



NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau



BILL RICHARDSON
Governor
DIANE DENISH
Lieutenant Governor

Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
P.O. Box 26110, Santa Fe, NM 87502
Phone (505) 827-0187 Fax (505) 827-0160
www.nmenv.state.nm.us

RON CURRY
Secretary
JON GOLDSTEIN
Deputy Secretary

M E M O R A N D U M

FROM: James Hogan, Program Manager, Monitoring and Assessment Section - SQWB
RE: Application of Jacobi et al. (2006) SCI for bioassessment of New Mexico Waters
DATE: June 10, 2009

Benthic macroinvertebrate sampling is one of the forms of biomonitoring utilized by the state of New Mexico. SWQB has been collecting benthic macroinvertebrate data since 1979. Initial assessments were conducted using a modification of the RBP approach detailed in Barbour et al. (1999). The formal process of developing regional biological criteria began in 2002 with assistance from USEPA Region 6 and Tetra Tech, Inc., Ecological Services Division. The Jacobi et al. (2006) report represents the development of a stream condition index (SCI) for wadeable, perennial streams. To determine impairment, the assessment approach is based on comparing the benthic macroinvertebrate community of a specific stream with a reference condition, or a reference stream, to determine attainment of the applicable Aquatic Life Use. This approach is consistent with USEPA guidance. SWQB does not apply this method to large non-wadeable rivers, lakes and reservoirs, or non-perennial streams at this time. The purpose of this memo is to describe NMED's application of the Jacobi et al. (2006) report for bioassessments. For additional information please see section 3.1.1 of New Mexico's Assessment Protocols (NMED-SWQB, 2009).

The SCI was developed based on reference condition as determined by a number of reference sites. The Jacobi et al. (2006) report describes indices for three classes (bioregions) of streams based on elevation and watershed size. However, SWQB uses only the High Small (elevation and watershed, respectively) Index applied to the Mountain biological region which consists of Ecoregions 21 and 23 (Southern Rockies and AZ/NM Mountains). The available dataset, stream classification system, and reference site selection process did not sufficiently partition the variability and select an adequate number of sites to define the "reference condition" and a departure from this condition for the Low Large and Low Small bioregions. Application of the High Small SCI in the Jacobi report places study reaches in the same condition category for all tested streams in the Mountain ecoregions regardless of elevation or watershed size. Therefore, SWQB presently applies the High Small SCI in the Jacobi et al. (2006) report to determine Aquatic Life Use attainment of all wadeable perennial streams in the Mountain ecoregions and refers to this as the mountain stream condition index (M-SCI). Any study site within approximately 20 kilometers of the boundary of ecoregions 21 and 23 should be compared to the definitions for the various ecoregions to determine the proper ecoregion designation for that site.

The M-SCI is composed of metrics from five categories representing community and species attributes including Taxonomic Composition, Taxonomic Richness, Tolerance, Habit, and Functional Feeding Group. Each metric is first calculated and normalized utilizing the 95th or 5th percentiles associated with each metric. All metrics are then summed and averaged to produce an M-SCI score between 0 and 100. The resulting score is then placed in a condition category of Very Good (100 – 78.35), Good (78.35 – 56.70), Fair (56.70 – 37.20), Poor (37.20 – 18.90), Very Poor (18.90 – 0) based on the distribution of reference site scores. Sites with M-SCI ranking of fair, poor or very poor (see Table 8-1 in the report) are considered to not supporting of the applicable aquatic life use.

Biological regions outside of the Mountains region will be assessed using the RBP approach as detailed in Plafkin et al. (1989) with minor regional modifications as recommended in Barbour et al. (1999) until SCIs can be developed for the Xeric and Plains regions. New Mexico will be using additional data from Ecoregions 22, 24, 25, and 26 collected in 2007 and 2008 to develop these additional regional SCIs. These ecoregions will probably be combined such that New Mexico will consist of three biological regions, Mountains, Plains, and Xeric. This approach is similar to SCI development for Wyoming and Colorado and generally follows the Level II ecoregions (Commission for Environmental Cooperation. 1997, 2006).

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Commission for Environmental Cooperation. 1997. Ecological regions of North America: Toward a common perspective. Commission for Environmental Cooperation, Montreal, Quebec, Canada. 71pp. Map revised 2006. Available at:

http://www.epa.gov/wed/pages/ecoregions/na_eco.htm#CEC%201997

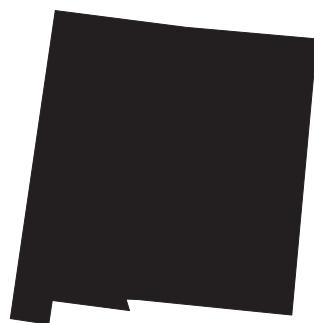
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BENTHIC MACROINVERTEBRATE STREAM CONDITION INDICES FOR NEW MEXICO WADEABLE STREAMS



Prepared for:

The New Mexico Environment Department
Runnels Building
1190 St. Francis Drive
Santa Fe, New Mexico 87505

Prepared by:

Gerald Z. Jacobi, Ph.D.
M. Donna Jacobi, Ph.D.
Jacobi and Associates
2314 Calle Colibri
Santa Fe, New Mexico 87505

and

Michael T. Barbour, Ph.D.
Erik W. Lepo
Tetra Tech, Inc.
10045 Red Run Blvd., Suite 110
Owings Mills, MD 21117

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TABLE OF CONTENTS

	Page
Acknowledgements	ii
Table of Contents	iii
List of Tables	iv
List of Figures.....	v
Acronyms and Abbreviations	vi
Summary.....	vii
1. Introduction	1
2. The Application of Stream Bioassessment in New Mexico	3
3. Establishing Bioregions as a Basis for Bioassessment.....	5
4. Transforming Biological Attributes into Metrics.....	13
5. Evaluation and Selection of Metrics for Biological Indices	16
6. Aggregating Metrics into Biological Indices	21
7. Testing and Refining the Indices Using Independent Data.....	22
8. Conclusions and Recommendations	25
8.1 Rating System	25
8.2 Developing confidence intervals for criteria	25
8.3 Refining and maintaining the index.....	28
9. Literature Cited	29
Appendices	
A. Site Locations and Physiography	
B. Site Score Components	
C. Site Attributes	
D. Revised Site Scores	
E. Comparison of Metrics by Location	
F. New Mexico Master Taxa List 1980-2001	
G. Metric Values of New Mexico Stream Samples	
H. Metric Standardization	
I. Metric Discrimination Efficiencies	
J. Correlation among Metrics	
K. Comparison of Indices among Bioregions for Biomonitoring in New Mexico	
L. Index Composition and Discrimination Efficiency	
M. Microsoft Access Query to Calculate Indices	
N. Development of Confidence Intervals	

LIST OF TABLES

Table		Page
3-1	Development of site scores	6
3-2	Bioregions, characteristics, and site scores.....	6
5-1.	Most efficient metrics (standardized) with thresholds (TH) and discrimination efficiencies (DE).....	18
5-2.	Metrics with high correlations	19
6-1.	Thresholds and discrimination efficiencies for candidate index NMMSCI.....	21
7-1.	Thresholds and discrimination efficiencies for candidate index NMMSCI.....	23
8-1.	Suggested rating system for the New Mexico Macroinvertebrate Stream Condition Indicies.....	24

LIST OF FIGURES

Figure		Page
3-1	Sampling locations within New Mexico (N=444 stations)	8
3-2	Locations of reference samples within New Mexico (N=125 samples)	9
3-3	NMS plot by ecoregion (Level III).....	10
3-4a	NMS plot catchment area (km^2)	11
3-4b	NMS pilot by elevation (m).....	12
8-1	Box-and-whisker plot for Low Small NMMSCI	26
8-2	Box-and-whisker plot for Low Large NMMSCI	26
8-3	Box-and-whisker plot for High Small NMMSCI.....	26

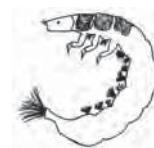
ACRONYMS AND ABBREVIATIONS

B-IBI	Benthic Index of Biotic Integrity
BPJ	Best Professional Judgment
DE	Discrimination Efficiency
EDAS	Ecological Data Application System
EPA	Environmental Protection Agency (U.S.)
HUC	Hydrologic Unit Code
IBI	Index of Biotic Integrity
ICI	Invertebrate Condition Index
NMED	New Mexico Environment Department
NMDS	Non-metric Multidimensional Scaling, also NMS
NMMSCI	New Mexico Macroinvertebrate Stream Condition Index
NMS	Non-metric Multidimensional Scaling, also NMDS
RBP	Rapid Bioassessment Protocol
SWQB	Surface Water Quality Bureau
SCI	Stream Condition Index
TH	Threshold
TMDL	Total Maximum Daily Load
WQ	Water Quality

SUMMARY

Our purpose was to develop multimetric biological indices for New Mexico wadeable streams. These stream condition indices (SCI) are designed to be used as a primary indicator of ecosystem health and to identify impairment with respect to the reference (or natural) condition. Results could be used to make recommendations for developing biocriteria to achieve more reliable assessments of New Mexico streams.

Information derived from nearly 800 macroinvertebrate samples collected between 1980 and 2001 was categorized based on similarities in composition. For New Mexico, a mountainous state, a three region classification based on elevation and catchment size (low small, low large, and high small) was determined to be the most appropriate for assessment purposes. Based on stream attributes and the best professional judgment of personnel familiar with the locations, a score was developed for each site.



Statewide stream assessment data using a modified Hess sampler from 189 fall samples with watershed size less than 4,000 mi² were used for developing indices. Organisms in these collections were identified to the lowest taxonomic level possible. The identifications and counts of organisms collected at each site provided the information used to calculate a suite of metrics for each benthic sample. These metrics (biological attributes) representing community diversity, composition, and tolerance to pollution of the bottom-dwelling macroinvertebrates were derived using the Ecological Data Application System (EDAS, Tetra Tech 2000). Twenty-seven candidate metrics were selected for use in index development.

The ranges of reference site values for the candidate New Mexico stream condition indices were compared with the ranges of values in the impaired sites by means of box-and-whisker plots. Discrimination efficiencies were calculated to show the percent of index values for the stressed sites which were below each index threshold (25th percentile). Data from 128 other Hess samples and 177 samples using a variety of collection methods were used to validate the indices. The final proposed regional indices were those with the highest discrimination efficiencies for both data sets. Index scores above the 25th percentile threshold were rated as "Very Good" or "Good"; below the 25th percentile threshold scores were divided into three categories: "Fair", "Poor", or "Very Poor".

A Microsoft Access Query which can be used to calculate the index for a sample or group of samples by entering the appropriate metric values from EDAS and instructions on developing confidence intervals are also provided.

1. INTRODUCTION

Over the past century, land use activities such as mining, agriculture, urbanization, and ranching have seriously threatened the quality of surface waters by contributing to nonpoint-source pollution. In New Mexico, the investigation of these nonpoint sources of water pollution has become a priority. It is the responsibility of the New Mexico Environment Department (NMED) to maintain and protect the ecosystem health of the state's waters. In keeping with the Clean Water Act and technical guidance from EPA, NMED developed water quality standards for the protection of ecosystem health. In support of the state's water quality standards, which mandate the implementation of biological and chemical criteria and a strict antidegradation policy, the ambient monitoring program has established an assessment "toolbox" that includes physical, chemical, and biological techniques.

The NMED established a Biological Assessment Program initiated by G. Z. Jacobi in 1979. Early programs were site specific or intensive monitoring which concentrated on point-source discharges in high quality mountain streams such as the Rio Hondo, Red River, and Chama River. Ambient monitoring stations were first sampled throughout the state in 1979. The NMED now uses a basin network of monitoring, scheduled on a yearly rotation and prioritization. A core team of biologists, hydrologists, and chemists provides the technical resources to conduct the monitoring. Biological data (e.g., the diversity of organisms) are necessary to assess the health of New Mexico's surface waters and to measure the attainment of biological integrity goals as directed by EPA and characterized by the state of New Mexico. The results presented in this report establish a framework for the assessment and monitoring of New Mexico's streams using these bioassessment procedures.

Bioassessment consists of comparing the biological condition of a stream to a reference condition, which is an aggregate of conditions in unimpaired streams of a region. Reference conditions are “best available” conditions where biological potential is at its highest for the particular region or area. These reference conditions are representative of sustainable ecosystem health. For New Mexico, a

Biocriteria: *under the Clean Water Act, numerical values or narrative statements that define a desired biological condition for a waterbody and are part of the WQ standards.*

Bioassessments: *evaluations of the biological condition of a waterbody that use biological surveys of the resident biota.*

Biosurveys: *the collection, processing, and analysis of representative portions of a resident biotic community or assemblage.*

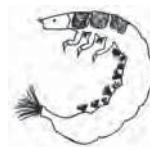
mountainous state, a regional classification based on elevation and catchment size appears to be the most appropriate framework for assessments. Partitioning the streams and watersheds into Level 3 ecoregions does not appear to improve biological assessment with the current dataset. The information derived from the surveys was aggregated into a macroinvertebrate Stream Condition Index (SCI) for New Mexico (NMMSCI). This SCI is used as a primary indicator of ecosystem health and can identify impairment with respect to the reference (or natural) condition. The index is composed of biological attributes, called metrics, that represent elements of the structure and function of the bottom-dwelling macroinvertebrate assemblage. Metrics are specific measures of diversity, composition, and tolerance to pollution, which provide ecological information. For this study these metrics were derived using the Ecological Data Application System (EDAS, Tetra Tech 2000).

A data analysis application has been developed to ensure consistency in data management and analysis throughout the state as NMED personnel conduct biological monitoring. Benefits expected from the implementation of the NMMSCI will apply to a broad spectrum of management programs, including:

- characterizing the existence and severity of point and nonpoint source impairment;
- targeting and prioritizing watersheds and ecosystem management areas for remedial or preventive programs;
- evaluating the effectiveness of nonpoint source best management programs;
- screening ecosystems for use attainability; and
- developing a basis for establishing biocriteria that relate to regional water quality goals, an EPA priority.

CORE METRIC CATEGORIES

- ◆ Taxonomic composition
- ◆ Taxonomic richness
- ◆ Habit
- ◆ Tolerance
- ◆ Functional feeding group



See definitions in the metric categories box in Chapter 4.

2. THE APPLICATION OF STREAM BIOASSESSMENT IN NEW MEXICO

The NMED is developing a bioassessment framework for use in assessing the quality of streams as part of the state's Monitoring and Assessment Program. Through the 303(d) and Total Maximum Daily Load (TMDL) framework outlined in the Clean Water Act of 1972 (and revisions of 1977, 1987), those waters considered to be impaired and threatened must be identified and improved to meet their designated uses. The definition of impairment by natural resource management or regulatory agencies is typically based on attainment or non-attainment of numerical water quality standards associated with the designated use of a waterbody. If those standards are not met (or attained) then the waterbody is considered to be impaired. Resident biota in a watershed function as continual natural monitors of environmental quality by responding to the episodic and cumulative effects of pollution and habitat alteration. Conducting ambient biological surveys is one of the primary approaches to biomonitoring. These surveys, in turn, are used to measure the attainment of biological integrity. The assessment of ecosystem health cannot be done without measuring the attainment of biological integrity goals as directed by EPA and addressed by the state of New Mexico.

The Clean Water Act of 1972 (PL-92-500) has as one of its primary goals the maintenance and restoration of biological integrity, which incorporates biological, physical, and chemical quality. This concept refers to assemblages of organisms that would inhabit a particular area if it had not been affected by human activities. This integrity or structure and function of the aquatic community becomes the primary reference condition used to measure and assess waterbodies in a particular region.

Biological integrity is commonly defined as “the capability of supporting and maintaining a balanced, integrated, adaptive community of organisms having a species composition, diversity and functional organization comparable to that of the natural habitat of the regions” (Karr and Dudley 1981, Gibson et al. 1996).

Careful measurement of the aquatic ecosystem and its constituent biological communities can determine the condition of biological integrity. Several key attributes are measured to indicate the quality of the aquatic resources. Biological surveys establish the attributes or measures used to summarize several community characteristics, such as taxa richness, number of individuals, sensitive or insensitive species, observed pathologies, and the presence or absence of essential habitat elements.

Multimetric, invertebrate indices of biotic integrity, variously called RBP (Rapid Bioassessment Protocol; Plafkin et al. 1989; Barbour et al. 1999), ICI (Invertebrate Condition Index; Ohio EPA 1988), B-IBI (Benthic IBI; Kerans and Karr 1994) and SCI (Stream Condition Index; Barbour et al. 1996) have been developed for many regions of North America and are generally accepted for biological assessment of aquatic resource quality (e.g., Gibson et al. 1996, Southerland and Stribling 1995, Karr 1991). The framework of bioassessment consists of characterizing reference conditions upon which comparisons can be made and identifying appropriate biological attributes with which to measure the condition. Reference conditions were considered to be the “best available” sites where biological potential is at its highest for the particular region or area. These reference conditions are representative of sustainable ecosystem health in New Mexico.

Biological measurements, called metrics, represent elements of the structure and function of the bottom-dwelling macroinvertebrate assemblage. Metrics change in some predictable way with increased human influence (Barbour et al. 1996). They include specific measures of diversity, composition, functional feeding group, habit, and ecological information on tolerance to pollution. Multimetric indices, such as the IBI, incorporate multiple biological community characteristics and measure the overall response of the community to environmental stressors (Karr et al. 1986, Barbour et al. 1995). Such a measure of the structure and function of the biota (using a regionally-calibrated multimetric index) is an appropriate indicator of ecological quality, reflecting biological responses to changes in physical habitat quality, the integrity of soil and water chemistry, geologic processes, and land use changes (to the degree that they affect the sampled habitat).

The purpose of this study was to develop a multimetric biological index for New Mexico streams. Results of the analysis could be used to make recommendations for improving the state’s biological sampling program to achieve more reliable assessments of New Mexico streams.

This study was designed to address the following questions:

- What is the most appropriate site classification for assessment of ecosystem health?
- What are the seasonal differences in biological metrics? (Are different index periods required for monitoring?)
- What are the appropriate metrics for a New Mexico Stream Condition Index (SCI)?
- What are thresholds that indicate the degree of comparability of New Mexico streams to reference condition?

3. ESTABLISHING BIOREGIONS AS A BASIS FOR BIOASSESSMENT

Biological systems naturally vary in composition and diversity of the fauna, depending on the physical characteristics and geomorphology of the waterbodies (in this case, streams) in which they reside. Partitioning this natural variability into relatively homogenous classes or bioregions can aid in establishing reference conditions, or benchmarks, from which to assess biological condition. The purpose of this classification analysis is to evaluate various stream characteristics, such as Level 3 ecoregions and draft version of Level 4, elevation, and catchment size, river basin (HUC 2, 4, 6, 8), physiographic regions, and strata derived from NM Dept. of Game and Fish data, as a means of establishing bioregions for New Mexico streams (Appendix A). The relative geographic clustering of the benthic data from New Mexico streams is depicted in Figure 3-1.

Methods of Analysis

- *Non-metric Multidimensional Scaling (NMDS) Ordination* — Spatial array of sites based on similarity/difference of benthic composition and abundance.
- *Similarity Analysis* — Tests for statistical significance and the strength of the classification.
- *Box-and-Whisker Plots* — Display of ranges of values for the biological data oriented by spatial and temporal groupings.
- *Scatterplots by elevation and catchment size* — Tests for correlation of biological attributes (metrics) with these strata.

Information derived from nearly 800 macroinvertebrate samples collected between 1980 and 2001 were categorized based on similarities in composition. For New Mexico, a mountainous state, a three region classification based on elevation and catchment size (low small, low large, and high small) was determined to be the most appropriate for assessment purposes.

Identification of reference sites (i.e., those having the expected composition and diversity of biota for a region or class of sites) provides the basis for evaluating bioregions. Based on stream attributes and the best professional judgment of personnel familiar with the locations, a score was developed for each site (Appendix B). The attributes included land and water use, point source discharges, 303d listing, habitat scores and level of impact (See Table 3-1 and Table 3-2, and Appendix C). A review by SWQB resulted in changes to bioregion and or reference status to 41 sites (Appendix D).

Based on average flow regimes, emergence phenology and logistics, the NMED SWQB determined a biological index period (Fall) extending from 15 August through 15 November was applicable for calibration of the SCIs used as the basis for bioassessment for each of the three

regional classifications in New Mexico. Statewide stream assessment data using a modified Hess sampler from 189 fall sites with watershed size less than 4,000 mi² were used for developing indices. Out of the 189 fall sites, 56 were identified as reference sites and 49 were identified as stressed based on the distributions of the scores for each bioregion (Figure 3-2).

Table 3-1. Development of site scores.

Component	Scoring	Range
Best Professional Judgment	Average of 1 – 4 scores	1 - 4
No Flow by Diversion	True = 1, False = 0	0 – 1
Channelized	True = 1, False = 0	0 – 1
< 10% Agriculture & Impact	Average of Agriculture: True = 1, False = 0 Impact: No = 0, Yes = 1	0 – 1
< 15% Grazing & Impact	Average of Grazing: True = 1, False = 0 Impact : No = 0, Yes = 1	0 – 1
< 5% Urban & Impact	Average of Urban True = 1, False = 0 Impact No = 0, Yes = 1	0 – 1
No Dams & Impact	Average of Dam Presence: True = 1, False = 0 Impact: No = 0, Yes = 1	0 – 1
On 303d List	True = 1, False = 0	0 – 1
No NPDES	True = 0, False = 1	0 – 1
Habitat Score	< .50 = 2, .50 - .75 = 1, > .75 = 0	0 – 2
Total Score (Sum of Above)		0 - 14

Documentation for results are as follows:

- Ordination of the benthic data indicated that a spatial classification by ecoregion was not distinct (Figure 3-3). Neither the data based on genus-level taxonomy nor that based on lowest taxonomic-level supported the use of ecoregions as bioregions.
- Ordination of the benthic data indicated that combined elevation and catchment size provided the most robust classification (Figure 3-4a and b).
- Box-and-whisker plots performed on various benthic attributes for reference sites illustrated only weak distinction among some of the bioregions (Appendix E). However, bioregions are retained as a basis for statewide bioassessments due to acceptable performance.

Table 3-2. Bioregions, characteristics, and site scores.

