

Appendix A-6

Region 6

West Fork Region 6

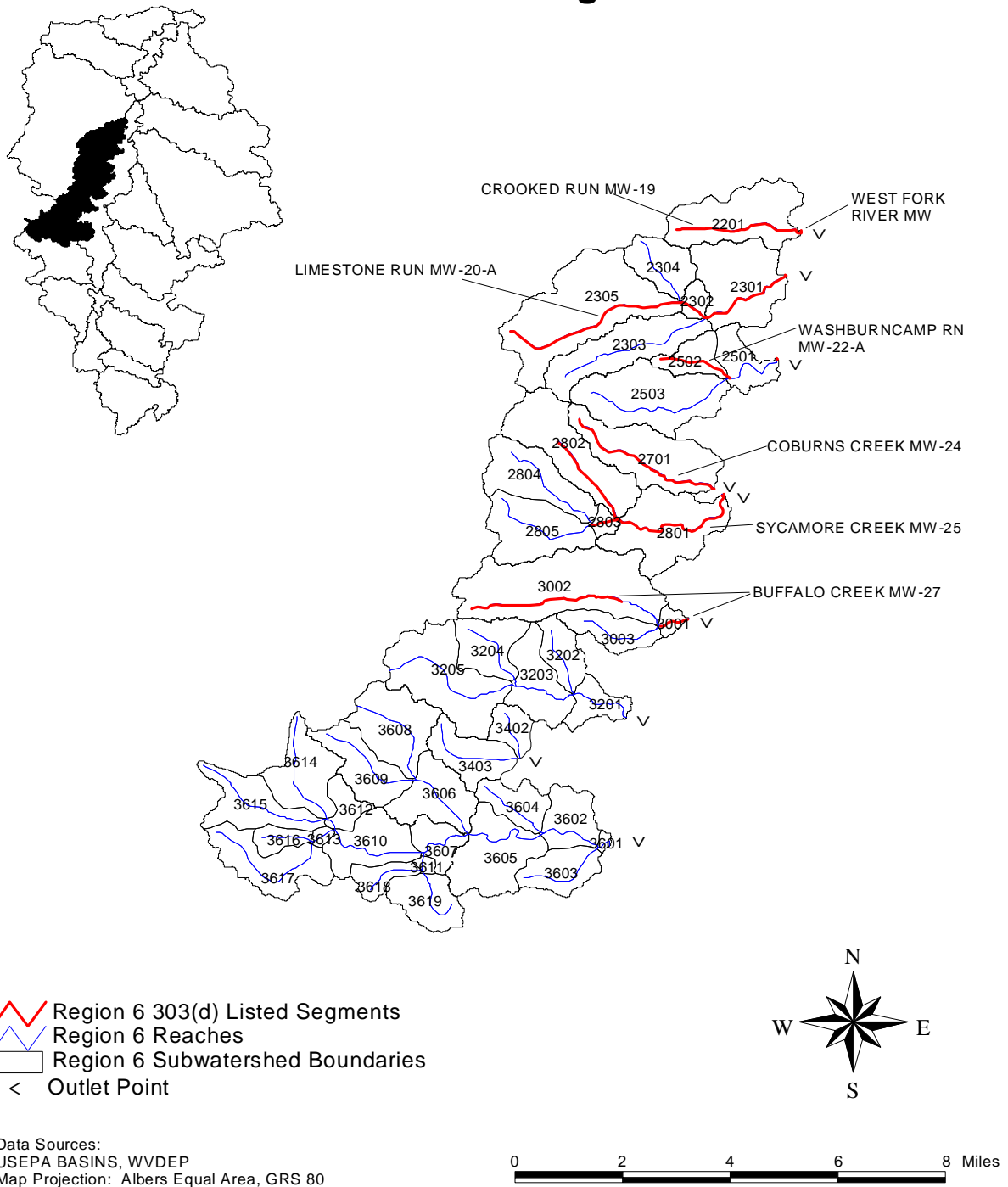


Figure 1. Region 6 - West Fork watershed

Metals and pH TMDLs for the West Fork River Watershed

Table 1. Impaired waterbodies in Region 6

Stream Name	Stream Code	Pollutant	Contributing SWS	Contributing Regions	Aquatic Life
Crooked Run	MW-19	pH, Metals	2201		Aquatic Life
Limestone Run	MW-20-A	Metals	2301, 2301, 2302, 2303, 2304, 2305		Aquatic Life
Washburn Camp Run	MW-22-A	Metals	2502		Aquatic Life
Coburns Creek	MW-24	Metals	2701		Aquatic Life
Sycamore Creek	MW-25	Metals	2801, 2802, 2803, 2804, 2805		Aquatic Life
Buffalo Creek	MW-27	Metals	3001, 3002, 3003		Aquatic Life

