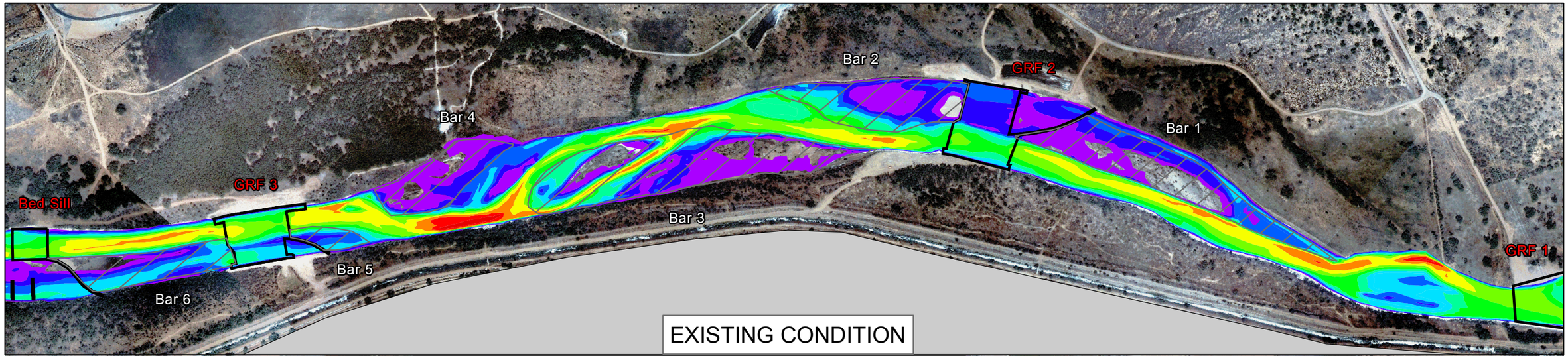


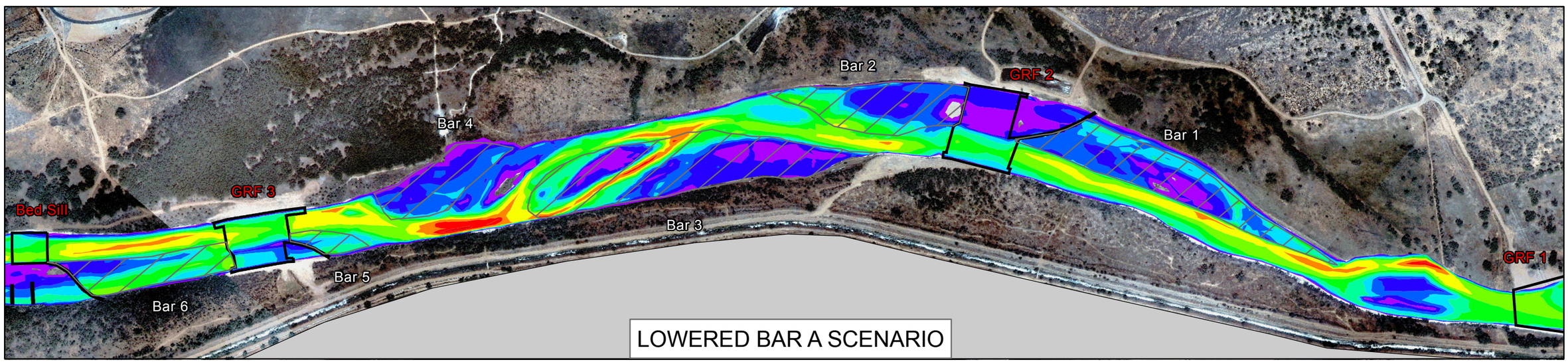


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Depth, ft
0
1
2
3
4
5
6
7
8
9
10

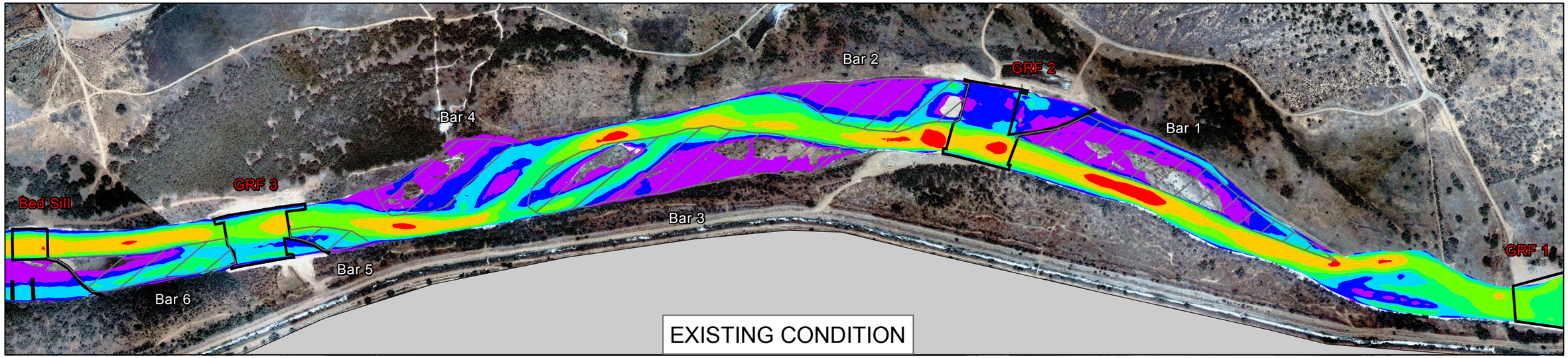
PUEBLO OF SANTA ANA RIO GRANDE REACH

7000 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 1



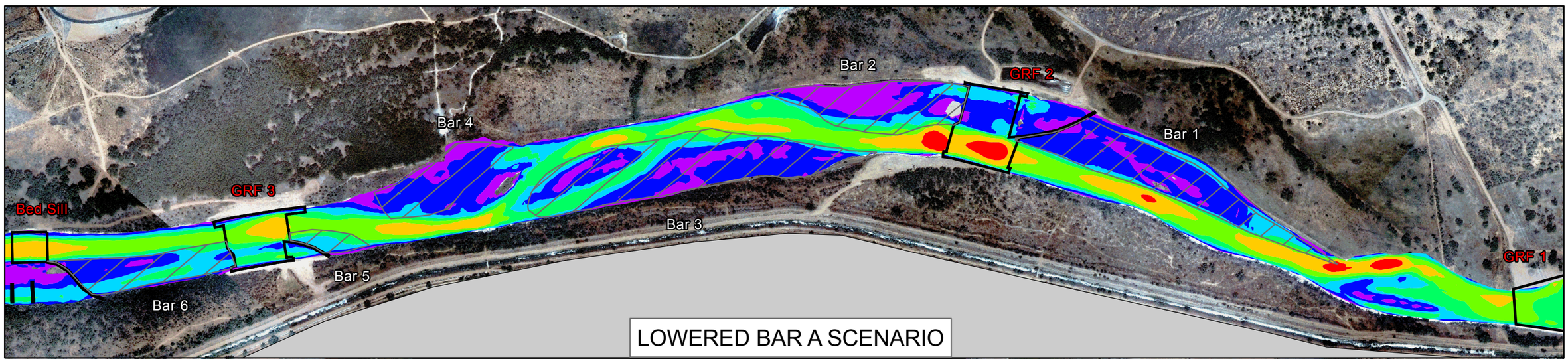


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Velocity, ft/s
0
1
2
3
4
5
6
7

