

A.1 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Blackfoot River below Alice Creek (B-1)**
 Sample No.: 350101
 Date: 8/23/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	c	14
Chaetophora	d	2
Closterium	r	17
Cosmarium	o	11
Gloeocystis	o	12
Heribaudiella	f	8
Mougeotia	f	7
Nostoc	d	3
Oscillatoria	d	1
Pediastrum	o	15
Rivularia	f	9
Scenedesmus	c	13
Staurastrum	o	16
Tetraspora	c	10
Tolypothrix	a	6
Ulothrix	a	5
diatoms (all genera collectively)	a	4

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium minutissimum	108	17.22
Adlafia bryophila	2	0.32
Adlafia minuscula	2	0.32
Amphipleura pellucida	3	0.48
Caloneis bacillum	10	1.59
Caloneis silicula	2	0.32
Cocconeis placentula	5	0.8
Craticula molestiformis	1	0.16
Cyclotella meneghiniana	3	0.48
Diatoma mesodon	3	0.48
Encyonema auerswaldii	2	0.32
Encyonema minutum	5	0.8
Encyonema semilanceolatum	16	2.55
Encyonema silesiacum	3	0.48
Epithemia adnata	3	0.48
Epithemia turgida	8	1.28
Eucocconeis laevis	2	0.32
Eunotia minor	1	0.16
Fragilaria capucina	32	5.1
Fragilaria tenera	10	1.59
Fragilaria vaucheriae	4	0.64
Gomphonema innocens	3	0.48
Gomphonema micropus	1	0.16
Gomphonema minusculum	2	0.32

A.2 (Site B-1 continued)

Diatom Species	Cells Counted	Percent
Gomphonema olivaceoides	5	0.8
Gomphonema subclavatum	8	1.28
Hannaea arcus	1	0.16
Mayamaea atomus	2	0.32
Melosira varians	1	0.16
Navicula cryptocephala	6	0.96
Navicula difficillima	2	0.32
Navicula minima	71	11.32
Navicula radiosa	1	0.16
Navicula reichardtiana	2	0.32
Nitzschia archibaldii	2	0.32
Nitzschia dissipata	8	1.28
Nitzschia fossilis	2	0.32
Nitzschia hantzschiana	3	0.48
Nitzschia inconspicua	4	0.64
Nitzschia lacuum	8	1.28
Nitzschia linearis	6	0.96
Nitzschia palea	3	0.48
Nitzschia paleacea	46	7.34
Nitzschia perminuta	19	3.03
Nitzschia pura	2	0.32
Planothidium frequentissimum	35	5.58
Psammothidium marginulatum	2	0.32
Pseudostaurosira brevistriata	13	2.07
Reimeria sinuata	5	0.8
Rhopalodia gibba	5	0.8
Sellaphora pupula	2	0.32
Staurosira construens	34	5.42
Staurosirella leptostauron	25	3.99
Staurosirella pinnata	43	6.86
Surirella angusta	3	0.48
Synedra ulna	27	4.31

A.3 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Landers Fork near Lincoln (B-2)**

Sample No.: 350201

Date: 8/24/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Audouinella	d	3
Chaetophora	d	2
Microchaete	o	6
Oscillatoria	a	4
Phormidium	d	1
diatoms (all genera collectively)	f	5

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	13	2.07
Achnanthydium exiguum	1	0.16
Achnanthydium minutissimum	457	72.66
Adlafia minuscula	3	0.48
Amphipleura pellucida	2	0.32
Cocconeis placentula	6	0.95
Cymbella excisa	25	3.97
Cymbella excisiformis	1	0.16
Diatoma mesodon	2	0.32
Encyonema fogedii	2	0.32
Encyonema hebridicum	2	0.32
Encyonema minutum	3	0.48
Encyonema reichardtii	1	0.16
Encyonema silesiacum	18	2.86
Encyonopsis krammeri	20	3.18
Encyonopsis microcephala	4	0.64
Encyonopsis subminuta	3	0.48
Eucocconeis laevis	2	0.32
Fragilaria vaucheriae	2	0.32
Gomphonema innocens	5	0.79
Gomphonema micropumilum	2	0.32
Gomphonema minusculum	1	0.16
Gomphonema minutum	1	0.16
Gomphonema olivaceoides	1	0.16
Gomphonema parvulum	2	0.32
Gomphonema pumilum	1	0.16
Hannaea arcus	1	0.16
Meridion circulare	2	0.32
Navicula antonii	1	0.16
Navicula cryptotenella	2	0.32
Navicula reichardtiana	4	0.64
Navicula tripunctata	3	0.48
Nitzschia dissipata	4	0.64
Nitzschia fonticola	2	0.32
Nitzschia lacuum	13	2.07

A.4 (Site B-2 continued)

Diatom Species	Cells Counted	Percent
Nitzschia linearis	1	0.16
Nitzschia perminuta	2	0.32
Nitzschia pura	2	0.32
Nitzschia pusilla	2	0.32
Reimeria sinuata	5	0.79
Rossethidium pusillum	3	0.48
Synedra acus	1	0.16
Synedra ulna	1	0.16

A.5 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Blackfoot River at Dalton Mountain Road near Lincoln (B-3)**

Sample No.: 350301

Date: 8/24/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Audouinella	c	8
Chaetophora	f	6
Closterium	o	10
Mougeotia	c	9
Nostoc	d	1
Oscillatoria	f	7
Phormidium	o	11
Spirogyra	a	4
Ulothrix	f	5
Vaucheria	d	2
diatoms (all genera collectively)	d	3

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	1	0.16
Achnanthydium minutissimum	101	16.01
Adlafia minuscula	5	0.79
Amphipleura pellucida	15	2.38
Amphora aequalis	2	0.32
Amphora inariensis	2	0.32
Amphora libyca	2	0.32
Amphora pediculus	1	0.16
Caloneis bacillum	2	0.32
Cocconeis pediculus	3	0.48
Cocconeis placentula	41	6.5
Cyclotella distinguenda	2	0.32
Cyclotella meneghiniana	1	0.16
Cymbella diversistigmata	2	0.32
Cymbella excisa	15	2.38
Cymbella neocistula	2	0.32
Diatoma anceps	2	0.32
Diatoma moniliformis	6	0.95
Diploneis oblongella	2	0.32
Encyonema hebridicum	1	0.16
Encyonema silesiacum	11	1.74
Encyonema simile	9	1.43
Encyonopsis microcephala	2	0.32
Epithemia sorex	4	0.63
Epithemia turgida	1	0.16
Fragilaria capucina	5	0.79
Fragilaria vaucheriae	4	0.63
Geissleria acceptata	2	0.32
Gomphoneis erienne	2	0.32

A.6 (Site B-3 continued)

Diatom Species	Cells Counted	Percent
Gomphonema acuminatum	2	0.32
Gomphonema micropus	5	0.79
Gomphonema minutum	10	1.58
Gomphonema olivaceoides	1	0.16
Gomphonema parvulum	4	0.63
Gomphonema pumilum	2	0.32
Hannaea arcus	3	0.48
Melosira varians	23	3.65
Meridion circulare	2	0.32
Navicula antonii	7	1.11
Navicula capitatoradiata	7	1.11
Navicula cryptofallax	3	0.48
Navicula cryptotenella	7	1.11
Navicula lenzii	1	0.16
Navicula minima	6	0.95
Navicula parabilis	1	0.16
Navicula radiosa	3	0.48
Navicula reichardtiana	13	2.06
Navicula tripunctata	6	0.95
Navicula viridula	1	0.16
Nitzschia acidoclinata	3	0.48
Nitzschia archibaldii	4	0.63
Nitzschia dissipata	29	4.6
Nitzschia gracilis	1	0.16
Nitzschia lacuum	8	1.27
Nitzschia linearis	5	0.79
Nitzschia palea	8	1.27
Nitzschia paleacea	11	1.74
Nitzschia perminuta	1	0.16
Nitzschia recta	5	0.79
Nitzschia sublinearis	13	2.06
Pinnularia microstauron	2	0.32
Planothidium dubium	10	1.58
Planothidium frequentissimum	2	0.32
Planothidium lanceolatum	1	0.16
Pseudostaurosira brevistriata	23	3.65
Reimeria sinuata	6	0.95
Rhopalodia gibba	1	0.16
Rossethidium pusillum	2	0.32
Sellaphora laevissima	2	0.32
Staurosira construens	50	7.92
Staurosirella leptostauron	2	0.32
Staurosirella pinnata	73	11.57
Surirella angusta	4	0.63
Synedra acus	3	0.48
Synedra mazamaensis	2	0.32
Synedra ulna	5	0.79

A.7 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Blackfoot River above Nevada Creek near Helmville (B-4)**

Sample No.: 350401

Date: 8/25/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	c	14
Audouinella	o	13
Calothrix	c	12
Chaetophora	f	7
Chamaesiphon	c	15
Cladophora	f	5
Closterium	c	10
Cosmarium	d	4
Lyngbya	r	18
Microspora	f	9
Mougeotia	a	8
Nostoc	d	1
Oedogonium	r	17
Oscillatoria	c	11
Scenedesmus	r	19
Spirogyra	d	3
Staurastrum	o	16
Tolypothrix	a	6
diatoms (all genera collectively)	d	2

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	1	0.16
Achnanthydium minutissimum	44	6.82
Adlafia minuscula	1	0.16
Amphipleura pellucida	8	1.24
Amphora libyca	1	0.16
Amphora pediculus	15	2.33
Caloneis bacillum	2	0.31
Caloneis silicula	2	0.31
Cocconeis pediculus	7	1.09
Cocconeis placentula	22	3.41
Craticula acidoclinata	2	0.31
Cyclotella meneghiniana	3	0.47
Cymbella excisa	6	0.93
Diatoma mesodon	2	0.31
Diatoma moniliformis	47	7.29
Diatoma vulgare	3	0.47
Encyonema auerswaldii	2	0.31
Encyonema minutum	5	0.78
Encyonema semilanceolatum	4	0.62
Encyonema silesiacum	8	1.24
Encyonopsis krammeri	2	0.31

A.8 (Site B-4 continued)

Diatom Species	Cells Counted	Percent
Encyonopsis microcephala	2	0.31
Encyonopsis subminuta	14	2.17
Epithemia adnata	4	0.62
Epithemia sorex	66	10.23
Epithemia turgida	7	1.09
Fragilaria bicapitata	3	0.47
Fragilaria capucina	3	0.47
Fragilaria nanana	2	0.31
Geissleria decussis	3	0.47
Gomphoneis septa	11	1.71
Gomphonema micropumilum	2	0.31
Gomphonema micropus	3	0.47
Gomphonema minusculum	7	1.09
Gomphonema minutum	6	0.93
Gomphonema olivaceoides	1	0.16
Gomphonema parvulum	2	0.31
Hippodonta capitata	2	0.31
Melosira varians	12	1.86
Navicula antonii	2	0.31
Navicula capitatoradiata	20	3.1
Navicula cryptocephala	2	0.31
Navicula cryptofallax	7	1.09
Navicula cryptotenella	12	1.86
Navicula lenzii	2	0.31
Navicula radiosa	10	1.55
Navicula reichardtiana	7	1.09
Navicula subrotundata	2	0.31
Navicula tripunctata	4	0.62
Neidium dubium	1	0.16
Nitzschia angustata	2	0.31
Nitzschia archibaldii	5	0.78
Nitzschia dissipata	54	8.37
Nitzschia draveillensis	2	0.31
Nitzschia flexoides	4	0.62
Nitzschia fonticola	2	0.31
Nitzschia gracilis	5	0.78
Nitzschia lacuum	8	1.24
Nitzschia linearis	5	0.78
Nitzschia palea	7	1.09
Nitzschia paleacea	12	1.86
Nitzschia pusilla	1	0.16
Nitzschia recta	1	0.16
Nitzschia sinuata	2	0.31
Nitzschia sociabilis	1	0.16
Nitzschia sublinearis	2	0.31
Nitzschia vermicularis	2	0.31
Placoneis gastrum	2	0.31
Placoneis placentula	2	0.31
Planothidium dubium	7	1.09
Planothidium frequentissimum	4	0.62
Pseudostaurosira brevistriata	19	2.95

