

Appendix N. Segment 0833 Benthic Macroinvertebrate IBIs and Species Lists

Metrics and Scoring for Leaf Pack¹ Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	19	3
2. EPT Taxa Abundance	2	1
3. Biotic Index (HBI)	0.18	4
4. % Chironomidae	5.41	3
5. % Dominant taxon	42.7	1
6. % Dominant FFG	73.8	1
7. % Predators	71.8	1
8. Ratio of Intolerant:Tolerant taxa	1.14	1
9. % of total trichoptera as Hydropsychidae	0	1
10. # of non-insect taxa	3	2
11. % Collector-gatherers	7.21	1
12. % of total number as Elmidae	0	1

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	20
High:	29 - 36	Aquatic Life Use:	Limited
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 23 August 2001

COUNTY: Parker

LOCATION: Station **17463**

ECOREGION #: 29

¹Refer to text on page 42 for explanation

PARAMETRIC DATA

Station 17463

23 August 2001

STORET CODE	(<) OR (>)	Value	Description
91988		2	Belostoma sp.
92002		5	Ranatra sp.
91600		12	Caenis sp.
91646		7	Baetis sp.
92165		1	Hydrochus sp.
92128		7	Neoporus (=Hydroporus) sp.
92154		7	Berosus sp.
92178		7	Tropisternus sp.
92100		13	Peltodytes sp.
92264		5	Elodes sp.
92491		10	Chironomidae
92622		1	Tabanus sp.
91790		79	Epicordulia priniceps
91792		2	Erythemis sp.
91718		7	Gomphus (incl. Arigomphus) sp.
91683		5	Argia sp.
91241		1	Hyalella azteca
92874		13	Physella sp.
90913		1	Hirudinea

Measurement Comments and Field Observations:

pools only, no flow; CPOM (no riffles); approx. 1 meter picked; hydrogen sulfide smell; dark, clear water; Zsd 20" in 20"

Metrics and Scoring for Root Sweep¹ Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	28	4
2. EPT Taxa Abundance	3	1
3. Biotic Index (HBI)	6.11	1
4. % Chironomidae	5	3
5. % Dominant taxon	15	4
6. % Dominant FFG	42.24	3
7. % Predators	42.25	1
8. Ratio of Intolerant:Tolerant taxa	0.62	1
9. % of total trichoptera as Hydropsychidae	0	1
10. # of non-insect taxa	5	3
11. % Collector-gatherers	29.67	3
12. % of total number as Elmidae	5.5	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	29
High:	29 - 36	Aquatic Life Use	High
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 23 August 2001

COUNTY: Parker

LOCATION: Station **11062**

ECOREGION #: 29

¹Refer to text on page 42 for explanation

PARAMETRIC DATA

Station 11062

23 August 2001

STORET CODE	(<) OR (>)	Value	Description
92002		1	Ranatra sp.
91953		1	Mesovelgia sp.
92165		1	Hydrochus sp.
92128		1	Neoporus (=Hydroporus) sp.
92100		1	Peltodytes sp.
92264		1	Elodes sp.
92715		1	Stratiomys sp.
92762		1	Bulimidae sp.
91619		2	Stenacron sp.
93036		2	Corbicula sp.
91944		3	Rhumatobates sp.
92253		3	Stenelmis sp.
91792		3	Erythemis sp.
91718		3	Gomphus (incl Arigomphus) sp.
91757		3	Nasiaeschna sp.
91669		3	Hetaerina sp.
91241		4	Hyalella azteca
92154		6	Berosus sp.
92230		8	Dubiraphia sp.
91790		8	Epicordulia (priniceps)
91402		9	Palaemonetes pugio
92491		10	Chironomidae
91683		10	Argia sp.
92874		15	Physella sp.
91942		23	Metrobates sp.
91646		23	Baetis sp.
91600		24	Caenis sp.
92044		30	Trichocorxia sp.

Measurement Comments and Field Observations:

5-minute root sweep; deep pools; low transparency; cattle in stream; benthic community index reported on ALU monitoring checklist is based on the 5-minute kicknet rather than the root sweep.