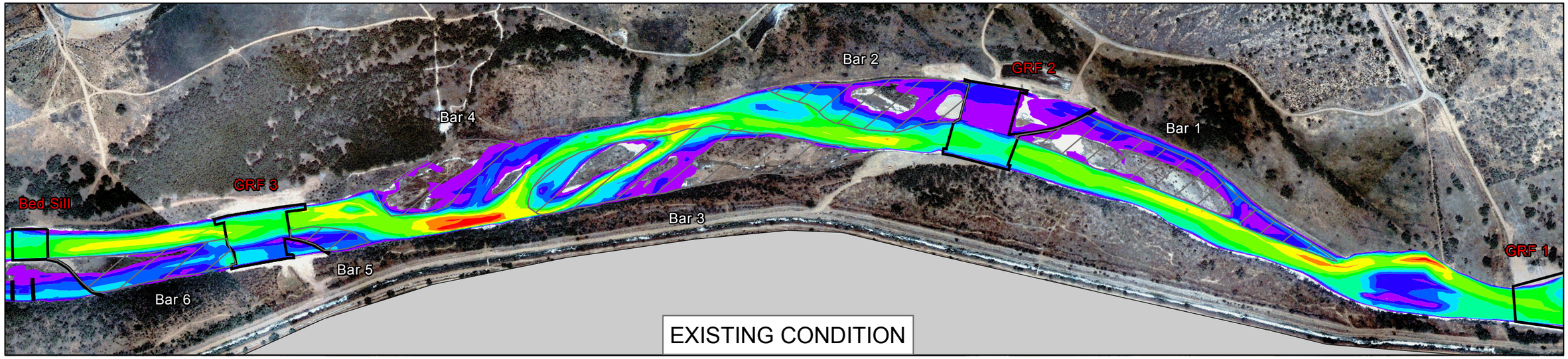
PUEBLO OF SANTA ANA RIO GRANDE

7000 CFS, VELOCITY

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 2



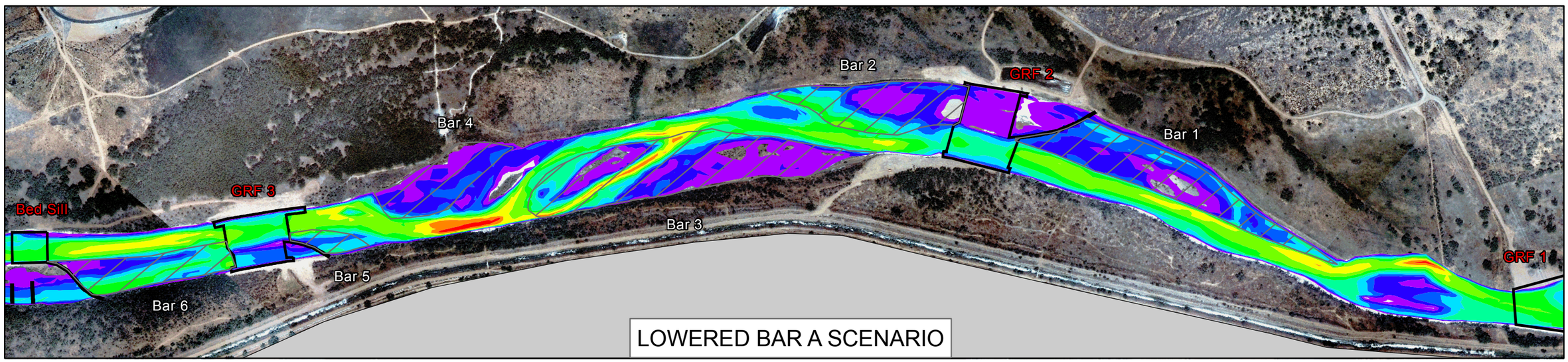


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

Bars	Area	Overbank Lowering Scenario					
		A		B		C	
		Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Depth, ft
0
1
2
3
4
5
6
7
8
9
10