T = Aquatic Life Trout Waters

W = Warm Water Fishery

Table 2. Locations of abandoned mines (seep, deep mine, and/or leachate)

SWS
2201
2301
2303
2304
2305
2502
2503
2701
2801
2802
2803
2804
2805
3002
3003
3201
3202
3203
3204
3205
3403
3602
3603
3604
3605

Metals and pH TMDLs for the West Fork River Watershed

Table 3a. Water quality data for aluminum

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2201	WVMW-19_STA2	4510.00	4510	4510	1	03/21/01	03/21/01
2301	MW-020-0002	50.00	50	50	1	08/09/00	08/09/00
2304	MW-020-0003	320.00	320	320	1	08/09/00	08/09/00
2305	WVMW-20-D_STA5	60.00	60	60	1	08/09/00	08/09/00
2501	WVMW-22_STA1	15040.00	80	30000	2	03/21/01	08/16/00
2502	MW-022-0002	50.00	50	50	1	08/16/00	08/16/00
2701	MW-024-0001	150.00	150	150	1	08/07/00	08/07/00
2801	WVMW-25_STA1	13900.00	100	27700	2	08/07/00	03/21/01
2802	WV1011723_DSS-14	561.69	108.1	10000	53	12/18/01	02/02/00
3001	WVMW-27_STA1	50.00	50	50	1	08/16/00	08/16/00
3002	WVMW-27_STA2	140.00	140	140	1	07/27/00	07/27/00
3201	WVMW-29_STA2	125.00	125	125	1	03/20/01	03/20/01
3205	WVMW-29_STA3	197.00	60	334	2	08/09/00	03/20/01
3601	MW-032-0001	160.00	160	160	1	08/15/00	08/15/00
3604	WVMW-32-B_STA5	119.00	60	178	2	03/19/01	08/15/00
3606	WVMW-32-E_STA7	247.00	247	247	1	03/19/01	03/19/01
3610	MW-032-0002	120.00	120	120	2	07/25/00	07/25/00

Table 3b. Water quality data for iron

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2201	WVMW-19_STA2	5890.00	5890	5890	1	03/21/01	03/21/01
2301	MW-020-0002	140.00	140	140	1	08/09/00	08/09/00
2304	MW-020-0003	480.00	480	480	1	08/09/00	08/09/00
2305	WVMW-20-D_STA5	1760.00	1760	1760	1	08/09/00	08/09/00
2501	WVMW-22_STA1	20765.00	130	41400	2	03/21/01	08/16/00
2502	MW-022-0002	110.00	110	110	1	08/16/00	08/16/00
2701	MW-024-0001	270.00	270	270	1	08/07/00	08/07/00
2801	WVMW-25_STA1	21685.00	170	43200	2	08/07/00	03/21/01
2802	WV1011723_DSS-14	362.79	30	2160	53	01/10/01	03/16/00
3001	WVMW-27_STA1	80.00	80	80	1	08/16/00	08/16/00
3002	WVMW-27_STA2	390.00	390	390	1	07/27/00	07/27/00
3201	WVMW-29_STA2	278.00	278	278	1	03/20/01	03/20/01
3205	WVMW-29_STA3	254.00	160	348	2	08/09/00	03/20/01
3601	MW-032-0001	520.00	520	520	1	08/15/00	08/15/00
3604	WVMW-32-B_STA5	172.50	110	235	2	03/19/01	08/15/00
3605	112WRD_390855080295539	870.00	450	1400	4	05/04/79	08/19/80
3606	WVMW-32-E_STA7	374.00	374	374	1	03/19/01	03/19/01
3610	MW-032-0002	480.00	480	480	2	07/25/00	07/25/00