Location	Elevation	Watershed Size	Reference Score	Stressed Score
Low Elevation Small Catchment Sites	< 7500 ft.	< 150 sq. mi.	≤ 5.5	≥ 7
Low Elevation Large Catchment Sites	< 7500 ft.	≥ 150 sq. mi.	≤ 6.67	≥ 9
High Elevation Small Catchment Sites	≥ 7500 ft.	< 200 sq. mi.	≤ 3	≥ 6

Conclusion for Classification into Bioregions

- Use of ecoregions to serve as bioregions for benthic assessments of cobble habitat in streams of New Mexico is not necessary.
- Classification was best determined by elevation and catchment size.
- The broad collection timeframe of NMED introduces variability into the dataset and use of the Fall period improves the bioassessment.

Recommendations From this Analysis

- The issue of using bioregions to stratify or partition the aquatic community is not totally resolved, but appears to focus on elevation and catchment size characteristics of the streams. Further analysis is warranted to refine bioregions or develop alternative frameworks.
- Additional sampling in the bioregions could reduce the variability in the metrics.

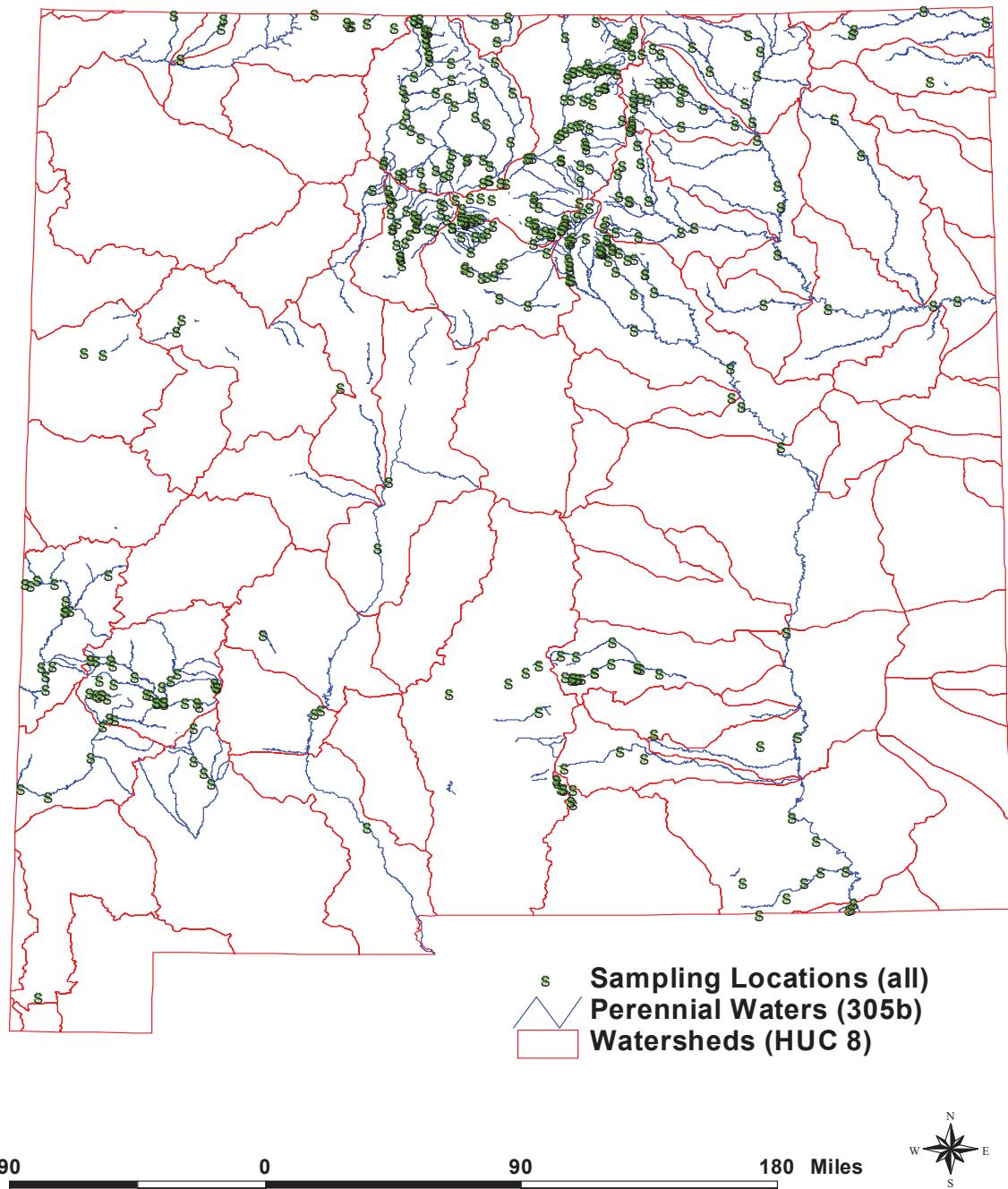


Figure 3-1. Sampling locations within New Mexico (N=444 stations).

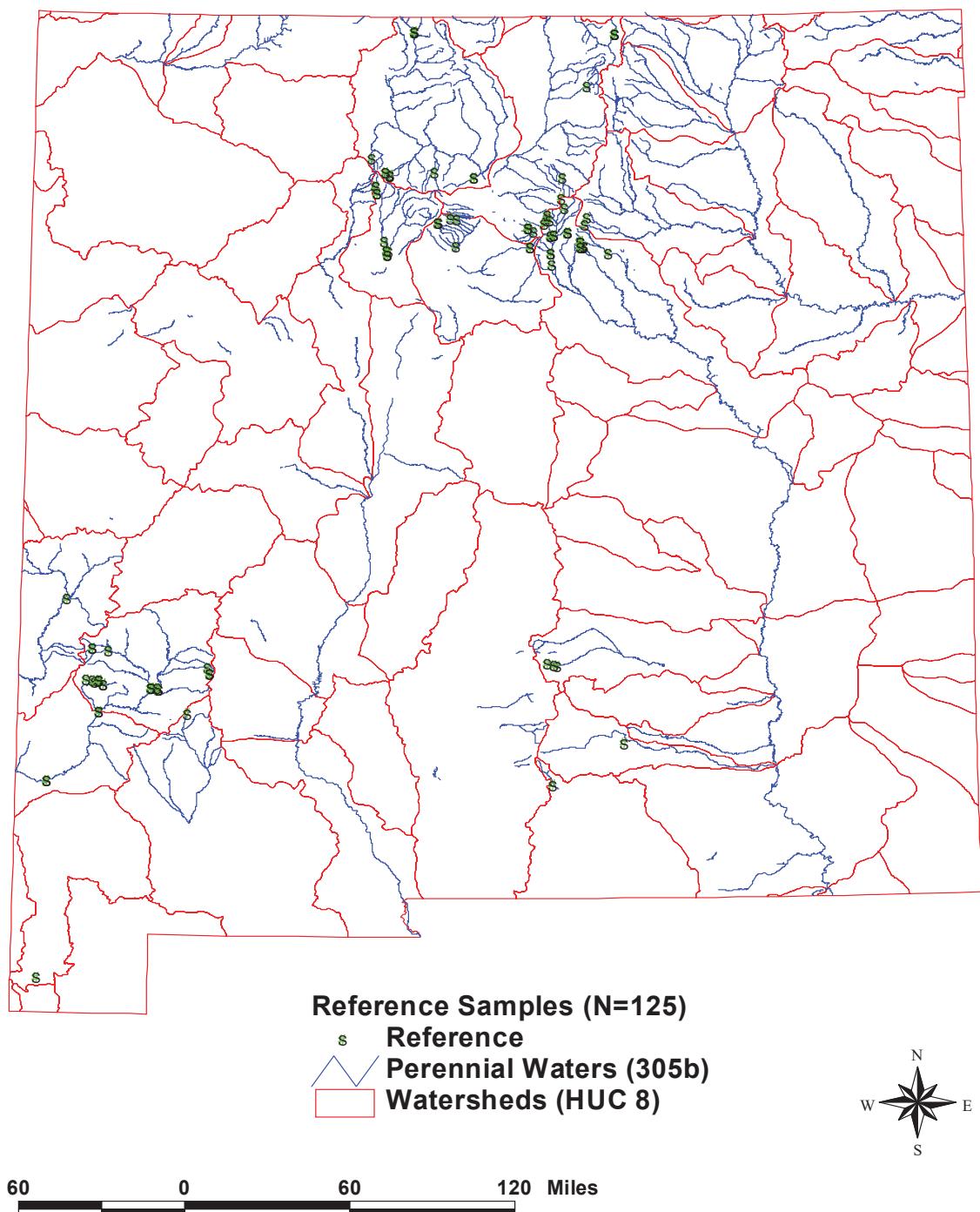


Figure 3-2. Locations of reference samples within New Mexico (N=125 samples).

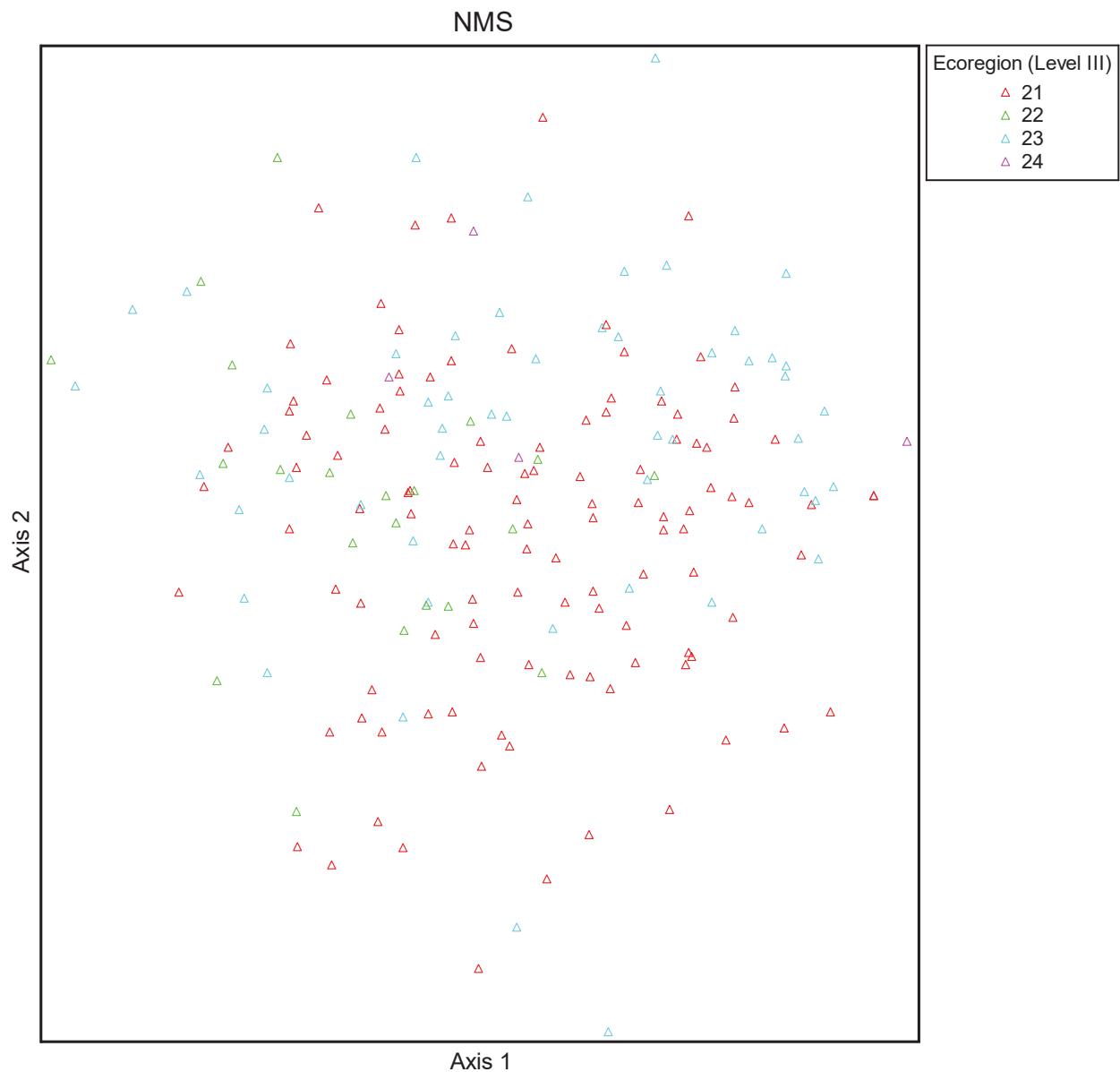


Figure 3-3. NMS plot by ecoregion (Level III).

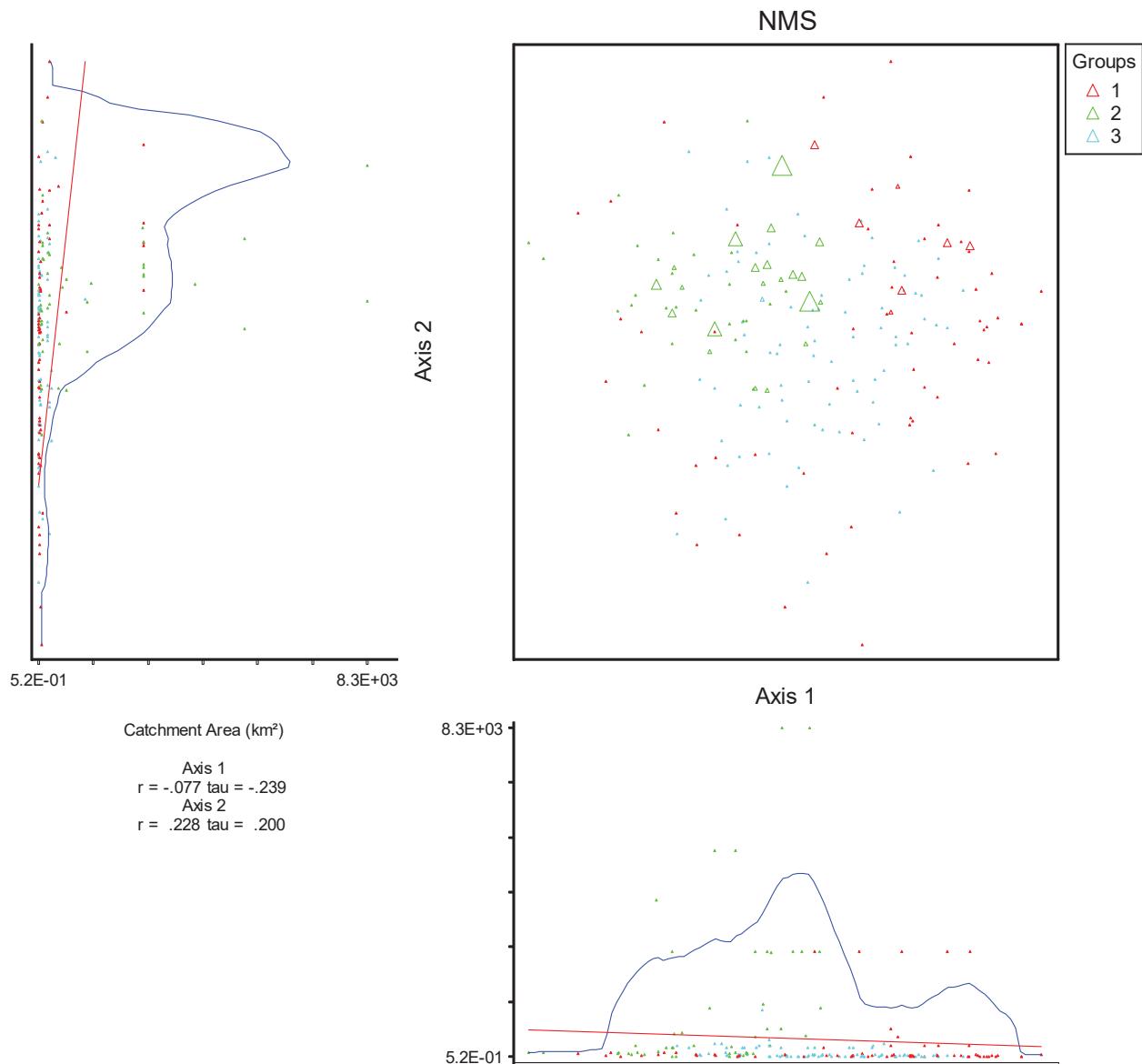


Figure 3-4a. NMS plot catchment area (km²).

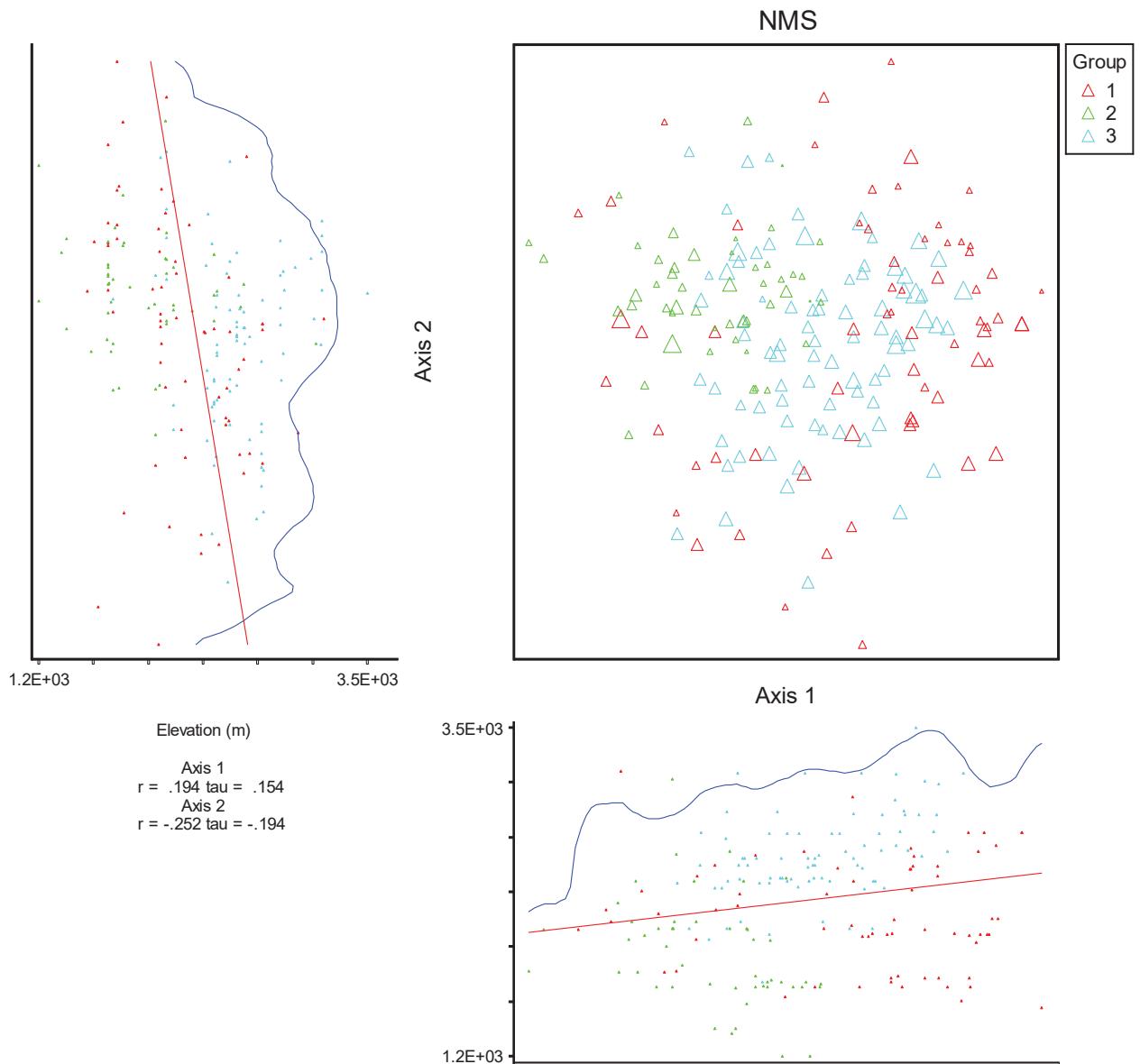


Figure 3-4b. NMS plot by elevation (m).

4. TRANSFORMING BIOLOGICAL ATTRIBUTES INTO METRICS

A *metric* is a characteristic of the biota that changes in some predictable way with increased human influence.

Various attributes of the benthic macroinvertebrate community have been characterized in the form of quantitative measures called metrics. The attributes of the community that are measured by these metrics fall into several categories (see box to left) of benthic

community characteristics, and the specific metrics within those categories can indicate different aspects of the community condition. For example, metrics dealing with species richness or diversity, such as Total Taxa, can be used as indicators of community health because an ecologically healthy system is generally expected to support a more diverse community of fauna than can be supported in an ecologically impaired area. Multiple metrics evaluated together can give an overall indication of ecological integrity.

New Mexico's benthic macroinvertebrate samples used for analysis were collected between 1980 and 2001. Organisms in these collections were identified to the lowest taxonomic level possible (Appendix F). Prior to 1989 midges were not identified beyond family level. For our analyses using EDAS, we grouped the taxonomy of midges to family level and the remainder to a minimum of genus level to maintain taxonomic consistency for the collection. Within each sample, the number of individuals of each taxon was tallied. Samples with multiple replicates were combined for analysis. The identifications and counts of organisms collected at each site provided the information used to calculate a suite of metrics for each benthic sample (Appendix G).

Metric Categories

- *Taxonomic richness* — counts of distinct taxa within selected taxonomic groups.
- *Taxonomic composition* — proportions of individuals belonging to specific selected taxonomic groups.
- *Functional feeding group* — dominant mode of feeding, though not the specific nutritional source or benefits (e.g., suspension feeder, predator, etc.).
- *Habit* — dominant behavior of an animal for moving and maintaining physical position in its habitat (e.g., sprawling, clinging, etc.).
- *Degree of tolerance* — counts, proportions, or weighted scores of taxa based on ability to survive exposure to pollutants.

Proposing candidate metrics for developing indices involves three basic steps, shown in the Metrics and Scoring box below. Metrics were calculated for each of the 767 New Mexico benthic macroinvertebrate samples using EDAS. These metrics represented five categories: taxonomic richness, taxonomic composition, feeding groups, habit, and tolerance (see metric categories box). Box-and whisker plots for the metrics were then examined to determine which metrics should be proposed for use in index development (Appendix E).

Metrics were converted to standardized scores using the formulas in Appendix H, based on the direction of the metric's response to stress. Percentile distributions of each metric's values were determined for the entire set of data ($n = 767$ benthic samples). Standardized score conversions use the 95th or 5th percentile, shown in Appendix H.