A.9 (Site B-4 continued)

Diatom Species	Cells Counted	Percent
Reimeria sinuata	5	0.78
Rhopalodia gibba	10	1.55
Sellaphora pupula	2	0.31
Staurosira construens	21	3.26
Staurosirella leptostauron	5	0.78
Staurosirella pinnata	25	3.88
Surirella linearis	3	0.47
Synedra acus	3	0.47
Synedra mazamaensis	4	0.62
Synedra parasitica	2	0.31
Synedra ulna	10	1.55

A.10 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Nevada Creek below Nevada Creek**

Reservoir (B-5)

Sample No.: 350501

Date: 8/25/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Audouinella	o	4
Cladophora	d	1
Coelastrum	r	6
Microspora	r	5
Oscillatoria	a	3
diatoms (all genera collectively)	d	2

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium minutissimum	4	0.64
Asterionella formosa	4	0.64
Aulacoseira granulata	53	8.53
Aulacoseira italica	3	0.48
Cocconeis pediculus	12	1.93
Cocconeis placentula	99	15.94
Craticula buderi	2	0.32
Cyclostephanos invisitatus	24	3.86
Cymbella excisa	2	0.32
Diatoma vulgare	1	0.16
Encyonema silesiacum	3	0.48
Fragilaria crotonensis	11	1.77
Fragilaria vaucheriae	3	0.48
Frustulia vulgare	1	0.16
Geissleria decussis	2	0.32
Gomphonema minutum	54	8.7
Gomphonema parvulum	11	1.77
Gomphonema pumilum	6	0.97
Hippodonta capitata	3	0.48
Melosira varians	49	7.89
Meridion circulare	2	0.32
Navicula antonii	3	0.48
Navicula capitatoradiata	58	9.34
Navicula cryptocephala	1	0.16
Navicula cryptotenella	16	2.58
Navicula oligotrappenta	2	0.32
Navicula reichardtiana	6	0.97
Navicula tripunctata	67	10.79
Nitzschia amphibia	1	0.16
Nitzschia dissipata	4	0.64
Nitzschia hantzschiana	1	0.16
Nitzschia heufleriana	4	0.64
Nitzschia linearis	1	0.16
Nitzschia palea	7	1.13

A.11 (Site B-5 continued)

Diatom Species	Cells Counted	Percent
Nitzschia paleacea	2	0.32
Nitzschia recta	1	0.16
Planothidium frequentissimum	4	0.64
Reimeria sinuata	1	0.16
Rhoicosphenia abbreviata	4	0.64
Sellaphora pupula	2	0.32
Stephanodiscus hantzschii	51	8.21
Stephanodiscus medius	2	0.32
Stephanodiscus minutulus	27	4.35
Stephanodiscus niagarae	4	0.64
Surirella minuta	1	0.16
Synedra ulna	2	0.32

A.12 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Nevada Creek near mouth (B-6)**

Sample No.: 350601

Date: 8/25/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	f	11
Audouinella	o	14
Chaetophora	c	8
Cladophora	d	1
Closterium	o	12
Coelastrum	r	17
Microchaete	o	15
Microspora	c	10
Mougeotia	c	7
Nostoc	d	5
Oedogonium	d	2
Oscillatoria	f	9
Pediastrum	r	16
Phormidium	d	4
Scenedesmus	o	13
Spirogyra	a	6
diatoms (all genera collectively)	d	3

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium exiguum	4	0.65
Achnanthydium minutissimum	64	10.37
Caloneis bacillum	8	1.3
Cocconeis pediculus	27	4.38
Cocconeis placentula	20	3.24
Craticula halophila	1	0.16
Cyclotella meneghiniana	10	1.62
Encyonema cespitosum	1	0.16
Encyonema simile	2	0.32
Epithemia adnata	8	1.3
Epithemia sorex	159	25.77
Epithemia turgida	3	0.49
Fragilaria vaucheriae	1	0.16
Gomphoneis eriense	7	1.13
Gomphonema gracile	2	0.32
Gomphonema micropumilum	3	0.49
Gomphonema micropus	2	0.32
Gomphonema minutum	19	3.08
Gomphonema olivaceum	2	0.32
Gomphonema parvulum	33	5.35
Gomphonema pumilum	18	2.92
Gomphonema subclavatum	4	0.65
Melosira varians	3	0.49
Navicula antonii	2	0.32

A.13 (Site B-6 continued)

Diatom Species	Cells Counted	Percent
<i>Navicula capitatoradiata</i>	21	3.4
<i>Navicula cryptotenella</i>	24	3.89
<i>Navicula lanceolata</i>	1	0.16
<i>Navicula minima</i>	5	0.81
<i>Navicula oligotraphenta</i>	2	0.32
<i>Navicula reichardtiana</i>	3	0.49
<i>Navicula tripunctata</i>	13	2.11
<i>Nitzschia amphibia</i>	4	0.65
<i>Nitzschia archibaldii</i>	3	0.49
<i>Nitzschia dissipata</i>	2	0.32
<i>Nitzschia flexoides</i>	2	0.32
<i>Nitzschia fonticola</i>	4	0.65
<i>Nitzschia inconspicua</i>	1	0.16
<i>Nitzschia lacuum</i>	2	0.32
<i>Nitzschia linearis</i>	1	0.16
<i>Nitzschia palea</i>	28	4.54
<i>Nitzschia paleacea</i>	24	3.89
<i>Nitzschia sigmoidea</i>	1	0.16
<i>Nitzschia solita</i>	3	0.49
<i>Planothidium dubium</i>	2	0.32
<i>Planothidium frequentissimum</i>	3	0.49
<i>Reimeria sinuata</i>	2	0.32
<i>Rhoicosphenia abbreviata</i>	15	2.43
<i>Rhopalodia gibba</i>	5	0.81
<i>Sellaphora pupula</i>	2	0.32
<i>Simonsenia delognei</i>	8	1.3
<i>Stauroneis smithii</i>	3	0.49
<i>Staurosira construens</i>	18	2.92
<i>Staurosirella leptostauron</i>	3	0.49
<i>Staurosirella pinnata</i>	1	0.16
<i>Stephanodiscus hantzschii</i>	2	0.32
<i>Surirella angusta</i>	2	0.32
<i>Surirella gracilis</i>	2	0.32
<i>Surirella minuta</i>	1	0.16
<i>Synedra ulna</i>	1	0.16

A.14 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Blackfoot River at Raymond Bridge (B-7)**
 Sample No.: 350701
 Date: 8/26/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Asterocystis	r	14
Audouinella	r	13
Calothrix	c	11
Chaetophora	c	9
Cladophora	o	7
Closterium	c	8
Coelastrum	r	16
Cosmarium	a	6
Mougeotia	f	5
Nostoc	d	1
Oscillatoria	c	10
Phormidium	c	12
Scenedesmus	o	17
Spirogyra	d	2
Stigeoclonium	r	15
Tolypothrix	d	3
diatoms (all genera collectively)	d	4

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthes hintzii	2	0.32
Achnantheidium minutissimum	22	3.48
Adlafia bryophila	8	1.26
Amphipleura pellucida	10	1.58
Amphora inariensis	2	0.32
Amphora montana	2	0.32
Amphora pediculus	5	0.79
Caloneis bacillum	2	0.32
Cocconeis pediculus	5	0.79
Cocconeis placentula	59	9.32
Cyclotella meneghiniana	3	0.47
Diatoma moniliformis	14	2.21
Diatoma vulgare	8	1.26
Encyonema silesiacum	1	0.16
Encyonopsis subminuta	3	0.47
Epithemia adnata	4	0.63
Epithemia sores	155	24.49
Epithemia turgida	3	0.47
Fragilaria vaucheriae	3	0.47
Frustulia amphipleuroides	1	0.16
Geissleria acceptata	1	0.16
Gomphoneis erienne	9	1.42
Gomphoneis septa	2	0.32
Gomphonema minutum	10	1.58

A.15 (Site B-7 continued)

Diatom Species	Cells Counted	Percent
Gomphonema parvulum	6	0.95
Gomphonema pumilum	10	1.58
Gomphonema subclavatum	3	0.47
Gomphonema truncatum	1	0.16
Hannaea arcus	1	0.16
Hippodonta lueneburgensis	1	0.16
Karayevia laterostrata	2	0.32
Melosira varians	10	1.58
Navicula antonii	1	0.16
Navicula capitatoradiata	14	2.21
Navicula cryptocephala	2	0.32
Navicula cryptotenella	37	5.85
Navicula minima	2	0.32
Navicula reichardtiana	5	0.79
Navicula tripunctata	7	1.11
Navicula viridulacalcis	1	0.16
Nitzschia acicularis	2	0.32
Nitzschia acidoclinata	7	1.11
Nitzschia amphibia	2	0.32
Nitzschia angustata	1	0.16
Nitzschia archibaldii	20	3.16
Nitzschia dissipata	16	2.53
Nitzschia draveillensis	4	0.63
Nitzschia hantzschiana	2	0.32
Nitzschia heufleriana	1	0.16
Nitzschia inconspicua	4	0.63
Nitzschia liebetruthii	1	0.16
Nitzschia linearis	1	0.16
Nitzschia modesta	2	0.32
Nitzschia palea	9	1.42
Nitzschia paleacea	43	6.79
Nitzschia recta	2	0.32
Nitzschia sociabilis	1	0.16
Placoneis gastrum	1	0.16
Placoneis pseudanglica	1	0.16
Planothidium dubium	2	0.32
Planothidium frequentissimum	2	0.32
Planothidium hauckianum	2	0.32
Planothidium lanceolatum	2	0.32
Psammothidium levanderi	2	0.32
Reimeria sinuata	7	1.11
Rhoicosphenia abbreviata	4	0.63
Rhopalodia gibba	6	0.95
Sellaphora pupula	2	0.32
Simonsenia delognei	5	0.79
Stauroneis smithii	1	0.16
Stausosira construens	8	1.26
Stausosirella leptostauron	3	0.47
Stausosirella pinnata	8	1.26
Stephanodiscus hantzschii	3	0.47
Stephanodiscus minutulus	1	0.16

A.16 (Site B-7 continued)

Diatom Species	Cells Counted	Percent
Suirella minuta	2	0.32
Synedra acus	3	0.47
Synedra parasitica	1	0.16
Synedra ulna	12	1.9