Metrics and Scoring for Kick Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	20	3
2. EPT Taxa Abundance	3	1
3. Biotic Index (HBI)	6.6	1
4. % Chironomidae	29.05	1
5. % Dominant taxon	29.05	3
6. % Dominant FFG	37.9	3
7. % Predators	37.89	1
8. Ratio of Intolerant:Tolerant taxa	0.12	1
9. % of total trichoptera as Hydropsychidae	100	1
10. # of non-insect taxa	3	2
11. % Collector-gatherers	30.07	3
12. % of total number as Elmidae	1.12	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	24
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 23 August 2001

COUNTY: Parker

LOCATION: Station **11062**

ECOREGION #: 29

PARAMETRIC DATA

Station 11062

23 August 2001

STORET CODE	(<) OR (>)	Value	Description
92044		34	Trichocorxia sp.
92064		2	Ambrysus pulchellus
91919		2	Microvelia sp.
91600		14	Caenis sp.
91646		13	Baetis sp.
92154		17	Berosus sp.
92178		1	Tropisternus sp.
92161		3	Enochrus sp.
92100		1	Peltodytes sp.
92232		1	Macrelmis sp.
92253		1	Stenelmis sp.
92074		1	Corydalis sp.
92292		2	Cheumatopsyche sp.
92491		52	Chironomidae
92715		2	Stratiomys sp.
91718		5	Gomphus (incl. Arigomphus) sp.
91683		3	Argia sp.
91241		4	Hyalella azteca
92874		10	Physella sp.
93036		11	Corbicula sp.

Measurement Comments and Field Observations:

Kick net effort; deep pools; low transparency; cattle in stream

Metrics and Scoring for Leaf Pack¹ Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	19	3
2. EPT Taxa Abundance	5	2
3. Biotic Index (HBI)	6.84	1
4. % Chironomidae	0	1
5. % Dominant taxon	37.88	2
6. % Dominant FFG	28.79	4
7. % Predators	23.48	3
8. Ratio of Intolerant:Tolerant taxa	0.09	1
9. % of total trichoptera as Hydropsychidae	75	2
10. # of non-insect taxa	3	2
11. % Collector-gatherers	27.27	3
12. % of total number as Elmidae	39.39	1

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	25
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 22 August 2001

COUNTY: Parker

LOCATION: Station **17461**

ECOREGION #: 29

¹Refer to text on page 42 for explanation

PARAMETRIC DATA

Station 17461

22 August 2001

STORET CODE	(<) OR (>)	Value	Description
90913		1	Hirudinea
91241		1	Hyalella azteca
91600		7	Caenis sp.
91646		1	Baetis sp.
91683		2	Argia sp.
91718		1	Gomphus (incl. Arigomphus) sp.
91954		2	Mesovelia mulsanti
91988		1	Belostoma sp.
92064		2	Ambrysus pulchellus
92100		1	Peltodytes sp.
92154		6	Berosus sp.
92221		1	Helichus sp.
92230		1	Dubiraphia sp.
92253		25	Stenelmis sp.
92268		1	Chimarra sp.
92292		2	Cheumatopsyche sp.
92376		1	Helicopsyche sp.
92715		1	Stratiomys sp.
93036		9	Corbicula sp.

Measurement Comments and Field Observations:

CPOM effort; zsd is 1ft in 3 ft; gray-green water; floating algae; hydrogen sulfide smell; ALU subcategory indicated based on kicknet, not CPOM

Metrics and Scoring for Root Sweep¹ Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	27	4
2. EPT Taxa Abundance	4	2
3. Biotic Index (HBI)	6.04	1
4. % Chironomidae	8.98	3
5. % Dominant taxon	22.16	3
6. % Dominant FFG	46.32	2
7. % Predators	45.21	1
8. Ratio of Intolerant:Tolerant taxa	0.49	1
9. % of total trichoptera as Hydropsychidae	100	1
10. # of non-insect taxa	3	2
11. % Collector-gatherers	20.06	3
12. % of total number as Elmidae	20.36	2