Box-and-whisker plots for the standardized candidate metrics, comparing the distribution of values in reference sites with the distribution of values in stressed sites, are presented in Appendix E. The distributions displayed in these plots were evaluated as follows:

- The box portion of the plots represents the middle 50% of the metric values.
- The line inside the box represents the median metric value.
- The top of the box represents the 75th percentile of the metric distribution.
- The bottom of the box represents the 25th percentile of the metric distribution.
- The whiskers above and below the box represent the upper and lower tails of the distribution.
- Circles above or below the whiskers represent outliers or extremes in the distribution.
- If the box portions of the plots for reference and stressed sites for a particular metric did not overlap, or had minimal overlap, the metric was considered a possible candidate for index development and is listed in the following box.

Metrics and Scoring

- Calculate metrics* – Calculate values for the selected metrics for all 767 sampling sites.
- Standardize scores* – Convert all metric values to a standard 0-100 point scale.
- Propose metrics for use in index development* – Select the most discriminatory metrics by examining box-and-whisker plots.

Proposed Metrics

- Twenty-seven candidate metrics were selected for use in index development as follows:

Taxonomic Composition	Tolerance
Shannon DI (\log_2)	Baetis to Ephemeroptera %
Beck BI	Sensitive EPT%
HBI	Intolerant %
Margalef DI	Intolerant Taxa
Percent Dominant Taxon	
Evenness	
Coleoptera %	Habit
Odonata %	Clinger Taxa
Plecoptera %	Sprawler Taxa
	Swimmer Taxa
Taxonomic Richness	Sprawler %
EPT Taxa	Swimmer %
Ephemeroptera Taxa	
Coleoptera Taxa	Functional Feeding Group
Plecoptera Taxa	Scraper %
Trichoptera Taxa	Scraper Taxa
Total Taxa	Shredder Taxa

5. EVALUATION AND SELECTION OF METRICS FOR BIOLOGICAL INDICES

A set of working indices for scoring New Mexico stream condition was determined for each of the site classes following the steps summarized in the box to the right. The process of metric selection is iterative, with the areas of consideration being revisited and weighed throughout the process. Selection of specific metrics for use in a stream condition index was based on several evaluation criteria using the 189 fall samples (see metric evaluation box).

Index Development

- Select metrics* – Metric selection is further refined based on Discrimination Efficiencies for each Site.
- Calculate index* – Average the standardized metric scores for each benthic sampling site for each index.

Metric Evaluation.

Metrics are included if they:

- are able to differentiate between reference and impaired sites (methods: box plots, discrimination efficiencies [DE]);
- represent at least some different aspects of the community (taxa composition, richness, tolerance, and other metric categories); and
- minimize redundancy among individual component metrics (method: Pearson correlations).

Indices were developed for the fall season and the three bioregions by examining the discrimination efficiencies for the candidate metrics for each index and selecting the most discriminatory metrics for each. These metrics should represent different community attributes and not be redundant (Appendix I).

Discrimination efficiencies (Paul and Gerritsen, 2002) were calculated based on the proportion

of the values of the metric for the stressed sites which fell below the bottom of the box in the plot for the reference sites for metrics following metric standardization. All twenty-seven candidate metrics exhibited discrimination efficiencies of 50% or higher for one or more of the regions (Table 5-1). Additional discrimination efficiencies for these and excluded metrics are listed in Appendix I. One metric, HBI, exhibited trends in the opposite direction from that is expected for the measure and was not included in the proposed metrics. Two others, Coleoptera % and Coleoptera Taxa, can be expected go either direction but had high discrimination efficiencies for one region and were included in the set of proposed metrics.

Discriminatory metrics, identified on the basis of boxplots and discrimination efficiencies, represent five different categories of benthic community attributes: taxonomic richness, taxonomic composition, habit, functional feeding group and tolerance to environmental stress

(see Conclusion for Metric Selection box, page 20). Different sets of metrics had high or relatively high discrimination efficiencies for the three site classes. Table 5-1 reports the recommended metrics for use in stream condition indices for each region.

Pearson correlation coefficients (Appendix J) identified high correlations among several metrics, summarized in Table 5-2. These metrics (Shannon DI, Beck BI, D_MG, Percent Dominant taxon, Clinger taxa, EPT taxa, and Plecoptera taxa) were evaluated for inclusion in indices where one or more also had high discrimination efficiencies.

Table 5-1. Most efficient metrics (standardized) with thresholds (TH) and discrimination efficiencies (DE).

	Low Small		Low Large		High Small	
	TH	DE	TH	DE	TH	DE
Taxonomic Composition						
Shannon DI (\log_2)	72.65	66.67%	72.65	79.17%	72.65	68.75%
Beck BI	14	55.56%	14	95.83%	18	81.25%
HBI	67.13	66.67%	67.13	54.17%	73.32	62.50%
Margalef DI	3.15	66.67%	3.15	87.50%	3.41	81.25%
Dominant Taxon	73.70	-	30.77	70.83%	73.70	-
Evenness	63.19	66.67%	77.56	83.33%	63.19	62.50%
Coleoptera Percent	4.887	88.89%	3.23	58.33%	3.23	56.25%
Plecoptera Percent	2.33	66.67%	2.33	75.00%	15.58	62.50%
Odonata Percent	0	66.67%	0.65	79.17%	0	75.00%
Taxonomic Richness						
EPT Taxa	12	77.78%	12	91.67	13	75.00%
Ephemeroptera Taxa	57.14	88.89%	57.14	83.33%	71.43	87.50%
Coloptera Taxa	1	-	2	83.33%	1	-
Plecoptera Taxa	14.29	66.67%	14.29	83.33%	42.86	68.75%
Trichoptera Taxa	62.5	77.78%	62.5	79.17%	62.5	62.50%
Total Taxa	64.52	66.67%	64.52	87.50%	64.52	56.25%
Tolerance						
Baetis to Ephemeroptera Pct.	49.57	-	49.57	79.17%	49.57	-
Sensitive EPT Percent	36.34	55.56%	20.81	50.00%	47.80	68.75%
Intolerant Percent	19.24	-	19.24	79.17%	39.23	68.75%
Intolerant Taxa	46.15	66.67%	46.15	83.33%	61.54	81.25%
Habit						
Clinger Taxa	11	77.78%	11	87.50%	11	68.75%
Sprawler Taxa	33.33	55.56%	33.33	75.00%	50	81.25%
Swimmer Taxa					50	81.25%
Sprawler Percent	3.37	-	20.81	70.83%	3.37	-
Swimmer Percent	8.28	-	8.28	91.67%	8.28	-
Functional Feeding Group						
Scraper %	12.25	88.89%	9.10	79.17%	9.10	68.75%
Scraper Taxa	50	88.89%	50	79.17%	50	68.75%
Shredder Taxa	33.33	55.56%	50	100.00%	33.33	-

Table 5-2. Metrics with high correlations.

Metric	Associated Correlations			
Beck BI	Clinger Taxa 0.840	EPT Taxa 0.937	Total taxa 0.855	Intolerant taxa 0.965
D_MG	Shannon DI 0.829	Beck BI 0.816	Total taxa 0.924	EPT Taxa 0.857
Clinger taxa	D_MG 0.852	EPT taxa 0.909	Total taxa 0.891	
EPT taxa	Plecoptera taxa 0.809	Total Taxa 0.895	Intolerant taxa 0.884	
Shannon DI	Percent Dominant taxon -0.898			
Plecoptera taxa	Intolerant taxa 0.844			

Conclusion for Metric Selection

- Candidate metrics were selected for use in index development as follows:

Low Elev. Small Catch.	Low Elev. Large Catch.	High Elev. Small Catch.
Taxonomic Composition	Taxonomic Composition	Taxonomic Composition
Shannon DI (\log_2)	Shannon DI (\log_2)	Shannon DI (\log_2)
Beck BI	Beck BI	Beck BI
HBI	Margalef DI	Margalef DI
Margalef DI	% Dominant Taxon	Evenness
Evenness	Evenness	Odonota %
Coleoptera %	Odonota %	Plecoptera %
Odonota %	Plecoptera %	
Plecoptera %		
Taxonomic Richness	Taxonomic Richness	Taxonomic Richness
EPT Taxa	EPT Taxa	EPT Taxa
Ephemeroptera Taxa	Ephemeroptera Taxa	Ephemeroptera Taxa
Plecoptera Taxa	Coleoptera Taxa	Plecoptera Taxa
Trichoptera Taxa	Plecoptera Taxa	Trichoptera Taxa
Total Taxa	Trichoptera Taxa	Total Taxa
	Total Taxa	
Tolerance	Tolerance	Tolerance
Sensitive EPT %	Baetis to Ephemeroptera %	Sensitive EPT %
Intolerant Taxa	Intolerant Taxa	Intolerant Taxa
	Intolerant Percent	Intolerant Percent
Habit	Habit	Habit
Clinger Taxa	Clinger Taxa	Clinger Taxa
Sprawler Taxa	Sprawler Taxa	Sprawler Taxa
	Sprawler %	Swimmer Taxa
	Swimmer %	
Functional Feeding Group	Functional Feeding Group	Functional Feeding Group
Scraper %	Scraper %	Scraper %
Scraper Taxa	Scraper Taxa	Scraper Taxa
Shredder Taxa	Shredder Taxa	

6. AGGREGATING METRICS INTO BIOLOGICAL INDICES

The metrics selected for each region were combined into a variety of indices, being careful to avoid including metrics which were highly correlated (Table 5-2). In addition, only metrics with discrimination efficiencies of 70% for the Low Large samples, 60% or higher for the High Small samples, and 50% or higher for the Low Small Samples were used in developing indices. The standardized metric scores were then averaged to provide indices with values ranging from 0 to 100.

The ranges of reference site values for the candidate New Mexico stream condition indices were compared with the ranges of values in the impaired sites by means of box-and-whisker plots (Appendix K). These boxplots indicated that the candidate indices had different abilities to discriminate between reference and stressed sites. Examination of the boxplots for the candidate regions indicated that thresholds for each bioregion were more appropriate than thresholds for the state level because of the large proportions of reference sites which would be classified as “stressed”.

An index threshold based on the bottom of the box in the reference plot (25th percentile) was determined for each candidate index. Discrimination efficiencies were calculated to show the percent of index values for the stressed sites which were below each index threshold. Thresholds and discrimination efficiencies for the candidate indices are presented in Appendix L. The candidate indices with the highest discrimination efficiencies for each bioregion in the fall sampling season were considered proposed indices.

Table 6-1. Thresholds and discrimination efficiencies for candidate index NMMSCI.

Fall Hess for Catchment Areas below 4000 mi ²		
Region	Threshold	DE
Low Small	43.55	77.78%
Low Large	51.64	91.67%
High Small	56.70	93.75%

7. TESTING AND REFINING THE INDICES USING INDEPENDENT DATA

Data from 128 other Hess samples with catchments greater than 4000 sq. mi. and 177 samples using kick-net sampling methods were used to validate the indices. Testing the indices on data which were not used in the index development indicates the utility of the indices and can show how the indices might work on future data collections and, in this case, using kick-nets. Only indices with the highest discrimination efficiencies for a region were tested on the remaining samples (Appendix L). A comparison of the candidate indices using results from the original data and the most discriminatory results from the independent test data showed reasonable agreement (Table 6-1). Samples from the stressed High Elevation Small Catchment sites had lower rates of classification as impaired than those from the Low Elevation sites. It is important to note that for the kick-net samples the reference sites would often be classified as impaired using these indices and thresholds for Low Elevation Large Catchment sites (52.5%).

The indices with the highest discrimination efficiencies for both data sets were selected as the final proposed indices for each region. The metrics included in the final indices are shown on page 24.

Table 7-1. Thresholds and discrimination efficiencies for candidate indices NMMSCI.

	LSNMMSCI	LLNMMSCI	HSNNMCSI
Threshold	43.55	51.64	56.70
Off Season Hess below 4000 mi²			
Regional Samples	77.78%	91.67%	93.75%
Other Methods And Hess above 4000 mi²	Stressed Site Samples	Stressed Site Samples	Stressed Site Samples
Regional Samples	70.00%	88.24%	69.57%
Ben_01	-	0.00%	100.00%
Ben_01a	60.00%	75.00%	75.00%
Ben_02	-	100.00%	-
Ben_03	-	100.00%	75.00%
Ben_03p	75.00%	100.00%	0.00%
Ben_03r	100.00%	0.00%	50.00%
Other Methods And Hess above 4000 mi²	Reference Site Samples	Reference Site Samples	Reference Site Samples
Regional Samples	27.78%	48.21%	18.33%
Ben_01	-	0.00%	0.00%
Ben_01a	25.00%	36.36%	15.38%
Ben_02	100.00%	66.67%	-
Ben_03	22.73%	60.00%	26.67%
Ben_03p	42.86%	50.00%	22.22%
Ben_03r	25.00%	40.00%	11.11%

Final Index Metrics

- The final NMMSCI contained the following metrics:

Low Small NMMSCI	Low Large NMMSCI	High Small NMMSCI
Taxonomic Composition Coleoptera %	Taxonomic Composition Shannon DI (\log_2)	Taxonomic Composition Shannon DI (\log_2) Evenness Plecoptera %
Taxonomic Richness EPT Taxa Ephemeroptera Taxa	Taxonomic Richness EPT Taxa Ephemeroptera Taxa Trichoptera Taxa	Taxonomic Richness Ephemeroptera Taxa Plecoptera Taxa
Tolerance Sensitive EPT %	Tolerance	Tolerance Sensitive EPT % Intolerant Percent
Habit Sprawler Taxa	Habit	Habit Clinger Taxa Sprawler Taxa Swimmer Taxa
Functional Feeding Group Scraper % Scraper Taxa	Functional Feeding Group Scraper % Scraper Taxa	Functional Feeding Group Scraper % Scraper Taxa

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Rating System

Regional Stream Condition Indices for New Mexico streams (NMMSCI) can be used to assess the biological condition of New Mexico streams for the Fall sampling period. The recommendations for New Mexico Stream Condition Indices are as follows:

- All samples could be evaluated with their associated NMMSCI.
- Ratings of “Good” or “Very Good” could apply to sites that score at or above the 25th percentile of reference sites. Index scores below the 25th percentile threshold could be divided into three categories: “Fair”, “Poor”, or “Very Poor” (Barbour, et. al., 1999). Table 8-1 lists suggested ranges for the bioregion developed by equidistant partitioning of scores above and below the 25th percentile. These suggested ranges have been applied to the regions in Figures 8-1, 8-2, and 8-3.
- Appendix M provides a Microsoft Access Query which can be used to calculate the index for a sample or group of samples by entering the appropriate metric values from EDAS.

Table 8-1. Suggested rating system for the New Mexico Macroinvertebrate Stream Condition Indices.

Percent Comparison to Reference					
Rating	Very Good	Good	Fair	Poor	Very Poor
Low Small NMMSCI	>56.45	43.55 – 56.45	29.03 – 43.55	14.52 – 29.03	< 14.52
Low Large NMMSCI	> 75.82	51.64 – 75.82	34.43 - 51.64	17.21 - 34.43	<17.21
High Small NMMSCI	> 78.35	56.70 – 78.35	37.20 - 56.70	18.90 - 37.20	< 18.90

8.2 Developing confidence intervals for criteria

Occasionally a sample index value may be very close to one of the cut-off points for a rating condition. In that case it would be helpful to have a confidence interval around the cut-off when making decisions about the rating. Using the mean standard errors and critical values one can develop confidence intervals as shown in Appendix N.

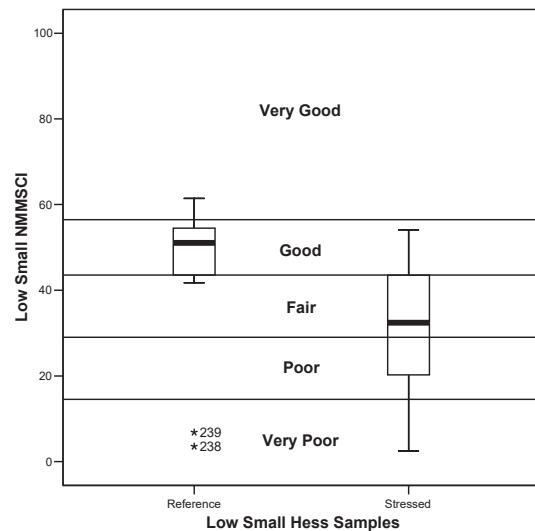


Figure 8-1. Box-and-whisker plot for Low Small NMMSCI with proposed ratings.

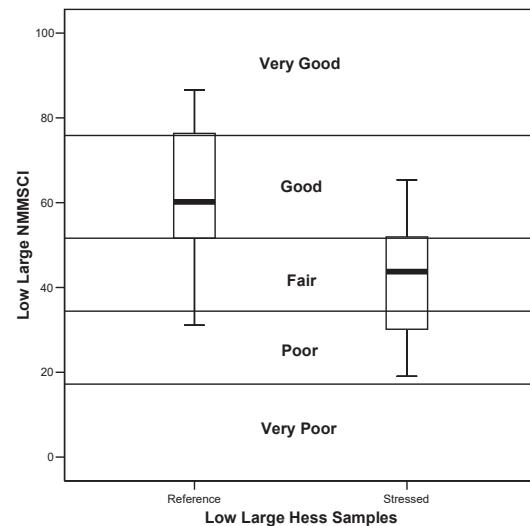


Figure 8-2. Box-and-whisker plot for Low Large NMMSCI with proposed ratings.

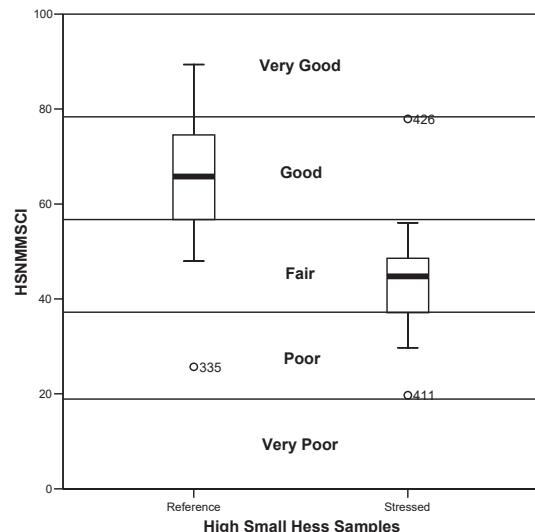


Figure 8-3. Box-and-whisker plot for High Small NMMSCI with proposed ratings.

8.3 Refining and maintaining the index

The suggested ranges of NMMSCI scores in Table 8-1 and the confidence intervals in Appendix N could be refined by periodic review (annually at a minimum) of the SCI as additional samples are available. Data for sites should be examined in more detail to determine if they were misidentified. Decisions on impairment should be based on both SCI scores and changes in the factors resulting in stress at the sites.

Annual addition of data for new and existing sites can be used to recalculate the indices. As the database increases and becomes more representative of the entire state, both the standard values and the index distributions should become more stable. In particular, additional sampling at Low Elevation Small Catchment sites should be carried out to determine if the low discrimination efficiencies observed for the development data set are an anomaly or an actual representation of the metrics for this bioregion.

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APPENDICES

- A. Site Locations and Physiography**
- B. Site Score Components**
- C. Site Attributes**
- D. Revised Site Scores**
- E. Comparison of Metrics by Location**
- F. New Mexico Master Taxa List 1980-2001**
- G. Metric Values of New Mexico Stream Samples**
- H. Metric Standardization**
- I. Metric Discrimination Efficiencies**
- J. Correlation among Metrics**
- K. Comparison of Indices among Bioregions for Biomonitoring in New Mexico**
- L. Index Composition and Discrimination Efficiency**
- M. Microsoft Access Query to Calculate Indices**
- N. Development of Confidence Intervals**

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Appendix A: Site Locations and Physiography