A.17 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **North Fork Blackfoot River above Dry Gulch (B-8)**
 Sample No.: 350801
 Date: 8/26/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	f	6
Closterium	c	7
Merismopedia	o	13
Mougeotia	a	3
Oedogonium	c	5
Protoderma	c	8
Scenedesmus	c	9
Spirogyra	a	4
Staurastrum	o	11
Stigeoclonium	o	10
Ulothrix	r	12
Zygnema	d	2
diatoms (all genera collectively)	d	1

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthyrium deflexum	25	3.99
Achnanthyrium minutissimum	219	34.93
Adlafia minuscula	2	0.32
Amphora pediculus	2	0.32
Brachysira vitrea	6	0.96
Cocconeis placentula	5	0.8
Cyclotella distinguenda	4	0.64
Cymbella cymbiformis	2	0.32
Cymbella excisa	2	0.32
Cymbella vulgata	2	0.32
Denticula kuetzingii	3	0.48
Denticula tenuis	14	2.23
Diatoma mesodon	2	0.32
Diatoma moniliformis	6	0.96
Diatoma tenuis	9	1.44
Diatoma vulgaris	1	0.16
Didymosphenia geminata	4	0.64
Encyonema minutum	2	0.32
Encyonema silesiacum	20	3.19
Encyonema simile	3	0.48
Encyonema ventricosum	2	0.32
Encyonopsis cesatiformis	4	0.64
Encyonopsis cesatii	4	0.64
Encyonopsis descripta	5	0.8
Encyonopsis falaisensis	4	0.64
Encyonopsis microcephala	5	0.8
Encyonopsis subminuta	42	6.7
Eucocconeis laevis	3	0.48

A.18 (Site B-8 continued)

Diatom Species	Cells Counted	Percent
<i>Fragilaria capucina</i>	24	3.83
<i>Fragilaria incognita</i>	19	3.03
<i>Fragilaria nanana</i>	4	0.64
<i>Fragilaria tenera</i>	9	1.44
<i>Fragilaria vaucheriae</i>	14	2.23
<i>Gomphonema minusculum</i>	4	0.64
<i>Gomphonema olivaceoides</i>	2	0.32
<i>Gomphonema olivaceum</i>	2	0.32
<i>Gomphonema pumilum</i>	2	0.32
<i>Hannaea arcus</i>	3	0.48
<i>Karayevia clevei</i>	1	0.16
<i>Navicula aquaedurae</i>	2	0.32
<i>Navicula capitatoradiata</i>	3	0.48
<i>Navicula cryptotenella</i>	6	0.96
<i>Navicula krammerae</i>	2	0.32
<i>Navicula minima</i>	2	0.32
<i>Navicula moskalii</i>	2	0.32
<i>Navicula reichardtiana</i>	2	0.32
<i>Navicula stroemii</i>	3	0.48
<i>Nitzschia acicularis</i>	2	0.32
<i>Nitzschia alpinobacillum</i>	2	0.32
<i>Nitzschia angustata</i>	4	0.64
<i>Nitzschia bacillum</i>	2	0.32
<i>Nitzschia bryophila</i>	1	0.16
<i>Nitzschia dissipata</i>	11	1.75
<i>Nitzschia draveillensis</i>	2	0.32
<i>Nitzschia fonticola</i>	4	0.64
<i>Nitzschia gracilis</i>	2	0.32
<i>Nitzschia lacuum</i>	10	1.59
<i>Nitzschia linearis</i>	1	0.16
<i>Nitzschia perminuta</i>	4	0.64
<i>Nitzschia pura</i>	5	0.8
<i>Pseudostaurosira brevistriata</i>	21	3.35
<i>Reimeria sinuata</i>	5	0.8
<i>Sellaphora bacillum</i>	2	0.32
<i>Staurosira construens</i>	15	2.39
<i>Staurosirella leptostauron</i>	1	0.16
<i>Staurosirella pinnata</i>	17	2.71
<i>Synedra acus</i>	3	0.48
<i>Synedra ulna</i>	5	0.8

A.19 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Monture Creek near Ovando (B-9)**

Sample No.: 350901

Date: 8/27/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	c	10
Audouinella	r	13
Cladophora	o	8
Closterium	o	9
Cosmarium	o	11
Mougeotia	f	4
Oedogonium	d	2
Oscillatoria	d	1
Pediastrum	r	12
Sorastrum	r	14
Spirogyra	f	5
Staurastrum	a	6
Ulothrix	c	7
diatoms (all genera collectively)	d	3

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	7	1.09
Achnanthydium minutissimum	108	16.82
Achnanthydium rivulare	6	0.93
Amphipleura pellucida	5	0.78
Amphora inariensis	2	0.31
Amphora pediculus	3	0.47
Aulacoseira alpigena	1	0.16
Cocconeis pediculus	10	1.56
Cocconeis placentula	7	1.09
Cymbella excisa	37	5.76
Cymbella neocistula	2	0.31
Diatoma mesodon	1	0.16
Diatoma vulgare	4	0.62
Didymosphenia geminata	2	0.31
Encyonema minutum	31	4.83
Encyonema silesiacum	214	33.33
Encyonopsis subminuta	17	2.65
Eucocconeis laevis	2	0.31
Fragilaria capucina	26	4.05
Fragilaria vaucheriae	27	4.21
Geissleria acceptata	2	0.31
Gomphonema clavatum	2	0.31
Gomphonema minutum	10	1.56
Gomphonema olivaceoides	7	1.09
Gomphonema olivaceum	3	0.47
Gomphonema parvulum	3	0.47
Hannaea arcus	2	0.31

A.20 (Site B-9 continued)

Diatom Species	Cells Counted	Percent
Hippodonta capitata	1	0.16
Navicula antonii	3	0.47
Navicula capitatoradiata	3	0.47
Navicula cryptocephala	3	0.47
Navicula cryptotenella	3	0.47
Navicula gregaria	1	0.16
Navicula radiosa	3	0.47
Navicula reichardtiana	2	0.31
Navicula tripunctata	4	0.62
Neidium binodeformis	2	0.31
Nitzschia acidoclinata	2	0.31
Nitzschia alpinobacillum	2	0.31
Nitzschia bacilliformis	1	0.16
Nitzschia bryophila	4	0.62
Nitzschia dissipata	7	1.09
Nitzschia gracilis	1	0.16
Nitzschia heufleriana	2	0.31
Nitzschia lacuum	2	0.31
Nitzschia palea	2	0.31
Nitzschia paleacea	2	0.31
Nitzschia pura	6	0.93
Nitzschia recta	1	0.16
Nitzschia sublinearis	1	0.16
Planothidium dubium	7	1.09
Planothidium frequentissimum	2	0.31
Planothidium lanceolatum	3	0.47
Reimeria sinuata	7	1.09
Staurosira construens	9	1.4
Staurosirella leptostauron	1	0.16
Staurosirella pinnata	2	0.31
Synedra acus	1	0.16
Synedra ulna	11	1.71

A.21 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Blackfoot River at Scotty Brown Bridge (B-10)**
 Sample No.: 351001
 Date: 8/27/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	c	11
Asterocystis	o	14
Audouinella	o	15
Calothrix	c	10
Chaetophora	f	5
Closterium	f	7
Coelastrum	r	19
Cosmarium	a	4
Merismopedia	o	18
Mougeotia	f	8
Oedogonium	c	9
Oscillatoria	d	1
Pediastrum	o	13
Phormidium	c	12
Scenedesmus	a	6
Staurastrum	o	16
Tolypothrix	r	17
Ulothrix	a	3
diatoms (all genera collectively)	d	2

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	25	3.92
Achnanthydium minutissimum	168	26.37
Achnanthydium rivulare	8	1.26
Adlafia bryophila	3	0.47
Adlafia suchlandtii	2	0.31
Amphipleura pellucida	5	0.78
Amphora inariensis	2	0.31
Amphora pediculus	6	0.94
Cocconeis pediculus	2	0.31
Cocconeis placentula	14	2.2
Cyclotella distinguenda	1	0.16
Cymbella excisa	30	4.71
Denticula tenuis	2	0.31
Diatoma moniliformis	62	9.73
Diatoma vulgare	1	0.16
Didymosphenia geminata	3	0.47
Encyonema auerswaldii	2	0.31
Encyonema cespitosum	2	0.31
Encyonema kamtschaticum	2	0.31
Encyonema minutum	4	0.63
Encyonema silesiacum	19	2.98
Encyonema simile	2	0.31

A.22 (Site B-10 continued)

Diatom Species	Cells Counted	Percent
<i>Encyonopsis cesatii</i>	1	0.16
<i>Encyonopsis microcephala</i>	4	0.63
<i>Encyonopsis subminuta</i>	51	8.01
<i>Epithemia adnata</i>	2	0.31
<i>Epithemia sorex</i>	8	1.26
<i>Epithemia turgida</i>	1	0.16
<i>Fragilaria capucina</i>	22	3.45
<i>Fragilaria incognita</i>	2	0.31
<i>Fragilaria vaucheriae</i>	8	1.26
<i>Geissleria paludosa</i>	2	0.31
<i>Gomphoneis eriense</i>	2	0.31
<i>Gomphoneis minuta</i>	3	0.47
<i>Gomphonema clavatum</i>	1	0.16
<i>Gomphonema minusculum</i>	9	1.41
<i>Gomphonema minutum</i>	4	0.63
<i>Gomphonema olivaceum</i>	3	0.47
<i>Gomphonema parvulum</i>	4	0.63
<i>Hannaea arcus</i>	1	0.16
<i>Melosira varians</i>	2	0.31
<i>Navicula antonii</i>	1	0.16
<i>Navicula capitatoradiata</i>	5	0.78
<i>Navicula cryptotenella</i>	17	2.67
<i>Navicula radiosa</i>	1	0.16
<i>Navicula reichardtiana</i>	7	1.1
<i>Navicula schmassmannii</i>	2	0.31
<i>Navicula tripunctata</i>	7	1.1
<i>Nitzschia acidoclinata</i>	2	0.31
<i>Nitzschia bryophila</i>	2	0.31
<i>Nitzschia dissipata</i>	8	1.26
<i>Nitzschia fonticola</i>	2	0.31
<i>Nitzschia hantzschiana</i>	2	0.31
<i>Nitzschia lacuum</i>	22	3.45
<i>Nitzschia palea</i>	3	0.47
<i>Placoneis exigua</i>	2	0.31
<i>Planothidium frequentissimum</i>	2	0.31
<i>Pseudostaurosira brevistriata</i>	7	1.1
<i>Reimeria sinuata</i>	3	0.47
<i>Rhopalodia gibba</i>	2	0.31
<i>Sellaphora pupula</i>	4	0.63
<i>Staurosira construens</i>	18	2.83
<i>Staurosirella pinnata</i>	10	1.57
<i>Surirella minuta</i>	1	0.16
<i>Synedra acus</i>	1	0.16
<i>Synedra mazamaensis</i>	1	0.16
<i>Synedra nana</i>	4	0.63
<i>Synedra ulna</i>	6	0.94

A.23 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Clearwater River at Clearwater (B-11)**
 Sample No.: 351101
 Date: 8/27/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	o	14
Audouinella	r	16
Calothrix	a	2
Chaetophora	a	1
Heribaudiella	f	5
Microchaete	c	11
Mougeotia	r	15
Oedogonium	o	9
Oscillatoria	o	13
Pediastrum	o	12
Phormidium	c	8
Protoderma	o	10
Rivularia	a	4
Scenedesmus	c	7
Stigeoclonium	c	6
diatoms (all genera collectively)	a	3