Metals and pH TMDLs for the West Fork River Watershed

Table 3c. Water quality data for manganese

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2201	WVMW-19_STA2	500.00	500	500	1	03/21/01	03/21/01
2301	MW-020-0002	60.00	60	60	1	08/09/00	08/09/00
2304	MW-020-0003	480.00	480	480	1	08/09/00	08/09/00
2305	WVMW-20-D_STA5	280.00	280	280	1	08/09/00	08/09/00
2501	WVMW-22_STA1	980.00	80	1880	2	03/21/01	08/16/00
2502	MW-022-0002	120.00	120	120	1	08/16/00	08/16/00
2701	MW-024-0001	40.00	40	40	1	08/07/00	08/07/00
2801	WVMW-25_STA1	1160.00	40	2280	2	08/07/00	03/21/01
2802	WV1011723_DSS-14	156.09	27.9	510	53	12/18/01	11/10/99
3001	WVMW-27_STA1	40.00	40	40	1	08/16/00	08/16/00
3002	WVMW-27_STA2	80.00	80	80	1	07/27/00	07/27/00
3201	WVMW-29_STA2	79.00	79	79	1	03/20/01	03/20/01
3205	WVMW-29_STA3	207.00	34	380	2	08/09/00	03/20/01
3601	MW-032-0001	60.00	60	60	1	08/15/00	08/15/00
3604	WVMW-32-B_STA5	110.00	80	140	2	03/19/01	08/15/00
3605	112WRD_390855080295539	60.00	50	80	4	03/24/80	05/04/79
3606	WVMW-32-E_STA7	56.00	56	56	1	03/19/01	03/19/01
3610	MW-032-0002	70.00	70	70	2	07/25/00	07/25/00

Table 3d. Water quality data for Total Nonfilterable Residue

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2201	WVMW-19_STA2	82.00	82	82	1	03/21/01	03/21/01
2301	MW-020-0002	1.00	1	1	1	08/09/00	08/09/00
2304	MW-020-0003	2.00	2	2	1	08/09/00	08/09/00
2305	WVMW-20-D_STA5	4.00	4	4	1	08/09/00	08/09/00
2501	WVMW-22_STA1	585.00	2	1168	2	08/16/00	03/21/01
2502	MW-022-0002	1.00	1	1	1	08/16/00	08/16/00
2701	MW-024-0001	0.00	0	0	1	08/07/00	08/07/00
2801	WVMW-25_STA1	605.50	2	1209	2	03/21/01	08/07/00
3001	WVMW-27_STA1	1.00	1	1	1	08/16/00	08/16/00
3002	WVMW-27_STA2	2.00	2	2	1	07/27/00	07/27/00
3201	WVMW-29_STA2	4.40	4.4	4.4	1	03/20/01	03/20/01
3205	WVMW-29_STA3	3.50	3	4	2	08/09/00	03/20/01
3601	MW-032-0001	2.00	2	2	1	08/15/00	08/15/00
3604	WVMW-32-B_STA5	5.75	1	10.5	2	08/15/00	03/19/01
3606	WVMW-32-E_STA7	4.80	4.8	4.8	1	03/19/01	03/19/01
3610	MW-032-0002	2.00	2	2	2	07/25/00	07/25/00

Metals and pH TMDLs for the West Fork River Watershed

Table 3e. Water quality data for pH

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2201	WVMW-19_STA2	7.78	7.78	7.8	1	03/21/01	03/21/01
2301	MW-020-0002	7.99	7.99	8.0	1	08/09/00	08/09/00
2304	MW-020-0003	7.64	7.64	7.6	1	08/09/00	08/09/00
2305	WVMW-20-D_STA5	7.60	7.6	7.6	1	08/09/00	08/09/00
2501	WVMW-22_STA1	7.81	7.65	8.0	2	03/21/01	08/16/00
2502	MW-022-0002	7.92	7.92	7.9	1	08/16/00	08/16/00
2701	MW-024-0001	7.94	7.94	7.9	1	08/07/00	08/07/00
2801	WVMW-25_STA1	7.87	7.63	8.1	2	08/07/00	03/21/01
2802	WV1011723_DSS-14	7.80	7.6	8.2	53	12/18/01	11/03/00
3001	WVMW-27_STA1	7.60	7.6	7.6	1	08/16/00	08/16/00
3002	WVMW-27_STA2	8.02	8.02	8.0	1	07/27/00	07/27/00
3201	WVMW-29_STA2	8.05	8.05	8.1	1	03/20/01	03/20/01
3205	WVMW-29_STA3	7.82	7.56	8.1	2	08/09/00	03/20/01
3601	MW-032-0001	7.77	7.7	7.8	2	08/15/00	08/15/00
3604	WVMW-32-B_STA5	8.01	7.91	8.1	2	03/19/01	08/15/00
3605	112WRD_390855080295539	7.62	7	8.2	5	05/04/79	09/29/83
3606	WVMW-32-E_STA7	7.84	7.84	7.8	1	03/19/01	03/19/01
3610	MW-032-0002	7.48	7.48	7.5	1	07/25/00	07/25/00

