

Chemical Monitoring Results: Summer 2003 - Summer 2004
Watauga River Watershed Monitoring

Turbidity												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	April-05	May-05	Jun-05
1 (WR1)			1.3	9.5	1.1	2.4	1.4	1.0	2.6	33.0	1.6	8.8
2 (WR2)	9.0	34.0	1.5	3.0	1.5	2.8	1.3					
3(WR3)	3.0	21.0	1.2	6.0	1.3	2.8	1.5	1.7	2.8	17.0	2.9	30.0
4(CC1)	13.0	70.0	0.8	3.5	1.8	2.2	1.0	3.5	9.7	65.0	2.8	6.9
5 (LC1)	140.0	55.0	2.6	170.0	5.4	5.2	2.5	2.2	4.5	22.0	3.5	16.0
6 (DC1)	11.0	19.0	0.4	1.4	1.5	1.9	1.1		2.6	15.0	1.2	13.0
7(BRUF1)	450.0	14.0	1.3	3.3	3.9	2.3	0.7		7.6	33.0	4.7	3.9
8(BF1)	5.7	1.6	2.6	1.6	5.3	5.9	3.4	<1		1.7	1.5	
9(ER1)	4.7	22.0	0.4	1.7	2.4	1.3	1.7	2.8	6.3	16.0	4.3	12.0
10(ER2)	4.2	6.7	1.3	5.5	7.8	3.4	4.4	2.9	8.3	90.0	4.9	12.0
11(ATDF1)								2.3	1.1	25.0	2.5	7.5
VWIN Regional AVG	6.0	6.0	6.0	5.9			6.2	5.8	5.8	5.8	5.8	5.8

NH3												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	April 05	May-05	Jun-05
1 (WR1)			0.09	0.11	0.03	0.06	0.08	0.05	0.04	0.28	0.03	0.08
2 (WR2)	0.10	0.16	0.05	0.05	0.06	0.05	0.07					
3(WR3)	0.06	0.11	0.05	0.08	0.05	0.03	0.09	0.06	0.04	0.16	0.03	0.17
4(CC1)	0.11	0.17	0.07	0.05	0.04	0.04	0.07	0.04	0.05	0.20	0.05	0.09
5 (LC1)	0.17	0.16	0.05	0.14	0.03	0.03	0.10	0.06	0.06	0.14	0.04	0.10
6 (DC1)	0.07	0.12	0.05	0.19	0.03	0.04	0.06		0.03	0.13	0.02	0.11
7(BRUF1)	0.48	0.10	0.07	0.08	0.06	0.03	0.03		0.07	0.18	0.06	0.07
8(BF1)	0.20	0.09	0.16	0.09	0.13	0.12	0.14	<0.02		0.02	0.02	
9(ER1)	0.05	0.17	0.05	0.05	0.06	0.03	0.05	0.05	0.04	0.14	0.05	0.13
10(ER2)	0.09	0.13	0.07	0.08	0.12	0.07	0.07	0.06	0.08	0.19	0.08	0.17
11(ATDF1)								0.10	0.05	0.25	0.05	0.16
VWIN Regional AVG	0.10	0.10	0.10	0.10			0.10	0.09	0.09	0.09	0.09	0.09

pH												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	April 05	May-05	Jun-05
1 (WR1)			7.4	7.2	7.4	7.2	7.4	6.8	7.1	6.8	7.5	7.5
2 (WR2)	6.8	6.9	7.9	7.2	7.4	7.4	8.0					
3(WR3)	7.0	6.8	7.4	7.1	7.3	7.2	7.2	6.9	7.0	6.8	7.4	7.3
4(CC1)	7.3	7.1	7.5	7.3	7.5	8.0	8.0	7.2	7.2	7.2	8.7	7.9
5 (LC1)	7.2	7.4	7.5	7.5	7.5	7.6	7.5	7.3	7.3	7.2	7.6	7.5
6 (DC1)	6.1	7.1	7.4	7.4	7.7	7.3	7.5		7.2	7.1	7.3	7.4
7(BRUF1)	7.0	7.4	7.5	7.4	7.4	7.6	7.0		7.3	7.3	7.6	7.6
8(BF1)	6.3	6.4	6.5	6.9	7.2	6.8	7.3	6.6		6.5	6.6	
9(ER1)	7.2	7.4	7.6	7.3	7.6	7.6	7.1	7.1	7.3	7.1	7.4	7.7
10(ER2)	7.2	7.4	7.5	7.2	7.4	7.5	7.3	7.0	7.2	7.1	7.3	7.5
11(ATDF1)								7.1	7.1	6.8	7.1	7.3
VWIN Regional AVG	7.1	7.1	7.1	7.0			7.0	7.0	7.0	7.0	7.0	7.0