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	25
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833
 DATE: 22 August 2001
 COUNTY: Parker
 LOCATION: Station **17461**

ECOREGION #: 29

¹Refer to text on page 42 for explanation

PARAMETRIC DATA

Station 17461

22 August 2001

STORET CODE	(<) OR (>)	Value	Description
91525		2	Hydracarina
91600		6	Caenis sp.
91619		2	Stenacron sp.
91646		13	Baetis sp.
91683		37	Argia sp.
91718		2	Gomphus (incl. Arigomphus) sp.
91790		2	Epicordulia (priniceps)
91792		2	Erythemis sp.
91944		2	Rhumatobates sp.
91946		7	Trepobates sp.
91954		5	Mesovelia mulsanti
91988		2	Belostoma sp.
92002		1	Ranatra sp.
92044		1	Trichocoxia sp.
92064		4	Ambrysus pulchellus
92154		5	Berosus sp.
92178		1	Tropisternus sp.
92230		26	Dubiraphia sp.
92253		8	Stenelmis sp.
92264		2	Elodes sp.
92292		1	Cheumatopsyche sp.
92453		5	Culex sp.
92491		15	Chironomidae
92703		3	Munroessa/Synelita/Neocataclysta sp.
92715		3	Stratiomys sp.
92874		4	Physella sp.
93036		6	Corbicula sp.

Measurement Comments and Field Observations:

Root sweep effort; zsd is 1ft in 3 ft; gray-green water; floating algae; hydrogen sulfide smell; ALU subcategory based on kicknet results

Metrics and Scoring for Kick Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	26	4
2. EPT Taxa Abundance	7	3
3. Biotic Index (HBI)	6.3	1
4. % Chironomidae	14.2	2
5. % Dominant taxon	25.31	3
6. % Dominant FFG	27.43	4
7. % Predators	22.64	3
8. Ratio of Intolerant:Tolerant taxa	0.17	1
9. % of total trichoptera as Hydropsychidae	62.5	2
10. # of non-insect taxa	4	3
11. % Collector-gatherers	27.27	3
12. % of total number as Elmidae	27.78	2

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	31
High:	29 - 36	Aquatic Life Use:	High
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 22 August 2001

COUNTY: Parker

LOCATION: Station **17461**

ECOREGION #: 29

PARAMETRIC DATA

Station 17461

22 August 2001

STORET CODE	(<) OR (>)	Value	Description
92044		1	Trichocorxia sp.
92064		3	Ambrysus pulchellus
91923		1	Rhagovelia sp.
91600		5	Caenis sp.
91646		9	Baetis sp.
91554		1	Choroterpes sp.
91590		2	Isonychia sp.
92128		4	Neoporus (=Hydroporus) sp.
92221		1	Helichus sp.
92154		7	Berosus sp.
92161		2	Enochrus sp.
92253		41	Stenelmis sp.
92230		4	Dubiraphia sp.
92292		5	Cheumatopsyche sp.
92376		1	Helicopsyche sp.
92268		2	Chimarra sp.
92491		23	Chironomidae
92715		1	Stratiomys sp.
92622		1	Tabanus sp.
91718		1	Gomphus (incl. Arigomphus) sp.
91713		2	Erpetogomphus sp.
91683		8	Argia sp.
91241		8	Hyalella azteca
92874		4	Physella sp.
93036		24	Corbicula sp.
90075		1	Dugesia sp.

Measurement Comments and Field Observations:

Kicknet effort; Zsd is 1ft in 3 ft; gray-green water; floating algae; hydrogen sulfide smell; ALU subcategory based on kicknet results

Metrics and Scoring for Leaf Pack¹ Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

Leaf Pack

Metric	Value	Score
1. Taxa Richness	20	3
2. EPT Taxa Abundance	4	2
3. Biotic Index (HBI)	4.16	3
4. % Chironomidae	0	1
5. % Dominant taxon	41.90	1
6. % Dominant FFG	35.64	4
7. % Predators	25.71	2
8. Ratio of Intolerant:Tolerant taxa	1.90	2
9. % of total trichoptera as Hydropsychidae	0	1
10. # of non-insect taxa	1	1
11. % Collector-gatherers	34.29	2
12. % of total number as Elmidae	2.85	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	26
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 21 August 2001