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	8	1.25
Achnanthydium minutissimum	37	5.77
Amphipleura pellucida	1	0.16
Amphora pediculus	18	2.81
Aulacoseira granulata	6	0.94
Caloneis bacillum	3	0.47
Cocconeis pediculus	1	0.16
Cocconeis placentula	98	15.29
Cyclotella meneghiniana	1	0.16
Cymbella excisa	21	3.28
Cymbella perparva	14	2.18
Cymbella vulgata	2	0.31
Encyonema minutum	2	0.31
Encyonema silesiacum	5	0.78
Encyonopsis microcephala	3	0.47
Encyonopsis subminuta	6	0.94
Epithemia sorex	3	0.47
Epithemia turgida	5	0.78
Eucocconeis laevis	1	0.16
Fragilaria capucina	13	2.03
Fragilaria crotonensis	3	0.47
Fragilaria vaucheriae	1	0.16
Geissleria acceptata	1	0.16
Geissleria paludosa	1	0.16
Gomphoneis minuta	54	8.42

A.24 (Site B-11 continued)

Diatom Species	Cells Counted	Percent
Gomphonema augur	2	0.31
Gomphonema gracile	4	0.62
Gomphonema micropumilum	4	0.62
Gomphonema minusculum	16	2.5
Gomphonema minutum	11	1.72
Gomphonema parvulum	2	0.31
Gomphonema pumilum	34	5.3
Gomphonema rhombicum	83	12.95
Gomphonema subclavatum	15	2.34
Gomphonema truncatum	2	0.31
Karayevia clevei	2	0.31
Melosira varians	3	0.47
Navicula capitatoradiata	7	1.09
Navicula cryptocephala	1	0.16
Navicula cryptotenella	38	5.93
Navicula minima	4	0.62
Navicula radiosa	6	0.94
Navicula tripunctata	4	0.62
Nitzschia acicularis	2	0.31
Nitzschia acidoclinata	14	2.18
Nitzschia archibaldii	9	1.4
Nitzschia dissipata	7	1.09
Nitzschia graciliformis	1	0.16
Nitzschia incognita	3	0.47
Nitzschia inconspicua	2	0.31
Nitzschia palea	3	0.47
Nitzschia paleacea	4	0.62
Placoneis elginensis	2	0.31
Planothidium minutissimum	2	0.31
Reimeria sinuata	7	1.09
Rhoicosphenia abbreviata	1	0.16
Rossithidium pusillum	4	0.62
Staurosira construens	7	1.09
Staurosirella pinnata	4	0.62
Synedra acus	5	0.78
Synedra ulna	18	2.81

A.25 Taxonomic and abundance data for soft-bodied and diatom algae from the Blackfoot River and tributaries, August 2004

Location (Site No.): **Blackfoot River near Bonner (B-12)**
 Sample No.: 351201
 Date: 8/27/2004

Soft-Bodied Algae Genera	Estimated Abundance¹	Estimated Biovolume Rank
Ankistrodesmus	c	18
Asterocystis	o	16
Audouinella	r	21
Bulbochaete	c	14
Calothrix	f	10
Chaetophora	f	8
Closterium	c	12
Coelastrum	o	19
Cosmarium	f	9
Heribaudiella	a	6
Mougeotia	d	2
Oedogonium	a	7
Oscillatoria	d	3
Pediastrum	c	13
Rivularia	c	15
Scenedesmus	a	11
Sorastrum	r	23
Spirogyra	d	1
Staurastrum	r	22
Stigeoclonium	r	20
Tolypothrix	o	17
Ulothrix	a	5
diatoms (all genera collectively)	d	4

¹r = rare; o = occasional; c = common; f = frequent; a = abundant; d = dominant

Diatom Species	Cells Counted	Percent
Achnanthydium deflexum	12	1.88
Achnanthydium minutissimum	59	9.23
Adlafia bryophila	3	0.47
Amphipleura pellucida	7	1.1
Amphora pediculus	15	2.35
Caloneis bacillum	1	0.16
Cocconeis pediculus	5	0.78
Cocconeis placentula	12	1.88
Cyclotella meneghiniana	2	0.31
Cymbella excisa	61	9.55
Cymbella mexicana	2	0.31
Cymbella neocistula	2	0.31
Diatoma moniliformis	158	24.73
Diatoma vulgare	1	0.16
Diploneis elliptica	1	0.16
Encyonema auerswaldii	2	0.31
Encyonema cespitosum	6	0.94
Encyonema minutum	7	1.1

A.26 (Site B-12 continued)

Diatom Species	Cells Counted	Percent
<i>Encyonema silesiacum</i>	11	1.72
<i>Encyonopsis microcephala</i>	5	0.78
<i>Encyonopsis subminuta</i>	57	8.92
<i>Epithemia adnata</i>	3	0.47
<i>Epithemia sorex</i>	9	1.41
<i>Epithemia turgida</i>	1	0.16
<i>Fragilaria capucina</i>	14	2.19
<i>Gomphoneis erienne</i>	2	0.31
<i>Gomphoneis minuta</i>	10	1.56
<i>Gomphonema micropumilum</i>	4	0.63
<i>Gomphonema minusculum</i>	5	0.78
<i>Gomphonema minutum</i>	16	2.5
<i>Gomphonema olivaceoides</i>	2	0.31
<i>Gomphonema olivaceum</i>	2	0.31
<i>Gomphonema pumilum</i>	8	1.25
<i>Gomphonema rhombicum</i>	5	0.78
<i>Gomphonema subclavatum</i>	6	0.94
<i>Gomphonema truncatum</i>	2	0.31
<i>Karayevia laterostrata</i>	2	0.31
<i>Navicula antonii</i>	2	0.31
<i>Navicula capitatoradiata</i>	5	0.78
<i>Navicula cryptotenella</i>	13	2.03
<i>Navicula radiosa</i>	2	0.31
<i>Navicula reichardtiana</i>	6	0.94
<i>Navicula tripunctata</i>	3	0.47
<i>Nitzschia acidoclinata</i>	4	0.63
<i>Nitzschia bacillum</i>	1	0.16
<i>Nitzschia dissipata</i>	7	1.1
<i>Nitzschia fonticola</i>	3	0.47
<i>Nitzschia hantzschiana</i>	2	0.31
<i>Nitzschia inconspicua</i>	3	0.47
<i>Nitzschia lacuum</i>	8	1.25
<i>Nitzschia palea</i>	1	0.16
<i>Nitzschia sublinearis</i>	2	0.31
<i>Planothidium lanceolatum</i>	3	0.47
<i>Reimeria sinuata</i>	3	0.47
<i>Rossethidium pusillum</i>	2	0.31
<i>Sellaphora pupula</i>	2	0.31
<i>Staurosira construens</i>	20	3.13
<i>Staurosirella leptostauron</i>	6	0.94
<i>Staurosirella pinnata</i>	6	0.94
<i>Synedra acus</i>	5	0.78
<i>Synedra mazamaensis</i>	2	0.31
<i>Synedra parasitica</i>	1	0.16
<i>Synedra ulna</i>	7	1.1

B.1 Diatom association metrics and diatom species ecological attributes, Blackfoot River and tributaries, August 2004. Metrics and values determined by *Hannaea*, Helena, MT.

Location (Site No.): Blackfoot River below Alice Creek (B-1)			
Sample No.: 350101			
Date: 8/23/2004			
Sample	Metric	Category	Value
350101	Valves Counted	--	627
350101	Cells Counted	--	313.5
350101	Total Number of Species	--	56
350101	Total Number of Species Counted	--	56
350101	Percent Dominant Species	--	17.22
350101	Shannon's Diversity Index	--	4.6
350101	Pollution Index	--	2.4
350101	Pollution Tolerance (% by Category)	Sensitive	52.95
350101	Pollution Tolerance (% by Category)	Tolerant	34.45
350101	Pollution Tolerance (% by Category)	Most Tolerant	12.6
350101	Siltation Index	--	30.46
350101	Disturbance Index	--	17.22
350101	Stability Index	--	30.62
350101	Percent Rhopalodiales	--	2.55
350101	Percent Aerophiles	--	16.27
350101	Percent Centrics	--	0.64
350101	Heavy Metals Index	--	31.58
350101	Motility (% by Category)	Moderately Motile	20.26
350101	Motility (% by Category)	Not Motile	58.53
350101	Motility (% by Category)	Variable Motility	1.75
350101	Motility (% by Category)	Highly Motile	16.91
350101	pH (% by Category)	Circumneutral	30.3
350101	pH (% by Category)	Alkalibiontic	2.55
350101	pH (% by Category)	Acidophilous	2.39
350101	pH (% by Category)	Acidobiontic	0
350101	pH (% by Category)	Not Classified	9.57
350101	pH (% by Category)	Alkaliphilous	55.18
350101	pH (% by Category)	Indifferent	0
350101	Salinity (% by Category)	Fresh	77.03
350101	Salinity (% by Category)	Marine	0
350101	Salinity (% by Category)	Brackish-fresh	8.93
350101	Salinity (% by Category)	Very Fresh	5.1
350101	Salinity (% by Category)	Not Classified	8.93
350101	Salinity (% by Category)	Brackish	0
350101	Nitrogen Uptake (% by Category)	Not Classified	16.11
350101	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	25.84
350101	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	37.16
350101	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	12.76
350101	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	8.13
350101	Oxygen Demand (% by Category)	Moderate	17.22
350101	Oxygen Demand (% by Category)	Low	11.96
350101	Oxygen Demand (% by Category)	Not Classified	15.79
350101	Oxygen Demand (% by Category)	Continuously High	46.73
350101	Oxygen Demand (% by Category)	Very Low	0.48
350101	Oxygen Demand (% by Category)	Fairly High	7.81

B.2 (Site B-1 continued)

Sample	Metric	Category	Value
350101	Saprobity (% by Category)	alpha-Mesosaprobous	11.96
350101	Saprobity (% by Category)	Not Classified	9.25
350101	Saprobity (% by Category)	Polysaprobous	0.48
350101	Saprobity (% by Category)	Oligosaprobous	15.63
350101	Saprobity (% by Category)	beta-Mesosaprobous	45.61
350101	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	17.07
350101	Trophic State (% by Category)	Mesotraphentic	8.61
350101	Trophic State (% by Category)	Dystrophic	0
350101	Trophic State (% by Category)	Variable	33.01
350101	Trophic State (% by Category)	Hypereutraphentic	0.8
350101	Trophic State (% by Category)	Meso-eutraphentic	15.79
350101	Trophic State (% by Category)	Oligo-mesotraphentic	7.5
350101	Trophic State (% by Category)	Oligotraphentic	0.96
350101	Trophic State (% by Category)	Not Classified	10.05
350101	Trophic State (% by Category)	Eutraphentic	23.29
350101	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	25.52
350101	Moisture (% by Category)	Not Classified	16.59
350101	Moisture (% by Category)	Exclusively Outside Waterbodies	0.32
350101	Moisture (% by Category)	Rarely Outside Waterbodies	7.02
350101	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	48.96
350101	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	1.59
350101	Similarity Index	Reference Sample ID: 350301	45.46