TSS												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	Apr-05	May-05	Jun-05
1 (WR1)			1.2	6.8	2.8	2.4	3.2	<4	<4	41.2	<4	9.6
2 (WR2)	14.4	32.8	1.6	1.2	2.0	2.8	4.8					
3(WR3)	4.8	17.2	1.6	2.7	0.8	1.6	4.0	<4	<4	17.2	4.0	20.0
4(CC1)	20.4	73.6	0.4	3.2	4.4	2.2	4.4	<4	6.4	87.6	4.4	9.6
5 (LC1)	146.5	54.0	2.0	96.0	8.8	5.6	6.8	<4	<4	10.8	<4	4.4
6 (DC1)	14.0	46.4	0.4	2.4	4.0	1.6	4.4		<4	12.0	<4	10.4
7(BRUF1)	498.0	15.6	1.2	6.0	6.4	2.8	3.6		8.8	38.0	8.8	4.4
8(BF1)	5.6	2.8	3.2	0.8	6.0	5.2	6.8	<4		4.0	<4	
9(ER1)	5.2	17.2	1.2	0.8	2.8	0.4	4.4	4.0	13.0	15.2	4.8	71.2
10(ER2)	4.0	5.2	1.2	4.0	6.0	1.6	6.4	<4	6.4	63.0	<4	6.2
11(ATDF1)								<4	<4	23.6	8.4	4.4
VWIN Regional AVG	4.7	4.7	4.7	5.1			5.5	5.6	5.6	5.6	5.6	5.6

NO3												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	Apr-05	May-05	Jun-05
1 (WR1)			0.6	0.8	0.5	0.3	0.3	0.5	0.6	0.9	0.4	0.5
2 (WR2)	0.3	0.7	0.9	0.8	0.5	0.3	0.6					
3(WR3)	0.2	0.6	0.3	0.7	0.5	0.4	0.2	0.3	0.4	0.7	0.3	0.6
4(CC1)	0.8	1.3	0.2	1.6	1.3	0.8	0.8	1.3	1.6	1.8	0.9	0.9
5 (LC1)	1.2	1.2	1.0	1.8	1.1	1.1	0.7	0.9	1.0	1.1	0.9	0.9
6 (DC1)	0.4	0.6	0.3	0.5	0.4	0.3	0.3		0.6	0.8	0.4	0.6
7(BRUF1)	2.1	1.6	0.3	1.9	1.4	1.2	1.1		1.7	1.9	1.1	1.2
8(BF1)	0.3	0.2	1.2	0.3	0.2	0.2	0.1	0.2		0.7	0.3	
9(ER1)	0.5	0.6	0.4	1.0	0.7	0.6	0.2	0.7	1.0	1.1	0.6	0.8
10(ER2)	0.6	0.7	0.9	1.0	0.9	0.9	0.6	0.8	1.0	1.2	0.8	0.7
11(ATDF1)								0.4	0.5	1.0	0.4	0.5
VWIN Regional AVG	0.5	0.5	0.5	0.5			0.5	0.6	0.6	0.6	0.6	0.6