COUNTY: Parker

LOCATION: Station **17462**

ECOREGION #: 29

¹Refer to text on page 42 for explanation

PARAMETRIC DATA

Station 17462

21 August 2001

STORET CODE	(<) OR (>)	Value	Description
91554		44	Choroterpes sp.
91600		13	Caenis sp.
91619		2	Stenacron
91646		1	Baetis sp.
91683		2	Argia sp.
91718		2	Gomphus sp.
91730		1	Progomphus sp.
91746		1	Basiaeschna janata
91988		4	Belostoma sp.
92064		2	Ambrysus pulchellus
92076		1	Corydalis cornutus
92128		10	Neoporus (=Hydroporus) sp.
92154		3	Berosus sp.
92161		1	Enochrus sp.
92178		1	Tropisternus
92221		7	Helichus sp.
92230		1	Dubiraphia sp.
92253		2	Stenelmis sp.
92264		4	Elodes sp.
93036		3	Corbicula sp.

Measurement Comments and Field Observations:

Leaf pack (no riffles); clear water; evidence of cattle

Metrics and Scoring for Root Sweep¹ Samples,
Rapid Bioassessment Protocol - Benthic Macroinvertebrates

5-minute root sweep

Metric	Value	Score
1. Taxa Richness	33	4
2. EPT Taxa Abundance	6	2
3. Biotic Index (HBI)	5.52	1
4. % Chironomidae	2.62	4
5. % Dominant taxon	19.37	4
6. % Dominant FFG	34.81	4
7. % Predators	32.81	2
8. Ratio of Intolerant:Tolerant taxa	1.19	1
9. % of total trichoptera as Hydropsychidae	0	1
10. # of non-insect taxa	6	4
11. % Collector-gatherers	30.89	2
12. % of total number as Elmidae	21.47	2

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	31
High:	29 - 36	Aquatic Life Use:	High
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 21 August 2001

COUNTY: Parker

LOCATION: Station **17462**

ECOREGION #: 29

¹Refer to text on page 42 for explanation

PARAMETRIC DATA

Station 17462

21 August 2001

STORET CODE	(<) OR (>)	Value	Description
91988		6	Belostoma sp.
92064		1	Ambrysus pulchellus
91944		5	Rhumatobates sp.
91946		2	Trepobates sp.
91923		3	Rhagovelia sp.
91600		12	Caenis sp.
91646		20	Baetis sp.
91619		11	Stenacron sp.
91554		6	Choroerpes sp.
91570		2	Hexagenia sp.
92089		7	Gyrinus sp.
92128		3	Neoporus (=Hydroporus) sp.
92221		8	Helichus sp.
92154		3	Berosus sp.
92178		1	Tropisternus sp.
92161		1	Enochrus sp.
92253		2	Stenelmis sp.
92230		37	Dubiraphia sp.
92233		2	Heterelmis vulnerita
92264		1	Elodes sp.
92069		2	Sialis sp.
92395		2	Trienodes sp.
92491		5	Chironomidae
91769		1	Macromia sp.
91792		1	Erythemis sp.
91718		2	Gomphus sp.
91683		21	Argia sp.
91241		8	Hyalella azteca
92874		3	Physella sp.
93036		1	Corbicula sp.
91525		10	Hydracarina
90382		1	Oligochaeta
90075		1	Dugesia sp.