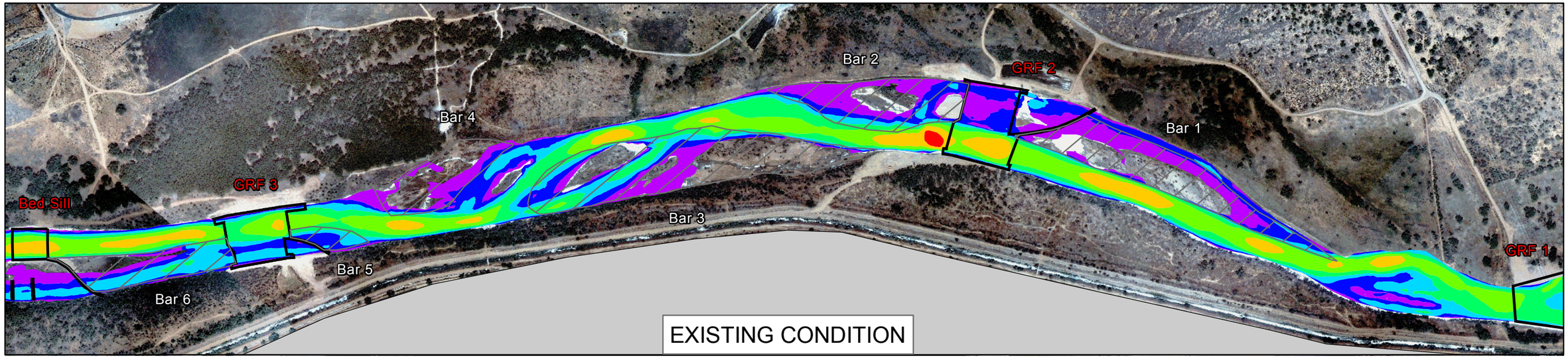
PUEBLO OF SANTA ANA RIO GRANDE REACH

5400 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 3



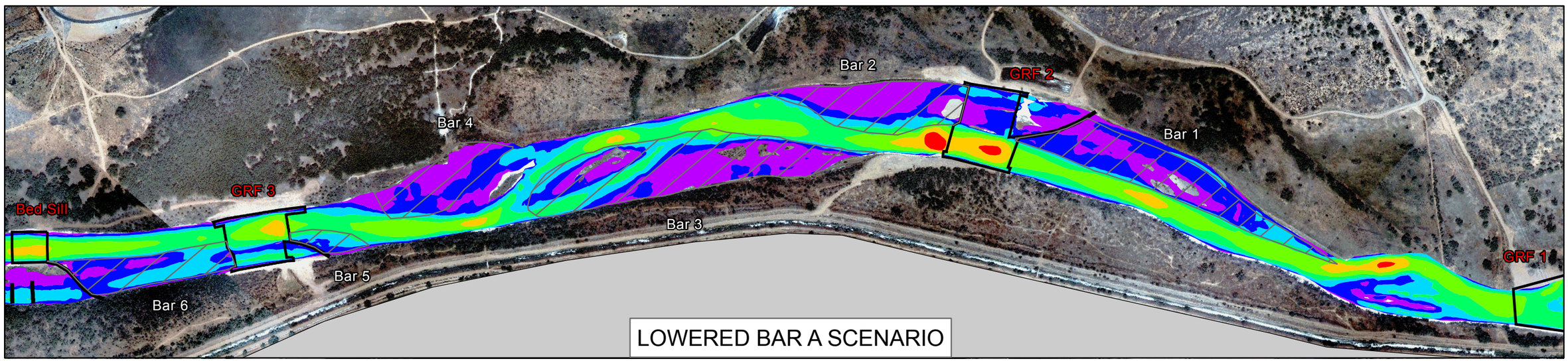


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Velocity, ft/s
0
1
2
3
4
5
6
7

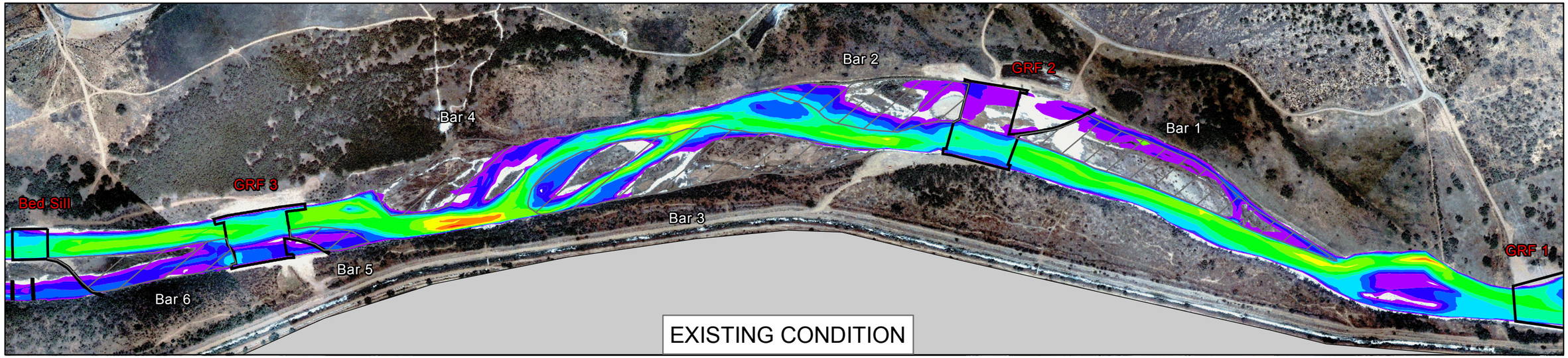
PUEBLO OF SANTA ANA RIO GRANDE

5400 CFS, VELOCITY

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 4



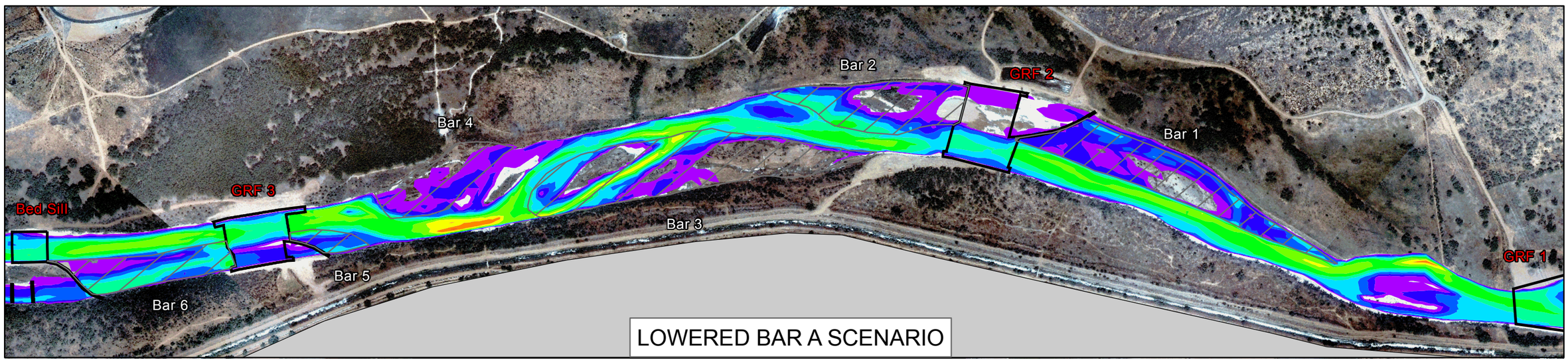


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

Bars	Area	Overbank Lowering Scenario					
		A		B		C	
		Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Depth, ft
0
1
2
3
4
5
6
7
8
9
10

