Appendix A-12
Region 12

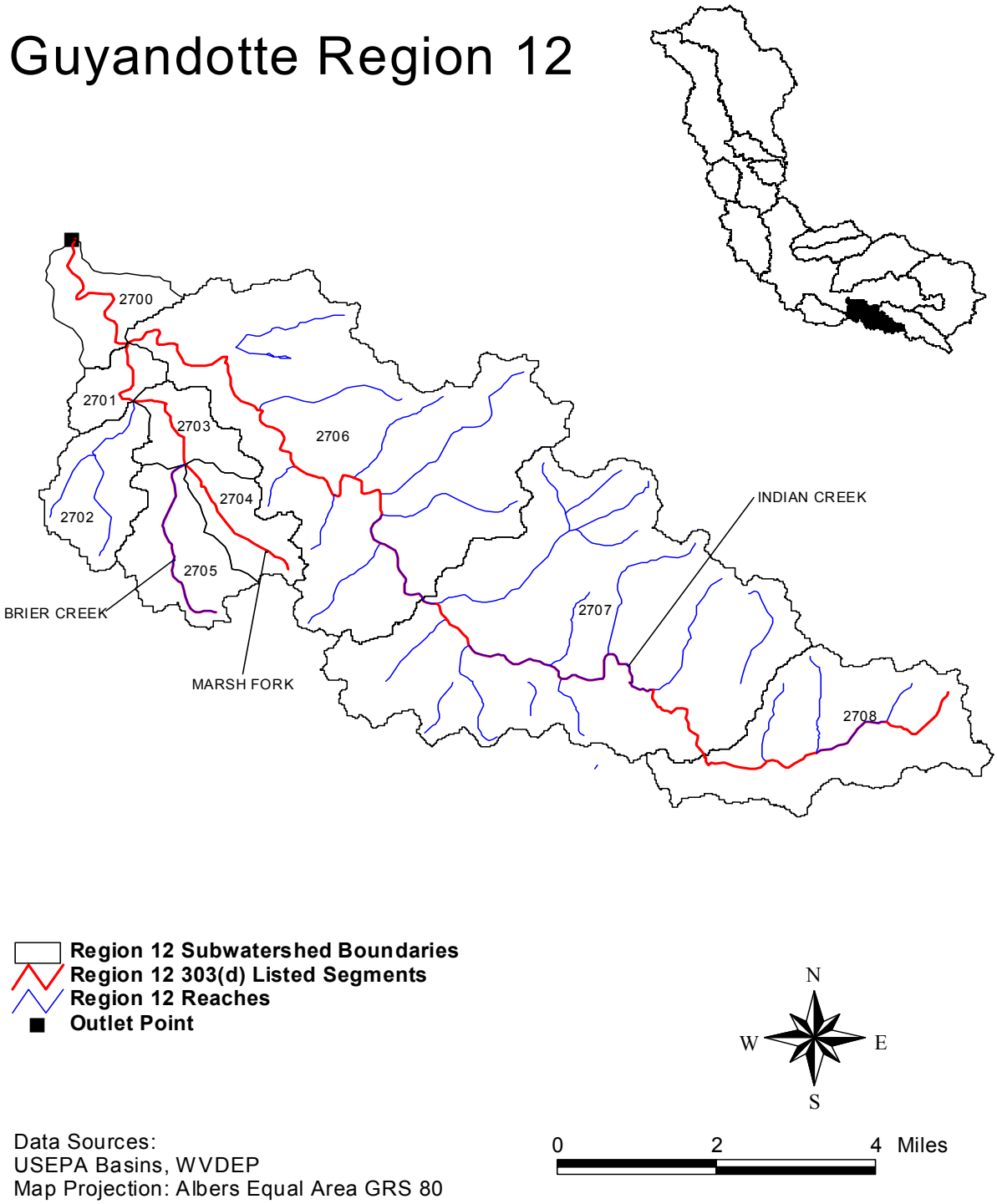

Figure 1. Region 12 - Guyandotte Watershed

Table 1. Impaired waterbodies in Region 12

Stream Name	Stream Code	Pollutant	Contributing SWS	Contributing Regions	Affected Use
Brier Creek	OG-110-A	Metals	2701, 2702, 2703, 2704, 2705		Aquatic Life, Human Health
Indian Creek	OG-110	Metals	2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708		Aquatic Life, Human Health
Marsh Fork	OG-110-A-2	Metals	2704		Aquatic Life, Human Health