Conductivity												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	April 05	May-05	Jun-05
1 (WR1)			69.6	89.9	57.5	67.5	55.7	50.8	71.4	44.8	55.2	48.9
2 (WR2)	52.4	52.6	111.2	61.8	59.5	70.0	88.0					
3(WR3)	44.3	39.1	40.8	74.9	47.5	52.7	44.1	40.9	55.2	36.0	44.8	43.7
4(CC1)	94.8	92.8	55.3	107.3	99.4	131.8	106.9	93.9	103.5	100.0	90.2	106.9
5 (LC1)	97.2	166.7	122.9	250.2	131.1	153.7	127.3	114.9	221.6	225.8	130.5	127.5
6 (DC1)	46.6	42.5	50.6	53.7	42.6	54.4	46.7		48.0	47.8	45.0	43.8
7(BRUF1)	116.9	136.9	147.5	161.8	149.8	193.2	140.3		143.5	264.1	130.6	145.7
8(BF1)	18.7	15.1	12.3	26.7	22.5	41.6	19.9	15.9		18.1	17.1	
9(ER1)	60.9	58.5	67.9	87.6	68.3	81.5	43.4	58.7	78.7	79.6	65.3	73.0
10(ER2)	63.7	59.6	70.7	91.9	75.3	80.8	62.0	58.0	103.1	64.1	62.9	68.7
11(ATDF1)								34.3		34.8	36.7	39.0
VWIN Regional AVG	63.1	63.1	63.1	59.4			59.0	60.6	60.6	60.6	60.6	60.6

OrthoP												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	Apr-05	May-05	Jun-05
1 (WR1)			0.01	0.07	0.03	0.02	0.01	<0.02	0.02	0.03	0.05	0.05
2 (WR2)	0.17	0.08	0.10	0.05	0.03	0.01	0.01					
3(WR3)	0.11	0.07	0.02	0.05	0.02	0.04	0.01	<0.02	0.02	0.01	0.04	0.05
4(CC1)	0.17	0.16	0.01	0.04	0.03	0.07	0.02	0.05	0.04	0.10	0.06	0.20
5 (LC1)	0.25	0.14	0.06	0.13	0.03	0.11	0.02	<0.02	0.02	0.02	0.06	0.05
6 (DC1)	0.09	0.08	0.06	0.07	0.05	0.09	0.06		0.02	0.04	0.02	0.08
7(BRUF1)	0.58	0.12	0.08	0.09	0.12	0.12	0.03		0.05	0.09	0.06	0.13
8(BF1)	0.07	0.01	0.03	0.03	0.01	0.03	0.01	<0.02		0.01	<0.02	
9(ER1)	0.27	0.09	0.12	0.08	0.06	0.04	0.01	0.02	0.03	0.06	0.07	0.09
10(ER2)	0.12	0.15	0.16	0.09	0.06	0.05	0.01	0.02	0.02	0.10	0.05	0.05
11(ATDF1)								0.02	<0.02	0.04	0.05	0.02
VWIN Regional AVG	0.16	0.16	0.16	0.14			0.13	0.11	0.11	0.11	0.11	0.11

Alkalinity												
Data Station	Jun-03	Aug-03	Oct-03	Feb-04	May-04	Jul-04	Oct-04	Dec-04	Feb-05	Apr-05	May-05	Jun-05
1 (WR1)			23.2	14.0	16.0	24.0	21.0	18.0	17.0	10.0	14.8	16.0
2 (WR2)	18.0	13.8	34.6	16.0	16.0	24.0	27.0					
3(WR3)	14.0	10.0	14.4	16.0	14.0	20.0	18.0	12.0	17.0	10.0	11.6	14.0
4(CC1)	35.0	26.0	20.3	24.0	28.0	46.0	37.0	28.0	30.0	20.0	25.0	34.0
5 (LC1)	25.0	22.0	24.6	30.0	22.0	31.0	27.0	24.0	23.0	16.0	18.4	34.0
6 (DC1)	20.0	16.0	21.8	17.0	16.0	24.0	21.0		20.0	14.0	14.4	17.0
7(BRUF1)	38.0	28.0	34.2	27.0	30.0	38.0	34.0		31.0	24.0	25.8	33.0
8(BF1)	10.0	3.0	8.8	13.0	8.0	21.0	11.0	6.0		4.0	3.8	
9(ER1)	22.0	17.0	23.4	17.0	18.0	24.0	18.0	18.0	20.0	14.0	25.6	23.0
10(ER2)	26.0	18.0	25.0	20.0	18.0	30.0	22.0	20.0	23.0	14.0	6.2	20.5
11(ATDF1)								14.0	15.0	7.0	10.8	15.0
VWIN Regional AVG	22.3	22.3	22.3	21.4			21.0	22.9	22.9	22.9	22.9	22.9