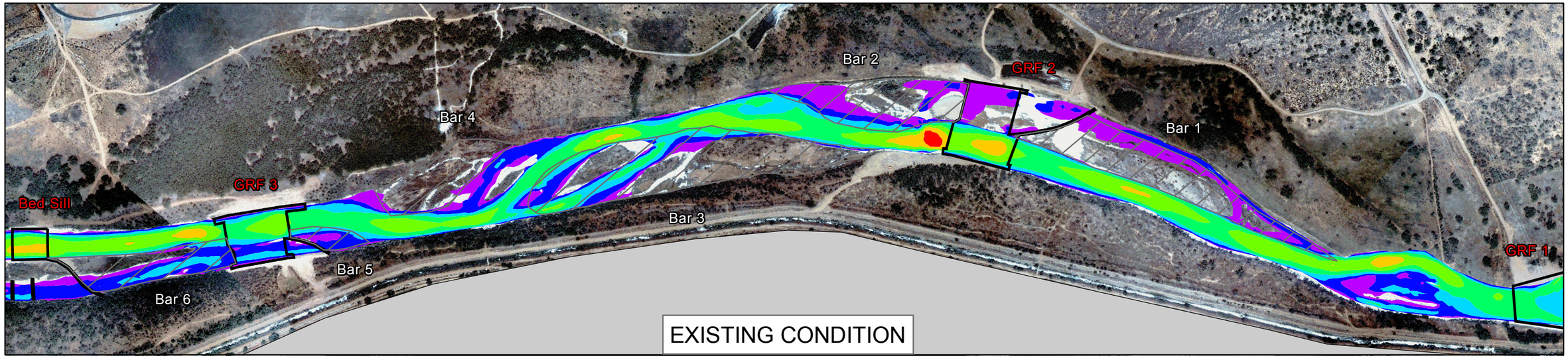
PUEBLO OF SANTA ANA RIO GRANDE REACH

4000 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 5



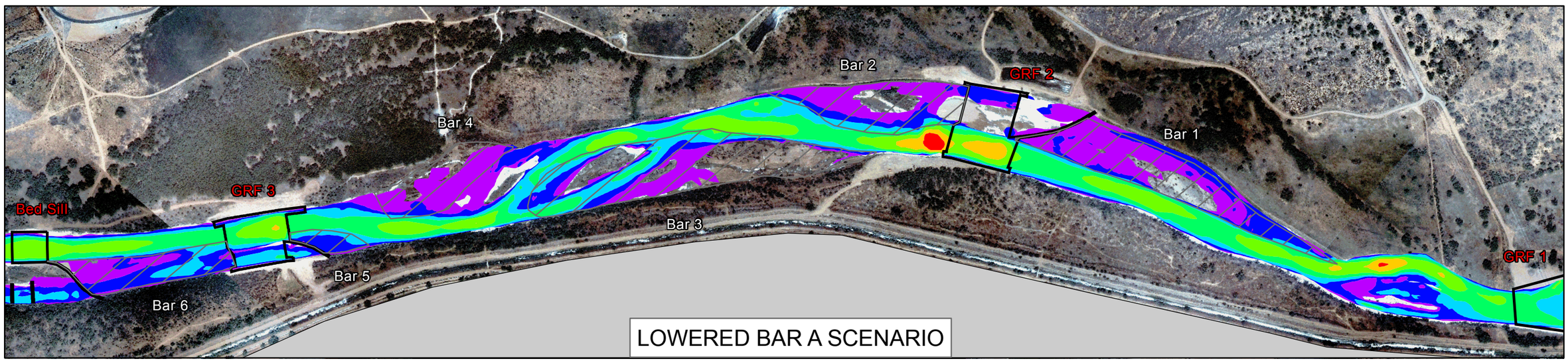


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Velocity, ft/s
0
1
2
3
4
5
6
7

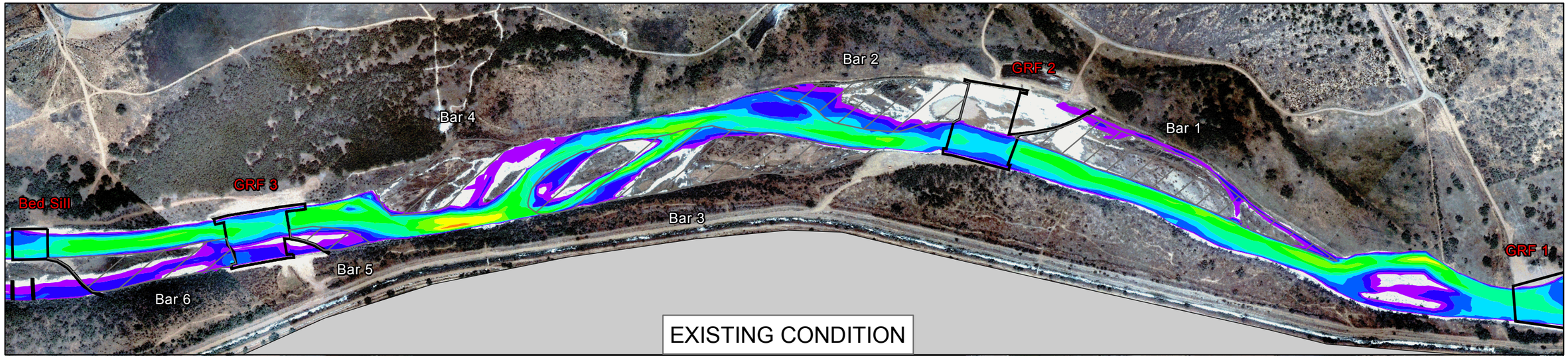
PUEBLO OF SANTA ANA RIO GRANDE

4000 CFS, VELOCITY

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 6



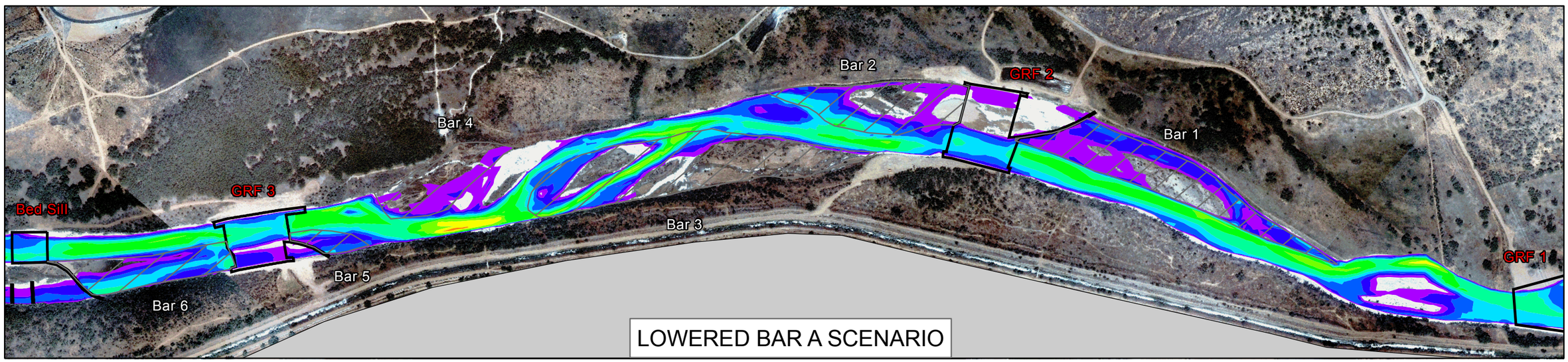


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Depth, ft
0
1
2
3
4
5
6
7
8
9
10