T = Aquatic Life Trout Waters

W = Warm Water Fishery

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

SWS
2706

Table 3a. Water quality data for dissolved aluminum

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2700	OG-110-0001	110.00	110	110	1	09/06/00	09/06/00
2702	OG-110-A-1m0.	100.00	100	100	1	09/05/00	09/05/00
2704	OG-110-A-2m	100.00	100	100	1	09/05/00	09/05/00
2706	20	239.63	31	1000	8	10/14/02	07/02/03
2706	OG-110-Am	100.00	100	100	1	09/05/00	09/05/00
2707	OG-110-K.3m0.	100.00	100	100	1	08/30/00	08/30/00

Table 3b. Water quality data for total aluminum

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2700	OG-110-0001	450.00	450	450	1	09/06/00	09/06/00
2702	OG-110-0004	360.00	360	360	1	09/05/00	09/05/00
2703	OG-110-0005	120.00	120	120	1	09/05/00	09/05/00
2706	20	279.70	22	1100	10	10/14/02	07/02/03
2706	OG-110-0003	250.00	250	250	1	09/05/00	09/05/00
2706	OG-110m3	320.00	320	320	1	01/30/01	01/30/01
2706	OG-110m9	740.00	740	740	1	01/30/01	01/30/01
2707	OG-110-0007	380.00	380	380	1	08/30/00	08/30/00
2707	OG-110m11	1620.00	1620	1620	1	01/30/01	01/30/01
2707	OG-110m11.2	340.00	340	340	1	01/30/01	01/30/01

Table 3c. Water quality data for dissolved iron

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2700	OG-110-0001	160.00	160	160	1	09/06/00	09/06/00
2702	OG-110-0004	360.00	360	360	1	09/05/00	09/05/00
2703	OG-110-0005	110.00	110	110	1	09/05/00	09/05/00
2706	20	112.50	70	150	8	10/14/02	07/02/03
2706	OG-110-0003	310.00	310	310	1	09/05/00	09/05/00
2707	OG-110-0007	60.00	60	60	1	08/30/00	08/30/00

Table 3d. Water quality data for total iron

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2700	OG-110-0001	520.00	520	520	1	09/06/00	09/06/00
2700	OG-110m0.2	520.00	520	520	1	09/06/00	09/06/00
2702	OG-110-0004	360.00	360	360	1	09/05/00	09/05/00
2702	OG-110-A-1m0.	900.00	900	900	1	09/05/00	09/05/00
2703	OG-110-0005	250.00	250	250	1	09/05/00	09/05/00
2706	20	232.00	140	300	10	10/14/02	07/02/03
2706	OG-110-0003	590.00	590	590	1	09/05/00	09/05/00
2706	OG-110m3	440.00	440	440	1	01/30/01	01/30/01
2706	OG-110m9	320.00	320	320	1	01/30/01	01/30/01
2707	OG-110-0007	440.00	440	440	1	08/30/00	08/30/00
2707	OG-110m11	370.00	370	370	1	01/30/01	01/30/01
2707	OG-110m11.2	130.00	130	130	1	01/30/01	01/30/01

Table 3e. Water quality data for dissolved manganese

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2706	20	52.50	40	90.0	4	10/14/02	07/02/03

Table 3f. Water quality data for total manganese

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2700	OG-110m0.2	50.0	50.00	50.0	1	9/6/2000	9/6/2000
2702	OG-110-0004	180.0	180.00	180.0	1	9/5/2000	9/5/2000
2704	OG-110-A-2m	50.0	50.00	50.0	1	9/5/2000	9/5/2000
2706	20	55.0	30.00	110.0	6	10/14/2002	7/2/2003
2706	OG-110-0003	50.0	50.00	50.0	1	9/5/2000	9/5/2000
2706	OG-110m3	50.0	50.00	50.0	1	1/30/2001	1/30/2001
2706	OG-110m9	50.0	50.00	50.0	1	1/30/2001	1/30/2001
2707	OG-110-K.3m0.	50.0	50.00	50.0	1	8/30/2000	8/30/2000
2707	OG-110m11	50.0	50.00	50.0	1	1/30/2001	1/30/2001
2707	OG-110m11.2	50.0	50.00	50.0	1	1/30/2001	1/30/2001