Measurement Comments and Field Observations:

Root sweep (no riffles); clear water; evidence of cattle

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	9	2
2. EPT Taxa Abundance	3	1
3. Biotic Index (HBI)	5.73	1
4. % Chironomidae	4.95	3
5. % Dominant taxon	47.8	1
6. % Dominant FFG	42.31	3
7. % Predators	6.04	4
8. Ratio of Intolerant:Tolerant taxa	0.66	1
9. % of total trichoptera as Hydropsychidae	100	1
10. # of non-insect taxa	1	1
11. % Collector-gatherers	26.65	3
12. % of total number as Elmidae	0	1

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	22
High:	29 - 36		
Intermediate:	22 - 28	Aquatic Life Use:	Intermediate
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 30 April 2002

COUNTY: Parker

LOCATION: Station **16415**

ECOREGION #: 29

PARAMETRIC DATA

Station 16415

30 April 2002

STORET CODE	(<) OR (>)	Value	Description
91241		2	Hyalella sp.
91600		87	Caenis sp.
91646		2	Baetis sp.
91687		1	Enallagma sp.
92108		3	Agabus sp.
92128		4	Neoporus sp.
92292		7	Cheumatopsyche sp.
92491		9	Chironomidae
92596		67	Simulium sp.

Measurement Comments and Field Observations:

Kicknet effort

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	20	3
2. EPT Taxa Abundance	5	2
3. Biotic Index (HBI)	6.89	1
4. % Chironomidae	10.25	2
5. % Dominant taxon	57.38	1
6. % Dominant FFG	37.02	3
7. % Predators	17.35	3
8. Ratio of Intolerant:Tolerant taxa	0.08	1
9. % of total trichoptera as Hydropsychidae	100	1
10. # of non-insect taxa	3	2
11. % Collector-gatherers	36.61	2
12. % of total number as Elmidae	0	1

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	22
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 1 May 02

COUNTY: Parker

LOCATION: Station **17463**

ECOREGION #: 29

PARAMETRIC DATA

Station 17463

1 May 2002

STORET CODE	(<) OR (>)	Value	Description
90913		1	Hirudinea
91241		20	Hyalella sp.
91600		140	Caenis sp.
91613		1	Stenonema sp.
91646		1	Baetis sp.
91687		2	Enallagma sp.
91706		1	Gomphidae Arigomphus
91713		4	Erpetogomphus sp.
91806		1	Libellula sp.
91883		2	Perlesta sp.
92100		4	Peltodytes sp.
92108		2	Agabus sp.
92128		4	Neoporus
92154		12	Berosus sp.
92178		1	Tropistrenus sp.
92292		1	Cheumatopsyche sp.
92478		2	Bezzia sp.
92491		25	Chironomidae
92596		9	Simulium sp.
92874		11	Physella sp.

Measurement Comments and Field Observations:

Kicknet effort

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	13	2
2. EPT Taxa Abundance	2	1
3. Biotic Index (HBI)	6.95	1
4. % Chironomidae	13.51	2
5. % Dominant taxon	27.03	3
6. % Dominant FFG	50.46	2
7. % Predators	50.46	1
8. Ratio of Intolerant:Tolerant taxa	0.1	1
9. % of total trichoptera as Hydropsychidae	0	1
10. # of non-insect taxa	2	2
11. % Collector-gatherers	20.7	3
12. % of total number as Elmidae	0	1

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	20
High:	29 - 36	Aquatic Life Use:	Limited
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 1 May 2002

COUNTY: Parker

LOCATION: Station **11062**

ECOREGION #: 29

PARAMETRIC DATA

Station 11062

1 May 2002

STORET CODE	(<) OR (>)	Value	Description
91241		10	Hyaella sp.
91600		2	Caenis sp.
91687		3	Enallagma sp.
91883		1	Perlesta sp.
91988		1	Belostoma sp.
92064		1	Ambrysus sp.
92100		1	Peltodytes sp.
92128		8	Neoporus sp.
92168		1	Helophorus sp.
92491		5	Chironomidae
92596		1	Simulium sp.
92622		1	Tabanus sp.
92876		2	Lymnaeidae

Measurement Comments and Field Observations:

Kicknet effort; debris

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	23	4
2. EPT Taxa Abundance	7	3
3. Biotic Index (HBI)	4.78	2
4. % Chironomidae	19.82	1
5. % Dominant taxon	19.82	4
6. % Dominant FFG	29.41	4
7. % Predators	20.89	3
8. Ratio of Intolerant:Tolerant taxa	1.01	1
9. % of total trichoptera as Hydropsychidae	95.24	1
10. # of non-insect taxa	5	3
11. % Collector-gatherers	29.41	3
12. % of total number as Elmidae	11.98	3