Table 3f. Water quality data for dissolved zinc

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
3605	112WRD_390855080295539	12	12	12	1	8/19/1980	8/19/1980

Metals and pH TMDLs for the West Fork River Watershed

Table 4a. Aluminum baseline conditions and allocations (WLAs) for permitted mining point sources

SWS	NPDES Permit ID	Baseline (lb/yr)	Allocation (lb/yr)	Allocation (mg/L)	% Reduction
2304	WV1007823	122	122	4.60	0
2305	WV1007122	656	656	4.60	0
2305	WV1007823	603	603	4.60	0
2802	WV1011723	204	204	4.60	0

Table 4b. Iron baseline conditions and allocations (WLAs) for permitted mining point sources

SWS	NPDES Permit ID	Baseline (lb/yr)	Allocation (lb/yr)	Allocation (mg/L)	% Reduction
2304	WV1007823	84	84	3.20	0
2305	WV1007122	453	453	3.20	0
2305	WV1007823	416	416	3.20	0
2802	WV1011723	140	140	3.20	0

Table 4c. Manganese baseline conditions and allocations (WLAs) for permitted mining point sources

SWS	NPDES Permit ID	Baseline (lb/yr)	Allocation (lb/yr)	Allocation (mg/L)	% Reduction
2304	WV1007823	54	54	2.00	0
2305	WV1007122	290	290	2.00	0
2305	WV1007823	267	267	2.00	0
2802	WV1011723	91	91	2.00	0

Metals and pH TMDLs for the West Fork River Watershed

Table 5a. Aluminum baseline conditions and allocations (LAs) for nonpoint sources

SWS	AML		Revoked Mines		Nonpoint Source		Requires Reduction
	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	
2201	5,614	393	0	0	579	579	x
2301	7,948	795	382	38	532	532	x
2302	0	0	0	0	80	80	
2303	1,633	408	0	0	565	565	x
2304	1,655	199	0	0	271	271	x
2305	3,385	339	0	0	1,031	1,031	x
2501	0	0	0	0	232	232	
2502	289	58	0	0	186	186	x
2503	3,222	516	0	0	697	697	x
2701	2,627	473	0	0	626	626	x
2801	1,528	459	0	0	617	617	x
2802	2,570	386	0	0	621	621	x
2803	137	82	0	0	56	56	x
2804	2,790	363	0	0	445	445	x
2805	1,425	371	0	0	504	504	x
3001	0	0	0	0	48	48	
3002	2,586	776	0	0	1,000	1,000	x
3003	1,203	180	0	0	221	221	x
3201	478	143	0	0	159	159	x
3202	853	171	0	0	203	203	x
3203	1,011	657	0	0	345	345	x
3204	159	159	0	0	306	306	
3205	269	269	0	0	705	705	
3402	0	0	0	0	146	146	
3403	20	20	0	0	311	311	
3601	0	0	0	0	18	18	
3602	792	792	0	0	246	246	
3603	2,714	217	0	0	230	230	x
3604	665	180	0	0	209	209	x
3605	1,181	1,181	0	0	480	480	
3606	0	0	0	0	374	374	
3607	0	0	0	0	168	168	
3608	0	0	0	0	492	492	
3609	0	0	0	0	349	349	
3610	0	0	0	0	356	356	
3611	0	0	0	0	25	25	
3612	0	0	0	0	121	121	
3613	0	0	0	0	29	29	
3614	0	0	0	0	407	407	
3615	0	0	0	0	381	381	
3616	0	0	0	0	110	110	
3617	0	0	0	0	435	435	
3618	0	0	0	0	134	134	
3619	0	0	0	0	287	287	