StationID	WaterbodyName	BasinID	Eco3 ID	Eco4 ID	Game & Fish	Region	Physiographic Region	Elevation Feet	Elevation meters	Lat Dec	Long Dec	Catchment Area Miles	Catchment Area km
02DryCim003.2	Dry Cimarron	11,040,001	26	261	3	1	4,349,28	1,326	36.91750000	-103.02722222	1,023,63	2,651.20	
02DryCim049.8	Dry Cimarron	11,040,001	26	260	3	1	4,877,36	1,487	36.98861111	-103.42194444	545,00	1,411.55	
02DryCim100.0	Dry Cimarron	11,040,001	21	211	2	1	6,012,24	1,833	36.89388889	-103.88900000	352,81	352.81	
02DryCim103.6	Dry Cimarron	11,040,001	21	211	2	1	6,143,44	1,873	36.87305556	-103.88900000	231,58	599.79	
04Vermejo73.7	Vermejo River	11,080,001	21	211	1	1	7,080,40	2,158	36.81472222	-104.88638889	202,90	525.51	
05Cienegue006.3	Cieneguilla Creek	11,080,002	21	211	1	1	8,189,83	2,496	36.48416667	-105.26416667	68,94	178.55	
05Cienegue021.9	Cieneguilla Creek	11,080,002	21	210	1	1	8,566,69	2,611	36.36333333	-105.28583333	6,74	17.46	
05SPonil004.0	South Ponil Creek	11,080,002	21	210	1	1	7,642,40	2,330	36.62360000	-105.08070000	10,50	27.20	
05SPonil007.2	South Ponil Creek	11,080,002	21	210	1	1	8,026,16	2,447	36.62430000	-105.11280000	8,10	20.98	
06Canadian232.6	Canadian River	11,080,003	26	261	3	1	4,424,51	1,348	35.66492000	-104.37790000	6,015,00	15,578.85	
28Cabresto005.4	Cabresto Creek	13,020,101	22	221	1	3	7,888,40	2,405	36.73055556	-105.55333333	34,28	88.79	
28Casias000.6	Casias Creek	13,020,101	21	210	1	3	9,556,14	2,913	36.91349000	-105.28102000	16,16	41.96	
28Columb000.1	Columbine Creek	13,020,101	21	211	1	3	7,862,16	2,397	36.68055556	-105.51472222	17,51	45.35	
28Comanche000.1	Comanche Creek	13,020,101	21	210	1	3	8,960,96	2,732	36.83113889	-105.31775000	45,50	117.85	
28Comanc007.7	Comanche Creek	13,020,101	21	210	1	3	9,220,98	2,811	36.77919444	-105.27519444	34,00	88.06	
28RCostill025.6	Rio Costilla	13,020,101	22	221	1	3	7,950,72	2,424	36.96694444	-105.50638889	195,00	505.05	
28RCostill048.9	Rio Costilla	13,020,101	21	210	1	3	8,970,25	2,734	36.83940000	-105.30799000	71,60	185.44	
28RCostill052.2	Rio Costilla	13,020,101	21	210	1	3	8,891,51	2,710	36.83563889	-105.34555556	120,43	311.91	
28RCostill055.5	Rio Costilla	13,020,101	21	210	1	3	9,331,16	2,844	36.87319444	-105.28227788	54,60	141.41	
28RCostill057.9	Rio Costilla	13,020,101	21	210	1	3	9,403,35	2,866	36.89741667	-105.26053333	17,05	44.16	
Red River	Red River	13,020,101	22	221	1	3	7,136,18	2,175	36.68027788	-105.65555556	185,00	479.15	
Red River	Red River	13,020,101	21	210	1	3	7,464,28	2,275	36.70333333	-105.56777788	113,00	292.67	
Red River	Red River	13,020,101	21	210	1	3	8,202,50	2,500	36.69861111	-105.47944444	72,61	188.06	
Red River	Red River	13,020,101	21	210	1	3	8,891,51	2,710	36.67361111	-105.37916677	28,90	74.85	
Red River	Red River	13,020,101	21	210	1	3	8,891,51	2,710	36.70777788	-105.43722222	66,60	172.49	
Red River	Red River	13,020,101	22	221	1	3	8,645,44	2,635	36.70694444	-105.42805566	66,86	173.17	
Frijoles	Frijoles	13,020,101	22	221	1	3	7,019,20	2,140	35.93694444	-105.87083333	21,03	54.47	
Rio Grande	Rio Grande	13,020,101	22	221	2	3	5,444,80	1,660	35.85544444	-106.16361111	14,310,00	37,062.90	
Rio Guaile	Rio Guaile	13,020,101	21	210	1	3	8,258,28	2,517	35.92944444	-105.35290000	3,60	9.32	
Rio Hondo	Rio Hondo	13,020,101	21	210	1	3	6,453,73	1,967	36.55683333	-105.70833333	73,60	190.62	
Rio Hondo	Rio Hondo	13,020,101	22	221	1	3	7,641,45	2,329	36.54166667	-105.55833333	36,20	93.76	
Rio en Medio	Rio en Medio	13,020,101	21	211	1	3	8,980,10	2,737	35.80333333	-105.83333333	4,86	12.59	
Rio en Medio	Rio en Medio	13,020,101	21	210	1	3	10,466,39	3,190	35.79336111	-105.79341667	0,70	1.81	
Rio en Medio	Rio en Medio	13,020,101	21	210	1	3	10,637,00	3,242	35.79147222	-105.89633889	0,40	1.04	
Rio Nambe	Rio Nambe	13,020,101	22	221	2	3	6,861,76	2,092	35.84944444	-105.89633889	27,50	71.23	
Santa Cruz River	Santa Cruz River	13,020,101	22	221	2	3	6,451,99	1,967	35.96472222	-105.90388889	86,00	222.74	
Abiquiu Creek	Abiquiu Creek	13,020,102	22	221	2	3	5,989,28	1,852	36.19777778	-106.32305656	43,35	111.37	
Chihuahuenos Creek	Chihuahuenos Creek	13,020,102	21	211	1	3	7,778,34	2,371	36.10972222	-106.47111111	7,20	18.65	
Coyote Creek	Coyote Creek	13,020,102	21	210	1	3	8,599,32	2,621	36.60161944	-106.09722222	8,00	20.72	
El Rio	El Rio	13,020,102	21	211	1	3	8,015,05	2,443	36.44000000	-106.27277788	36,00	93.24	
El Rio	El Rio	13,020,102	21	210	1	3	9,419,31	2,871	35.56611111	-106.29000000	7,00	18.13	
Little Tusa	Little Tusa	13,020,102	21	210	1	3	8,997,83	2,743	36.74638889	-106.14750000	7,00	18.13	
Polvadera Creek	Polvadera Creek	13,020,102	22	221	2	3	6,610,79	2,015	36.18305556	-106.43166667	33,00	85.47	
Rio Canjilon	Rio Canjilon	13,020,102	21	211	1	3	8,042,02	2,451	36.50633889	-106.40250000	24,00	62.16	
Chama River	Chama River	13,020,102	22	221	2	3	5,653,16	1,723	36.07388889	-106.11166667	3,144,00	8,142.96	
Chama River	Chama River	13,020,102	22	221	2	3	5,794,25	1,766	36.16861111	-106.18277788	2,477,36	6,416.36	
Chama River	Chama River	13,020,102	22	221	2	3	6,050,16	1,844	36.23666667	-106.41638889	5,560,73	2,147,00	
Chama River	Chama River	13,020,102	22	221	2	3	6,337,13	1,932	36.32722222	-106.61833333	1,608,00	4,164.72	
Chama River	Chama River	13,020,102	21	211	2	3	6,402,05	1,951	36.36972222	-106.67966667	1,695,00	4,390,05	
Chama River	Chama River	13,020,102	21	211	2	3	6,512,79	1,985	36.46038889	-106.70550000	1,145,00	2,965,55	
Chama River	Chama River	13,020,102	22	221	2	3	6,709,67	2,040	36.55116667	-106.71603333	860,00	2,227,40	
Chama River	Chama River	13,020,102	22	221	2	3	6,811,54	2,076	36.59133333	-106.73038889	793,00	2,053,87	
Chama River	Chama River	13,020,102	21	210	1	3	7,690,66	2,344	36.8508056	-106.58680222	168,00	435,12	
Chama River	Chama River	13,020,102	21	210	1	3	7,766,13	2,367	36.87841667	-106.58291667	120,67	312,54	

Appendix A: Site Locations and Physiography

29RCChama165.4	210	1	3	7.884.24	2.403	36.91250000	-106.5730556	274.93
29RCChama166.4	13,020,102	21	210	1	3	7.917.05	2.413	106.15
29RCChama002.6	13,020,102	21	210	1	3	7.762.85	2.366	274.93
29RCChama002.8	13,020,102	21	210	1	3	7.766.13	2.367	119.50
29RGallina005.5	13,020,102	21	211	2	3	6.584.82	2.007	119.50
29RGallina048.3	13,020,102	21	211	1	3	8.249.76	2.515	271.00
29RIdo004.5	13,020,102	21	221	2	3	5.887.60	1.795	701.89
29RIdo004.7	13,020,102	22	221	2	3	5.916.65	1.803	18.13
29RIdo008.8	13,020,102	22	221	2	3	6.220.78	1.896	7.00
29RPuercodChama	13,020,102	21	210	1	3	8.177.96	2.523	38.33
29RResmedero	13,020,102	21	210	1	3	9.022.75	2.750	15.28
Rio Tuss	13,020,102	21	210	1	3	7.673.47	2.339	5.90
Rio Vallecito	13,020,102	21	210	1	3	8.783.24	2.677	102.00
Canyon de Valle	13,020,201	21	210	1	3	7.303.51	2.226	264.18
Canyon de Valle	13,020,201	21	210	1	3	7.369.85	2.247	10.00
Pajarito Creek	13,020,201	21	210	1	3	7.319.91	2.231	11.00
Santa Fe River	13,020,201	22	220	2	3	5.279.13	1.609	85.73
Santa Fe River	13,020,201	21	210	1	3	7.930.18	2.417	39.00
East Fork Jemez River	13,020,202	21	210	1	3	8.029.06	2.502	10.00
East Fork Jemez River	13,020,202	21	210	1	3	8.419.05	2.566	11.00
Jemez River	13,020,202	22	221	2	3	5.620.35	1.713	1.225.98
Jemez River	13,020,202	22	221	2	3	5.667.84	1.728	257.50
Rio Cebolla	13,020,202	21	210	1	3	7.021.06	2.195	518.00
Rio Guadalupe	13,020,202	22	221	2	3	5.658.73	1.725	666.93
Rio de las Vacas	13,020,202	21	210	1	3	7.242.24	2.208	120.00
Rio de las Vacas	13,020,202	21	210	1	3	8.274.68	2.522	1.225.98
Rio de las Vacas	13,020,202	21	210	1	3	9.472.25	2.887	473.35
Mimbres River	13,030,202	23	230	2	2	6.837.60	2.084	200.00
Cow Creek	13,060,001	21	211	1	1	10.338.43	3.151	102.00
Dalton Creek	13,060,001	21	210	1	1	7.290.38	2.220	10.00
El Ponenir Creek	13,060,001	21	211	1	1	7.254.29	2.211	1.225.98
El Ponenir Creek	13,060,001	21	210	1	1	7.559.42	2.304	13.00
Gallinas River	13,060,001	21	211	1	1	6.726.75	2.050	33.67
Gallinas River	13,060,001	21	211	2	2	6.564.86	2.050	75.11
Gallinas River	13,060,001	21	210	1	1	6.865.04	2.093	67.00
Gallinas River	13,060,001	21	210	1	1	7.480.88	2.280	274.32
Holy Ghost Creek	13,060,001	21	210	1	1	8.435.45	2.571	313.39
Holy Ghost Creek	13,060,001	21	210	1	1	7.917.05	2.413	116.55
Pecos River	13,060,001	21	210	1	1	7.547.77	2.413	1.225.98
Tecolote Creek	13,060,001	21	210	1	1	7.999.08	2.438	1.225.98
Tecolote Creek	13,060,001	22	221	4	1	4.444.48	1.355	3.00
Tecolote Creek	13,060,001	21	210	1	1	7.775.97	2.370	28.23
Tecolote Creek	13,060,004	21	210	1	1	8.468.26	2.581	45.00
Tecolote Creek	13,060,001	21	210	1	1	8.583.10	2.616	171.56
Tecolote Creek	13,060,001	21	210	1	1	8.494.51	2.589	67.26
Tecolote Creek	13,060,001	21	210	1	1	8.730.74	2.661	3.00
Wright Canyon	13,060,001	21	210	1	1	8.596.22	2.620	3.00
Wright Canyon	13,060,001	21	210	1	1	8.609.34	2.624	1.225.98
Wright Canyon	13,060,001	21	210	1	1	9.000.32	2.744	1.225.98
Rio Ruidoso	13,060,008	23	231	2	1	5.197.10	1.584	1.225.98
Pecos River	13,060,011	24	241	4	1	2.840.48	866	3.67
Pecos River	13,060,011	24	241	4	1	2.935.60	895	15.02
Pecos River	13,060,011	24	241	4	1	3.086.48	941	14.76
Delaware River	13,070,002	24	241	4	1	2.847.91	868	48.044.50
Navajo River	14,080,101	21	211	2	4	6.581.69	2.006	689.00
Navajo River	14,080,101	21	211	2	4	6.555.44	1.998	1.784.51
Navajo River	14,080,101	21	211	2	4	6.512.79	1.985	660.97
Navajo River	14,080,101	21	211	2	4	6.863.85	2.092	1.137.42
Black Canyon Creek	15,040,001	23	230	2	4	5.751.59	1.753	445.48

Appendix A: Site Locations and Physiography

77BlackC028.3	Black Canyon Creek	230	1	4	4	7.296.94	2.224		15.00	38.85
77Bonner002.4	Bonner Creek	23	230	1	4	7.191.07	2.192		18.13	
77EFGl000.1	East Fork Gila River	15,040.001	23	230	2	4	5.553.04	1.693	-107.959056	2,659.93
77EFGl010.0	East Fork Gila River	15,040.001	23	230	2	4	5.714.90	1.742	-108.205333	2,631.44
77EFGl035.4	East Fork Gila River	15,040.001	23	230	2	4	6.155.16	1.876	-108.1653175	1,016.00
77GliaR092.0	Gila River	15,040.001	23	230	3	4	4.863.96	1.482	-108.123333	1,853.17
77MFGl028.3	Middle Fork Gila River	15,040.001	23	230	2	4	6.399.96	1.950	-108.0810522	4,641.28
77Mogoll038.8	Mogollon Creek	15,040.001	23	230	2	4	6.745.74	2.056	-108.3423270	668.22
77Mogoll042.0	Mogollon Creek	15,040.001	23	230	1	4	7.073.84	2.156	-108.5368333	31.96
77TrailC000.1	Trail Canyon Creek	15,040.001	23	230	2	4	6.726.05	2.050	-108.5365000	9.10
77WFgl000.3	Gila River	15,040.001	23	230	2	4	5.985.84	1.703	-108.2486111	2.80
77WFgl038.1	West Fork Gila River	15,040.001	23	230	2	4	6.940.38	2.115	-108.182138.89	7.25
77Willow000.6	Willow Creek	15,040.001	23	230	1	4	7.930.18	2.417	-108.31914021	509.29
78GliaR026.1	Gila River	15,040.002	24	240	4	4	4.005.03	1.221	-108.64687118	12.34
78GliaR052.6	Gila River	15,040.002	23	231	4	4	4.393.26	1.339	-108.59488119	33.57
78GliaR074.8	Gila River	15,040.002	23	231	3	4	4.620.26	1.408	-108.04298000	2,015.00
80Negrit000.1	Negrito Creek	15,040.004	23	230	2	4	5.797.53	1.767	-108.7444444	5,218.85
80SanFrad28.6	San Francisco River	15,040.004	23	231	3	4	4.560.59	1.390	-108.4674127	499.07
80SanFrai15.7	San Francisco River	15,040.004	23	230	2	4	5.682.69	1.732	-108.405780556	41.44
80SanFrai15.7	San Francisco River	15,040.004	23	230	2	4	5.751.59	1.753	-108.770556677	3,210.00
80SanFrai154.1	San Francisco River	15,040.004	23	230	1	4	7.139.46	2.176	-108.77050000	8,313.90
80Tularo029.6	Rio Tularosa	13,050.003	23	230	2	2	5.566.16	1.697	-108.7705282500	6,783.21
04Canadian363.5	Canadian River	11,080.001	26	260	2	1	5.702.92	1.739	-108.770566677	1,012.06
04Canadian402.9	Canadian River	11,080.001	26	260	2	1	6,002.55	1.830	-108.770583333	434.00
04Canadian409.4	Canadian River	11,080.001	26	260	2	1	6,240.46	1.902	-108.77050000	906.50
04Canadian429.9	Canadian River	11,080.001	21	211	2	1	6,591.82	2.009	-108.770566677	350.00
04Vermej002.9	Vermejo River	11,080.001	26	260	2	1	5,889.40	1.795	-108.9897222	174.83
04Vermej045.4	Vermejo River	11,080.001	21	211	2	1	6,365.14	1.940	-108.88608333	116.00
05Cieneguilla016.5	Cieneguilla Creek	11,080.002	21	211	1	1	8,379.67	2.554	-108.5236000	300.44
05Cieneguilla018.5	Cieneguilla Creek	11,080.002	21	211	1	1	8,415.77	2.565	-108.446832000	4,407.61
05Cieneguilla019.3	Cieneguilla Creek	11,080.002	21	211	1	1	8,455.14	2,577	-108.562815000	631.97
05Cimarron018.4	Cimarron River	11,080.002	26	261	2	1	8,080.77	1,775	-108.4972222	1,124.06
05Cimarron045.5	Cimarron River	11,080.002	26	261	2	1	6,197.81	1,889	-108.52838000	593.11
05Cimarr050.8	Cimarron River	11,080.002	21	211	2	1	6,614.50	2,016	-108.5611111	288.47
05Cimarr072.7	Cimarron River	11,080.002	21	210	1	1	8,030.03	2,448	-108.77050000	111.38
05Cimarr077.2	Cimarron River	11,080.002	21	211	1	1	8,054.86	2,455	-108.7705282500	144.74
05McCrystal007.0	McCrystal Creek	11,080.002	21	210	1	1	8,703.19	2,653	-108.770566677	558.20
05Monte000.5	Monte Verde Creek	11,080.002	21	210	1	1	6,555.92	2,639	-108.77055556	2,997.59
05Moreno003.7	Moreno Creek	11,080.002	21	211	1	1	8,218.91	2,025	-108.2838889	301.00
05MPonil000.1	Middle Poni Creek	11,080.002	21	210	1	1	7,183.20	2,190	-108.293656	53.38
05MPonil027.2	Middle Poni Creek	11,080.002	21	211	1	1	9,528.40	2,905	-108.2736111	40.22
05NPonil000.1	North Poni Creek	11,080.002	21	211	2	1	6,710.88	2,046	-108.2736111	15.72
05NPonil027.5	North Poni Creek	11,080.002	21	210	1	1	8,003.20	2,440	-108.2736111	407.72
05Ponil023.8	Ponil Creek	11,080.002	21	211	2	1	6,642.00	2,025	-108.2736111	11.98
05Rayado033.8	Rayado Creek	11,080.002	21	211	2	1	6,791.57	2,070	-108.273622222	31.03
05Sixmile001.4	Sixmile Creek	11,080.002	21	211	1	1	8,222.19	2,506	-108.273622222	2,445.74
06Canadian274.8	Canadian River	11,080.003	26	261	3	1	4,885.41	1,489	-108.27363889	15.13
06Canadian282.5	Canadian River	11,080.003	26	261	2	1	5,083.69	1,550	-108.27365556	2,592.59
06Coyote027.5	Coyote Creek	11,080.004	26	260	2	1	5,626.92	1,715	-108.27365556	3,777.63
07Coyote040.0	Coyote Creek	11,080.004	26	261	2	1	6,947.37	2,118	-108.27364444	9,784.06
07Coyote047.9	Coyote Creek	11,080.004	21	211	1	1	7,680.46	2,342	-108.27364444	4,422.89
07Manuelias020.9	Manuelias Creek	11,080.004	21	210	1	1	8,396.58	2,560	-108.27364444	7,381.50
06Canadian2348.3	Canadian River	11,080.003	26	260	2	1	5,626.92	1,715	-108.27364444	1,043.71
07MoraiR078.7	Mora River	11,080.004	26	260	2	1	6,262.23	1,909	-108.27364444	2,703.21
07MoraiR132.9	Mora River	11,080.004	21	210	1	1	7,342.88	2,238	-108.27364444	119.55
07MoraiR146.6	Mora River	11,080.004	21	210	1	1	7,130.15	2,173	-108.27364444	30.63
07MoraiR147.1	Mora River	11,080.004	21	210	1	1	7,130.15	2,173	-108.27364444	437.71

Appendix A: Site Locations and Physiography

07MoraRt170.9	Mora River	210	1	1	7.851.43	2.393	57.00	147.63
07MoraRt179.1	Mora River	210	1	1	8.219.98	2.506	88.06	88.06
07Sapelli000.1	Sapello River	260	2	1	6.496.38	1.980	34.00	-105.3446111
07Sapelli044.4	Sapello River	211	2	1	6.945.88	2.117	300.00	300.00
07Sapelli057.4	Sapello Creek	210	1	1	7.500.69	2.287	363.12	-105.2519444
07Sapelli069.8	Sapello River	210	1	1	8.218.91	2.505	34.29	-105.3835890
08Concha039.1	Conchas River	261	3	1	4.424.51	1.348	5.20	13.47
08Tremen026.2	Trementina Creek	261	3	1	4.575.60	1.395	53.00	-105.4772278
09Canadi039.0	Canadian River	261	4	1	3.606.52	1.100	20.00	-104.4772200
09Canadi062.4	Canadian River	261	4	1	3.767.32	1.119	20.00	-104.4772200
09Canadi84.1	Canadian River	261	4	1	3.972.07	1.211	11.141.00	11.141.00
10PaloB005.1	Palo Blanco	260	2	1	6.032.51	1.839	19.501.43	19.501.43
10UteCrt145.0	Ute Creek	260	2	1	5.412.00	1.650	20.00	20.00
16Seneca048.5	Seneca Creek	261	2	1	5.343.37	1.629	11.38	11.38
27RPInos000.8	Rio de los Pinos	221	1	3	8.019.60	2.445	323.75	323.75
27RPInos011.3	Rio de los Pinos	211	1	3	8.200.00	2.500	107.00	107.00
27RSanAn025.3	Rio San Antonio	211	1	3	8.798.08	2.682	106.1468033	106.1468033
28BigTesu013.2	Big Tesuque Creek	210	1	3	10.325.31	3.147	36.1997500	36.1997500
28DPCan012.4	Dp Canyon	211	2	3	6.913.07	2.107	11.437.88	11.437.88
28Embudo000.8	Embudo Creek	221	2	3	5.872.99	1.790	30.808.08	30.808.08
28Embudo020.5	Rio Embudo	221	1	3	7.156.96	2.182	277.13	277.13
28LosAla010.5	Los Alamos Canyon	211	2	3	6.512.79	1.985	7.529.51	7.529.51
28LosAla021.0	Los Alamos Canyon	210	1	3	7.958.80	2.316	20.00	20.00
28LosAla021.5	Los Alamos Canyon	210	1	3	7.727.88	2.356	12.70	12.70
28NFRH0000.5	North Fork Rio Hondo	210	1	3	9.439.44	2.877	10.10	10.10
28NFTes002.1	North Fork Tesuque Creek	210	1	3	10.197.52	3.109	1.63	1.63
28RCChup015.2	Rio Chupadero	211	1	3	8.389.58	2.557	29.47	29.47
28RCCost046.7	Rio Costillito	211	1	3	8.765.12	2.672	11.38	11.38
28RCCost048.3	Rio Costilla	210	1	3	8.960.96	2.732	15.70	15.70
28RedRiv000.9	Red River	221	2	3	6.751.62	2.058	36.6000000	36.6000000
28RedRiv009.8	Red River	221	1	3	7.267.42	2.215	105.7997222	105.7997222
28RedRiv012.7	Red River	221	1	3	7.106.65	2.166	105.8694000	105.8694000
28RedRiv017.1	Red River	211	1	3	7.680.82	2.341	12.898	12.898
28RedRiv019.6	Red River	211	1	3	7.854.71	2.394	106.3532500	106.3532500
28RedRiv025.4	Red River	210	1	3	8.251.72	2.515	35.8858333	35.8858333
28RedRiv031.1	Red River	210	1	3	8.455.14	2.577	36.6000000	36.6000000
28RFern050.2	Rio Fernando de Taos	221	1	3	7.166.10	2.184	105.6116667	105.6116667
28RFerma032.5	Rio Fernando de Taos	210	1	3	8.954.40	2.730	105.6513889	105.6513889
28RGGrand011.1	Rio Grande	221	1	3	7.260.99	2.213	105.3149667	105.3149667
28RGGrand015.6	Rio Grande	211	1	3	7.488.70	2.283	97.00	97.00
28RGGrand027.8	Rio Grande	221	2	3	5.621.92	1.714	487.83	487.83
28RGGrand055.7	Rio Grande	221	1	3	5.822.00	2.221	137.37	137.37
28RGGrand0624.3	Rio Grande	221	2	3	5.838.40	1.775	71.70	71.70
28RHond003.9	Rio Hondo	221	2	3	6.752.30	2.058	466.20	466.20
28RHond647.9	Rio Grande	221	1	3	6.074.56	1.852	271.95	271.95
28RHond022.4	Rio Hondo	221	1	3	6.074.56	1.852	253.82	253.82
28RHond026.7	Rio Hondo	210	1	3	6.370.54	2.035	108.78	108.78
28RHond026.9	Rio Hondo	210	1	3	6.774.80	2.035	27.324.50	27.324.50
28RIOlla000.8	Rito de la Olla	221	1	3	7.330.80	2.235	26.936.00	26.936.00
28RLucer013.0	Rio Lucero	211	1	3	7.404.81	2.257	170.68	170.68
28RMedio007.2	Rio en Medio	221	1	3	8.041.02	2.451	101.27	101.27
28RNamb001.1	Rio Nambé	221	2	3	7.222.03	2.201	12.53	12.53
28RNamb004.0	Rio Nambé	221	2	3	6.284.48	1.916	41.44	41.44