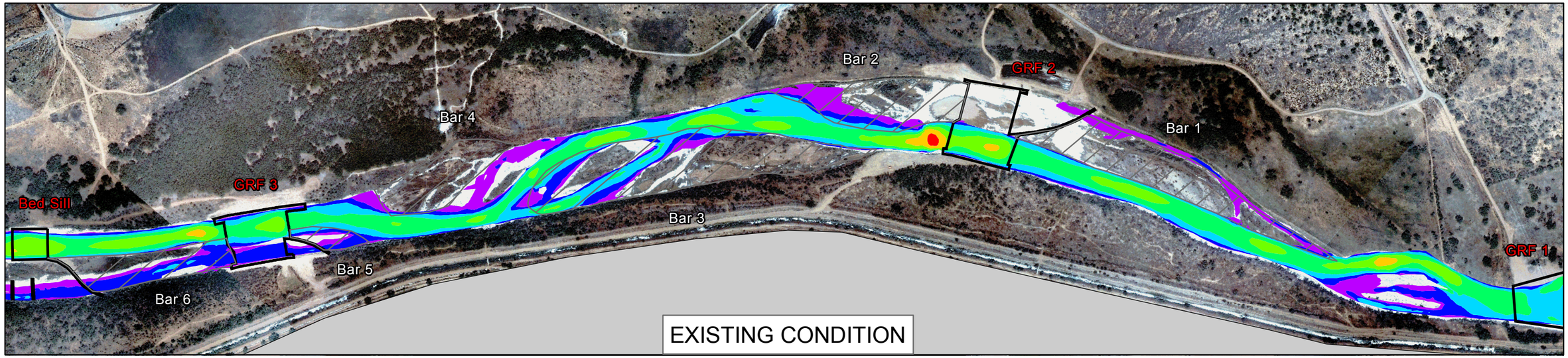
PUEBLO OF SANTA ANA RIO GRANDE REACH

3000 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 7



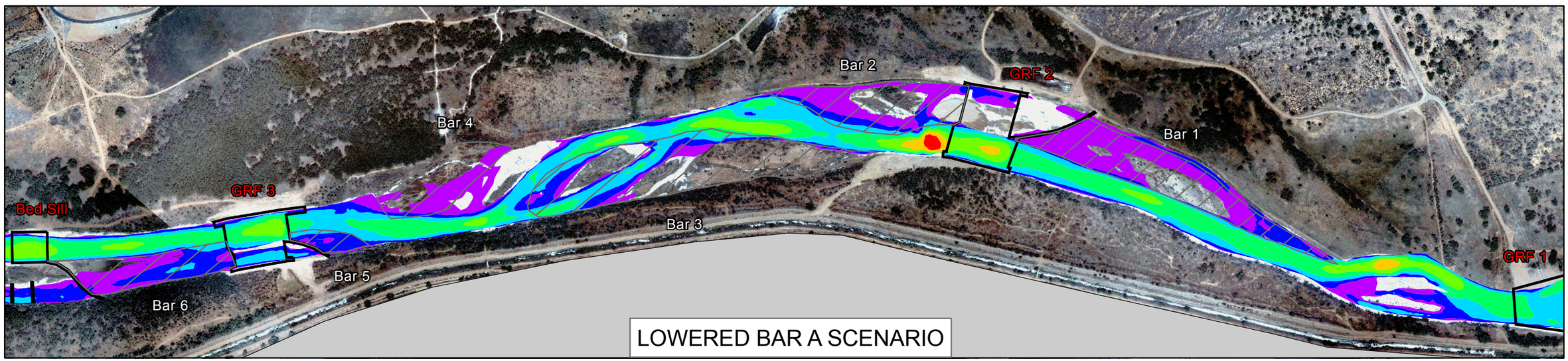


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Velocity, ft/s
0
1
2
3
4
5
6
7

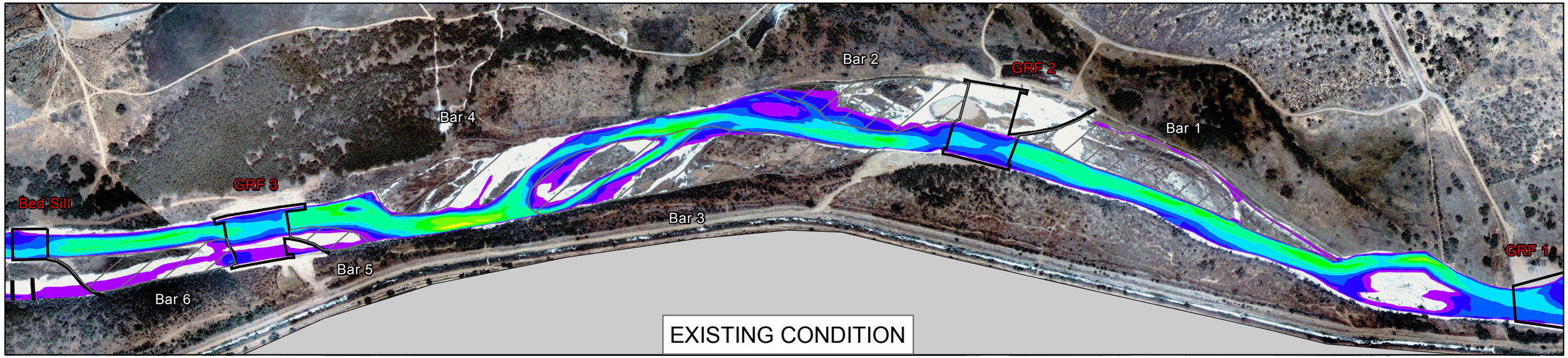
PUEBLO OF SANTA ANA RIO GRANDE

3000 CFS, VELOCITY

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 8



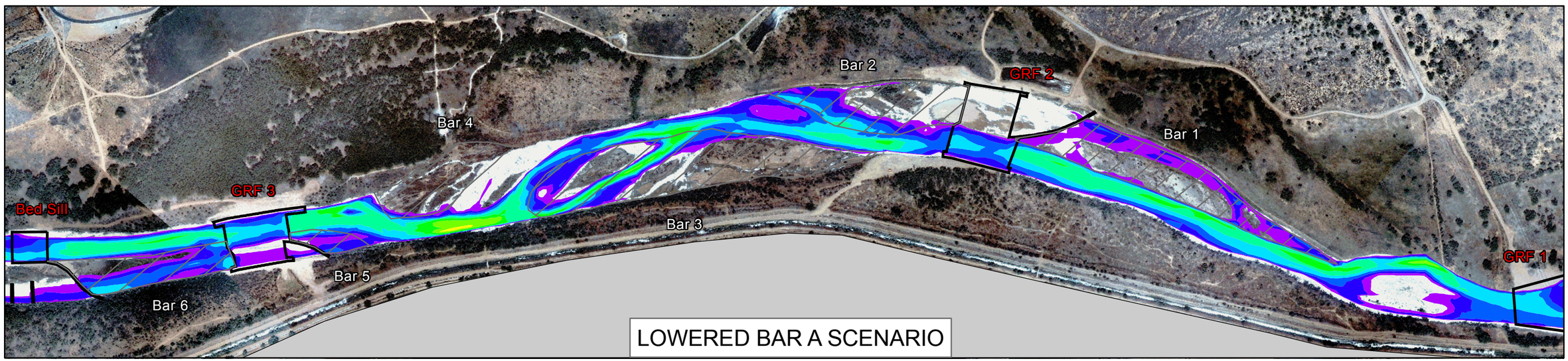


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Depth, ft
0
1
2
3
4
5
6
7
8
9
10