Metals and pH TMDLs for the West Fork River Watershed

Table 5b. Iron baseline conditions and allocations (LAs) for nonpoint sources

SWS	AML		Revoked Mines		Nonpoint Source		Requires Reduction
	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	
2201	19,408	970	0	0	1,110	1,110	x
2301	27,479	1,374	263	13	973	973	x
2302	0	0	0	0	152	152	
2303	5,644	677	0	0	1,085	1,085	x
2304	5,724	401	0	0	526	526	x
2305	11,704	1,404	0	0	1,953	1,953	x
2501	0	0	0	0	405	405	
2502	1,000	320	0	0	369	369	x
2503	11,141	1,226	0	0	1,384	1,384	x
2701	9,083	999	0	0	1,246	1,246	x
2801	5,284	1,057	0	0	1,219	1,219	x
2802	8,886	977	0	0	1,210	1,210	x
2803	475	166	0	0	109	109	x
2804	9,645	772	0	0	884	884	x
2805	4,927	838	0	0	1,001	1,001	x
3001	0	0	0	0	97	97	
3002	9,268	1,668	0	0	1,950	1,950	x
3003	4,312	388	0	0	446	446	x
3201	1,713	343	0	0	313	313	x
3202	3,057	306	0	0	388	388	x
3203	3,624	725	0	0	673	673	x
3204	570	456	0	0	597	597	x
3205	964	964	0	0	1,397	1,397	
3402	0	0	0	0	288	288	
3403	71	71	0	0	631	631	
3601	0	0	0	0	37	37	
3602	2,840	2,840	0	0	490	490	
3603	9,725	389	0	0	467	467	x
3604	2,383	357	0	0	425	425	x
3605	4,233	4,233	0	0	988	988	
3606	0	0	0	0	747	747	
3607	0	0	0	0	346	346	
3608	0	0	0	0	968	968	
3609	0	0	0	0	694	694	
3610	0	0	0	0	729	729	
3611	0	0	0	0	52	52	
3612	0	0	0	0	253	253	
3613	0	0	0	0	61	61	
3614	0	0	0	0	813	813	
3615	0	0	0	0	767	767	
3616	0	0	0	0	222	222	
3617	0	0	0	0	896	896	
3618	0	0	0	0	272	272	
3619	0	0	0	0	585	585	

Metals and pH TMDLs for the West Fork River Watershed

Table 5c. Manganese baseline conditions and allocations (LAs) for nonpoint sources

SWS	AML		Revoked Mines		Nonpoint Source		Requires Reduction
	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	
2201	3,366	1,010	0	0	484	484	x
2301	4,766	953	170	34	459	459	x
2302	0	0	0	0	67	67	
2303	979	979	0	0	472	472	
2304	993	496	0	0	225	225	x
2305	2,030	1,827	0	0	870	870	x
2501	0	0	0	0	207	207	x
2502	173	173	0	0	152	152	
2503	1,932	1,295	0	0	568	568	x
2701	1,575	1,229	0	0	509	509	x
2801	917	917	0	0	503	503	
2802	1,541	1,156	0	0	513	513	x
2803	82	82	0	0	46	46	
2804	1,673	836	0	0	364	364	x
2805	855	855	0	0	412	412	
3001	0	0	0	0	41	41	
3002	1,643	1,643	0	0	882	882	
3003	764	466	0	0	192	192	x
3201	304	304	0	0	139	139	
3202	542	406	0	0	181	181	x
3203	642	642	0	0	305	305	
3204	101	101	0	0	270	270	
3205	171	171	0	0	616	616	
3402	0	0	0	0	128	128	
3403	13	13	0	0	269	269	
3601	0	0	0	0	15	15	
3602	503	503	0	0	213	213	
3603	1,724	517	0	0	198	198	x
3604	422	422	0	0	180	180	
3605	750	750	0	0	409	409	
3606	0	0	0	0	325	325	
3607	0	0	0	0	143	143	
3608	0	0	0	0	433	433	
3609	0	0	0	0	303	303	
3610	0	0	0	0	304	304	
3611	0	0	0	0	21	21	
3612	0	0	0	0	102	102	
3613	0	0	0	0	25	25	
3614	0	0	0	0	354	354	
3615	0	0	0	0	330	330	
3616	0	0	0	0	95	95	
3617	0	0	0	0	371	371	
3618	0	0	0	0	115	115	
3619	0	0	0	0	246	246	