Location (Site No.): **Landers Fork near Lincoln (B-2)**

Sample No.: 350201

Date: 8/24/2004

Sample	Metric	Category	Value
350201	Valves Counted	--	629
350201	Cells Counted	--	314.5
350201	Total Number of Species	--	43
350201	Total Number of Species Counted	--	43
350201	Percent Dominant Species	--	72.66
350201	Shannon's Diversity Index	--	2.1
350201	Pollution Index	--	2.92
350201	Pollution Tolerance (% by Category)	Tolerant	6.68
350201	Pollution Tolerance (% by Category)	Sensitive	92.69
350201	Pollution Tolerance (% by Category)	Most Tolerant	0.64
350201	Siltation Index	--	5.72
350201	Disturbance Index	--	72.66
350201	Stability Index	--	1.11
350201	Percent Rhopalodiales	--	0
350201	Percent Aerophiles	--	0.32
350201	Percent Centrics	--	0
350201	Heavy Metals Index	--	4.61
350201	Motility (% by Category)	Variable Motility	12.56
350201	Motility (% by Category)	Highly Motile	4.13
350201	Motility (% by Category)	Moderately Motile	3.18
350201	Motility (% by Category)	Not Motile	80.13
350201	pH (% by Category)	Alkalibiontic	0
350201	pH (% by Category)	Indifferent	0
350201	pH (% by Category)	Acidophilous	0.32

B.3 (Site B-2 continued)

Sample	Metric	Category	Value
350201	pH (% by Category)	Acidobiontic	0
350201	pH (% by Category)	Not Classified	6.04
350201	pH (% by Category)	Alkaliphilous	14.79
350201	pH (% by Category)	Circumneutral	78.86
350201	Salinity (% by Category)	Brackish	0
350201	Salinity (% by Category)	Not Classified	5.56
350201	Salinity (% by Category)	Very Fresh	1.59
350201	Salinity (% by Category)	Fresh	92.53
350201	Salinity (% by Category)	Marine	0
350201	Salinity (% by Category)	Brackish-fresh	0.32
350201	Nitrogen Uptake (% by Category)	Not Classified	9.86
350201	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	8.59
350201	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	81.24
350201	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	0.32
350201	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	0
350201	Oxygen Demand (% by Category)	Moderate	4.77
350201	Oxygen Demand (% by Category)	Low	0.32
350201	Oxygen Demand (% by Category)	Fairly High	2.7
350201	Oxygen Demand (% by Category)	Continuously High	82.35
350201	Oxygen Demand (% by Category)	Not Classified	9.86
350201	Oxygen Demand (% by Category)	Very Low	0
350201	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	0.79
350201	Saprobity (% by Category)	beta-Mesosaprobous	81.88
350201	Saprobity (% by Category)	Polysaprobous	0
350201	Saprobity (% by Category)	Oligosaprobous	5.09
350201	Saprobity (% by Category)	Not Classified	7.79
350201	Saprobity (% by Category)	alpha-Mesosaprobous	4.45
350201	Trophic State (% by Category)	Mesotraphentic	5.41
350201	Trophic State (% by Category)	Variable	77.42
350201	Trophic State (% by Category)	Hypereutraphentic	0
350201	Trophic State (% by Category)	Dystrophic	0
350201	Trophic State (% by Category)	Oligo-mesotraphentic	0.79
350201	Trophic State (% by Category)	Oligotraphentic	1.59
350201	Trophic State (% by Category)	Not Classified	6.52
350201	Trophic State (% by Category)	Meso-eutraphentic	1.75
350201	Trophic State (% by Category)	Eutraphentic	6.52
350201	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350201	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.48
350201	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	77.27
350201	Moisture (% by Category)	Rarely Outside Waterbodies	3.97
350201	Moisture (% by Category)	Not Classified	11.61
350201	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	6.68
350201	Similarity Index	Reference Sample ID: 350101	25.5

Location (Site No.): **Blackfoot River at Dalton Mountain Road near Lincoln (B-3)**

Sample No.: 350301

Date: 8/24/2004

Sample	Metric	Category	Value
350301	Valves Counted	--	631
350301	Cells Counted	--	315.5
350301	Total Number of Species	--	76

B.4 (Site B-3 continued)

Sample	Metric	Category	Value
350301	Total Number of Species Counted	--	76
350301	Percent Dominant Species	--	16.01
350301	Shannon's Diversity Index	--	5.01
350301	Pollution Index	--	2.64
350301	Pollution Tolerance (% by Category)	Sensitive	67.19
350301	Pollution Tolerance (% by Category)	Tolerant	29.32
350301	Pollution Tolerance (% by Category)	Most Tolerant	3.49
350301	Siltation Index	--	23.93
350301	Disturbance Index	--	16.01
350301	Stability Index	--	28.21
350301	Percent Rhopalodiales	--	0.95
350301	Percent Aerophiles	--	4.28
350301	Percent Centrics	--	4.12
350301	Heavy Metals Index	--	11.73
350301	Motility (% by Category)	Moderately Motile	16.48
350301	Motility (% by Category)	Not Motile	62.28
350301	Motility (% by Category)	Variable Motility	6.66
350301	Motility (% by Category)	Highly Motile	14.58
350301	pH (% by Category)	Circumneutral	25.83
350301	pH (% by Category)	Alkalibiontic	0.95
350301	pH (% by Category)	Acidophilous	0.16
350301	pH (% by Category)	Acidobiontic	0
350301	pH (% by Category)	Not Classified	8.56
350301	pH (% by Category)	Alkaliphilous	64.5
350301	pH (% by Category)	Indifferent	0
350301	Salinity (% by Category)	Fresh	85.1
350301	Salinity (% by Category)	Marine	0
350301	Salinity (% by Category)	Brackish-fresh	4.6
350301	Salinity (% by Category)	Very Fresh	2.69
350301	Salinity (% by Category)	Not Classified	7.61
350301	Salinity (% by Category)	Brackish	0
350301	Nitrogen Uptake (% by Category)	Not Classified	16.8
350301	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	19.65
350301	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	55.15
350301	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	5.39
350301	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	3.01
350301	Oxygen Demand (% by Category)	Moderate	17.75
350301	Oxygen Demand (% by Category)	Low	2.85
350301	Oxygen Demand (% by Category)	Not Classified	16.01
350301	Oxygen Demand (% by Category)	Continuously High	47.7
350301	Oxygen Demand (% by Category)	Very Low	0.16
350301	Oxygen Demand (% by Category)	Fairly High	15.53
350301	Saprobity (% by Category)	alpha-Mesosaprobous	12.68
350301	Saprobity (% by Category)	Not Classified	8.72
350301	Saprobity (% by Category)	Polysaprobous	1.27
350301	Saprobity (% by Category)	Oligosaprobous	7.92
350301	Saprobity (% by Category)	beta-Mesosaprobous	64.5
350301	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	4.91
350301	Trophic State (% by Category)	Mesotraphentic	4.6
350301	Trophic State (% by Category)	Dystrophic	0

B.5 (Site B-3 continued)

Sample	Metric	Category	Value
350301	Trophic State (% by Category)	Variable	36.61
350301	Trophic State (% by Category)	Hypereutraphentic	1.27
350301	Trophic State (% by Category)	Meso-eutraphentic	14.9
350301	Trophic State (% by Category)	Oligo-mesotraphentic	2.69
350301	Trophic State (% by Category)	Oligotraphentic	1.58
350301	Trophic State (% by Category)	Not Classified	11.09
350301	Trophic State (% by Category)	Eutraphentic	27.26
350301	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	25.67
350301	Moisture (% by Category)	Not Classified	16.32
350301	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350301	Moisture (% by Category)	Rarely Outside Waterbodies	14.26
350301	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	42.31
350301	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	1.43
350301	Similarity Index	Reference Sample ID: 350401	51.8

Location (Site No.): **Blackfoot River above Nevada Creek near Helmsville (B-4)**

Sample No.: 350401

Date: 8/25/2004

Sample	Metric	Category	Value
350401	Valves Counted	--	645
350401	Cells Counted	--	322.5
350401	Total Number of Species	--	83
350401	Total Number of Species Counted	--	83
350401	Percent Dominant Species	--	10.23
350401	Shannon's Diversity Index	--	5.44
350401	Pollution Index	--	2.61
350401	Pollution Tolerance (% by Category)	Sensitive	62.33
350401	Pollution Tolerance (% by Category)	Tolerant	36.12
350401	Pollution Tolerance (% by Category)	Most Tolerant	1.55
350401	Siltation Index	--	30.85
350401	Disturbance Index	--	6.82
350401	Stability Index	--	23.1
350401	Percent Rhopalodiales	--	13.49
350401	Percent Aerophiles	--	13.18
350401	Percent Centrics	--	2.33
350401	Heavy Metals Index	--	8.53
350401	Motility (% by Category)	Moderately Motile	31.47
350401	Motility (% by Category)	Not Motile	43.57
350401	Motility (% by Category)	Variable Motility	6.05
350401	Motility (% by Category)	Highly Motile	18.29
350401	pH (% by Category)	Circumneutral	18.6
350401	pH (% by Category)	Alkalibiontic	13.95
350401	pH (% by Category)	Acidophilous	0
350401	pH (% by Category)	Acidobiontic	0
350401	pH (% by Category)	Not Classified	11.47
350401	pH (% by Category)	Alkaliphilous	55.97
350401	pH (% by Category)	Indifferent	0
350401	Salinity (% by Category)	Fresh	75.5
350401	Salinity (% by Category)	Marine	0
350401	Salinity (% by Category)	Brackish-fresh	11.94
350401	Salinity (% by Category)	Very Fresh	1.71

B.6 (Site B-4 continued)

Sample	Metric	Category	Value
350401	Salinity (% by Category)	Not Classified	10.85
350401	Salinity (% by Category)	Brackish	0
350401	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	2.95
350401	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	49.46
350401	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	26.36
350401	Nitrogen Uptake (% by Category)	Not Classified	18.6
350401	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	2.64
350401	Oxygen Demand (% by Category)	Continuously High	23.57
350401	Oxygen Demand (% by Category)	Fairly High	33.02
350401	Oxygen Demand (% by Category)	Moderate	23.57
350401	Oxygen Demand (% by Category)	Low	1.4
350401	Oxygen Demand (% by Category)	Very Low	0.47
350401	Oxygen Demand (% by Category)	Not Classified	17.98
350401	Saprobity (% by Category)	alpha-Mesosaprobous	18.91
350401	Saprobity (% by Category)	Polysaprobous	1.09
350401	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	3.57
350401	Saprobity (% by Category)	beta-Mesosaprobous	57.36
350401	Saprobity (% by Category)	Oligosaprobous	7.75
350401	Saprobity (% by Category)	Not Classified	11.32
350401	Trophic State (% by Category)	Dystrophic	0
350401	Trophic State (% by Category)	Variable	20.78
350401	Trophic State (% by Category)	Hypereutraphentic	1.09
350401	Trophic State (% by Category)	Eutraphentic	39.22
350401	Trophic State (% by Category)	Meso-eutraphentic	19.69
350401	Trophic State (% by Category)	Mesotraphentic	4.34
350401	Trophic State (% by Category)	Oligo-mesotraphentic	2.17
350401	Trophic State (% by Category)	Oligotraphentic	0.16
350401	Trophic State (% by Category)	Not Classified	12.56
350401	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	30.39
350401	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350401	Moisture (% by Category)	Not Classified	17.05
350401	Moisture (% by Category)	Rarely Outside Waterbodies	20.62
350401	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.16
350401	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	31.78
350401	Similarity Index	Reference Sample ID: 350701	49.39