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	32
High:	29 - 36	Aquatic Life Use:	High
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 2 May 2002

COUNTY: Parker

LOCATION: Station **17461**

ECOREGION #: 29

PARAMETRIC DATA

Station 17461

2 May 2002

STORET CODE	(<) OR (>)	Value	Description
90075		3	Dugesia sp.
90913		1	Hirudinea
91241		1	Hyalella sp.
91402		2	Palaemonetes pugio
91590		1	Isonychia sp.
91600		3	Caenis sp.
91613		22	Stenonema sp.
91646		41	Baetis sp.
91669		1	Hetaerina sp.
91706		1	Gomphidae (incl.Arigomphus) sp.
91713		8	Erpetogomphus sp.
91730		1	Progomphus sp.
91883		14	Perlesta sp.
92002		1	Ranatra sp.
92074		1	Corydalis sp.
92221		2	Helichus sp.
92242		1	Microcylleopus sp.
92253		25	Stenelmis sp.
92292		20	Cheumatopsyche sp.
92378		1	Marilia sp.
92491		43	Chironomidae
92596		16	Simulium sp.
93036		8	Corbicula sp.

Measurement Comments and Field Observations:

Kicknet effort

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	20	3
2. EPT Taxa Abundance	5	2
3. Biotic Index (HBI)	4.93	2
4. % Chironomidae	30	1
5. % Dominant taxon	30	3
6. % Dominant FFG	32.61	4
7. % Predators	32.61	2
8. Ratio of Intolerant:Tolerant taxa	0.95	1
9. % of total trichoptera as Hydropsychidae	100	1
10. # of non-insect taxa	1	1
11. % Collector-gatherers	25.43	3
12. % of total number as Elmidae	1.74	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	27
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 2 May 2002

COUNTY: Parker

LOCATION: Station **17462**

ECOREGION #: 29

PARAMETRIC DATA

Station 17462

2 May 2002

STORET CODE	(<) OR (>)	Value	Description
91590		13	Isonychia sp.
91600		7	Caenis sp.
91613		37	Stenonema sp.
91646		18	Baetis sp.
91683		1	Argia sp.
91713		14	Erpetogomphus sp.
91730		15	Progomphus sp.
91769		1	Macromia sp.
91923		3	Rhagovelia sp.
92064		3	Ambrysus sp.
92090		1	Dinuetus sp.
92100		2	Peltodytes sp.
92128		9	Neoporus sp.
92154		2	Berosus sp.
92178		2	Tropistrenus sp.
92221		5	Helichus sp.
92253		4	Stenelmis sp.
92292		14	Cheumatopsyche sp.
92491		69	Chironomidae
93036		10	Corbicula sp.

Measurement Comments and Field Observations:

Kicknet effort

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	7	1
2. EPT Taxa Abundance	0	1
3. Biotic Index (HBI)	5.37	1
4. % Chironomidae	0	1
5. % Dominant taxon	80.25	1
6. % Dominant FFG	80.25	1
7. % Predators	3.70	1
8. Ratio of Intolerant:Tolerant taxa	8.86	4
9. % of total trichoptera as Hydropsychidae	0	1
10. # of non-insect taxa	4	3
11. % Collector-gatherers	0	1
12. % of total number as Elmidae	0	1

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	17
High:	29 - 36		
Intermediate:	22 - 28	Aquatic Life Use:	Limited
Limited:	< 22		

STREAM : Clear Fork Trinity Seg 0833

DATE: 24 July 2002

COUNTY: Parker

LOCATION: Station **16415**

ECOREGION #: 29

PARAMETRIC DATA

Station 16415

24 July 2002

STORET CODE	(<) OR (>)	Value	Description
90913		3	Hirudinea
92154		5	Berosus sp.
92478		1	Bezzia sp.
92715		26	Stratiomys sp.
92874		12	Physella sp.
92887		1	Helisoma sp.
93024		195	Sphaeriidae

Measurement Comments and Field Observations:

Kicknet effort; Benthos collected on a separate day from nekton due to questions about habitat.

