material we already own to use

≈200 tons of RAP already stockpiled. Blended into new base it trims what we buy; reworking the RAP already on our roads could save more.

Ruby Ranch road tiers



Legend

Tier 1A
Ruby Ranch Rd entrance: already paved

Tier 1B
Main collectors: Emerald Rd and Ruby Rd to Topaz. Start here

Tier 2
Residential roads

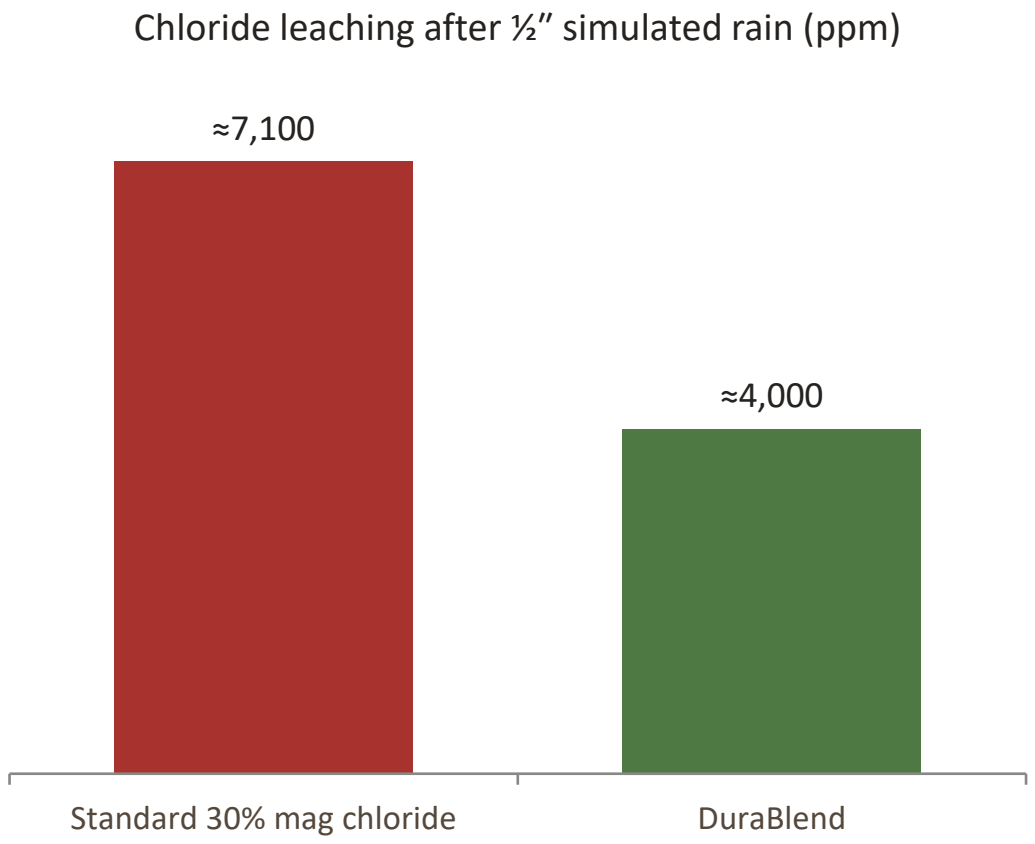
Tier 3
Low-traffic roads and access easements

Tiers are based on the MIRO traffic study: average daily vehicle trips and residences served.

Source: MIRO Ruby Ranch Roadway Report (Job 18103, 2018), Road Exhibit CSK-02.

Binder option under review: DuraBlend

A product that could cut chloride leaching and fits our environmental stewardship goals



Values read from EnviroTech's 2024 DuraBlend brochure chart (manufacturer data, not yet verified).

Less leaching
About 45% less chloride runoff than standard mag chloride, per the manufacturer

Costs a little more
About 16–18% more than RoadSaver (standard mag chloride) at the same rates, per contractor pricing

Holds the road together
Bonds with aggregate to cap the surface: fewer potholes, less road base lost

Still researching
Health and environmental effects of both DuraBlend and mag chloride, and dialing in costs. A resident physician wants more information before weighing in. Next: conference call with the manufacturer.