Location (Site No.): **Nevada Creek below Nevada Creek Reservoir (B-5)**

Sample No.: 350501

Date: 8/25/2004

Sample	Metric	Category	Value
350501	Valves Counted	--	621
350501	Cells Counted	--	310.5
350501	Total Number of Species	--	46
350501	Total Number of Species Counted	--	46
350501	Percent Dominant Species	--	15.94
350501	Shannon's Diversity Index	--	4.2
350501	Pollution Index	--	2.52
350501	Pollution Tolerance (% by Category)	Sensitive	54.75
350501	Pollution Tolerance (% by Category)	Tolerant	42.35
350501	Pollution Tolerance (% by Category)	Most Tolerant	2.9
350501	Siltation Index	--	29.63

B.7 (Site B-5 continued)

Sample	Metric	Category	Value
350501	Disturbance Index	--	0.64
350501	Stability Index	--	3.38
350501	Percent Rhopalodiales	--	0
350501	Percent Aerophiles	--	2.09
350501	Percent Centrics	--	34.3
350501	Heavy Metals Index	--	4.67
350501	Motility (% by Category)	Moderately Motile	26.41
350501	Motility (% by Category)	Not Motile	69.24
350501	Motility (% by Category)	Variable Motility	0.81
350501	Motility (% by Category)	Highly Motile	3.54
350501	pH (% by Category)	Circumneutral	14.01
350501	pH (% by Category)	Alkalibiontic	13.04
350501	pH (% by Category)	Acidophilous	0
350501	pH (% by Category)	Acidobiontic	0
350501	pH (% by Category)	Not Classified	6.44
350501	pH (% by Category)	Alkaliphilous	66.51
350501	pH (% by Category)	Indifferent	0
350501	Salinity (% by Category)	Fresh	90.66
350501	Salinity (% by Category)	Marine	0
350501	Salinity (% by Category)	Brackish-fresh	3.7
350501	Salinity (% by Category)	Very Fresh	0.16
350501	Salinity (% by Category)	Not Classified	5.48
350501	Salinity (% by Category)	Brackish	0
350501	Nitrogen Uptake (% by Category)	Not Classified	19.97
350501	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	0.81
350501	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	59.74
350501	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	18.04
350501	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	1.45
350501	Oxygen Demand (% by Category)	Moderate	49.28
350501	Oxygen Demand (% by Category)	Low	11.11
350501	Oxygen Demand (% by Category)	Not Classified	20.13
350501	Oxygen Demand (% by Category)	Continuously High	1.45
350501	Oxygen Demand (% by Category)	Very Low	0
350501	Oxygen Demand (% by Category)	Fairly High	18.04
350501	Saprobity (% by Category)	alpha-Mesosaprobous	25.44
350501	Saprobity (% by Category)	Not Classified	6.44
350501	Saprobity (% by Category)	Polysaprobous	1.13
350501	Saprobity (% by Category)	Oligosaprobous	0.48
350501	Saprobity (% by Category)	beta-Mesosaprobous	56.2
350501	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	10.31
350501	Trophic State (% by Category)	Mesotraphentic	2.09
350501	Trophic State (% by Category)	Dystrophic	0
350501	Trophic State (% by Category)	Variable	5.64
350501	Trophic State (% by Category)	Hypereutraphentic	13.69
350501	Trophic State (% by Category)	Meso-eutraphentic	3.38
350501	Trophic State (% by Category)	Oligo-mesotraphentic	0
350501	Trophic State (% by Category)	Oligotraphentic	0
350501	Trophic State (% by Category)	Not Classified	7.09
350501	Trophic State (% by Category)	Eutraphentic	68.12
350501	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	41.06

B.7 (Site B-5 continued)

Sample	Metric	Category	Value
350501	Moisture (% by Category)	Not Classified	17.23
350501	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350501	Moisture (% by Category)	Rarely Outside Waterbodies	23.67
350501	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	17.87
350501	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.16
350501	Similarity Index	Reference Sample ID: 350601	25.86

Location (Site No.): **Nevada Creek near mouth (B-6)**

Sample No.: 350601

Date: 8/25/2004

Sample	Metric	Category	Value
350601	Valves Counted	--	617
350601	Cells Counted	--	308.5
350601	Total Number of Species	--	59
350601	Total Number of Species Counted	--	59
350601	Percent Dominant Species	--	25.77
350601	Shannon's Diversity Index	--	4.46
350601	Pollution Index	--	2.52
350601	Pollution Tolerance (% by Category)	Sensitive	63.05
350601	Pollution Tolerance (% by Category)	Tolerant	25.45
350601	Pollution Tolerance (% by Category)	Most Tolerant	11.51
350601	Siltation Index	--	26.26
350601	Disturbance Index	--	10.37
350601	Stability Index	--	3.89
350601	Percent Rhopalodiales	--	28.36
350601	Percent Aerophiles	--	35.66
350601	Percent Centrics	--	2.43
350601	Heavy Metals Index	--	15.72
350601	Motility (% by Category)	Moderately Motile	42.46
350601	Motility (% by Category)	Not Motile	42.79
350601	Motility (% by Category)	Variable Motility	0.49
350601	Motility (% by Category)	Highly Motile	14.26
350601	pH (% by Category)	Circumneutral	25.77
350601	pH (% by Category)	Alkalibiontic	29.01
350601	pH (% by Category)	Acidophilous	0
350601	pH (% by Category)	Acidobiontic	0
350601	pH (% by Category)	Not Classified	7.94
350601	pH (% by Category)	Alkaliphilous	37.28
350601	pH (% by Category)	Indifferent	0
350601	Salinity (% by Category)	Fresh	79.9
350601	Salinity (% by Category)	Marine	0
350601	Salinity (% by Category)	Brackish-fresh	16.86
350601	Salinity (% by Category)	Very Fresh	0
350601	Salinity (% by Category)	Not Classified	3.08
350601	Salinity (% by Category)	Brackish	0.16
350601	Nitrogen Uptake (% by Category)	Not Classified	16.21
350601	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	34.36
350601	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	31.6
350601	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	9.4
350601	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	8.43
350601	Oxygen Demand (% by Category)	Moderate	14.1

B.8 (Site B-6 continued)

Sample	Metric	Category	Value
350601	Oxygen Demand (% by Category)	Low	11.02
350601	Oxygen Demand (% by Category)	Not Classified	14.75
350601	Oxygen Demand (% by Category)	Continuously High	17.99
350601	Oxygen Demand (% by Category)	Very Low	1.62
350601	Oxygen Demand (% by Category)	Fairly High	40.52
350601	Saprobity (% by Category)	alpha-Mesosaprobous	11.83
350601	Saprobity (% by Category)	Not Classified	6.81
350601	Saprobity (% by Category)	Polysaprobous	4.54
350601	Saprobity (% by Category)	Oligosaprobous	1.13
350601	Saprobity (% by Category)	beta-Mesosaprobous	67.42
350601	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	8.27
350601	Trophic State (% by Category)	Mesotraphentic	1.3
350601	Trophic State (% by Category)	Dystrophic	0
350601	Trophic State (% by Category)	Variable	18.8
350601	Trophic State (% by Category)	Hypereutraphentic	4.86
350601	Trophic State (% by Category)	Meso-eutraphentic	7.94
350601	Trophic State (% by Category)	Oligo-mesotraphentic	0.65
350601	Trophic State (% by Category)	Oligotraphentic	0
350601	Trophic State (% by Category)	Not Classified	3.57
350601	Trophic State (% by Category)	Eutraphentic	62.88
350601	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	45.87
350601	Moisture (% by Category)	Not Classified	11.35
350601	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350601	Moisture (% by Category)	Rarely Outside Waterbodies	11.67
350601	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	31.12
350601	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0
350601	Similarity Index	Reference Sample ID: 350701	61.39

Location (Site No.): **Blackfoot River at Raymond Bridge (B-7)**

Sample No.: 350701

Date: 8/26/2004

Sample	Metric	Category	Value
350701	Valves Counted	--	633
350701	Cells Counted	--	316.5
350701	Total Number of Species	--	79
350701	Total Number of Species Counted	--	79
350701	Percent Dominant Species	--	24.49
350701	Shannon's Diversity Index	--	4.83
350701	Pollution Index	--	2.56
350701	Pollution Tolerance (% by Category)	Sensitive	58.61
350701	Pollution Tolerance (% by Category)	Tolerant	38.7
350701	Pollution Tolerance (% by Category)	Most Tolerant	2.69
350701	Siltation Index	--	31.6
350701	Disturbance Index	--	3.48
350701	Stability Index	--	9.64
350701	Percent Rhopalodiales	--	26.54
350701	Percent Aerophiles	--	31.6
350701	Percent Centrics	--	2.69
350701	Heavy Metals Index	--	12.95
350701	Motility (% by Category)	Moderately Motile	44.39
350701	Motility (% by Category)	Not Motile	35.23

B.9 (Site B-7 continued)

Sample	Metric	Category	Value
350701	Motility (% by Category)	Variable Motility	0.63
350701	Motility (% by Category)	Highly Motile	19.75
350701	pH (% by Category)	Circumneutral	16.59
350701	pH (% by Category)	Alkalibiontic	28.75
350701	pH (% by Category)	Acidophilous	0.16
350701	pH (% by Category)	Acidobiontic	0
350701	pH (% by Category)	Not Classified	7.11
350701	pH (% by Category)	Alkaliphilous	47.39
350701	pH (% by Category)	Indifferent	0
350701	Salinity (% by Category)	Fresh	79.3
350701	Salinity (% by Category)	Marine	0
350701	Salinity (% by Category)	Brackish-fresh	13.43
350701	Salinity (% by Category)	Very Fresh	3.63
350701	Salinity (% by Category)	Not Classified	3.63
350701	Salinity (% by Category)	Brackish	0
350701	Nitrogen Uptake (% by Category)	Not Classified	16.43
350701	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	33.02
350701	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	37.28
350701	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	4.74
350701	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	8.53
350701	Oxygen Demand (% by Category)	Moderate	27.96
350701	Oxygen Demand (% by Category)	Low	3.48
350701	Oxygen Demand (% by Category)	Not Classified	15.17
350701	Oxygen Demand (% by Category)	Continuously High	13.59
350701	Oxygen Demand (% by Category)	Very Low	0.47
350701	Oxygen Demand (% by Category)	Fairly High	39.34
350701	Saprobity (% by Category)	alpha-Mesosaprobous	18.33
350701	Saprobity (% by Category)	Not Classified	6.64
350701	Saprobity (% by Category)	Polysaprobous	1.42
350701	Saprobity (% by Category)	Oligosaprobous	3.16
350701	Saprobity (% by Category)	beta-Mesosaprobous	64.77
350701	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	5.69
350701	Trophic State (% by Category)	Mesotraphentic	4.11
350701	Trophic State (% by Category)	Dystrophic	0
350701	Trophic State (% by Category)	Variable	15.01
350701	Trophic State (% by Category)	Hypereutraphentic	2.05
350701	Trophic State (% by Category)	Meso-eutraphentic	7.9
350701	Trophic State (% by Category)	Oligo-mesotraphentic	2.05
350701	Trophic State (% by Category)	Oligotraphentic	1.42
350701	Trophic State (% by Category)	Not Classified	4.9
350701	Trophic State (% by Category)	Eutraphentic	62.56
350701	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	56.4
350701	Moisture (% by Category)	Not Classified	12.32
350701	Moisture (% by Category)	Exclusively Outside Waterbodies	1.26
350701	Moisture (% by Category)	Rarely Outside Waterbodies	9.16
350701	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	20.06
350701	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.79
350701	Similarity Index	Reference Sample ID: 351001	28.64