Appendix A: Site Locations and Physiography

Rio del Pueblo	13,020,101	22	1	3	3	7,183,20	2,190	145,29	-105,731,3889
Rio del Pueblo	13,020,101	21	211	1	3	7,750,38	2,362	261,59	36,171,50000
Rio del Pueblo	13,020,101	21	210	1	3	8,229,52	2,509	209,97	-105,555,0000
Rio Pueblo de Taos	13,020,101	22	221	2	3	6,135,47	1,870	1,082,88	-105,729,1667
Rio Pueblo de Taos	13,020,101	22	221	2	3	6,634,18	2,022	404,10	36,355,00000
Rio Pueblo de Taos	13,020,101	22	221	2	3	6,660,43	2,030	984,20	-105,705,0000
Rio Pueblo de Taos	13,020,101	22	221	2	3	6,726,05	2,050	380,00	-105,686,111
Rio Pueblo de Taos	13,020,101	22	221	2	3	6,798,23	2,072	198,60	-105,630,0000
Rio Quemado	13,020,101	22	221	2	3	6,461,98	1,970	234,40	36,388,8889
Rio Santa Barbara	13,020,101	22	221	1	3	7,165,70	2,184	111,37	36,001,20000
Rio Santa Barbara	13,020,101	21	210	1	3	8,875,11	2,705	155,40	-105,197,2222
Sandia Canyon	13,020,101	21	211	2	3	6,788,39	2,069	88,32	-105,686,0556
Sandia Canyon	13,020,101	21	211	1	3	7,034,46	2,144	3,37	35,886,3889
Sandia Canyon	13,020,101	21	210	1	3	7,237,89	2,206	2,59	-106,311,9444
Sandia Canyon	13,020,101	21	210	1	3	7,237,89	2,206	1,55	-106,313,3333
Big Tesuque Creek	13,020,101	22	221	1	3	7,211,05	2,198	43,00	35,875,0000
Canada del Potero	13,020,102	21	211	1	3	7,474,12	2,278	10,30	35,738,90000
Cannones Creek	13,020,102	21	210	1	3	7,651,29	2,332	26,68	36,401,1111
Coyote Creek	13,020,102	21	211	1	3	7,136,18	2,175	88,29	-106,609,7222
El Rio	13,020,102	22	221	2	3	5,872,99	1,790	345,53	-106,224,1667
Nabor Creek	13,020,102	21	210	1	3	8,203,28	2,501	14,25	-106,634,4444
Nabor Creek	13,020,102	21	210	1	3	8,511,60	2,595	5,50	-106,200,8333
Polvadera Creek	13,020,102	21	211	2	3	6,627,62	2,020	3,53	-106,623,8889
Rio Brazos	13,020,102	21	211	1	3	7,366,88	2,246	19,08	-106,439,1667
Chama River	13,020,102	21	210	1	3	7,990,08	2,436	34,09	36,746,9444
Chama River	13,020,102	21	211	1	3	7,050,87	2,149	296,04	-106,734,1667
Rio Chama	13,020,102	21	210	1	3	7,460,99	2,274	482,00	-106,659,7222
Rio Chama	13,020,102	21	210	1	3	7,913,10	2,412	582,98	-106,656,2222
Rio Chama	13,020,102	21	210	1	3	7,789,09	2,374	35,43	-106,599,1667
Rio Chama	13,020,102	21	210	1	3	8,209,06	2,502	94,76	-106,588,6444
Rio Chama	13,020,102	21	210	1	3	8,317,34	2,535	43,95	-106,426,1111
Rio Encino	13,020,102	21	211	1	3	7,821,90	2,384	17,97	-106,659,7222
Rio Gallina	13,020,102	21	211	1	3	7,920,30	2,414	26,16	-106,522,2222
Rio del Medio	13,020,102	21	211	1	3	8,105,94	2,471	7,20	-106,439,1667
Rio Nutrias	13,020,102	22	221	1	3	7,297,94	2,224	18,66	36,916,6667
Rio Ojo Caliente	13,020,102	21	211	2	3	5,216,79	1,590	82,88	-106,519,4444
Rio Poole	13,020,102	21	210	1	3	7,903,93	2,409	445,80	-106,643,0556
Rito Tierra Amarilla	13,020,102	21	210	1	3	8,337,76	2,542	10,10	-106,146,3889
Rio Tiras	13,020,102	21	211	2	3	6,251,24	1,905	44,03	-106,446,9444
Sexto Creek	13,020,102	21	210	1	3	8,317,34	2,535	1,154,62	-106,049,7222
Ancho Creek	13,020,201	22	221	2	3	5,216,79	1,651	6,73	-106,219,8056
Bulldog Gulch	13,020,201	21	210	1	3	7,300,23	2,225	0,26	-106,334,1667
Canyon de Valle	13,020,201	21	210	1	3	7,362,56	2,244	12,00	-106,424,75000
Capulin Creek	13,020,201	21	211	2	3	6,996,24	2,133	38,85	-106,360,4000
Rito de los Frijoles	13,020,201	21	210	1	3	7,992,52	2,436	7,77	-106,413,0278
Galisteo Creek	13,020,201	22	221	2	3	5,660,97	1,725	6,20	-106,660,5556
Galisteo Creek	13,020,201	22	221	2	3	6,018,53	1,834	134,68	-106,943,4000
Pajarito Creek	13,020,201	22	221	2	3	5,527,14	1,685	41,00	-106,196,6667
Pajarito Creek	13,020,201	21	211	2	3	6,932,75	2,113	51,28	-106,295,8330
Pajarito Creek	13,020,201	21	210	1	3	7,395,37	2,254	4,00	-106,335,8330
Pajarito Creek	13,020,201	21	210	1	3	7,375,69	2,248	6,60	-106,336,6667
Pajarito Creek	13,020,201	21	210	1	3	7,910,49	2,411	3,24	-106,337,5000
Rio Frijoles	13,020,201	21	211	2	3	5,341,47	1,628	14,900,00	-106,287,7500
Rio Frijoles	13,020,201	21	211	2	3	6,078,45	1,853	46,62	-106,288,4000
Rio de los Frijoles	13,020,201	21	210	1	3	7,926,90	2,416	9,32	-106,413,6667
Rio Grande	13,020,201	22	220	2	3	5,223,51	1,593	38,591,00	-106,332,6400
Santa Fe River	13,020,201	22	220	2	3	5,229,91	1,594	678,58	-106,338,9167

Appendix A: Site Locations and Physiography

Santa Fe River	30SantaF012.7	22	220	2	3	5,498.96	1,676	598.29
Santa Fe River	30SantaF015.3	13,020,201	22	220	2	5,640.04	1,719	35,55152778
Santa Fe River	30SantaF021.2	13,020,201	22	220	2	5,856.59	1,785	35,55777778
Santa Fe River	30SantaF028.3	13,020,201	22	220	2	6,135.47	1,870	35,60238889
Santa Fe River	30SantaF032.8	13,020,201	22	220	2	6,269.99	1,911	35,62944444
Rito de los Frijoles River	30WFRf000.1	13,020,201	21	210	1	7,982.67	2,433	-106,08083333
East Fork Jemez River	31EFJlem000.1	13,020,202	21	210	2	6,779.76	2,067	-106,64356333
East Fork Jemez River	31EFJlem025.4	13,020,202	21	210	1	8,547.01	2,605	-106,48000000
Jaramillo Creek	31Jaram008.0	13,020,202	21	210	1	8,619.19	2,627	9.20
Rio Guadalupe	31RGuad008.2	13,020,202	22	221	2	5,053.05	1,687	1,464.96
Rito de los Indios	31RInd000.2	13,020,202	21	211	2	3,984.54	1,824	1,477.75
Jemez River	31JemezR064.6	13,020,202	21	210	2	6,283.12	1,915	453.15
Jemez River	31JemezR071.3	13,020,202	21	210	2	3,6724.00	2,050	434.01
Rio Cebolla	31RCeb005.6	13,020,202	21	210	1	7,460.99	2,274	108.78
Rio Cebolla	31RCeb015.9	13,020,202	21	210	1	7,940.88	2,421	82.88
Rio San Antonio	31RSanAn005.3	13,020,202	21	211	2	6,053.45	1,845	612.54
Rio San Antonio	31RSanAn008.4	13,020,202	21	210	1	9,803.92	2,989	106,4889444
Rio San Antonio	31RSanAn009.1	13,020,202	21	210	1	3,7983.52	2,434	106,6858889
Rio Penas Negras	31RPenas000.3	13,020,202	21	210	1	3,6740.40	2,055	35,82850000
Rio San Antonio	31RSanAn001.1	13,020,202	21	210	2	3,7625.04	2,324	106,70472222
Rio San Antonio	31RSanAn011.1	13,020,202	21	210	1	3,7773.60	2,370	236.50
Rio San Antonio	31RSanAn012.2	13,020,202	21	210	1	3,7790.33	2,375	106,6532900
Rio San Antonio	31RSanAn012.9	13,020,202	21	210	1	3,8625.75	2,629	106,7867778
Rio San Antonio	31RSanAn036.8	13,020,202	21	210	1	3,7880.96	2,402	106,64356333
Rio de las Vacas	31RVac004.2	13,020,202	21	210	1	3,7806.40	2,380	106,6373333
Rio de las Vacas	31RVac011.1	13,020,202	21	210	1	3,8255.76	2,517	106,65027778
Rio de las Vacas	31RVac012.2	13,020,202	21	210	1	3,7740.80	2,360	78.00
Sulphur Creek	31Sulph000.2	13,020,202	21	210	1	4,510.00	1,375	178.06
Rio Grande	32RGrand024.5	13,020,203	24	240	4	2,4584.31	1,398	37.56
Rio Grande	32RGrand322.1	13,020,203	24	240	4	2,4724.13	1,440	264.18
Rio Grande	32RGrand373.5	13,020,203	22	220	4	3,7339.60	2,237	242.68
Rio Puerco	33RPuer046.3	13,020,204	22	221	1	3,7380.86	2,219	202.02
Bluewater Creek	36Bluewa012.9	13,020,207	23	231	1	2,7540.64	2,298	106,6315000
Bluewater Creek	36Bluewa013.5	13,020,207	23	231	2	2,5253.48	1,602	106,4726944
Rio San Jose	36RSanJ015.0	13,020,207	22	220	2	6,012.54	1,833	106,7893000
Alamosa Creek	40Alamos054.9	13,020,211	23	231	2	4,244.73	1,294	106,80166667
Rio Grande	41GRGrand204.5	13,030,101	24	241	4	2,3945.10	1,203	106,8058333
Rio Grande	42GRGrand087.9	13,030,102	24	240	4	2,4508.40	1,374	106,9160000
Mimbres River	45Mimbrie085.7	13,030,202	24	241	2	5,466.15	1,666	106,9237600
Mimbres River	45Mimbrie094.6	13,030,202	23	231	2	5,646.60	1,721	107,8566000
Mimbres River	45Mimbrie104.8	13,030,202	23	230	2	5,922.21	1,805	107,85722222
Salt Creek	48SaltC021.7	13,050,003	24	240	4	4,050.98	1,232	31,658.35
Three Rivers	48ThreeR033.7	13,050,003	24	240	4	2,4508.40	1,374	106,30277778
Three Rivers	48ThreeR047.6	13,050,003	24	241	2	5,243.04	1,598	94.10
Sacramento River	49Sacram004.2	13,050,003	23	231	2	6,312.64	1,924	243.72
Sacramento River	49Sacram004.4	13,050,004	23	230	2	2,848.36	2,087	106,8858333
Sacramento River	49Sacram004.6	13,050,004	23	230	1	7,021.34	2,140	106,638889
Sacramento River	49Sacram061.8	13,050,004	23	230	1	7,775.97	2,370	105,7541667
Sacramento River	49Sacram066.9	13,050,004	23	230	1	8,346.86	2,544	105,7558333
Sacramento River	49Sacram068.7	13,050,004	23	230	1	8,504.35	2,592	105,7513889
Sacramento River	49Sacram049.1	13,050,004	23	230	1	7,720.19	2,353	38.80
Sacramento River	49Sacram051.6	13,050,004	23	230	1	7,694.88	2,346	105,7425000
Scott Able Creek	49ScottA000.1	13,050,004	23	230	1	8,183.60	2,495	5.20
Beaver Creek	50Beaver000.1	13,060,001	21	210	1	9,010.16	2,747	105,4495000
Cave Creek	50CaveCr001.9	13,060,002	21	210	1	8,747.85	2,971	6.10
Cave Creek	50CaveCr003.4	13,060,001	21	210	1	8,180.32	2,494	105,7082000
Povenir Creek	50EPon012.6	13,060,001	22	221	1	8,925.49	1,806	13.00
Gallinas River	50Gallin075.8	13,060,001	21	211	2	6,417.64	1,956	33.67
Gallinas River	50Gallin101.8	13,060,001	21	211	1			809.48
								-105,2119444
								35,56500000
								172.00

Appendix A: Site Locations and Physiography

50Gallin102.1	21	211	2	1	6,424.20	1,958	35,56666667	-105,2108333	172.00	445.48
50Gloriet001.3			21	211	2	1	6,837.60	2,084	35,5922222	83.40
50Gloriet001.4			21	211	2	1	6,834.32	2,083	35,53802778	83.40
50Gloriet001.6			21	211	2	1	6,837.60	2,084	35,54013889	83.40
50Holling000.1			21	210	1	1	8,206.56	2,502	35,76150000	7.00
50Hogh011.1			21	210	1	1	10,502.56	3,164	35,7333333	1.30
50Horse003.4			21	210	1	1	7,736.60	2,358	35,8775000	3.37
50LacksC008.4			21	210	1	1	10,567.88	3,222	35,88885000	2.30
50PecosR757.0			22	221	3	1	4,604.28	1,404	35,0422300	2.05
50PecosR687.4			22	221	2	1	5,573.08	1,699	35,2570500	5.31
50PecosR739.5			21	211	2	1	6,804.79	2,074	35,5349444	6,293.70
50PecosR782.1			21	211	1	1	7,021.34	2,140	35,5946944	1,686.97
50PecosR784.7			21	211	1	1	7,080.21	2,159	35,61833000	651.34
50PecosR787.8			21	210	1	1	7,157.11	2,182	35,64284000	2,430.00
50PecosR802.1			21	210	1	1	7,640.51	2,329	35,74808000	105,6842700
Pecos River			21	210	1	1	10,422.06	3,177	35,93804000	105,2570500
Rio Hondo Creek			21	210	1	1	11,355.54	3,461	35,96875000	242.00
Pecos River			21	211	1	1	7,925.16	2,416	35,77729000	626.78
Pecos River			21	210	1	1	10,988.92	3,078	35,8453889	222.98
Pecos River			21	210	1	1	9,488.65	2,892	35,91191667	105,6834500
Pecos River			22	221	2	1	6,342.17	1,933	35,495972222	145.19
Rito de los Chimayosos			21	210	1	1	7,270.70	2,216	35,64555556	376.04
Rio Mora			21	210	1	1	6,758.86	2,060	35,58166667	105,5667500
Rio Oscuro			21	210	1	1	8,580.48	2,616	35,69252778	105,727533
Rio del Padre			21	210	1	1	10,171.10	3,100	35,82341667	11.61
Tecolote Creek			22	221	2	1	8,708.40	2,655	35,69775000	312.10
Tecolote Creek			21	210	1	1	4,564.33	1,392	34,87811000	105,6194444
Tecolote Creek			21	210	2	1	4,124.88	1,258	34,60120000	140.12
Tecolote Creek			21	210	1	1	3,525.62	1,075	34,69252778	2.20
Winsor Creek			21	210	1	1	3,330.86	1,016	35,82341667	3.63
Wright Canyon			21	210	1	1	3,520.63	1,073	33,57080000	1.10
Aqua Negra Creek			22	221	4	1	6,693.24	2,040	33,32111111	2.85
Pecos River			22	220	4	1	4,360.03	1,258	34,6669444	43.51
Cottonwood Creek			24	241	4	1	3,525.62	1,075	34,3875100	53.30
Pecos River			24	241	4	1	3,330.86	1,016	34,72761111	5.30
Pecos River			24	241	4	1	3,520.63	1,073	30,07	105,4804444
Carmiz Creek			23	230	2	1	6,693.24	2,040	11,372,777	889.79
Carizo Creek			23	230	2	1	6,697.76	2,042	33,32027778	2,304.56
Grindstone Creek			23	230	2	1	6,847.45	2,087	33,6836111	4,390.00
Rio Bonito			23	231	2	1	5,216.79	1,590	33,38750000	132.71
Rio Bonito			23	230	2	1	5,866.43	1,788	33,52500000	104,3216000
Rio Bonito			23	230	2	1	6,848.64	2,088	14,760.00	104,3712800
Rio Bonito			23	230	1	1	7,429.20	2,265	11,370.10	105,6800000
Rio Bonito			23	241	3	1	4,937.91	1,505	34,3861111	343.72
Rio Hondo			23	231	2	1	5,183.98	1,580	32,94375000	620.00
Rio Hondo			23	230	2	1	5,718.78	1,743	33,32500000	105,45485656
Rio Ruidoso			23	230	2	1	6,119.07	1,865	105,5472222	29,455.47
Rio Ruidoso			23	230	2	1	6,135.47	1,870	105,6800000	24.50
Rio Ruidoso			23	230	2	1	6,430.76	1,960	105,6836111	63.46
Rio Ruidoso			23	230	2	1	6,539.03	1,993	105,2761111	56.54
Rio Ruidoso			23	230	2	1	6,575.12	2,004	105,2663889	4.77
Rio Ruidoso			23	230	2	1	6,791.67	2,070	771.82	105,45485656
Rio Ruidoso			23	230	2	1	7,188.76	2,088	657.86	105,44500000
Rio Ruidoso			23	230	1	1	7,185.39	2,190	105,5472222	129.50
Rio Ruidoso			23	230	2	1	7,429.20	2,265	105,7509000	129.50
Rio Ruidoso			23	241	3	1	5,333.38	1,626	105,1522222	27.00
Rio Ruidoso			23	230	2	1	8,389.58	2,558	105,6464444	1,032.00
Rio Ruidoso			23	231	2	1	5,236.48	1,596	105,6536111	1,605.80
Rio Ruidoso			23	230	2	1	6,791.67	2,070	105,6805556	129.50
Rio Ruidoso			23	230	1	1	7,188.76	2,088	105,5472222	129.50
Rio Ruidoso			23	241	4	1	5,333.38	1,626	105,6247222	129.50
Rio Felix			24	241	2	1	8,389.58	2,558	105,3247222	116.00
Aqua Chiquita			23	230	1	1	5,236.48	1,596	105,6536111	155.66
Rio Penasco			23	231	2	1	6,791.67	2,070	105,3250000	134.94
Rio Penasco			23	230	2	1	7,188.76	2,088	105,3344444	52.10
Rio Penasco			23	230	1	1	7,185.39	2,190	105,33588889	404.04
Rio Penasco			23	241	4	1	5,333.38	1,626	105,5464444	404.82
Rio Ruidoso			23	230	2	1	8,389.58	2,558	105,3269444	116.00
Rio Ruidoso			23	230	2	1	5,236.48	1,596	105,327096500	300.44
Rio Ruidoso			23	230	2	1	6,791.67	2,070	105,6464444	12.95
Rio Ruidoso			23	230	2	1	7,188.76	2,088	105,2500000	5.10
Rio Ruidoso			23	230	1	1	7,185.39	2,190	105,3382700	13.21
Rio Ruidoso			23	241	4	1	5,333.38	1,626	105,33797222	458.97
Rio Ruidoso			23	230	2	1	8,389.58	2,558	105,33638889	31.08
Rio Ruidoso			23	230	2	1	5,236.48	1,596	105,3269444	668.22
Rio Ruidoso			23	230	2	1	6,791.67	2,070	105,6464444	10.00
Rio Ruidoso			23	230	2	1	7,188.76	2,088	105,2509000	15.02
Rio Ruidoso			23	231	2	1	7,185.39	2,190	105,6670900	85.70
Rio Ruidoso			24	241	4	1	5,333.38	1,626	104,29804000	5.49
Blue Spring			24	241	4	1	3,305.90	1,008	32,18044000	4.09
Chosa Spring			24	241	4	1	3,522.63	1,074	32,09809000	10.00
Dark Canyon Creek			24	241	4	1	6,174.33	1,882	32,18563000	15.02
Grapevine Creek			24	241	4	1	4,014.02	1,224	32,00286000	33.09
Grapevine Creek			24	241	4	1	4,014.02	1,224	104,56986000	2.12

Appendix A: Site Locations and Physiography

Appendix B: Site Score Components - Key to Criteria Worksheet

Rating (1-5) Rate overall watershed and stream condition above the site: 1 2 3 4 5

- 1 - pristine
- 2 – minimal impact
- 3 – slight impact
- 4 – moderately impacted
- 5 – severely impacted