Where we start: a phased plan by road tier

Tiers from the MIRO Ruby Ranch Roadway Report (2018), based on its traffic study of daily vehicle trips and residences served

Tier 1A
Already paved

Main entrance every resident uses

- Ruby Ranch Rd, gate house to the barn junction

Paved; not part of the grading program

Tier 1B
Start here

Main collector roads

- Emerald Rd, barn junction north to Pearl and Opal
- Ruby Rd, barn junction to Topaz

Full grading and drainage; binder once research is done

Tier 2
Following years

Residential roads

- Emerald Rd west loop
- Opal Rd
- Pearl Rd
- Topaz Rd
- Jade Rd (north)
- Ruby Rd south to the Lot 4 cul-de-sac

Annual grading; capital work as budget allows

Tier 3
Longer term

Low-traffic roads and access easements

- Garnet Rd
- Jade Rd (south)
- Pearl Ln
- Agate Rd
- 40’ utility and private access easements

Drainage and safety repairs as needed

Two budgets: maintain and improve

Annual maintenance

Every year, every road

- Grading, watering and compaction
- Dust control on selected sections
- Ditch cleaning

Goal: keep what we have from getting worse

Capital improvement

Planned, road by road

- Buy road base where it's thin and sub-grade rock shows through
- Blend in our stockpiled RAP
- Major reshaping and drainage work

Goal: enough material for a 4% crown and a proper surface

How we got here: years with no annual grader maintenance and no binders wore down the roads, so today's capital fix needs more material. Yearly maintenance protects that investment and lowers future capital costs.

Pricing: contractor planning estimates

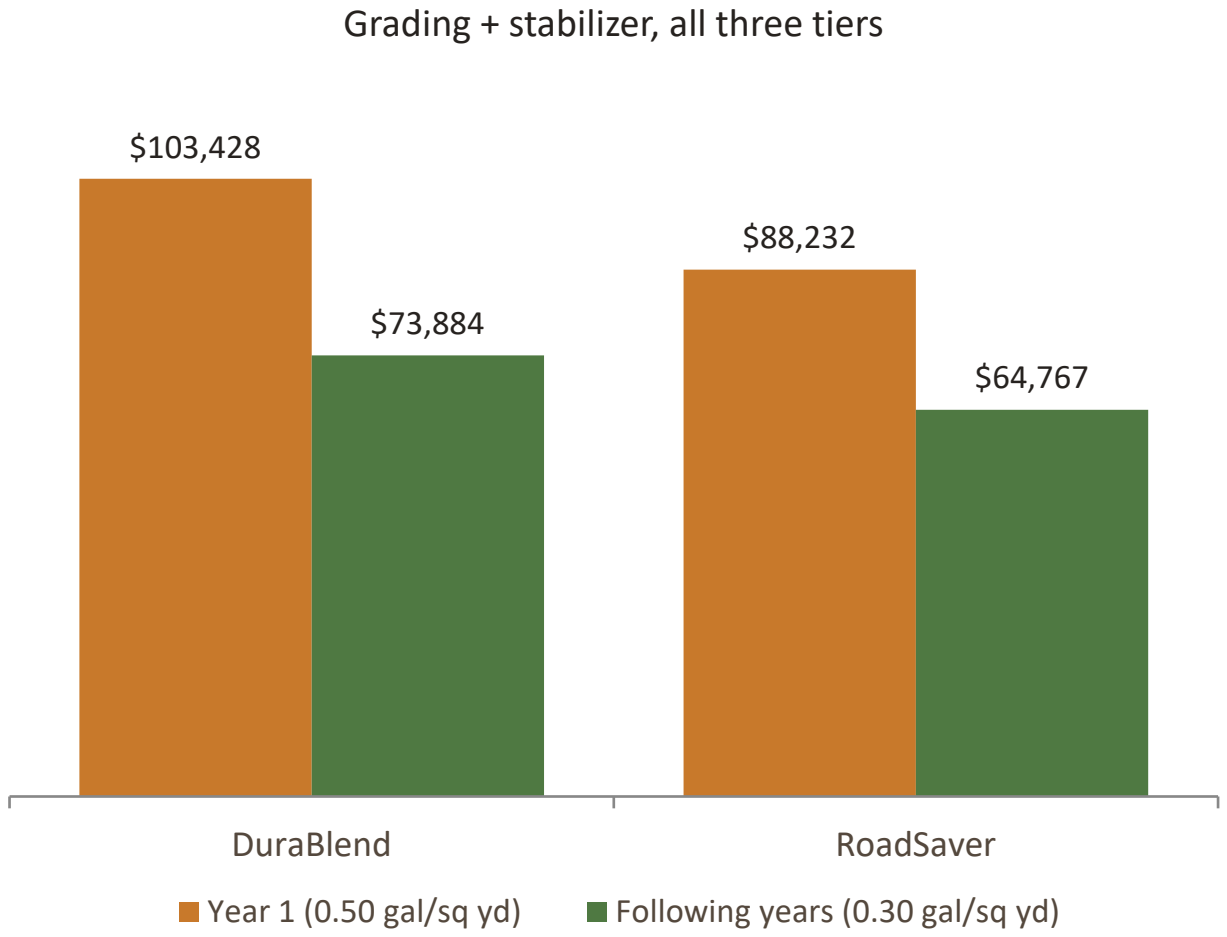
Current-season prices, not fixed bids. Board reviews now; approval at the Dec 11 meeting.