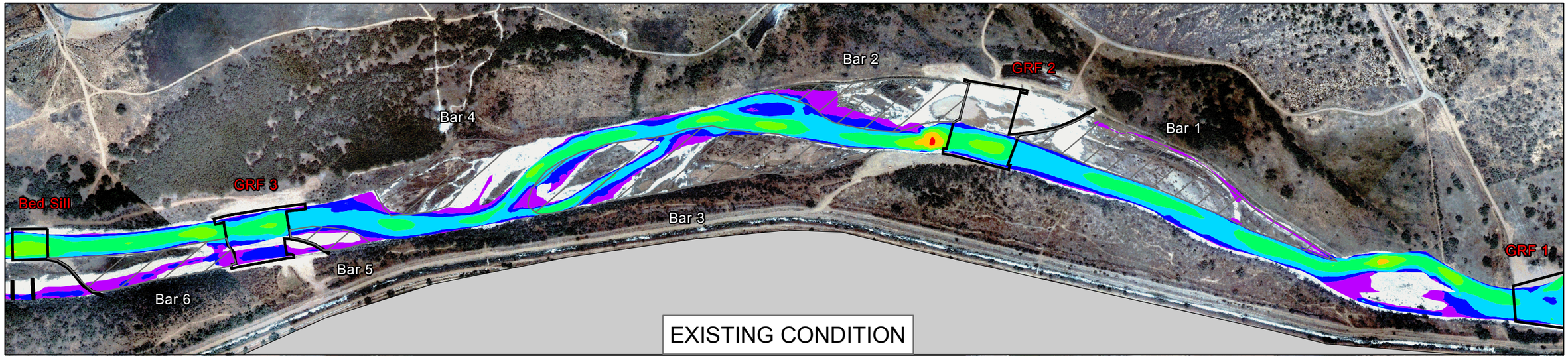
PUEBLO OF SANTA ANA RIO GRANDE REACH

2000 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 9



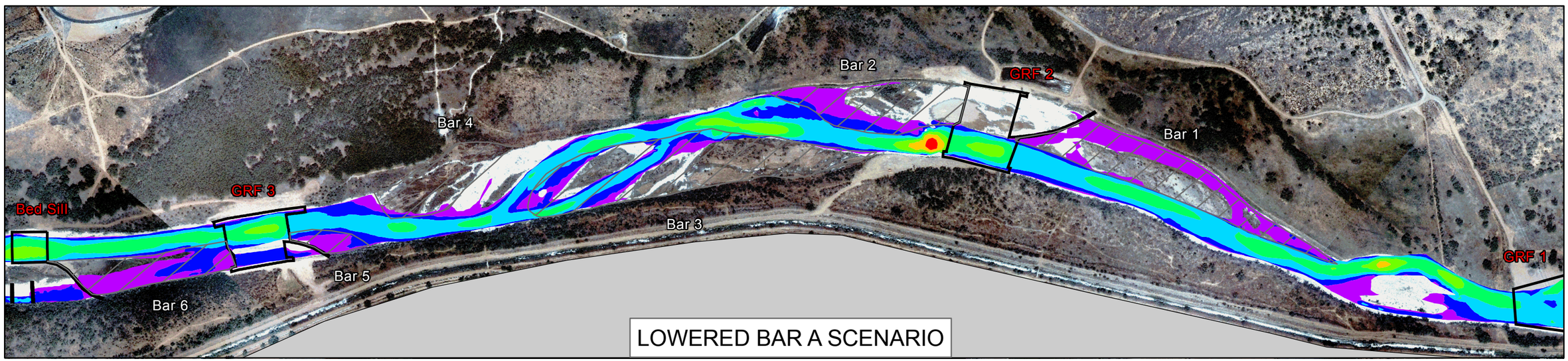


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Velocity, ft/s
0
1
2
3
4
5
6
7

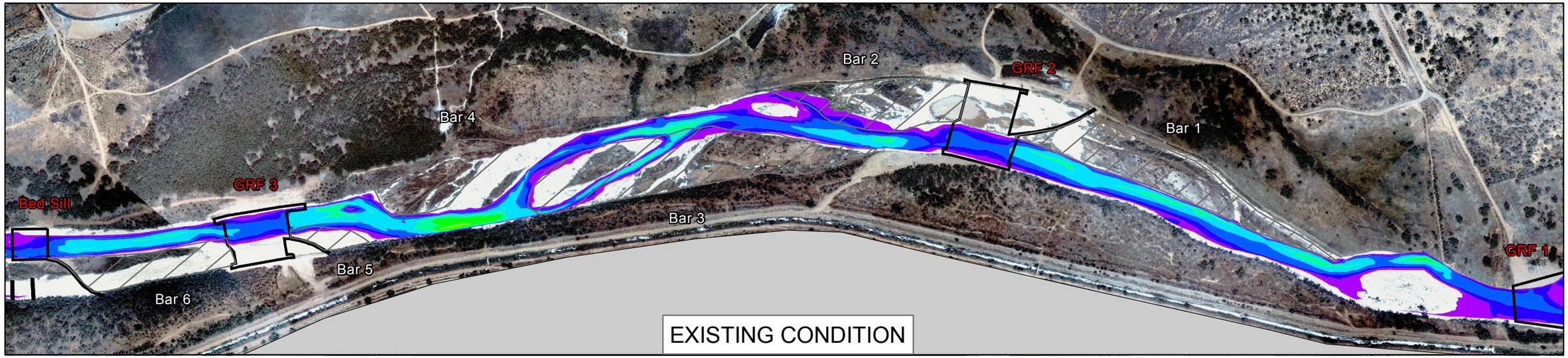
PUEBLO OF SANTA ANA RIO GRANDE

2000 CFS, VELOCITY

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 10



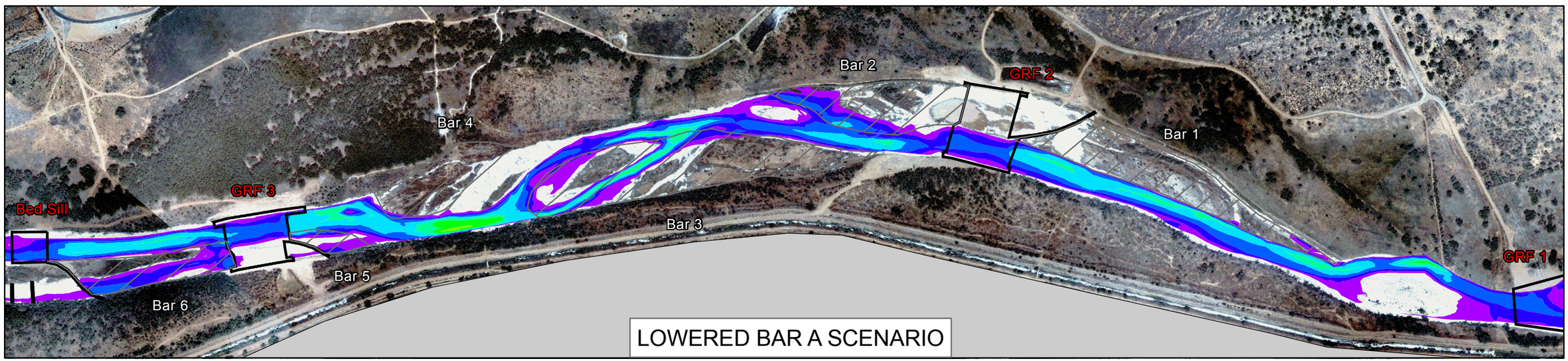


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Depth, ft
0
1
2
3
4
5
6
7
8
9
10