Ave. Flow	Average Stream Flow (excluding spring runoff and monsoon season) <input type="checkbox"/> <1cfs, <input type="checkbox"/> 1 to 10cfs, <input type="checkbox"/> >10cfs, <input type="checkbox"/> >100cfs
Flow Status	The stream has flow except during drought years - Perennial
Peren. or Inter.	The stream has no flow in some areas during most years - Intermittent
0 flow by diversion	The lack of flow due to diversion of water? T or F
Channalized	Is the stream channelized at the sites _____, any point upstream of the site _____,
<15% Grazing	Less then 15% of the watershed above the site have high intensity grazing (i.e., riparian access, high density, frequent grazing, over grazing) T or F
Column 1	New Site Name - number for 8 HUC, stream name, and river kilometer
Column 2	Site Description
Column 3	BPJ Score - described above
Column 4	0 flow due to diversion - described above
Column 5	Channalized - T or F (described above)
Column 6	<15 grazing - described above
Column 7	Is there impact to the stream from the above activity? N or Y
Column 8	<5% urban - in the watershed above the site
Column 9	Is there impact to the stream from the above activity? N or Y
Column 10	no dams
Column 11	Is there impact to the stream from the dam? 0-no, 0.5-minimal, 1-yes
Column 12	on 303d list - list of impaired waters, not meeting water quality standards
Column 13	no NPDES permits upstream of the site
Column 14	RBP Habitat Score as a percent (if no score estimated at >75, 75-50, or <50)
Column 15	Comments - any brief info on site and/or watershed

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Appendix B: Site Score Components - Criteria Worksheet

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Site Name	Site Description	BPJ		NPDES		Habitat		Partial		Total Score			
		Flow by diversion	Flow in T or F	Channeled Flow	Channeled Flow	<10% ag. T or F	Chan Score	Total Ag. T or F	Impact N score	303d Score	no NPDES	Habitat Score	Rank*
022DCEYCH05-2	Dry Cimarron River near Oklahoma Border	4.50	T	0	F	0	T	0	0	0	0	0.45	2
022DCEYCH05-8	Dry Cimarron River at Gage, NE of Guy	4.00	T	1	F	0	T	0	0	0	0	0.49	1
022DCEYCH05-6	Dry Cimarron River near Oak Creek	3.50	T	1	F	0	T	0	0	0	0	0.65	1
022DCEYCH05-1	Dry Cimarron River below Folsom Falls	4.00	T	1	F	0	T	0	0	0	0	0.5	3.5
022DCEYCH05-1	Dry Cimarron River at Gonzales Ranch, 4.5 miles NE of S	4.00	T	1	F	0	T	0	0	0	0	0.65	1
022DCEYCH05-9	Canadian River at Taigea	4.00	T	1	F	0	T	0	0	0	0	<0.50	2
022DCEYCH05-4	Canadian River, 1.5 miles above Rio Bonito	4.00	T	1	F	0	T	0	0	0	0	<0.50	2
57REULAC001-3	Rio Ruidoso at San Patricio, 1 mi above Rio Bonito	3.50	F	0	T	1	T	0	N	0	0	0.75	50
57REULAC001-3	Rio Ruidoso 50m above Gila River at FR 43	3.50	F	0	T	1	T	0	N	0	0	0.75	50
57REULAC001-3	Rio Ruidoso 50m above WWTB outfall	3.50	F	0	T	1	T	0	N	0	0	0.75	50
57REULAC001-3	Rio Ruidoso 300m E. of closed WWTB	3.50	F	0	T	1	T	0	N	0	0	0.75	50
57REULAC001-3	Rio Ruidoso below Carizo Creek	3.00	F	0	T	1	T	0	N	0	0	0.75	50
57REULAC001-3	Rio Ruidoso above Carizo Creek	3.00	F	0	T	1	T	0	N	0	0	0.75	50
57REULAC001-3	Rio Ruidoso at Hwy 37 Bridge	2.33	F	0	T	1	T	0	N	0	0	0.75	33.33
57REULAC001-3	Rio Ruidoso at reservation boundary	2.00	F	0	T	1	T	0	N	0	0	0.75	30
57REULAC001-3	Rio Ruidoso at Special Area on Flyng H Ranch	2.00	F	0	T	1	T	0	N	0	0	0.75	30
57REULAC001-3	Aqua Chigae Spring below Barren Springs	1.50	F	0	T	1	T	0	N	0	0	0.75	15
57REULAC001-3	No Penasco near Durkin at NM Hwy 24	3.00	F	0	T	1	T	0	N	0	0	0.75	30
57REULAC001-3	Rosenasco at Cleve Branch	3.00	F	0	T	1	T	0	N	0	0	0.75	30
57REULAC001-3	Rosenasco at Harley Crossing	NA	F	0	T	1	T	0	N	0	0	0.75	NA
60GLOBUS003-4	Cross Spring 2.8 miles above Black River, off CRd 100	1.00	F	0	T	0	T	0	N	0	0	0.70	1
60GLOBUS003-4	Dark Creek, 8.1 miles above a special area	1.00	F	0	T	0	T	0	N	0	0	0.70	1
60GLOBUS003-4	Geepaw Creek 4 miles above Black River (AKA Geepaw Creek)	3.00	F	0	T	0	T	0	N	0	0	0.70	1
60GLOBUS003-4	Pecos River near Red Butte at Hwy 25	4.00	T	1	F	1	T	1	F	1	0	0.56	12,000
60GLOBUS003-4	Pecos River below Black County Road 25	4.00	T	1	F	1	T	1	F	1	0	0.60	12,500
60GLOBUS003-4	Pecos River below Lower Tansit Dam	3.75	F	0	T	1	T	0	N	0	0	0.55	12,250
60GLOBUS003-4	Pecos River below Braniff Dam	4.00	F	0	T	1	T	0	N	0	0	<0.50	2
60GLOBUS003-4	Dominey River 0.5 miles above Pecos River	3.00	F	0	T	1	T	0	N	0	0	0.65	50
60GLOBUS003-4	Peck River above Detache River	4.00	F	0	T	1	T	0	N	0	0	0.75	1
60GLOBUS003-4	Animas River at Cedar Hill	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Animas River at CO Border near Riverside	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	La Plata River at CO Border	3.00	T	1	F	1	T	1	F	1	0	0.70	1
60GLOBUS003-4	Rio Pescado at Hwy 200 above Zuni	4.00	T	1	F	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Rio Pescado, below diversion	3.00	T	1	F	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River at eastern boundary of Jicarilla Apache	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River above Animas River 5 miles above Farmington	3.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River above Amaro Creek	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River, 2.3 miles above Black Canyon	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River downstream from Barilla Canyon and C	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River at Hwy 25	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Naiva River above Black Canyon CGC	2.67	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Black Canyon Creek above Ashen Canyon	3.33	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Black Canyon Creek below Bobcat Spring	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Bobcat Spring between Adobe Spring and East Fork	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Bonneville Creek 2.5 miles above Black Canyon	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Brule Creek, 1 mile above Middle Fl Gila	1.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Main Diamond Creek, 0.5 mile below junction of trails	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Main Diamond Creek at junction of trails 40.44± (near	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	MTD-Lancaster 39-3	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	MTD-Lancaster 40-1	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	East Fork Gila River at Gapevine	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	East Fork Gila River above Granite Creek	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	East Fork Gila River below Black Canyon	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	East Fork Gila River below Taylor Creek	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Gila River above Turkey Creek	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Gila River below East Fork Gila River	3.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Gila River above Middle Fork Gila River (Snow Cap)	2.67	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Mogollon Creek below Mouth of SF	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Mogollon Creek below Bobcat Spring at FT	1.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Mogollon Creek below Black Canyon	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Mogollon Creek below Gila River	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Mogollon Creek below White Middle Creek	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 0.5 miles below Black Creek	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 1 mile above Black Creek	2.00	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 1.5 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 2 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 3 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 3.5 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 4 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 4.5 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 5 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 5.5 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 6 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 7 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 8 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 9 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 10 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 11 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 12 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 13 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 14 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 15 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 16 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 17 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 18 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 19 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 20 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 21 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 22 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 23 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 24 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 25 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 26 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 27 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 28 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 29 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 30 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 31 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 32 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 33 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 34 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 35 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 36 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 37 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 38 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 39 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 40 miles above Middle Fork	2.50	F	0	T	1	T	0	N	0	0	0.70	1
60GLOBUS003-4	Wilcox Creek, 41 miles above Middle Fork</td												

Appendix B: Site Score Components - Criteria Worksheet

Site Name	Site Description	BPJ Score	0 flow by Ag	Channel diversity	Flow T or F	Channeldized T or F score	<10% ag T or F	ag s	Impact Y or N	Total Ag score	<15 graz	Grazing impact	or impact	<5% urban	Total urban impact	urb impact	no	on 303d	303d	no NPDES	Habitat Score	Habitat "Rank"	Total Score	
G2DZC-Chm03.2	DY Chiarron River near Oklahoma Border	4.50	T	F	T	0	0	Y	1	0.5	F	1	Y	1	1	1	0	0.5	yes	0	0	0.49	2	6.0
G2DZC-Chm03.8	DY Chiarron River at Gorge N. of Guy	4.00	T	F	T	0	0	Y	1	0.5	F	1	Y	1	1	1	0	0.5	yes	1	0	0	0.50	0.00
G2DZC-Chm100.0	DY Chiarron River near Oak Creek	4.00	T	F	T	0	0	N	0	0	F	1	Y	1	1	1	0	0	F	0.5	no	0	0	3.5
G2DZC-Chm13.6	DY Chiarron River below Folsom Falls	3.50	T	1	F	0	0	N	0	0	T	0	N	0	0	0	0	T	0	0	0	0	7.50	
G4Canadi.363.5	Canadian River at Gonzales Ranch, 4.5 miles NE of S	4.00	T	F	0	1	Y	1	Y	0	T	0	Y	1	1	1	0	T	0	0	0	0	5.500	
G4Canadi.402.9	Canadian River at Thiglia	4.00	T	1	T	0	0	N	0	0	F	1	Y	1	0	0	0	T	0	0	0	0	8.500	
G4Canadi.419.4	Canadian River at Hebron	4.00	T	1	F	0	0	T	0	0	F	1	Y	1	0	0	0	T	0	0	0	0	10.500	
G4Whitek018.8	Whitewater Creek at Catwalk	2.00	F	0	T	1	1	T	0	0	N	0	0	T	0	0	0	T	0	0	0	0	7.000	
80Whitek018.8	Whitewater Creek at Catwalk	2.00	F	0	T	1	1	T	0	0	N	0	0	T	0	0	0	T	0	0	0	0	3.0	
																		yes	1	0	0.85	0	2.0	

Appendix C: Site Attributes - Key to Attributes Worksheet

Rating (1-5) Rate overall watershed and stream condition above the site: 1 2 3 4 5

- 1 - pristine
- 2 – minimal impact
- 3 – slight impact
- 4 – moderately impacted
- 5 – severely impacted

Ave. Flow	Average Stream Flow (excluding spring runoff and monsoon season) <input type="checkbox"/> <1cfs, <input type="checkbox"/> 1 to 10cfs, <input type="checkbox"/> >10cfs, <input type="checkbox"/> >100cfs
Flow Status	The stream has flow except during drought years - Perennial
Peren. or Inter.	The stream has no flow in some areas during most years - Intermittent
0 flow by diversion	The lack of flow due to diversion of water? T or F
Channalized	Is the stream channelized at the sites _____, any point upstream of the site _____,
<15% Grazing	Less then 15% of the watershed above the site have high intensity grazing (i.e., riparian access, high density, frequent grazing, over grazing) T or F
Column 1	New Site Name - number for 8 HUC, stream name, and river kilometer
Column 2	Site Description
Column 3	BPJ Score - described above
Column 4	0 flow due to diversion - described above
Column 5	Channalized - T or F (described above)
Column 6	<15 grazing - described above
Column 7	Is there impact to the stream from the above activity? N or Y
Column 8	<5% urban - in the watershed above the site
Column 9	Is there impact to the stream from the above activity? N or Y
Column 10	no dams
Column 11	Is there impact to the stream from the dam? 0-no, 0.5-minimal, 1-yes
Column 12	on 303d list- list of impaired waters, not meeting water quality standards
Column 13	no NPDES permits upstream of the site
Column 14	RBP Habitat Score as a percent (if no score estimated at >75, 75-50, or <50)
Column 15	Comments - any brief info on site and/or watershed

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Appendix C: Site Attributes

Site Name	Site Description	0 flow by diversion T or F		Channalized T or F		<10% ag. T or F		ag impact Y or N		<15 grazing T or F		<5% urban T or F		un impact Y or N		no dams T or F		303d Score		no NPDES T or F		Habitat Score	
		T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
02DRClim01-2	Dry Cimarron River near Oklahoma Border	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	yes	1	T	T	0.45
02DRClim04-9	Dry Cimarron River at Cage N of Guy	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	yes	0	T	T	0.49
02DRClim05-0	Dry Cimarron River below Folion Falls	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	no	0	T	T	0.65
02DRClim03-6	Dry Cimarron River at Gonzales Ranch, 4.5 miles NE of C	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	<0.50
04Canadian1-5	Canadian River at Tiffia	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	0.65
04Canadian10-5	Canadian River at Coal Canyon	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	0.75-0.50
04Canadian12-9	Canadian River at Hebron	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	0.75-0.50
04Varmer10-2	Varmer River above I-25	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	F	F	<0.50
04Varmer14-5	Varmer River at Dawson	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	<0.50
04Varmer17-3	Varmer River below York Canyon	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	F	F	0.65
05Clemeng06-3	Clemenga Creek at Gage above Eagle Nest Lake	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.65
05Clemeng06-5	Clemenga Creek at County Road B-25	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.65
05Clemeng018-5	Clemenga Creek below Angel Fire Lagoons	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.65
05Clemeng019-3	Clemenga Creek at Angel Fire Road	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.65
05Clemeng021-9	Clemenga Creek below Crooked Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.65
05Clemeng045-4	Clemenga Creek above Boy's Ranch (5 mi below Raya	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.65
05Climmar044-5	Climmar River at USGS gage by Philmont	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	>0.75
05Climmar050-8	Climmar River at USGS gage by Philmont	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.65
05Climmar072-7	Climmar River in upper quality s	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.88
05Climmar077-2	Climmar River Tobey Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	>0.75
05McCrys007-0	McCrystal Creek above McCrystal Place	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75
05Monel1400-5	Monte Verde above Clemigilla Creek and Lake	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.65
05Monreno003-7	Moreno Creek above U.S. Hwy 64	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.60
05MPoni11000-1	Middle Ponil Creek above South Ponil Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.84
05MPoni1027-2	Middle Ponil Creek above FR 1950s	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.89
05NPoni1000-1	North Ponil Creek above Ponil Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.71
05NPoni11027-5	North Ponil Creek at FR 1950	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
05Rayado033-8	Rayado Creek near USGS Gage on Philmont	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.92
05SXm11001-4	Sximile Creek at USGS Gage	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.72
05SPoni1004-0	South Ponil Creek 2.5 miles above Ponil Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	>0.75
05SPoni1007-2	South Ponil Creek 4.5 miles above Ponil Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	>0.75
05Canadian132-6	Canadian River at Sanchez	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
05Canadian1274-8	Canadian River at State Hwy 120 bridge	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
05Canadian122-5	Canadian River at Mills Canyon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
05Canadian148-3	Canadian River 0.25 mile below Cimarron River	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
07Cooyote011-9	Cooyote Creek at Rainsville	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.43
07Cooyote040-0	Cooyote Creek at State Park	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	>0.75
07Cooyote047-9	Cooyote Creek below Black Lake	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.45
07Manuel1020-9	Manuelitas Creek above Manuelitas Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	>0.75
07Mora1078-7	Mora River at Valmora	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.47
07Mora1079-1	Mora River below Luna and Julian Creeks	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
07Sapelo1000-7	Sapelo River below Mora River (HWY 125)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
07Sapelo1044-4	Sapelo River below Manuellas Creek (HWY 518)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
07Sapelo1157-4	Sapelo River at Sander's Cabin	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
07Mora1147-1	Mora River above Mosiman Ranch	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.43
07Mora1157-9	Mora River at Cleveland Church	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	>0.75
07Mora1170-9	Mora River at Chacon 0.5 miles above USGS Gage	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.45
07Tremend026-2	Tremendia Creek 0.2 mi downstream of Arroyo Rey	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	<0.50
07Canadian139-0	Canadian River 9 miles east of Logan	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.45
07Canadian142-4	Canadian River below Ute Reservoir at NM HWY 54	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.45
07Canadian184-1	Canadian River below Conchas Dam	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	<0.50
10Paiabu1005-1	Palo Blanco 3 miles above Ute Creek, 9 mi above hw	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
10UreCree145-0	Ure Creek downstream from Hwy 120	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.75-0.50
16Saneca048-5	Saneca Creek 7 miles above Clayton Lakes (aka Cielo Creek)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.75-0.50
28RRCost100-8	Rio de los Pinos 0.5 mi above CO @ DGS&F area	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.74
28RRCost1021-3	Rio de los Pinos at FS Boundary	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.72
28RRCost1025-3	Rio San Antonio at FR 87	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.51
28Brgress1013-2	Big Tesuque Creek above Aspen Vista FR	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	>0.75
28Cabres005-4	Cabresto Creek at USGS Gage	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75-0.50
28Casita1000-6	Casita Creek above Casita reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.67
28Columbi000-1	Columbie Creek above Red River	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.67
28Comanc001-1	Comancie Creek above Costilla Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.97
28DRCany012-4	DR Canyon Creek above Aspen Vista FR	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.67
28Erbud0020-0	Embudo Creek above Rio Grande at Gage Hwy68	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.67
28Erbud005-1	Embudo Creek below Rio Grande at Gage Hwy68	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.67
28Ercosta1010-5	Los Alamos Canyon below FA 53	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.67
28Ercosta1021-1	Los Alamos Canyon below Reservoir spillway	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.67
28Ercosta1025-3	North Fork Rio Honda adjacent to Taos Ski Valley/Pa	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.75-0.50
28NParkR0002-1	North Fork Reservoir at Santa Fe																						

Appendix C: Site Attribute

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Site Name	Site Description	0 flow by diversion T or F		Channalized T or F		<10% ag. T or F		ag impact Y or N		<15 grazing T or F		<5% urban T or F		urban impact Y or N		no dams T or F		303d Score		no NPDES T or F		Habitat Score	
		T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
02DRYCLm01-2	Dry Cimarron River near Oklahoma Border	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	yes	1	T	T	0.45
02DRYCLm04-9	Dry Cimarron River at Cage N of Guy	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	yes	0	T	T	0.49
02DRYCLm05-0	Dry Cimarron River near Oak Creek	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	no	0	T	T	0.65
02DRYCLm03-6	Dry Cimarron River below Follett Falls	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	<0.50
02Canadian1-62-5	Canadian River at Gonzales Ranch, 4.5 miles NE of T	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0	no	0	T	T	0.65
04Canadian1-07-5	Canadian River at Tijeras	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	no	0	T	T	<0.50
04Canadian1-09-4	Canadian River at Hebron	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0	no	0	T	T	0.75
04Canadian1-09-6	Nabor Creek 2 miles below Rio Chama	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0	no	0	T	T	0.75
28Poliyadovo9-8	Polvadera Creek below FR#22	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0	yes	1	T	T	>0.75
28Poliyadovo5-6	Polvadera Creek at Forest Road 422	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	T	T	0.75
28RFRazoo15-6	Rio Brazos above US HWY 84	T	F	T	F	T	F	T	N	T	N	T	N	T	N	T	O	0	no	0	T	T	0.50
28RFRazoo13-9	Rio Brazos above Carrizo's Lodge	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0	no	0	T	T	0.50
28RCarri1-03-9	Rio Carrizo at diversion above NY boundary	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	yes	1	F	F	0.70
28RChama1-04-7	Rio Chama at Hwy 285 at Gage (on San Juan Res?)	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	yes	1	F	F	0.70
28RChama19-3	Rio Chama at NM HWY 233 (4 miles below El Rio)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	yes	1	F	F	0.70	
28RChama029-4	Rio Chama at NM HWY 554 (to El Rio)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	yes	1	F	F	0.70	
28RChama150-4	Rio Chama below Abiquiu Dam at USGS Reservoir	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0.5	yes	1	F	F	0.70
28RChama189-5	Rio Chama near gate above Abiquiu Reservoir	F	T	F	T	F	T	T	N	T	N	T	N	T	N	T	O	0.5	no	0	F	F	0.85
28RChama190-1	Rio Chama below Rio Gallina	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	no	0	F	F	0.85	
28RChama190-1	Rio Chama below Rio Cebolla	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	no	0	F	F	0.85	
28RChama18-1	Rio Chama below Rio Nutrias	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	no	0	F	F	0.80	
28RChama12-6	Rio Chama below El Vado Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	no	0	F	F	0.80	
28RChama143-3	Rio Chama 2mi below La Plente Gage	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.85	
28RChama147-1	Rio Chama 4 km below Chama WWTP (G&F Area)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.83	
28RChama157-0	Rio Chama below Rio Gallina	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.83	
28RChama161-1	Rio Chama at US HWY 84 below Chama	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	T	T	0.76	
28RChama165-1	Rio Chama at NM HWY 17 bridge above Chama	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.86	
28RChama166-4	Rio Chama 0.5 miles above HWY 17 (water intake)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.76	
28RCallito102-6	Rio Chama 25m below (WWTP) outlet	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.70	
28RCallito104-0	Rio Chama above WWTP at State Rd 28	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito100-4	Rio Chama above Rd 29 bridge on Seagent W/A	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCham161-7	Rio Chama above Rio Gallina	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.74	
28RCenci019-7	Rio Encino at FR 100z	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.56	
28RCallito102-7	Rio del Medio above FR 25 near Cebolla	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito1045-1	Rio Nutrias above Rio Chama and Skull Ranch	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.84	
28RCallito1049-3	Rio Nutrias below HWY 84	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.65	
28RCallito1049-5	Rio Ojo Caliente at NM HWY 414	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito1049-5	Rio Pueblo at FR 103	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito1004-5	Rio Puerco above Gossute (WWTP boundary)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.85	
28RCallito004-5	Rio del Oso, 1.8 mi above SFN boundary	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.70	
28RCallito008-8	Rio del Oso, within enclosure	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.70	
28RCallito002-7	Rio del Medio 100z	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito1027-5	Rio Tetas above Las Tablas	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.60	
28RCallito26-1	Rio Vallecito above NF boundary	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.65	
28RCallito26-1	Rio Vallecito above NF boundary, 1 mile below San Pedro Park	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito000-5	Sexto Creek above Rio Grande	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.85	
28RCallito002-4	Rio Resmedio above Gossute (WWTP boundary)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RCallito008-8	Rio Resmedio above Gossute (WWTP boundary)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.90	
28RCallito000-2	Rio Tetas above Madera	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.70	
28RTuas600-2	Rio Tetas above Las Tablas	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
28RTuas28-5	Rio Tetas above Rio Grande	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.72	
28RTuas37-8	Rio Vallecito Canyon below Vallecitos Ranch	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	yes	1	F	F	0.75	
28RCallito000-5	Rio Vallecito above Rio Grande	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.85	
30Bullid000-1	Ancho Creek above Rio Grande	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.42	
30Bullid000-1	Bullid Gulch 1.3 miles below HWY 501	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.42	
30Canyon100-7	Canyon de Valle 2.6 miles above Water Canyon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.68	
30CanyonVal100-3	Canyon de Valle in pool 2.7 miles above Water Canyon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.65	
30CanyonVal100-4	Canyon de Valle 2.9 miles above Water Canyon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.79	
30CanyonVal100-4	Canyon de Valle 2.9 miles above Water Canyon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.72	
30CanyonVal100-2	Capulin Creek (CC) Band Nat. Mon.	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
30BKF100-1	Rio del los Frioles, East Fork	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.70	
30BKF100-1	Rio del los Frioles at Hwy 14 near Carrillos	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.68	
30BKF100-1	Rio del los Frioles at Bandelier Visitor Center	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.65	
30BKF100-1	Rio del los Frioles below West and East Fork	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.65	
30BKF100-1	Rio Grande below Cochiti Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	1	yes	1	F	F	0.65	
30BKF100-1	Rio Grande 10 miles above Rio Grande	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0.5	yes	1	F	F	0.63	
30BKF100-1	Rio Grande below Nine Mile Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.64	
30BKF100-1	Rio Grande below Nine Mile Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.61	
30BKF100-1	Rio Grande below Nine Mile Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.75	
30BKF100-1	Rio Grande below Nine Mile Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	O	0	yes	1	F	F	0.70	
30BKF100-																							