Line item	DuraBlend	RoadSaver	Budget
Drainage and shoulders (first priority, ≈4 days)	**$43,990**	**$43,990**	Capital
Tier 1B grading + stabilizer, initial 0.50 GPSY	**$21,462**	**$18,305**	Maintenance
Tier 2 grading + stabilizer, initial 0.50 GPSY	**$48,659**	**$41,283**	Maintenance
Tier 3 grading + stabilizer, initial 0.50 GPSY	**$33,307**	**$28,644**	Maintenance
New Class 6 road base, all of Tier 1B (≈0.95 mi, 4”)*	**≈$160,600**	**≈$157,500**	Capital
Culverts (installed in-house)	Ranch estimate	Ranch estimate	Capital
Water: ≈12–16k gal/day from ranch hydrant (no trucking)	Ranch estimate	Ranch estimate	Maintenance
2027 price allowance	+5–10%	+5–10%	Both
Total 2027 road request	**TBD**	**TBD**	**Dec 11 approval**

**Includes grading, compaction and initial stabilizer, so it replaces the Tier 1B grading line. Stockpiled RAP covers roughly 7% of the base; reworking RAP already on the roads could save more. Following years use a lighter 0.30 GPSY maintenance coat, about 27–29% less (next slide).*
Drainage could drop by about half if dug material stays on site, reused on meadow roads and water-tank access roads.

Binder costs drop after the first year

The first coat is heavier to build up the surface; a lighter maintenance coat follows each year after



≈27–29% less

each year after the first, once the surface is built up

Tier	DuraBlend Yr 1 → after	RoadSaver Yr 1 → after
Tier 1B	$21,462 → $15,325	$18,305 → $13,431
Tier 2	$48,659 → $34,319	$41,283 → $29,894
Tier 3	$33,307 → $24,240	$28,644 → $21,442

Contractor planning estimates, current-season prices. Roads that get new base have their Year 1 coat included in the base price.

What we're asking the board

1. Support annual grader maintenance as the long-term solution, with loader patching in between
2. Create separate road maintenance and capital lines in the 2027 budget
3. Approve using ranch water for grading, once the source is confirmed
4. Support continued research on a road binder (DuraBlend vs. mag chloride) before choosing one
5. Review the proposed 2027 road budget amount now; final approval at the Dec 11 meeting

Sources

- WBMD road findings: Nov 4, 2026 drive-through with an outside road contractor; road mileage from existing ranch map
- FHWA, Gravel Roads Construction & Maintenance Guide, FHWA-OTS-15-002 (2015): crown, shoulder and ditch standards (fhwa.dot.gov/construction/pubs/ots15002.pdf)
- UW–Madison Transportation Information Center, PASER Gravel Roads manual: rating crown, drainage and gravel layer (ctt.mtu.edu)
- Center for Dirt & Gravel Road Studies, Crown and Cross-Slope bulletin: 4–6% on unpaved roads (cdgrsdev.vmhost.psu.edu)
- Maine DOT, Model Grading Specifications for Roads (2022): no berm or windrow between road and ditch (maine.gov)
- MIRO, Ruby Ranch Roadway Report (Job 18103, 2018): traffic study, road tiers (CSK-02) and typical road cross sections (CSK-4.0)
- EnviroTech Services, DuraBlend brochure (2024): leaching, application rate and cost claims (envirotechservices.com)

WBMD · 2027 BUDGET WORK SESSION · NOV 12, 2026

Well 3R: what the CDPHE call costs us

Base, mid and worst case for the GWUDI decision: what gets built, and what it costs to build and run

THE DECISION

CDPHE decides how Well 3R's water must be treated

Groundwater

The ground filters the water naturally.

Treatment: chlorine only, like Wells 1 and 2.

GWUDI

Groundwater under the direct influence of surface water.

Treatment: filters for Giardia and Cryptosporidium, plus more chlorine contact time.

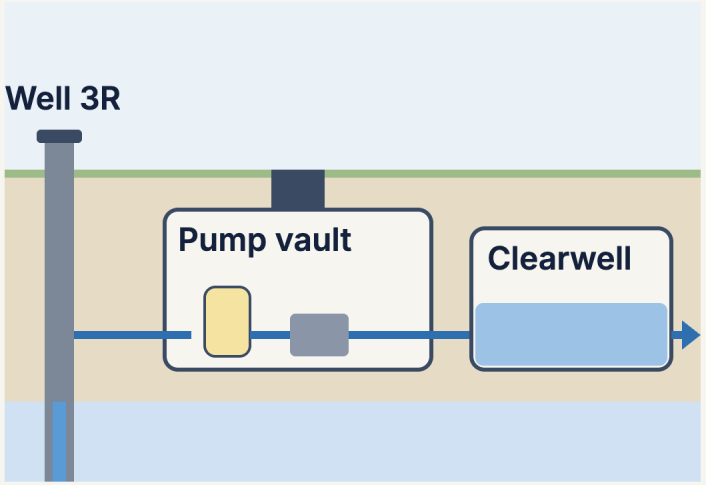
Three rounds of testing are in at CDPHE and look encouraging. More testing runs into 2027, so the budget has to cover all three cases.