B.10

Location (Site No.): **North Fork Blackfoot River above Dry Gulch (B-8)**

Sample No.: 350801

Date: 8/26/2004

Sample	Metric	Category	Value
350801	Valves Counted	--	627
350801	Cells Counted	--	313.5
350801	Total Number of Species	--	68
350801	Total Number of Species Counted	--	68
350801	Percent Dominant Species	--	34.93
350801	Shannon's Diversity Index	--	4.43
350801	Pollution Index	--	2.79
350801	Pollution Tolerance (% by Category)	Tolerant	20.26
350801	Pollution Tolerance (% by Category)	Sensitive	79.43
350801	Pollution Tolerance (% by Category)	Most Tolerant	0.32
350801	Siltation Index	--	11.8
350801	Disturbance Index	--	34.93
350801	Stability Index	--	24.4
350801	Percent Rhopalodiales	--	0
350801	Percent Aerophiles	--	2.71
350801	Percent Centrics	--	0.64
350801	Heavy Metals Index	--	11
350801	Motility (% by Category)	Variable Motility	15.47
350801	Motility (% by Category)	Highly Motile	7.97
350801	Motility (% by Category)	Moderately Motile	8.93
350801	Motility (% by Category)	Not Motile	67.62
350801	pH (% by Category)	Alkalibiontic	0.48
350801	pH (% by Category)	Indifferent	0
350801	pH (% by Category)	Acidophilous	1.44
350801	pH (% by Category)	Acidobiontic	0
350801	pH (% by Category)	Not Classified	16.75
350801	pH (% by Category)	Alkaliphilous	34.29
350801	pH (% by Category)	Circumneutral	47.05
350801	Salinity (% by Category)	Brackish-fresh	2.71
350801	Salinity (% by Category)	Not Classified	13.72
350801	Salinity (% by Category)	Very Fresh	8.29
350801	Salinity (% by Category)	Fresh	75.28
350801	Salinity (% by Category)	Brackish	0
350801	Salinity (% by Category)	Marine	0
350801	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	53.43
350801	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	19.62
350801	Nitrogen Uptake (% by Category)	Not Classified	26.32
350801	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	0.32
350801	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	0.32
350801	Oxygen Demand (% by Category)	Continuously High	58.37
350801	Oxygen Demand (% by Category)	Not Classified	24.88
350801	Oxygen Demand (% by Category)	Fairly High	5.58
350801	Oxygen Demand (% by Category)	Low	0.64
350801	Oxygen Demand (% by Category)	Very Low	0
350801	Oxygen Demand (% by Category)	Moderate	10.53
350801	Saprobity (% by Category)	Polysaprobous	0
350801	Saprobity (% by Category)	Not Classified	19.78

B.11 (Site B-8 continued)

Sample	Metric	Category	Value
350801	Saprobity (% by Category)	alpha-Mesosaprobous	10.05
350801	Saprobity (% by Category)	Oligosaprobous	17.38
350801	Saprobity (% by Category)	beta-Mesosaprobous	51.67
350801	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	1.12
350801	Trophic State (% by Category)	Dystrophic	0
350801	Trophic State (% by Category)	Variable	46.89
350801	Trophic State (% by Category)	Hypereutraphentic	0
350801	Trophic State (% by Category)	Eutraphentic	8.29
350801	Trophic State (% by Category)	Meso-eutraphentic	6.54
350801	Trophic State (% by Category)	Mesotraphentic	14.67
350801	Trophic State (% by Category)	Oligo-mesotraphentic	4.94
350801	Trophic State (% by Category)	Oligotraphentic	2.23
350801	Trophic State (% by Category)	Not Classified	16.43
350801	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	11.32
350801	Moisture (% by Category)	Not Classified	25.68
350801	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	49.76
350801	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.96
350801	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350801	Moisture (% by Category)	Rarely Outside Waterbodies	12.28
350801	Similarity Index	Reference Sample ID: 350701	16.82

Location (Site No.): **Monture Creek near Ovando (B-9)**

Sample No.: 350901

Date: 8/27/2004

Sample	Metric	Category	Value
350901	Valves Counted	--	642
350901	Cells Counted	--	321
350901	Total Number of Species	--	59
350901	Total Number of Species Counted	--	59
350901	Percent Dominant Species	--	33.33
350901	Shannon's Diversity Index	--	3.96
350901	Pollution Index	--	2.43
350901	Pollution Tolerance (% by Category)	Tolerant	55.14
350901	Pollution Tolerance (% by Category)	Sensitive	44.08
350901	Pollution Tolerance (% by Category)	Most Tolerant	0.78
350901	Siltation Index	--	9.03
350901	Disturbance Index	--	16.82
350901	Stability Index	--	13.08
350901	Percent Rhopalodiales	--	0
350901	Percent Aerophiles	--	5.14
350901	Percent Centrics	--	0.16
350901	Heavy Metals Index	--	50.78
350901	Motility (% by Category)	Variable Motility	46.88
350901	Motility (% by Category)	Highly Motile	5.14
350901	Motility (% by Category)	Moderately Motile	6.85
350901	Motility (% by Category)	Not Motile	41.12
350901	pH (% by Category)	Alkalibiontic	1.09
350901	pH (% by Category)	Indifferent	0
350901	pH (% by Category)	Acidophilous	0.16
350901	pH (% by Category)	Acidobiontic	0
350901	pH (% by Category)	Not Classified	8.72

B.12 (Site B-9 continued)

Sample	Metric	Category	Value
350901	pH (% by Category)	Alkaliphilous	24.3
350901	pH (% by Category)	Circumneutral	65.73
350901	Salinity (% by Category)	Brackish	0
350901	Salinity (% by Category)	Not Classified	6.54
350901	Salinity (% by Category)	Very Fresh	3.43
350901	Salinity (% by Category)	Fresh	87.69
350901	Salinity (% by Category)	Marine	0
350901	Salinity (% by Category)	Brackish-fresh	2.34
350901	Nitrogen Uptake (% by Category)	Not Classified	16.51
350901	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	10.59
350901	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	71.81
350901	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	0.47
350901	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	0.62
350901	Oxygen Demand (% by Category)	Moderate	47.04
350901	Oxygen Demand (% by Category)	Low	0.93
350901	Oxygen Demand (% by Category)	Fairly High	6.54
350901	Oxygen Demand (% by Category)	Continuously High	29.44
350901	Oxygen Demand (% by Category)	Not Classified	16.04
350901	Oxygen Demand (% by Category)	Very Low	0
350901	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	2.96
350901	Saprobity (% by Category)	beta-Mesosaprobous	39.56
350901	Saprobity (% by Category)	Polysaprobous	0.31
350901	Saprobity (% by Category)	Oligosaprobous	4.36
350901	Saprobity (% by Category)	Not Classified	7.94
350901	Saprobity (% by Category)	alpha-Mesosaprobous	44.86
350901	Trophic State (% by Category)	Mesotraphentic	7.48
350901	Trophic State (% by Category)	Variable	58.1
350901	Trophic State (% by Category)	Hypereutraphentic	0.31
350901	Trophic State (% by Category)	Dystrophic	0
350901	Trophic State (% by Category)	Oligo-mesotraphentic	1.87
350901	Trophic State (% by Category)	Oligotraphentic	0.78
350901	Trophic State (% by Category)	Not Classified	9.03
350901	Trophic State (% by Category)	Meso-eutraphentic	4.21
350901	Trophic State (% by Category)	Eutraphentic	18.22
350901	Moisture (% by Category)	Exclusively Outside Waterbodies	0
350901	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.93
350901	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	28.35
350901	Moisture (% by Category)	Rarely Outside Waterbodies	43.15
350901	Moisture (% by Category)	Not Classified	15.89
350901	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	11.68
350901	Similarity Index	Reference Sample ID: 350801	41.15

Location (Site No.): **Blackfoot River at Scotty Brown Bridge (B-10)**

Sample No.: 351001

Date: 8/27/2004

Sample	Metric	Category	Value
351001	Valves Counted	--	637
351001	Cells Counted	--	318.5
351001	Total Number of Species	--	68
351001	Total Number of Species Counted	--	68
351001	Percent Dominant Species	--	26.37

B.13 (Site B-10 continued)

Sample	Metric	Category	Value
351001	Shannon's Diversity Index	--	4.56
351001	Pollution Index	--	2.69
351001	Pollution Tolerance (% by Category)	Sensitive	69.86
351001	Pollution Tolerance (% by Category)	Tolerant	29.04
351001	Pollution Tolerance (% by Category)	Most Tolerant	1.1
351001	Siltation Index	--	14.13
351001	Disturbance Index	--	26.37
351001	Stability Index	--	22.45
351001	Percent Rhopalodiales	--	2.04
351001	Percent Aerophiles	--	4.71
351001	Percent Centrics	--	0.47
351001	Heavy Metals Index	--	10.52
351001	Motility (% by Category)	Moderately Motile	13.19
351001	Motility (% by Category)	Not Motile	61.85
351001	Motility (% by Category)	Variable Motility	18.37
351001	Motility (% by Category)	Highly Motile	6.59
351001	pH (% by Category)	Circumneutral	38.78
351001	pH (% by Category)	Alkalibiontic	2.67
351001	pH (% by Category)	Acidophilous	0
351001	pH (% by Category)	Acidobiontic	0
351001	pH (% by Category)	Not Classified	15.23
351001	pH (% by Category)	Alkaliphilous	43.33
351001	pH (% by Category)	Indifferent	0
351001	Salinity (% by Category)	Fresh	72.21
351001	Salinity (% by Category)	Marine	0
351001	Salinity (% by Category)	Brackish-fresh	10.52
351001	Salinity (% by Category)	Very Fresh	3.3
351001	Salinity (% by Category)	Not Classified	13.97
351001	Salinity (% by Category)	Brackish	0
351001	Nitrogen Uptake (% by Category)	Not Classified	27.16
351001	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	18.05
351001	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	53.38
351001	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	0.94
351001	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	0.47
351001	Oxygen Demand (% by Category)	Moderate	19.94
351001	Oxygen Demand (% by Category)	Low	1.1
351001	Oxygen Demand (% by Category)	Not Classified	26.84
351001	Oxygen Demand (% by Category)	Continuously High	44.74
351001	Oxygen Demand (% by Category)	Very Low	0
351001	Oxygen Demand (% by Category)	Fairly High	7.38
351001	Saprobity (% by Category)	alpha-Mesosaprobous	18.37
351001	Saprobity (% by Category)	Not Classified	18.37
351001	Saprobity (% by Category)	Polysaprobous	0.47
351001	Saprobity (% by Category)	Oligosaprobous	8.01
351001	Saprobity (% by Category)	beta-Mesosaprobous	52.43
351001	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	2.35
351001	Trophic State (% by Category)	Mesotraphentic	12.87
351001	Trophic State (% by Category)	Dystrophic	0
351001	Trophic State (% by Category)	Variable	36.89
351001	Trophic State (% by Category)	Hypereutraphentic	0.47