Appendix C: Site Attribute

Appendix C: Site Attributes

Site Name	Site Description	0 flow by diversion T or F		Channalized T or F		<10% ag. T or F		ag impact Y or N		<15 grazing T or F		<5% urban T or F		un impact Y or N		no dams T or F		303d Score		no NPDES T or F		Habitat Score	
		T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
02DryClim01-2	Dry Cimarron River near Oklahoma Border	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	yes	1	T	T	0.45
02DryClim01-9	Dry Cimarron River at Cage N of Guy	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	yes	1	T	T	0.49
02DryClim01-0	Dry Cimarron River near Oak Creek	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0.5	no	0	T	T	0.65
02DryClim01-6	Dry Cimarron River below Follett Falls	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	<0.50
04Canadian1-5	Canadian River at Gonzales Ranch, 4.5 miles NE of El Paso	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	0.65
04Canadian1-9	Canadian River at Tijeras	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	<0.50
04Canadian1-4	Canadian River at Hebbron	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	0	no	0	T	T	0.75
50JackassR08-4	Jack's Creek above int of trails 257 & 259	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.75
50PecosR012-6	Pecos River at Llano bridge	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	1	yes	1	F	F	0.70
50PecosR075-0	Pecos River below Santa Rosa Dam	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	1	yes	1	F	F	0.75
50PecosR087-4	Pecos River at El Cerrito (11 mi above Tecolote Creek)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.80
50PecosR087-5	Pecos River above Elorito Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.80
50PecosR087-1	Pecos River west of Monastery Lake	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.83
50RococoR02-4	Rio Oscuro 15 yards above FR 251	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	>0.75
50PecosR087-8	Pecos River below Lisbo Springs Hatchery	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.83
50PecosR002-1	Pecos River above Tererro Bridge	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.80
50PecosR028-4	Pecos River 400ft above Willow Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	>0.75
50RíoMonter000-3	Río de los Chirivayos 0.5 mi below lower Truchas Lagoon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.80
50RíoMonter000-3	Río Mora above Picos Campground	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	1	yes	1	F	F	0.84
50RococoR02-4	Rio del Padre 0.5 miles above FR 251	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	>0.75
50TecolocoR042-3	Tecolote Creek at US 255	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.80
50TecolocoR066-9	Tecolote Creek at San Gerónimo	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.68
50TecolocoR076-3	Tecolote Creek below Blue Canyon Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	>0.75
50TecolocoR083-3	Tecolote Creek below Wright Canyon	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75
50TecolocoR084-0	Tecolote Creek above Wright Canyon and FR 291	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75
50TecolocoR085-8	Tecolote Creek 5 mi west of Hwy 285, James Fun	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	>0.75
50Wimber000-9	Wilson Creek 50m above Winsor Trail/Stewart Lake!	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75
50WrightC007-7	Wright Canyon above FR 291	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75
50WrightC007-6	Wright Canyon 5 mi above Tecolote Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75
50WrightC007-2	Wright Canyon 1.2 miles above Tecolote Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	T	T	0.75
51AguaLinea004-2	Aguila Negra Creek below diversion 3 miles E of Hwy 58	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.80
51PecosR083-5	Pecos River below Summer Dam	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Cottonwood025-9	Cottonwood Creek 5 mi west of Hwy 285	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	<0.50
52PecosR094-6	Pecos River at Lake Arthur Falls	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	1	yes	1	F	F	0.50
52PecosR094-0	Pecos River at Highway 70/RRC crossing	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.50
52TecolocoR011-4	Tecolote Creek below Glendale Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.80
52Ruidoso010-8	Rio Ruidoso above Rio Ruidoso at NM Hwy 70	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.80
52Ruidoso0125-7	Rio Ruidoso 5mi above Salazar Canyon at County Road B-21	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.59
52Ruidoso013-1	Rio Bonito above NM Hwy 48 near Angus	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0.5	no	0	T	T	0.55
52Ruidoso016-1	Rio Bonito above Bonto Lake at FR 107	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.50
52Ruidoso017-0	Rio Hondo below Rio Ruidoso and Rio Bonito	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.68
52Ruidoso019-9	Rio Ruidoso at San Patricio 1mi above Rio Bonito	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.53
52Ruidoso020-8	Rio Ruidoso at Glendale a FR 443	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.52
52Ruidoso030-1	Rio Ruidoso 50ft above WWT/P outfall	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.55
52Ruidoso031-4	Rio Ruidoso below new WWT/P	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Ruidoso042-2	Rio Ruidoso 300ft E. of closed WWT/P	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Ruidoso044-4	Rio Ruidoso below Canizio Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Ruidoso045-1	Rio Ruidoso above Canizio Creek	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.68
52Ruidoso048-1	Rio Ruidoso at Hwy 37 Bridge	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.68
52Ruidoso052-5	Rio Ruidoso at reservation boundary	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.82
52Ruidoso11-14	Rio Felix at Special Area on Flying H Ranch	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.70
52Ruidoso10-5	Aqua Chiquita below Barren Springs	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Ruidoso10-10	Rio Penasco near Drunken at NM Hwy 24	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Ruidoso13-4	Rio Penasco at Cleve Ranch	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
52Ruidoso17-7	Rio Penasco at Buff Springs	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
60BlackR003-7	Black River at Harley Dam	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.70
60BlueSp003-3	Blue Spring	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
60Chiapas004-5	Chosa Spring 2.8 miles above Black River, off Co Rd	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
60DolidaWa001-0	Dark Canyon at special area	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	T	T	0.70
60GrandeC004-4	Grapevine Creek 5 miles above Black River (AKA Grande Creek)	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0.5	no	0	T	T	<0.75
60GrandeC011-5	Navajo River below Amargo Creek and below La Jolla	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	no	0	F	F	0.70
60GrandeC011-3	Navajo River downstream from Banfield Canyon and Ojo Caliente Apache	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0.5	no	0	T	T	0.70
60GrandeC010-3	Navajo River at eastern boundary of Navajo Apache	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0.5	no	0	T	T	0.70
60GrandeC010-11	San Juan River above Navajo Reservoir	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.75
60GrandeC010-10	San Juan River 5 miles above Farmington	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.65
60GrandeC010-8	Animas River at Cedar Hill	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
60GrandeC010-6	Animas River at CO Border	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0.5	no	0	F	F	0.70
60GrandeC010-5	La Plata River at CO Border	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	0	yes	1	F	F	0.70
60																							

Appendix C: Site Attributes

Site Name	Site Description	0 flow by diversion T or F		Channalized T or F		<10% ag. T or F		ag impact Y or N		<15 grazing T or F		<5% urban T or F		no dams T or F		303d Score		Habitat Score
		T	F	T	F	T	F	T	F	T	F	N	T	N	F	T	F	
02DZYC1m010-2	Dry Cimarron River near Oklahoma Border	T	F	T	F	T	F	T	F	T	F	Y	T	N	F	0.5	yes	0.45
02DZYC1m010-9	Dry Cimarron River at Cage N of Guy	T	F	T	F	T	F	T	F	T	F	Y	T	N	F	0.5	yes	0.49
02DZYC1m010-0	Dry Cimarron River near Oak Creek	T	F	T	F	T	F	T	F	T	F	Y	T	N	F	0.5	no	0.65
02DZYC1m010-6	Dry Cimarron River below Folion Falls	T	F	T	F	T	F	T	F	T	N	Y	T	N	F	0.5	no	0.65
04Canadian1362-5	Canadian River at Gonzales Ranch, 4.5 miles NE of Tijeras	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	<0.50
04Canadian1402-9	Canadian River at Tijeras	T	F	T	F	T	F	T	F	T	Y	T	N	T	O	0	no	0.75
04Canadian1403-4	Canadian River at Hobron	T	F	T	F	T	F	T	F	T	Y	T	N	T	O	0	no	0.75
77BjBlackC016-8	Black Canyon Creek above Upper Black Canyon CG	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77BjBlackC028-3	Black Canyon Creek above Aspen Canyon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77BjBobcat000-8	Bobcat Spring between Autio spring and East Fork CG	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77BjBonnerF002-4	Bonner Creek 1.5 miles above Black Canyon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77CubC001e010-6	Cub Creek 1 mile above Middle Fork Glia	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77Dalamon038-2	Main Diamond Creek .5 miles below junction of trails	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77Dalamon039-3	Main Diamond Creek .5 miles above junction of trails	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77EPKG11000-1	East Fork Glia River at Grapevine	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77EPKG11000-5	East Fork Glia River above Grapevine CG	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77EPKG11010-0	East Fork Glia River below Black Canyon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77EPKG11012-1	East Fork Glia River 1 mile above Black Canyon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77EPKG11035-4	East Fork Glia River below Taylor Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1092-0	Gila River above Turkey Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1131-3	Gila River below East Fork Gila River	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11ta001-1	Gilia Creek above Middle Fork Gila River (Snow Canyon)	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.82
77Gobble000-1	Gobbler Canyon Creek above Mogollon Creek @ FT	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77IronC000-1	Iron Creek above Middle Fork Gila River	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77MPKG11000-5	Middle Fork Gila River above West Fork Gila River	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77MPKG11028-3	Middle Fork Gila River above Indian Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77MPKG11054-8	Middle Fork Gila River below Gila Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77MPKG11055-0	Middle Fork Gila River above Gila Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77MPKG11029-9	Mogollon Creek at Bud's Hole	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77MPKG11037-2	Mogollon Creek below Mouth of SF	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77MPKG11038-8	Mogollon Creek below Trail Canyon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77MPKG11042-0	Mogollon Creek at Woodrow Canyon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77MPKG11020-2	Taylor Creek below Wall Lake	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0.5	yes	0.75
77MPKG11003-1	Trial Canyon Creek above Mogollon Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77TurkeyY001-8	Turkey Creek above Gila River at Wilderness Boundary	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77WMPKG11000-3	West Fork Gila River below Hot Springs above East Fork	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77WMPKG11010-0	West Fork Gila River 1.5 miles above Middle Fork	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77WMPKG11038-1	West Fork Gila River above White Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77WMPKG11038-6	Willow Creek above Gila Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1003-5	Gila River 1 mile west of Virden	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1026-1	Gila River below Red Rock at BLM wildlfie area	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1026-5	Gila River above Mangas Creek (near Bill Evans Lake)	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1074-3	Gila River below Mogollon Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1074-7	Gila River below Mogollon Creek	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1074-1	Clanton Draw on Gray Ranch	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1074-1	Centerline Creek at Forest Road 210	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77G11R1074-1	Negrito Creek above the Tularosa a River	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77G11R1074-1	San Francisco River below Glenwood at Hot Springs	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1049-1	San Francisco River below Alma	T	F	T	F	T	F	T	F	T	Y	T	N	T	O	0	no	0.60
77G11R1057-7	San Francisco River below Bill Evans Lake	T	F	T	F	T	F	T	F	T	Y	T	N	T	O	0	no	0.65
77G11R1057-7	San Francisco River above Reserve at Gage	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.70
77G11R1057-7	San Francisco River at Luna	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.70
77G11R1057-7	San Francisco River west of Luna	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.70
77G11R1057-7	Trout Creek - Quality Area	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.65
77G11R1057-7	Tularosa River above San Francisco River	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77G11R1057-7	Tularosa River above Aragon	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	no	0.75
77G11R1057-7	Whitewater Creek at Glenwood	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.75
77G11R1057-7	Whitewater Creek at Calivalk	F	F	F	F	F	F	F	F	F	Y	T	N	T	O	0	yes	0.85

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
28BigTes013.2	Big Tesuque Creek, above Aspen Vista FR	0.67	10325.31	35.78	-105.8	1	High Small	Reference	1
50CaveCr001.9	Cave Creek above Panchuela Creek	5.76	9010.16	35.85	-105.7	1	High Small	Reference	1
50Horset003.4	Horsethief Creek, 0.4 mi below FT 251 crossing	2.3	7736.6	35.88	-105.71	1.17	High Small	Reference	1
50RChima007.2	Rito de los Chimayos 0.5 mi below lower Truchas Lake	0.2	11355.54	35.97	-105.62	1.17	High Small	Reference	1
50CaveCr003.4	Cave Creek, 5 yds above FT 251 crossing	1.65	9747.85	35.86	-105.71	1.25	High Small	Reference	1
50ROscuro002.4	Rito Oscuro 15 yds above FT 251	2.2	10098.92	35.85	-105.72	1.25	High Small	Reference	1
50RFadre000.4	Rio del Padre, 0.5 miles above Beatty's Flat	11.61	9488.65	35.91	-105.6	1.25	High Small	Reference	1
29RResum002.4	Rito Resumadero above SPP Wilderness boundary	5.9	9022.75	36.11	-106.75	1.5	High Small	Reference	1
77Diamon038.2	Main Diamond Creek, 0.5 mile below trails 40 & 43	4.6	7782.53	33.3	-107.86	1.5	High Small	Reference	1
28RCost0057.9	Rio Costilla above Costilla Reservoir	17.05	9403.35	36.9	-105.26	2	High Small	Reference	1
30SantaF057.4	Santa Fe River above McClure reservoirs	10.6	7930.18	35.69	-105.82	2	High Small	Reference	1
31RVacas017.4	Rio de Las Vacas, FR 71, above barrier; Santa Fe N F	13	9472.25	36.04	-106.82	2	High Small	Reference	1
50Winsor006.9	Winsor Creek, 50m above Winsor trail/Stewart Lake trail	1.4	10171.1	35.82	-105.73	2.25	High Small	Reference	1
50Wright000.6	Wright Canyon below FR 291	5.8	8596.22	35.69	-105.48	2.25	High Small	Reference	1
50Wright000.7	Wright Canyon above FR 291	5.7	8609.34	35.69	-105.48	2.25	High Small	Reference	1
07Sapel0069.8	Sapello River at Mosimann Ranch	5.2	8218.91	35.82	-105.47	2.33	High Small	Reference	1
28RSanBa017.9	Rio Santa Barbara @ SB campground	34.1	8875.11	36.09	-105.61	2.33	High Small	Reference	1
50Tecolo072.0	Tecolote Creek below FR 291 above Wright Canyon	2.5	8583.1	35.69	-105.48	2.33	High Small	Reference	1
50Tecolo074.1	Tecolote Creek 1 mile above FR 291	1.4	8730.74	35.69	-105.49	2.33	High Small	Reference	1
28NFkRH0000.5	North Fork Rio Hondo at Taos Ski Valley Parking Lot	3.9	9439.44	36.6	-105.45	2.5	High Small	Reference	1
28RMedio013.3	Rio Lucero at USGS Gage on Taos Pueblo	4.86	8980.1	35.8	-105.83	2.5	High Small	Reference	1
29RGall045.1	Rio Gallina at FR 76 near Gallina	7.2	7920.33	36.19	-106.84	2.5	High Small	Reference	1
50CowCre064.0	Cow Creek at FR 156 near Elk Mt.	3	10338.43	35.77	-105.58	2.5	High Small	Reference	1
50HolyGh002.1	Holy Ghost Creek above campground	14	7999.08	35.76	-105.69	2.5	High Small	Reference	1
50Tecolo071.6	Tecolote Creek below Wright Canyon	2.8	8468.26	35.69	-105.48	2.5	High Small	Reference	1
50Tecolo072.8	Tecolote Creek above FR 291	2	8494.51	35.69	-105.48	2.5	High Small	Reference	1
77Diamon039.3	Main Diamond Creek at trails 40 & 42	2.8	8235.31	33.27	-107.84	2.5	High Small	Reference	1
77Diamon040.1	Main Diamond Creek, 0.5 mile above trails 40 & 43	2.1	7972.83	33.27	-107.84	2.5	High Small	Reference	1
31RVacas012.6	Rio de Las Vacas 0.25 miles above Rd 126	17.5	8274.68	36	-106.81	2.67	High Small	Reference	1
50Gallin141.9	Gallinas River at end of FR 263 above Burno Creek	84	8435.45	35.72	-105.5	2.67	High Small	Reference	1
07Manuel0020.9	Manuelitas Creek above Maestas Creek	3.92	7972.83	35.85	-105.46	2.83	High Small	Reference	1
50PecosR803.7	Pecos River 400m above Willow Creek	129.99	7775.97	35.76	-105.67	2.83	High Small	Reference	1
29RChama165.4	Chama River at NM HWY 17 bridge above Chama	106.15	7884.24	36.91	-106.57	3	High Small	Reference	1
29RChama166.4	Chama River below Chama Water Intake, Rio Arriba Co.	106.15	7917.05	36.92	-106.57	3	High Small	Reference	1
29RPuer037.5	Rio Puerto de Chama at FR 103	14.8	8277.96	36.1	-106.73	3	High Small	Reference	1
30EFkFri000.1	Rio de Los Frijoles, East Fork	2.04	7992.52	35.83	-106.41	3	High Small	Reference	1
30WFkFri000.1	Rio de los Frijoles, West Fork	1.5	7982.67	35.83	-106.41	3	High Small	Reference	1
77Willow000.6	Willow Creek above Glilia Creek	16	7930.18	33.41	-108.58	3	High Small	Reference	1

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
77Diamond038.1	Main Diamond Creek, 0.5 mile below trails 40 &43	4.6	8642.15	33.28	-107.85	2.5	High Small	Intermediate	2
28RMedio017.5	Rio en Medio above ski area	0.4	106337	35.79	-105.79	3	High Small	Intermediate	2
28RCostillo048.9	Rio Costilla above Comanche Creek	71.6	8970.25	36.84	-105.31	3.5	High Small	Intermediate	2
28RHondo014.8	Rio Hondo 1.5 miles above Valdez at USGS Gage	36.2	7641.45	36.54	-105.56	3.5	High Small	Intermediate	2
29RValle037.8	Rio Valleclito above NF boundary at Valleclitos Ranch	48	8783.24	36.64	-106.21	3.5	High Small	Intermediate	2
31EFkJem025.4	East Fork Jemez River near Cerro en Medio	5.8	8547.01	35.87	-106.45	3.5	High Small	Intermediate	2
31RVacas004.2	Rio de Las Vacas below private land (Sec. 24)	107.7	7880.96	36.94	-106.79	3.5	High Small	Intermediate	2
50EIPor004.8	El Porvenir Creek at Christian Camp, USGS 08380075	22	7559.42	35.71	-105.42	3.5	High Small	Intermediate	2
28RHondo026.9	Rio Hondo above WWTP	8	9380.38	36.6	-105.45	3.67	High Small	Intermediate	2
31EFkJem010.1	East Fork Jemez River 2 mi above HWY4	51	8209.06	35.82	-106.56	3.67	High Small	Intermediate	2
30RFrijo018.4	Rito de Los Frijoles below West and East Fork	3.6	7926.9	35.83	-106.41	4	High Small	Intermediate	2
31RSanAn036.8	Rio San Antonio Creek, Baca Location-PFC	14.5	8625.75	35.96	-106.47	4	High Small	Intermediate	2
28RHondo022.4	Rio Hondo 2.4 miles below WWTP	12.53	8629.03	36.59	-105.49	4.17	High Small	Intermediate	2
31RSanAn005.3	Rio San Antonio Creek above La Cueva Cpgd.	93.7	7625.04	35.86	-106.64	4.17	High Small	Intermediate	2
29REncin009.7	Rito Encino at FR 100z	10.1	7821.9	36.15	-106.52	4.5	High Small	Intermediate	2
29RPolleo009.5	Rio Polleo at FR 103	2.6	7903.93	36.13	-106.72	4.5	High Small	Intermediate	2
31EFkJem015.0	East Fork Jemez River below HWY 4 @ Las Conchas CG	45	8419.05	35.81	-106.53	4.5	High Small	Intermediate	2
31Jarami008.0	Jaramillo Creek above Cerro Pinyon @ Rd B	9.2	8619.19	35.9	-106.49	4.5	High Small	Intermediate	2
49Sacram066.9	Sacramento River below Sacramento Lake	8.1	8346.86	32.75	-105.78	4.5	High Small	Intermediate	2
49Sacram068.7	Sacramento River above Sacramento Lake	5.3	8504.35	32.76	-105.78	4.5	High Small	Intermediate	2
49Sacrom060.3	Sacramento River above Scott Able Creek	18.7	7720.19	32.71	-105.74	4.5	High Small	Intermediate	2
28RedRiv028.5	Red River above Red River WWTP (HRG 23.1)	66.86	8645.44	36.71	-105.43	4.83	High Small	Intermediate	2
05Cimmar077.2	Cimarron River at Tolby Creek	157.42	8054.86	36.54	-105.22	5	High Small	Intermediate	2
28RCostillo052.2	Rio Costilla at Valle Vidal Boundary	120.43	8891.51	36.84	-105.34	5	High Small	Intermediate	2
28RMedio016.9	Rio en Medio 200 m below ski area parking lot	0.7	10466.39	35.79	-105.8	5	High Small	Intermediate	2
29SextoC000.1	Sexto Creek above Rio Chamita	8.1	8317.34	36.98	-106.66	5	High Small	Intermediate	2
49Sacram061.8	Sacramento River at USGS Gage	14.3	7775.97	32.71	-105.75	5	High Small	Intermediate	2
50HolyGh000.6	Holy Ghost Creek below campground	15	7917.05	35.74	-105.68	5	High Small	Intermediate	2
28RHondo026.7	Rio Hondo 300 yards below WWTP	8.2	9370.54	36.6	-105.46	5.33	High Small	Intermediate	2
05Cieneg021.9	Cieneguilla Creek below Crooked Creek	6.74	8566.69	36.36	-105.29	5.5	High Small	Intermediate	2
28Cabres005.4	Cabresto Creek	34.28	7890.81	36.73	-105.55	5.5	High Small	Intermediate	2
28Columb000.1	Columbine Creek above Red River	17.51	7864.56	36.68	-105.51	5.5	High Small	Intermediate	2
29RCham017.8	Rio Chamita above Sexto Creek	6.94	8317.34	36.98	-106.66	5.5	High Small	Intermediate	2
05Sixmi001.4	Sixmile Creek at USGS Gage	11.3	8222.19	36.52	-105.27	5.67	High Small	Intermediate	2
28RedRiv027.8	Red River above Molycorp, below WWTP	66.6	8547.01	36.71	-105.44	5.83	High Small	Intermediate	2
28RCost055.5	Rio Costilla below Costilla Reservoir	54.6	9331.16	36.87	-105.28	6	High Small	Stressed	3
29RCanji039.4	Rio Canjilon at diversion above NF boundary	24	8041.73	36.51	-106.4	6	High Small	Stressed	3