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	23	4
2. EPT Taxa Abundance	3	1
3. Biotic Index (HBI)	7.28	1
4. % Chironomidae	3.57	4
5. % Dominant taxon	29.46	3
6. % Dominant FFG	62.28	1
7. % Predators	62.28	1
8. Ratio of Intolerant:Tolerant taxa	0.15	1
9. % of total trichoptera as Hydropsychidae	66.67	2
10. # of non-insect taxa	5	3
11. % Collector-gatherers	23.07	3
12. % of total number as Elmidae	6.25	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	28
High:	29 - 36		
Intermediate:	22 - 28	Aquatic Life Use:	Intermediate
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 24 July 2002

COUNTY: Parker

LOCATION: Station **17463**

ECOREGION #: 29

PARAMETRIC DATA

Station 17463

24 July 2002

STORET CODE	(<) OR (>)	Value	Description
90075		23	Dugesia sp.
90913		10	Hirudinea
91241		2	Hyallolela azteca
91600		16	Caenis sp.
91668		11	Arigomphus sp.
91806		7	Libellula sp.
91988		3	Belostoma sp.
92002		4	Ranatra nigra
92044		66	Trichocorixa sp.
92051		1	Notonecta sp.
92064		4	Ambrysus pulchellus
92100		5	Peltodytes sp.
92128		5	Neoporus sp.
92154		19	Berosus sp.
92178		16	Tropisternus sp.
92230		12	Dubiraphia sp.
92253		2	Stenelmis sp.
92292		2	Cheumatopsyche sp.
92378		1	Marilia flexuosa
92491		8	Chironomidae
92622		1	Tabanus sp.
92874		2	Physella sp.
93024		4	Sphaeriidae

Measurement Comments and Field Observations:

Kicknet effort

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	25	4
2. EPT Taxa Abundance	5	2
3. Biotic Index (HBI)	6.50	1
4. % Chironomidae	0	1
5. % Dominant taxon	33.17	2
6. % Dominant FFG	30.77	4
7. % Predators	30.77	2
8. Ratio of Intolerant:Tolerant taxa	0.14	1
9. % of total trichoptera as Hydropsychidae	91.30	1
10. # of non-insect taxa	4	3
11. % Collector-gatherers	20.91	3
12. % of total number as Elmidae	1.92	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	28
High:	29 - 36		
Intermediate:	22 - 28	Aquatic Life Use:	Intermediate
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 25 July 2002

COUNTY: Parker

LOCATION: Station **11062**

ECOREGION #: 29

PARAMETRIC DATA

Station 11062

25 July 2002

STORET CODE	(<) OR (>)	Value	Description
90382		1	Oligochaeta
91600		9	Caenis sp.
91613		1	Stenonema sp.
91669		3	Hetaerina sp.
91683		6	Argia sp.
91713		2	Erpetogomphus sp.
91730		5	Progomphus sp.
91923		5	Rhagovelia sp.
92002		1	Ranatra nigra
92044		69	Trichocorixa sp.
92074		2	Corydalus sp.
92100		1	Peltodytes sp.
92128		1	Neoporus sp.
92178		2	Tropisternus sp.
92221		2	Helichus sp.
92230		3	Dubiraphia sp.
92253		1	Stenelmis sp.
92292		21	Cheumatopsyche sp.
92324		1	Hydroptila sp.
92376		1	Helicopsyche sp.
92478		2	Bezzia sp.
92715		1	Stratiomys sp.
92874		27	Physella sp.
93024		1	Sphaeriidae
93036		40	Corbicula sp.