Table 3g. Water quality data for total selenium

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
No data available							

Table 3h. Water quality data for pH

SWS	WQ Station	Avg (ug/L)	Min (ug/L)	Max (ug/L)	Count	Start Date	End Date
2700	OG-110m0.2	7.1	7.1	7.1	1	9/6/2000	9/6/2000
2702	OG-110-A-1m0.	7.1	7.1	7.1	1	9/5/2000	9/5/2000
2704	OG-110-A-2m	7.1	7.1	7.1	1	9/5/2000	9/5/2000
2706	20	7.4	6.5	8.2	10	10/14/2002	7/2/2003
2706	OG-110-Am	7.1	7.1	7.1	1	9/5/2000	9/5/2000
2706	OG-110-Gm	7.1	7.1	7.1	1	9/5/2000	9/5/2000
2706	OG-110m3	5.0	5.0	5.0	1	1/30/2001	1/30/2001
2706	OG-110m9	4.9	4.9	4.9	1	1/30/2001	1/30/2001
2707	OG-110-K.3m0.	7.1	7.1	7.1	1	8/30/2000	8/30/2000
2707	OG-110m11	5.9	4.7	7.1	2	9/6/2000	1/30/2001
2707	OG-110m11.2	4.6	4.6	4.6	1	1/30/2001	1/30/2001

Table 3i. Water quality data for fecal coliforms

SWS	WQ Station	Avg (#/100 mL)	Min (#/100 mL)	Max (#/100 mL)	Count	Start Date	End Date
2700	OG-110-0001	36.0	36.0	36.0	1	9/6/2000	9/6/2000
2702	OG-110-0004	321.0	321.0	321.0	1	9/5/2000	9/5/2000
2703	OG-110-0005	71.0	71.0	71.0	1	9/5/2000	9/5/2000
2706	OG-110-0002	232.0	232.0	232.0	1	9/6/2000	9/6/2000
2706	OG-110-0003	1020.0	1020.0	1020.0	1	9/5/2000	9/5/2000
2706	OG-110-0006	1268.0	1268.0	1268.0	1	9/5/2000	9/5/2000
2707	OG-110-0007	540.0	540.0	540.0	1	8/30/2000	8/30/2000
2700	OG-110m0.2	36.0	36.0	36.0	1	9/6/2000	9/6/2000
2706	OG-110m3	280.0	280.0	280.0	1	1/30/2001	1/30/2001
2706	OG-110m9	2720.0	2720.0	2720.0	1	1/30/2001	1/30/2001
2707	OG-110m11	20.0	20.0	20.0	1	1/30/2001	1/30/2001
2707	OG-110m11.2	120.0	120.0	120.0	1	1/30/2001	1/30/2001

Table 4a. 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
2704	WV1011863	109	109	3.20	0
2705	WV1011863	44	44	3.20	0
2706	WV0061336	413	413	3.20	0
2706	WV1006266	45	45	3.20	0
2706	WV1008544	75	75	3.20	0
2706	WV1011871	74	74	3.20	0
2707	WV0090000	2,153	1,615	2.40	25
2707	WV1018531	10,362	7,771	2.40	25
2707	WV1018965	12,611	9,458	2.40	25
2708	WV0090000	499	289	1.86	42
2708	WV0097446	14,201	8,237	1.86	42

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

SWS	NPDES Permit ID	Baseline (lb/yr)	Allocation (lb/yr)	Allocation (mg/L)	% Reduction
2704	WV1011863	67	67	2.00	0
2705	WV1011863	27	27	2.00	0
2706	WV0061336	235	235	2.00	0
2706	WV1006266	26	26	2.00	0
2706	WV1008544	43	43	2.00	0
2706	WV1011871	42	42	2.00	0
2707	WV0090000	872	872	2.00	0
2707	WV1018531	4,198	4,198	2.00	0
2707	WV1018965	5,110	5,110	2.00	0
2708	WV0090000	194	126	1.30	35
2708	WV0097446	5,528	3,593	1.30	35