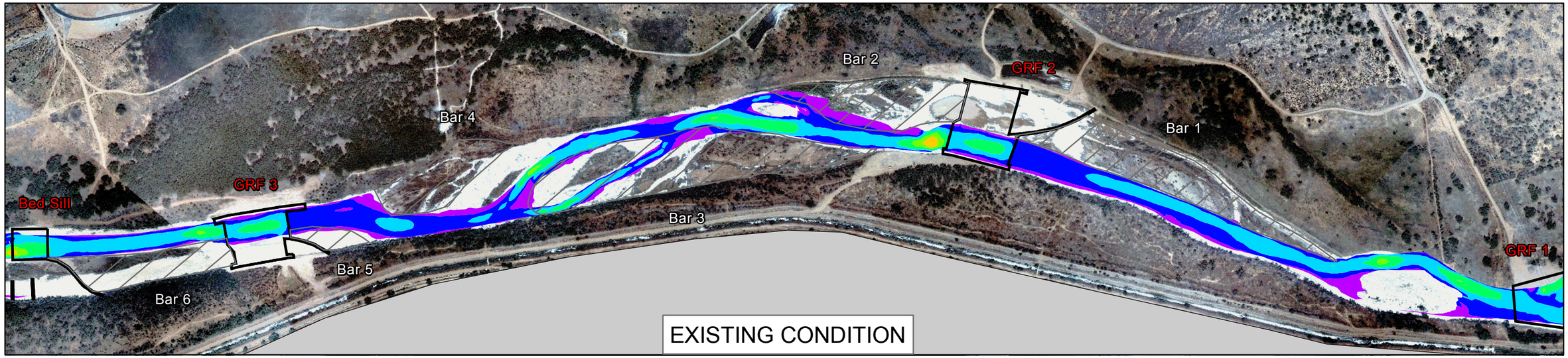
PUEBLO OF SANTA ANA RIO GRANDE REACH

1000 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 11



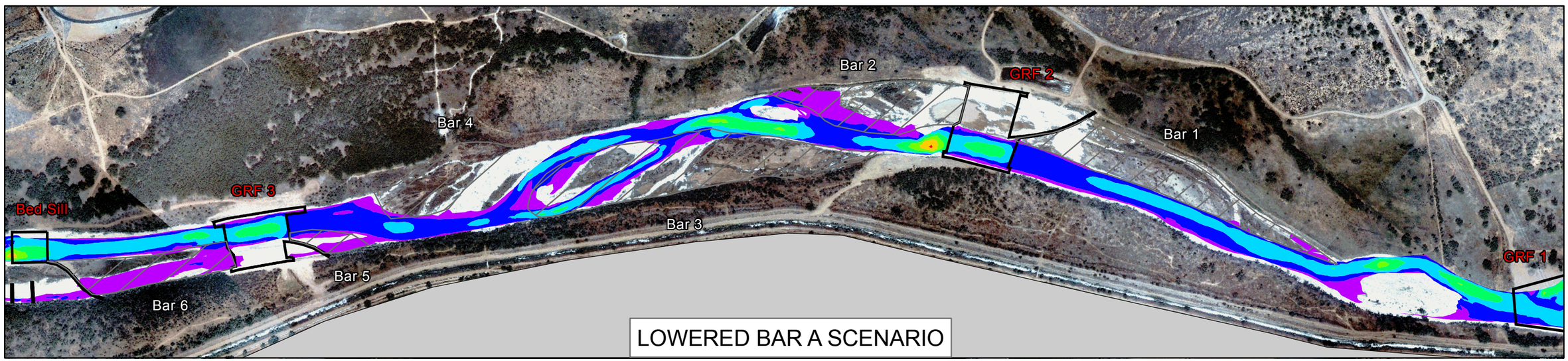


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Velocity, ft/s
0
1
2
3
4
5
6
7