Measurement Comments and Field Observations:

Kicknet effort

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	30	4
2. EPT Taxa Abundance	10	4
3. Biotic Index (HBI)	6.19	1
4. % Chironomidae	3.95	4
5. % Dominant taxon	26.75	3
6. % Dominant FFG	40.13	3
7. % Predators	40.13	1
8. Ratio of Intolerant:Tolerant taxa	0.19	1
9. % of total trichoptera as Hydropsychidae	62.5	2
10. # of non-insect taxa	3	2
11. % Collector-gatherers	21.71	3
12. % of total number as Elmidae	27.63	2

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	30
High:	29 - 36	Aquatic Life Use:	High
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 23 July 2002

COUNTY: Parker

LOCATION: Station **17461**

ECOREGION #: 29

PARAMETRIC DATA

Station 17461

23 July 2002

STORET CODE	(<) OR (>)	Value	Description
90075		41	Dugesia sp.
90382		2	Oligochaeta
91554		3	Choroterpes sp.
91590		1	Isonychia sp.
91600		15	Caenis sp.
91646		3	Baetis sp.
91668		1	Arigomphus sp.
91669		1	Hetaerina sp.
91683		12	Argia sp.
91713		7	Erpetogomphus sp.
91777		2	Brechmorhga mendax
91923		16	Rhagovelia sp.
92044		3	Trichocorixa sp.
92064		1	Ambrysus pulchellus
92074		1	Corydalis sp.
92100		1	Peltodytes sp.
92154		1	Berosus sp.
92221		2	Helichus sp.
92230		1	Dubiraphia sp.
92242		1	Microcylleopus pusillus
92253		61	Stenelmis sp.
92268		8	Chimarra sp.
92292		17	Cheumatopsyche sp.
92308		3	Smicridea sp.
92376		1	Helicopsyche sp.
92378		2	Marilia flexuosa
92391		1	Oecetis sp.
92491		9	Chironomidae
92622		5	Tabanus sp.
93036		6	Corbicula sp.

Measurement Comments and Field Observations:

Kicknet effort; glide no true pool

Metrics and Scoring for Kick Samples, Rapid
Bioassessment Protocol - Benthic Macroinvertebrates

Metric	Value	Score
1. Taxa Richness	26	4
2. EPT Taxa Abundance	7	3
3. Biotic Index (HBI)	5.47	1
4. % Chironomidae	0.47	1
5. % Dominant taxon	29.30	3
6. % Dominant FFG	63.18	1
7. % Predators	63.18	1
8. Ratio of Intolerant:Tolerant taxa	1.35	1
9. % of total trichoptera as Hydropsychidae	100	1
10. # of non-insect taxa	2	2
11. % Collector-gatherers	11.79	4
12. % of total number as Elmidae	0.93	4

AQUATIC LIFE USE POINT SCORE RANGES:

Exceptional:	>36	Total Score:	26
High:	29 - 36	Aquatic Life Use:	Intermediate
Intermediate:	22 - 28		
Limited:	< 22		

STREAM : Clear Fork Trinity Seg. 0833

DATE: 23 July 2002

COUNTY: Parker

LOCATION: Station **17462**

ECOREGION #: 29

PARAMETRIC DATA

Station 17462

23 July 2002

STORET CODE	(<) OR (>)	Value	Description
91554		8	Choroterpes sp.
91590		2	Isonychia sp.
91600		15	Caenis sp.
91613		2	Stenonema sp.
91646		2	Baetis sp.
91669		3	Hetaerina sp.
91713		16	Erpetogomphus sp.
91718		15	Gomphus sp.
91730		63	Progomphus sp.
91923		14	Rhagovelia sp.
92044		15	Trichocorixa sp.
92064		8	Ambrysus pulchellus
92074		1	Corydalis sp.
92100		4	Peltodytes sp.
92128		1	Neoporus sp.
92154		1	Berosus sp.
92178		1	Tropisternus sp.
92221		6	Helichus sp.
92253		2	Stenelmis sp.
92292		5	Cheumatopsyche sp.
92308		2	Smicridea sp.
92478		1	Bezzia sp.
92491		1	Chironomidae
92622		2	Tabanus sp.
92874		22	Physella sp.
93036		3	Corbicula sp.

Measurement Comments and Field Observations:

Kicknet effort; glide data no true pools