Table 4c. 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
2704	WV1011863	111	111	3.27	0
2705	WV1011863	45	45	3.27	0
2706	WV0061336	422	422	3.27	0
2706	WV1006266	46	46	3.27	0
2706	WV1008544	77	77	3.27	0
2706	WV1011871	76	76	3.27	0
2707	WV0090000	2,097	2,097	3.27	0
2707	WV1018531	10,091	10,091	3.27	0
2707	WV1018965	12,281	12,281	3.27	0
2708	WV0090000	486	486	3.27	0
2708	WV0097446	13,851	13,851	3.27	0

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

* Othen Nonpoint Sources include: Forest, Wetland, Agriculture, Pasture, and Urba

SWS	AML		Revoked Mines		Roads		Oil and Gas Wells		Harvested Forest		Barren Land		Other Non-Point Sources		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)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	
2700	0	0	0	0	23	23	6	6	0	0	21	21	56	56	
2701	0	0	0	0	9	9	5	5	0	0	0	0	33	33	
2702	0	0	0	0	15	15	5	5	0	0	0	0	72	72	
2703	0	0	0	0	15	15	11	11	0	0	0	0	46	46	
2704	0	0	0	0	9	9	10	10	0	0	0	0	51	51	
2705	0	0	0	0	25	25	7	7	0	0	0	0	81	81	
2706	1,180	71	0	0	298	298	12	12	20	20	78	78	2,789	2,789	x
2707	0	0	0	0	119	119	40	40	181	181	1,845	1,845	469	469	
2708	0	0	0	0	20	20	3	3	0	0	93	93	164	164	

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

SWS	AML		Revoked Mines		Roads		Oil and Gas Wells		Harvested Forest		Barren Land		Other Non-Point Sources		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)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	
2700	0	0	0	0	28	28	7	7	0	0	27	27	190	190	
2701	0	0	0	0	11	11	6	6	0	0	0	0	110	110	
2702	0	0	0	0	18	18	6	6	0	0	0	0	250	250	
2703	0	0	0	0	18	18	14	14	1	1	0	0	159	159	
2704	0	0	0	0	712	605	857	729	0	0	0	0	175	175	x
2705	0	0	0	0	1,944	1,653	572	486	0	0	0	0	277	277	x
2706	8,017	8,017	0	0	194	194	112	112	120	120	734	734	1,756	1,756	
2707	0	0	0	0	141	141	51	51	511	511	2,366	2,366	1,601	1,601	
2708	0	0	0	0	1,503	601	276	110	0	0	7,419	2,968	539	539	x

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

SWS	AML		Revoked Mines		Roads		Oil and Gas Wells		Harvested Forest		Barren Land		Other Non-Point Sources		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)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	Baseline Load (lb/yr)	Allocated Load (lb/yr)	
2700	0	0	0	0	15	15	4	4	0	0	14	14	81	81	
2701	0	0	0	0	6	6	3	3	0	0	0	0	47	47	
2702	0	0	0	0	10	10	3	3	0	0	0	0	104	104	
2703	0	0	0	0	10	10	8	8	0	0	0	0	67	67	
2704	0	0	0	0	6	6	7	7	0	0	0	0	74	74	
2705	0	0	0	0	16	16	5	5	0	0	0	0	117	117	
2706	4,413	441	0	0	302	302	14	14	22	22	93	93	3,075	3,075	x
2707	0	0	0	0	78	78	27	27	130	130	1,267	1,267	677	677	
2708	0	0	0	0	13	13	2	2	0	0	63	63	233	233	

Table 6. Fecal Coliform baseline and allocations

SWS	Stream	Agriculture		Natural Sources		Failing Septics		Residential	
		Baseline Load (counts)	Allocated Load (count)	Baseline Load (count)	Allocated Load (count)	Baseline Load (count)	Allocated Load (count)	Baseline Load (count)	Allocated Load (count)
2700	Indian Creek	7.03E+12	4.92E+12	1.19E+13	1.19E+13	1.39E+14	0.00E+00	4.56E+12	3.19E+12