THREE CASES

Three ways Well 3R could be built

BASE · GROUNDWATER

Chlorine only, in the existing vault

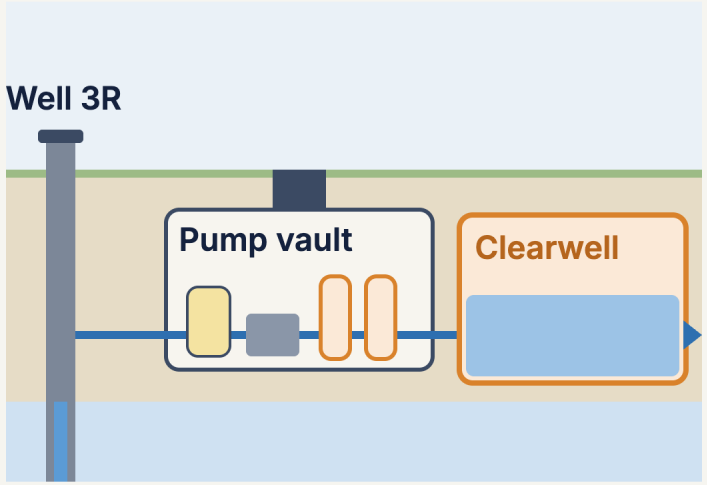


Capex
$233K–$302K

ORC opex
$52K / yr

MID · GWUDI

Filters in the vault, bigger clearwell

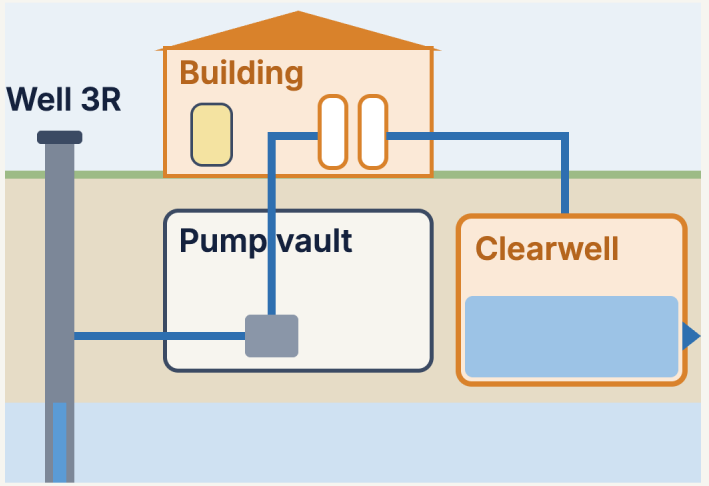


Capex
$344K–$471K

ORC opex
$65K / yr

WORST · GWUDI

New building, bigger clearwell



Capex
$480K–$646K

ORC opex
$65K / yr

Orange = new construction (filters, clearwell, building). Yellow = chlorine tank. Blue = water to Tank 2. Opex = ORC per year with Well 3R running.

SIDE BY SIDE

GWUDI adds $111K–$345K to build and $13K a year to run

	Base · Groundwater	Mid · GWUDI	Worst · GWUDI
New equipment	Chlorine feed	Filters + chlorine	Filters + chlorine
Where it goes	Existing vault	Existing vault	New building
Clearwell	Existing	New, larger	New, larger
Capex, one-time	$233K–$302K	$344K–$471K	$480K–$646K
Capex vs. base	—	+$111K–$169K	+$247K–$345K
ORC opex / year	$52,264	$64,932	$64,932
Opex vs. today	+$15,084	+$27,752	+$27,752

Today = $37,180 a year for Wells 1 and 2. Capex includes JVA's 30% contingency (memo, Nov 10, 2026).

OPERATING COST

Most of the opex increase is sampling, not ORC's %

ORC, per year	Today	Groundwater	GWUDI
Fixed contract ($2,640/mo)	$31,680	$33,264	$36,432
Routine sampling	$5,500	$5,500	$5,500
Well 3R sampling	—	$13,000	$13,000
Consumables	—	$500	$10,000
Total	$37,180	$52,264	$64,932

ORC's % bump

+5% (GW) = **$1,584**

+15% (GWUDI) = **$4,752**

Add to 2027 water budget

+$12K groundwater

+$23K GWUDI

Not in ORC's numbers: Well 3R power, cellular fees for controls options A/D, and repairs (2026 already $72.7K vs. $25K budget).