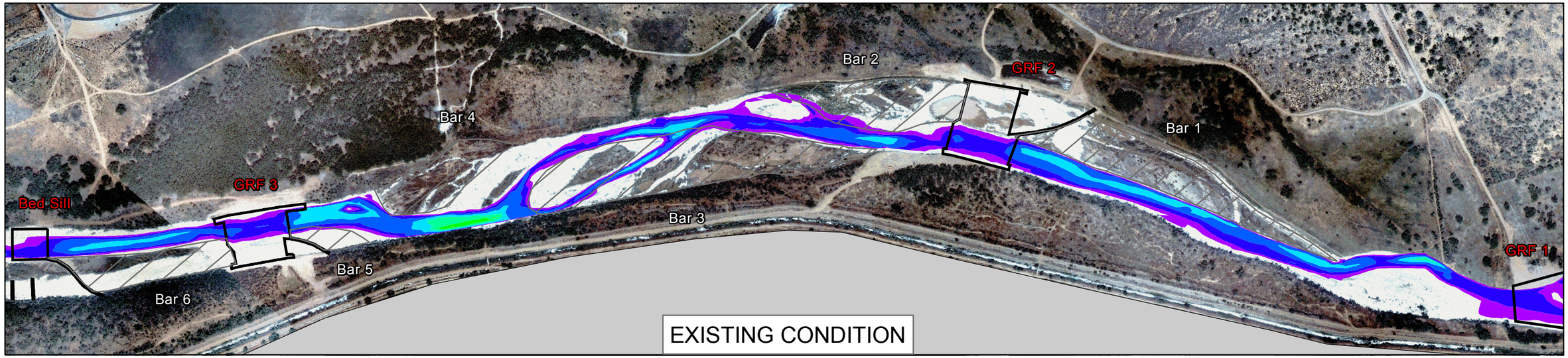
PUEBLO OF SANTA ANA RIO GRANDE

1000 CFS, VELOCITY

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 12



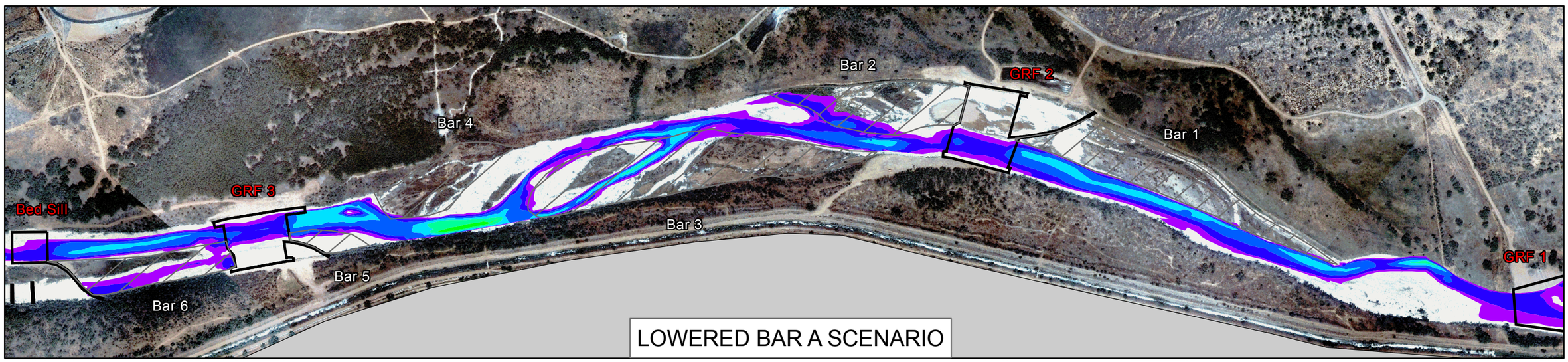


Table 1 Summary of Overbank Lowering Amounts and Associated Volumes for the Lowering Scenarios

		Overbank Lowering Scenario					
		A		B		C	
Bars	Area	Amt. Lowered	Volume	Amt. Lowered	Volume	Amt. Lowered	Volume
	acre	ft	yd³	ft	yd³	ft	yd³
1	13.81	2.0	44507	1.5	33380	2.5	55634
2	10.60	1.5	25629	1.0	17086	2.0	34171
3	21.75	1.0 - 1.5	47765	0.5 - 1.0	30234	1.5 - 2.0	65296
4	7.27	2.0	23443	1.5	17582	2.5	29304
5	1.73	1.5	4183	1.0	2789	2.0	5577
6	7.07	2.2	25061	1.7	19366	2.7	30757
Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs

Depth, ft
0
1
2
3
4
5
6
7
8
9
10

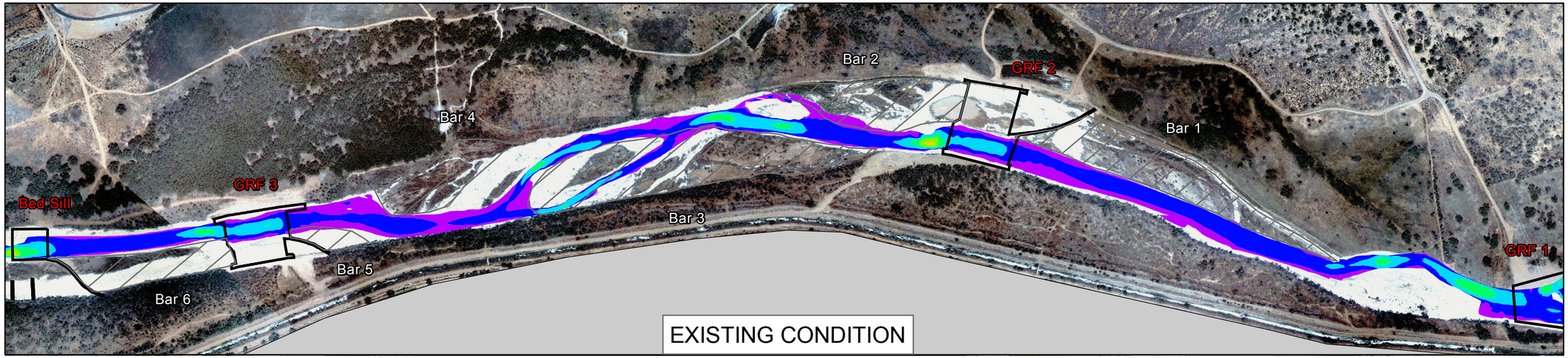
PUEBLO OF SANTA ANA RIO GRANDE REACH

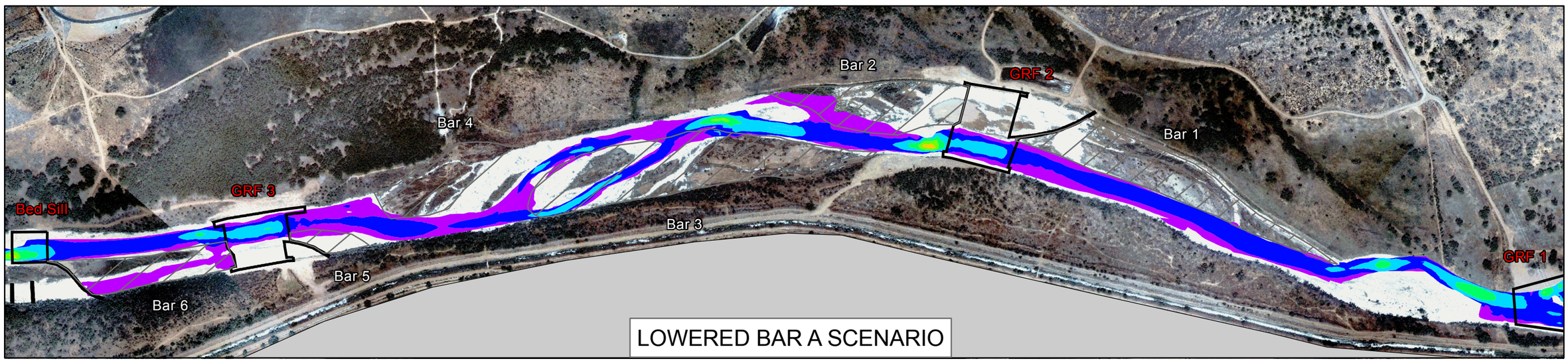
500 CFS, DEPTH

AYRES ASSOCIATES
ENGINEERS SCIENTISTS SURVEYORS
Fort Collins, CO 970-223-5556

SEPTEMBER 2006

PLATE 13





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Total	62.23	-	170588	-	120436	-	220740

0 400 800 1,600
Feet

Legend

Bars
GRFs
Velocity, ft/s
0
1
2
3
4
5
6
7

PUEBLO OF SANTA ANA RIO GRANDE

500 CFS, VELOCITY

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SEPTEMBER 2006

PLATE 14