B.14 (Site B-10 continued)

Sample	Metric	Category	Value
351001	Trophic State (% by Category)	Meso-eutraphentic	6.59
351001	Trophic State (% by Category)	Oligo-mesotraphentic	1.41
351001	Trophic State (% by Category)	Oligotraphentic	0.47
351001	Trophic State (% by Category)	Not Classified	15.86
351001	Trophic State (% by Category)	Eutraphentic	25.43
351001	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	16.33
351001	Moisture (% by Category)	Not Classified	27.63
351001	Moisture (% by Category)	Exclusively Outside Waterbodies	0.47
351001	Moisture (% by Category)	Rarely Outside Waterbodies	18.37
351001	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	36.26
351001	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.94
351001	Similarity Index	Reference Sample ID: 351201	61.92

Location (Site No.): **Clearwater River at Clearwater (B-11)**

Sample No.: 351101

Date: 8/27/2004

Sample	Metric	Category	Value
351101	Valves Counted	--	641
351101	Cells Counted	--	320.5
351101	Total Number of Species	--	61
351101	Total Number of Species Counted	--	61
351101	Percent Dominant Species	--	15.29
351101	Shannon's Diversity Index	--	4.75
351101	Pollution Index	--	2.75
351101	Pollution Tolerance (% by Category)	Tolerant	22.31
351101	Pollution Tolerance (% by Category)	Sensitive	76.29
351101	Pollution Tolerance (% by Category)	Most Tolerant	1.4
351101	Siltation Index	--	17
351101	Disturbance Index	--	5.77
351101	Stability Index	--	7.96
351101	Percent Rhopalodiales	--	1.25
351101	Percent Aerophiles	--	2.34
351101	Percent Centrics	--	1.56
351101	Heavy Metals Index	--	8.11
351101	Motility (% by Category)	Variable Motility	8.27
351101	Motility (% by Category)	Highly Motile	7.02
351101	Motility (% by Category)	Moderately Motile	15.76
351101	Motility (% by Category)	Not Motile	68.95
351101	pH (% by Category)	Alkalibiontic	1.25
351101	pH (% by Category)	Indifferent	0
351101	pH (% by Category)	Acidophilous	0
351101	pH (% by Category)	Acidobiontic	0
351101	pH (% by Category)	Not Classified	34.17
351101	pH (% by Category)	Alkaliphilous	43.53
351101	pH (% by Category)	Circumneutral	21.06
351101	Salinity (% by Category)	Brackish-fresh	2.03
351101	Salinity (% by Category)	Not Classified	28.24
351101	Salinity (% by Category)	Very Fresh	2.65
351101	Salinity (% by Category)	Fresh	66.61
351101	Salinity (% by Category)	Brackish	0.47
351101	Salinity (% by Category)	Marine	0

B.15 (Site B-11 continued)

Sample	Metric	Category	Value
351101	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	38.22
351101	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	13.26
351101	Nitrogen Uptake (% by Category)	Not Classified	45.24
351101	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	1.87
351101	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	1.4
351101	Oxygen Demand (% by Category)	Continuously High	18.88
351101	Oxygen Demand (% by Category)	Not Classified	45.09
351101	Oxygen Demand (% by Category)	Fairly High	11.23
351101	Oxygen Demand (% by Category)	Low	1.72
351101	Oxygen Demand (% by Category)	Very Low	0.16
351101	Oxygen Demand (% by Category)	Moderate	22.93
351101	Saprobity (% by Category)	Polysaprobous	0.47
351101	Saprobity (% by Category)	Not Classified	35.26
351101	Saprobity (% by Category)	alpha-Mesosaprobous	4.99
351101	Saprobity (% by Category)	Oligosaprobous	2.03
351101	Saprobity (% by Category)	beta-Mesosaprobous	53.2
351101	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	4.06
351101	Trophic State (% by Category)	Dystrophic	0
351101	Trophic State (% by Category)	Variable	21.68
351101	Trophic State (% by Category)	Hypereutraphentic	0.47
351101	Trophic State (% by Category)	Eutraphentic	32.14
351101	Trophic State (% by Category)	Meso-eutraphentic	5.77
351101	Trophic State (% by Category)	Mesotraphentic	7.64
351101	Trophic State (% by Category)	Oligo-mesotraphentic	2.5
351101	Trophic State (% by Category)	Oligotraphentic	0.78
351101	Trophic State (% by Category)	Not Classified	29.02
351101	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	31.05
351101	Moisture (% by Category)	Not Classified	41.19
351101	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	21.68
351101	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.31
351101	Moisture (% by Category)	Exclusively Outside Waterbodies	0
351101	Moisture (% by Category)	Rarely Outside Waterbodies	5.77
351101	Similarity Index	Reference Sample ID: 351001	31.74

Location (Site No.): **Blackfoot River near Bonner (B-12)**

Sample No.: 351201

Date: 8/27/2004

Sample	Metric	Category	Value
351201	Valves Counted	--	639
351201	Cells Counted	--	319.5
351201	Total Number of Species	--	63
351201	Total Number of Species Counted	--	63
351201	Percent Dominant Species	--	24.73
351201	Shannon's Diversity Index	--	4.55
351201	Pollution Index	--	2.58
351201	Pollution Tolerance (% by Category)	Tolerant	42.1
351201	Pollution Tolerance (% by Category)	Sensitive	57.75
351201	Pollution Tolerance (% by Category)	Most Tolerant	0.16
351201	Siltation Index	--	10.02
351201	Disturbance Index	--	9.23
351201	Stability Index	--	34.43

B.16 (Site B-12 continued)

Sample	Metric	Category	Value
351201	Percent Rhopalodiales	--	2.03
351201	Percent Aerophiles	--	3.44
351201	Percent Centrics	--	0.31
351201	Heavy Metals Index	--	6.73
351201	Motility (% by Category)	Variable Motility	23.94
351201	Motility (% by Category)	Highly Motile	4.85
351201	Motility (% by Category)	Moderately Motile	11.89
351201	Motility (% by Category)	Not Motile	59.31
351201	pH (% by Category)	Alkalibiontic	2.5
351201	pH (% by Category)	Indifferent	0
351201	pH (% by Category)	Acidophilous	0
351201	pH (% by Category)	Acidobiontic	0
351201	pH (% by Category)	Not Classified	16.74
351201	pH (% by Category)	Alkaliphilous	59.47
351201	pH (% by Category)	Circumneutral	21.28
351201	Salinity (% by Category)	Brackish	0
351201	Salinity (% by Category)	Not Classified	14.24
351201	Salinity (% by Category)	Very Fresh	2.03
351201	Salinity (% by Category)	Fresh	57.28
351201	Salinity (% by Category)	Marine	0
351201	Salinity (% by Category)	Brackish-fresh	26.45
351201	Nitrogen Uptake (% by Category)	Not Classified	26.76
351201	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (low organics)	21.75
351201	Nitrogen Uptake (% by Category)	Nitrogen Autotroph (high organics)	50.55
351201	Nitrogen Uptake (% by Category)	Facultative Nitrogen Heterotroph	0.78
351201	Nitrogen Uptake (% by Category)	Obligate Nitrogen Heterotroph	0.16
351201	Oxygen Demand (% by Category)	Moderate	32.55
351201	Oxygen Demand (% by Category)	Low	0.16
351201	Oxygen Demand (% by Category)	Fairly High	10.33
351201	Oxygen Demand (% by Category)	Continuously High	29.89
351201	Oxygen Demand (% by Category)	Not Classified	26.76
351201	Oxygen Demand (% by Category)	Very Low	0.31
351201	Saprobity (% by Category)	alpha-Mesosaprobous/Polysaprobous	2.5
351201	Saprobity (% by Category)	beta-Mesosaprobous	42.41
351201	Saprobity (% by Category)	Polysaprobous	0.16
351201	Saprobity (% by Category)	Oligosaprobous	4.85
351201	Saprobity (% by Category)	Not Classified	17.53
351201	Saprobity (% by Category)	alpha-Mesosaprobous	32.55
351201	Trophic State (% by Category)	Mesotraphentic	7.36
351201	Trophic State (% by Category)	Variable	18.62
351201	Trophic State (% by Category)	Hypereutraphentic	0.16
351201	Trophic State (% by Category)	Dystrophic	0
351201	Trophic State (% by Category)	Oligo-mesotraphentic	2.35
351201	Trophic State (% by Category)	Oligotraphentic	0.63
351201	Trophic State (% by Category)	Not Classified	15.34
351201	Trophic State (% by Category)	Meso-eutraphentic	8.45
351201	Trophic State (% by Category)	Eutraphentic	47.1
351201	Moisture (% by Category)	Exclusively Outside Waterbodies	0.47
351201	Moisture (% by Category)	Mainly Wet Places; Sometimes in Water	0.31
351201	Moisture (% by Category)	Mainly in Waterbodies; Regularly Wet	19.41

B.17 (Site B-12 continued)

Sample	Metric	Category	Value
351201	Moisture (% by Category)	Rarely Outside Waterbodies	33.18
351201	Moisture (% by Category)	Not Classified	26.13
351201	Moisture (% by Category)	Mainly in Waterbodies; Sometimes Wet	20.5
351201	Similarity Index	Reference Sample ID: 351101	38.43

Appendix C. Diatom taxa composing various metrics utilized in bioassessments, calculated as % abundance of cells in the genera or species listed:

Siltation index [*Navicula* (*Cavinula* + *Craticula* + *Diadesmis* + *Dickieia* + *Fallacia* + *Geissleria* + *Hippodonta* + *Luticola* + *Navicula* + *Placoneis* + *Sellaphora* + *Proshkinia* + *Kobayasiella* + *Aneumastus*) + ***Nitzschia*** (*Nitzschia* + *Simosenia* + *Tryblionella*) + ***Surirella***]

Stability index (5 araphid diatoms: pennate diatoms without a raphe)
(*Asterionella* + *Ctenophora* + *Diatoma* + *Fragilaria* + *Fragilariforma* + *Hannaea* + *Opephora* + *Pseudostaurosira* + *Staurosira* + *Staurosirella* + *Synedra* + *Tabellaria* + *Tabularia* + *Tetracyclus*)

Heavy metals index (presumptive) proposed by Bahls 2004, unpublished data.
All of these species appear to tolerate elevated concentrations of heavy metals:

Adlafia minuscula
Encyonema minutum
Encyonema silesiacum
Fragilaria capucina
Fragilaria vaucheria
Gomphonema parvulum
*Mayamaea atomus*¹
Navicula arvensis
*Navicula minima*¹
Navicula permitis
*Navicula seminulum*¹
Nitzschia palea
Planothidium lanceolatum
Surirella angusta
Synedra rumpens
Synedra ulna

¹ These species, when present in large numbers, appear to confirm elevated concentrations of heavy metals.