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
29RChama161.1	Chama River at U.S. HWY 84 bridge below Chama	120.67	7766.13	36.88	-106.58	6	High Small	Stressed	3
30Pajaro18.5	Pajarito Creek 0.3 miles above HWY 501	1.25	7910.49	35.87	-106.36	6	High Small	Stressed	3
28RedRiv025.4	Red River above Hanson Creek (below Fawn Lakes CG)	72.06	8251.72	36.7	-105.47	6.17	High Small	Stressed	3
29RChama157.0	Chama River below Rio Chamita (@Unser's)	168	7690.66	36.85	-106.59	6.17	High Small	Stressed	3
28RCosti025.6	Rio Costilla at USGS Gage above Costilla	195	7953.14	36.97	-105.51	6.5	High Small	Stressed	3
28RedRiv031.1	Red River below Bitter Creek	53.04	8455.14	36.71	-105.4	6.5	High Small	Stressed	3
28RGuaje021.7	Rio Guaje above reservoir; Santa Fe NF	3.6	8258.28	35.93	-106.36	6.5	High Small	Stressed	3
29Cannon002.4	Cannones Creek above HWY 84 (near Chama)	28.29	7651.29	36.81	-106.57	6.5	High Small	Stressed	3
29RChami016.1	Rio Chamita 1 mile above Nabor Creek	16.97	8209.06	36.96	-106.64	6.5	High Small	Stressed	3
59RPenas170.4	Rio Penasco at Bluff Springs	12	8084.38	32.83	-105.74	6.5	High Small	Stressed	3
05Cieneg019.3	Cieneguilla Creek at Angel Fire Road	11.98	8455.14	36.38	-105.28	6.83	High Small	Stressed	3
29RChami008.4	Rio Chamita above Rd 29 bridge on Seargent WLA	36.6	7789.09	36.92	-106.59	7	High Small	Stressed	3
28RedRiv017.1	Red River at Goat Hill Cpgd.	105	7680.82	36.69	-105.54	7.17	High Small	Stressed	3
28RedRiv024.1	Red River above Molycorp (USGS Staff Gauge)	72.61	8202.5	36.7	-105.48	7.17	High Small	Stressed	3
28LosAla021.0	Los Alamos Canyon below Reservoir spillway	6.22	7598.8	35.88	-106.35	7.5	High Small	Stressed	3
29RChami002.8	Rio Chamita 10m above Chama WWTP outfall	46.14	7766.13	36.88	-106.59	7.83	High Small	Stressed	3
05Moreno003.7	Moreno Creek above U.S. HWY 64	72.06	8218.91	36.55	-105.27	8	High Small	Stressed	3
28RedRiv019.6	Red River below Molycorp; above Columbine	98	7854.71	36.68	-105.51	8.17	High Small	Stressed	3
29RChami004.0	Rio Chamita above WWTP at State HWY 29	35.43	7913.77	36.92	-106.59	8.17	High Small	Stressed	3
05Cieneg018.5	Cieneguilla Creek below Angel Fire lagoons	15.53	8415.77	36.4	-105.28	8.33	High Small	Stressed	3
29RChami002.6	Rio Chamita 25m below WWTP outfall	46.14	7762.85	36.88	-106.59	8.5	High Small	Stressed	3
05Cieneg016.5	Cieneguilla Creek at County Road B-25	20.61	8379.67	36.41	-105.28	8.83	High Small	Stressed	3
07MoraRi170.9	Mora River at Chacon below Luna and Lujan Creeks	57	7851.43	36.12	-105.38	8.83	High Small	Stressed	3
05Cieneg006.3	Cieneguilla Creek at Gage above Eagle Nest Lake	68.94	8189.38	36.48	-105.26	9.17	High Small	Stressed	3
28RedRiv024.9	Red River at Zwerpel Dam	28.9	8891.51	36.67	-105.38	3.5	High Small	2.75	?
80Negrit000.1	Negrito Creek above the Tularosa River	192.69	5797.53	33.68	-108.74	3	Low Large	Reference	1
77GilaRi131.3	Gila River below East Fork Gila River	1526.86	5544.89	33.18	-108.21	3.5	Low Large	Reference	1
31RGuada008.2	Rio Guadalupe above tunnels	236.5	6053.45	35.73	-106.76	3.83	Low Large	Reference	1
50PecosR782.1	Pecos River west of Monastery Lake	222.98	7021.34	35.59	-105.68	3.83	Low Large	Reference	1
77EFKGil000.5	East Fork Gila River below Franks	1027	5554.73	33.18	-108.21	4	Low Large	Reference	1
77EFKGil010.0	East Fork Gila River below Black Canyon	1016	5715.5	33.18	-108.17	4	Low Large	Reference	1
78GilaRi026.1	Gila River @ Red Rock	3210	4006.1	32.65	-108.85	5	Low Large	Reference	1
77WFKGil000.3	West Fork Gila River above East Fork	509.29	5587.54	33.18	-108.2	5.5	Low Large	Reference	1
78GilaRi074.8	Gila River above Gila	2015	4619.65	33.04	-108.53	6	Low Large	Reference	1
31RGuada000.1	Rio Guadalupe above Jemez River	273.57	5659.73	35.67	-106.74	6.33	Low Large	Reference	1
31JemezR046.9	Jemez River below Jemez Springs School	473.35	5620.35	35.65	-106.74	6.5	Low Large	Reference	1
77EFKGil000.1	East Fork Gila River at Grapevine	1027	5554.73	33.18	-108.21	6.5	Low Large	Reference	1
31JemezR049.2	Jemez River above Rio Guadalupe	200	5669.57	35.67	-106.73	6.67	Low Large	Reference	1

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
05Cimmar050.8	Cimarron River at USGS gage by Philmont	294	6614.5	36.52	-104.98	5	Low Large	Intermediate	2
02DryCim103.6	Dry Cimarron River below Folsom Falls	231.58	6145.31	36.87	-103.88	5.5	Low Large	Intermediate	2
29RChama089.5	Chama River below Rio Gallina	1695	6401.23	36.37	-106.68	5.83	Low Large	Intermediate	2
31JemezR064.6	Jemez River above USFS Ranger Station	174.96	6283.12	35.79	-106.69	5.83	Low Large	Intermediate	2
29RChama090.1	Chama River above Rio Cebolla	1145	6512.79	36.46	-106.71	6	Low Large	Intermediate	2
29RChama143.8	Rio Chama 2mi below La Puent Gage	482	7050.87	36.67	-106.66	6	Low Large	Intermediate	2
29RChama147.1	Chama River 4 km below Chama WWTP (G&F Area)	225.09	7460.99	36.78	-106.57	6.5	Low Large	Intermediate	2
77EFkGil035.4	East Fork Gila River below Taylor Creek	715.51	6155.16	33.3	-108.12	6.5	Low Large	Intermediate	2
04Vermej073.7	Vermejo River below York Canyon	202.9	7080.4	36.81	-104.9	6.67	Low Large	Intermediate	2
28RedRiv005.3	Red River below Red River fish hatchery	185	7136.18	36.68	-105.66	6.83	Low Large	Intermediate	2
04Canadi409.4	Canadian River at Hebron	229	6240.46	36.79	-104.46	7	Low Large	Intermediate	2
29RChama118.1	Chama River below Rio Nutrias	860	6693.24	36.55	-106.72	7	Low Large	Intermediate	2
64Navajo023.3	Navajo River below Barella Canyon and CO border	172	6512.79	36.97	-107.08	7	Low Large	Intermediate	2
78GilaRi052.6	Gila River above Mangas Creek (near Bill Evans Lake)	2619	4393.26	32.87	-108.59	7.17	Low Large	Intermediate	2
06Canadi274.8	Canadian River at State HWY 120 bridge	3865.37	4885.41	35.92	-104.35	7.33	Low Large	Intermediate	2
29RQjoCa026.1	Rio Ojo Caliente at NM HWY 414	445.8	5216.79	36.31	-106.05	7.5	Low Large	Intermediate	2
50PecosR739.5	Pecos River above Glorieta Creek	242	6804.79	35.53	-105.67	7.5	Low Large	Intermediate	2
64Navajo009.7	Navajo River above Amargo Creek	255.2	6581.69	36.95	-107.06	7.5	Low Large	Intermediate	2
64Navajo015.5	Navajo River below Amargo Creek	439.16	6555.44	36.95	-107.07	7.5	Low Large	Intermediate	2
64Navajo029.4	Navajo River at E boundary of Jicarilla Apache Res	230.71	6863.85	36.97	-106.96	7.5	Low Large	Intermediate	2
80SanFra028.6	San Francisco River below Glenwood at Hot Springs	1653	4560.59	33.25	-108.88	7.5	Low Large	Intermediate	2
31JemezR058.9	Jemez River below Jemez Springs WWTP	184.46	5984.54	35.74	-106.71	7.67	Low Large	Intermediate	2
28RPuebT000.1	Rio Pueblo de Taos 400m above Rio Grande	418.1	6135.47	36.34	-105.73	8	Low Large	Intermediate	2
30SantaF000.1	Santa Fe River 100m above Rio Grande	262	5229.91	35.6	-106.34	8	Low Large	Intermediate	2
45Mimbre085.7	Mimbres River above Gallinas Creek	290	5466.15	32.73	-107.87	8	Low Large	Intermediate	2
57RBonito025.7	Rio Bonito near Salazar Canyon at County Road B-23	254	5866.43	33.53	-105.44	8	Low Large	Intermediate	2
57RHondo130.7	Rio Hondo below Rio Ruidoso and Rio Bonito	620	5183.98	33.38	-105.27	8	Low Large	Intermediate	2
62Delawa001.0	Delaware River 0.5 mi above Pecos River	689	2847.91	32.03	-104.03	8	Low Large	Intermediate	2
66Animas054.6	Animas River at CO Border near Riverside	1097.19	5909.08	36.98	-107.87	8	Low Large	Intermediate	2
80SanFra115.7	San Francisco River above Reserve at Gage	350	5751.59	33.74	-108.77	8	Low Large	Intermediate	2
80Tularo001.3	Tularosa River above San Francisco River	651.6	5685.97	33.68	-108.77	8	Low Large	Intermediate	2
45Mimbre104.8	Mimbres River at USGS Gage at Mimbres	216	5922.21	32.86	-107.97	8.5	Low Large	Intermediate	2
57RRuido019.8	Rio Ruidoso at Glencoe at FR 443	201.9	5718.78	33.41	-105.45	8.5	Low Large	Intermediate	2
31JemezR043.1	Jemez River at Owl Springs Road on Jemez Pueblo	565.62	5535.05	35.62	-106.73	8.67	Low Large	Intermediate	2
07Sapell000.1	Sapello River above Mora River (HWY 85)	300	6496.38	35.79	-104.98	8.83	Low Large	Intermediate	2
06Canadi348.3	Canadian River 0.25 mile below Cimarron River	2850	5626.92	36.3	-104.49	9	Low Large	Stressed	3
28RPuebT003.5	Rio Pueblo de Taos 4km above Rio Grande	404.1	6634.18	36.35	-105.71	9	Low Large	Stressed	3
30SantaF003.7	Santa Fe River above Cochiti Pueblo Hatchery	257.5	5279.13	35.59	-106.31	9	Low Large	Stressed	3

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
57RRuido001.3	Rio Ruidoso at San Patricio, 1mi above Rio Bonito	295.5	5197.1	33.39	-105.28	9	Low Large	Stressed	3
57RRuido031.4	Rio Ruidoso below new WWTP	156.3	6135.47	33.36	-105.55	9	Low Large	Stressed	3
04Vermej045.4	Vermejo River at Dawson	301	6365.14	36.68	-104.78	9.5	Low Large	Stressed	3
30SantaF012.7	Santa Fe River below mine at USGS Gage	231	5498.96	35.55	-106.23	9.5	Low Large	Stressed	3
30SantaF015.3	Santa Fe River 0.5 mi upstream Lonestar Mine	220	5640.04	35.55	-106.2	9.5	Low Large	Stressed	3
30SantaF021.2	Santa Fe River below La Cienega	215.5	5856.59	35.56	-106.15	9.5	Low Large	Stressed	3
29RChama122.6	Chama River below El Vado Reservoir	793	6811.36	36.59	-106.73	9.67	Low Large	Stressed	3
50Gallin101.8	Gallinas River 0.25 mile below Las Vegas WWTF	172	6417.64	35.57	-105.21	9.67	Low Large	Stressed	3
57RRuido030.1	Rio Ruidoso 50m above WWTP outfall	156	6119.07	33.36	-105.55	9.67	Low Large	Stressed	3
05Cimmar044.5	Cimarron River at Springer (@ City Park)	335.74	6197.81	36.47	-104.83	9.83	Low Large	Stressed	3
66Animas009.8	Animas River 5 miles above Farmington.	1345.72	5377.56	36.75	-108.14	9.83	Low Large	Stressed	3
02DryCim049.8	Dry Cimarron River at USGS Gage north of Guy, NM	545	4878.85	36.99	-103.42	10	Low Large	Stressed	3
28RPuebloT013.2	Rio Pueblo de Taos near Los Cordovas	198.6	6726.05	36.39	-105.63	10	Low Large	Stressed	3
50Gallin102.1	Gallinas River below Las Vegas, above WWTP outfall	172	6424.2	35.57	-105.21	10	Low Large	Stressed	3
67Lapl033.8	La Plata River at CO Border	331	5958.3	37	-108.19	10	Low Large	Stressed	3
28RedRiv009.8	Red River at HWY 3 bridge in Questa	158.74	7267.42	36.69	-105.61	10.17	Low Large	Stressed	3
80SanFra049.1	San Francisco River below Alma	1543	4878.85	33.37	-108.91	10.17	Low Large	Stressed	3
80SanFra105.7	San Francisco River below Reserve	434	5682.69	33.68	-108.78	10.17	Low Large	Stressed	3
28RPuebloT008.2	Rio Pueblo de Taos belwo WWTP near gage	380	6660.43	36.38	-105.67	10.33	Low Large	Stressed	3
02DryCim003.2	Dry Cimarron River near Oklahoma Border	1023.63	4350.61	36.92	-103.03	10.5	Low Large	Stressed	3
04Vermej002.9	Vermejo River above I-25	558.2	5889.4	36.5	-104.57	10.5	Low Large	Stressed	3
45Mimbre094.6	Mimbres River at NM HWY 90 in San Lorenzo	262	5646.6	32.79	-107.92	10.5	Low Large	Stressed	3
57RBonito000.8	Rio Bonito above Rio Ruidoso at NM HWY 70	298	5216.79	33.39	-105.28	10.5	Low Large	Stressed	3
29RChama019.3	Chama River at NM HWY 233 (other landmark?)	2477.36	5794.25	36.17	-106.18	11	Low Large	Stressed	3
57RHondo0117.	Rio Hondo at Picacho on Casa Linda Ranch	1032	4937.91	33.35	-105.15	11	Low Large	Stressed	3
28RedRiv012.7	Red River above Hatchery	180	7106.65	36.69	-105.65	11.17	Low Large	Stressed	3
50Gallin075.8	Gallinas River 1 mile above San Augustin	312.54	5925.49	35.47	-105.16	11.17	Low Large	Stressed	3
28Embudo000.8	Embudo Creek above Mogollon Creek	312	5872.99	36.21	-105.91	11.5	Low Large	Stressed	3
29RChama050.4	Chama River below Abiquiu Dam at USGS Gage	2147	6050.16	36.24	-106.42	11.83	Low Large	Stressed	3
29RChama004.5	Chama River at Hwy 285 at Gage (on San Juan Res.?)	3144	5653.16	36.07	-106.11	12	Low Large	Stressed	3
77TrailC000.1	Trail Canyon Creek above Mogollon Creek	2.8	6726.05	33.22	-108.54	2	Low Small	Reference	1
30Pajari016.3	Pararito Creek above Bulldog Gulch	2.55	7375.69	35.86	-106.34	2.5	Low Small	Reference	1
57Grind001.5	Grindstone Creek above New Reservoir	1.84	6847.45	33.32	-105.68	2.5	Low Small	Reference	1
77Gobble001.9	Gobbler Canyon Creek above Mogollon Creek @ FT 221	3	6709.65	33.22	-108.57	2.5	Low Small	Reference	1
77IronCr000.1	Iron Creek above Middle Fork Gila River	17.46	7054.15	33.39	-108.48	2.5	Low Small	Reference	1
50Dalton000.1	Dalton Creek above Pecos River	10.9	7290.38	35.66	-105.69	2.67	Low Small	Reference	1
77Mogoll029.9	Mogollon Creek at Bud's Hole	1.22	6693.24	33.23	-108.62	3	Low Small	Reference	1
77Mogoll037.2	Mogollon Creek below Mouth of S F	19.84	6552.16	33.21	-108.56	3	Low Small	Reference	1

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
77Mogollon038.8	Mogollon Creek below Trail Canyon		12.34	6745.74	33.22	-108.54	3	Low Small	Reference 1
77Mogollon042.0	Mogollon Creek at Woodrow Canyon		9.1	7073.84	33.2	-108.51	3	Low Small	Reference 1
57RRuido052.5	Rio Ruidoso at reservation boundary		18.7	7185.39	33.34	-105.73	3.33	Low Small	Reference 1
57Corrizo001.3	Carrizo Creek below Grindstone Creek		24.5	6693.24	33.32	-105.67	3.5	Low Small	Reference 1
29Polvadra009.8	Polvadra Creek at Forest Road 422		19.08	6627.62	36.12	-106.44	3.67	Low Small	Reference 1
77BlackC000.1	Black Canyon above East Fork Gila River		105.91	5751.59	33.17	-108.16	3.67	Low Small	Reference 1
50Gallin119.7	Gallinas River at Montezuma, USGS Gage 08380500		84	6867.13	35.65	-105.32	3.83	Low Small	Reference 1
30Pajarito012.6	Pajarito Canyon below Twomile Canyon		2.7	6932.75	35.85	-106.3	4	Low Small	Reference 1
30RFrijo000.1	Rito de los Frijoles above Rio Grande		19.8	5341.47	35.69	-106.3	4	Low Small	Reference 1
29RioOso004.7	Rio del Oso - REMAP		39	5915.64	36.09	-106.19	4.5	Low Small	Reference 1
49Sacram051.6	Sacramento River above Timberon		35.7	7021.34	32.65	-105.7	4.5	Low Small	Reference 1
79Clanton000.1	Clanton Draw on Gray Ranch		14.93	5085.55	31.53	-108.88	4.5	Low Small	Reference 1
45Mimbres127.4	Mimbres River at Cooney Campground		29	6837.6	33.04	-107.98	4.67	Low Small	Reference 1
29RioOso004.5	Rio del Oso, outside enclosure (downstream)		38.6	5889.4	36.09	-106.18	5.17	Low Small	Reference 1
59RPenas110.5	Rio Penasco near Drunken at NM HWY 24		5.1	5236.48	32.88	-105.25	5.5	Low Small	Reference 1
30Pajarito15.8	Pajarito Canyon below junction with Bulldog Gulch		2.78	7319.91	35.86	-106.33	3.5	Low Small	Intermediate 2
30Pajarito16.1	Pajarito Canyon below Starmer Gulch		1.54	7395.37	35.86	-106.34	3.5	Low Small	Intermediate 2
77MFkGii054.8	Middle Fork Gila River, Gila National Forest		129.97	7267.42	33.41	-108.61	3.5	Low Small	Intermediate 2
77Gilita000.1	Gilita Creek above Middle Fork Gila River		36.26	7270.7	33.41	-108.49	3.67	Low Small	Intermediate 2
50Gallin131.8	Gallinas River at FS boundary, USGS gage 08380000		21	7480.68	35.7	-105.42	3.83	Low Small	Intermediate 2
31RCebol005.6	Rio Cebolla at FR 376 crossing near Lake Fork Canyon		42	7460.99	35.86	-106.76	4.17	Low Small	Intermediate 2
30Bullido000.1	Bulldog Gulch above junction with Pajarito Canyon		0.1	7300.23	35.86	-106.33	4.5	Low Small	Intermediate 2
50EIPPorv000.1	El Porvenir Creek at HWY 65		25.97	7254.29	35.69	-105.38	4.83	Low Small	Intermediate 2
30CanVal003.7	Canyon de Valle 2.6 miles above Water Canyon		4.12	7303.51	35.85	-106.33	5	Low Small	Intermediate 2
30CanVal004.0	Canyon de Valle 2.8 miles above Water Canyon at Spring		4.25	7372.41	35.85	-106.33	5	Low Small	Intermediate 2
77BlackC016.8	Black Canyon Creek above Upper Black Canyon CG		48.09	6755.58	33.18	-108.03	5	Low Small	Intermediate 2
80Tularo050.8	Tularosa River above Aragon		94	6755.58	33.89	-108.52	5	Low Small	Intermediate 2
29RioOso008.8	Rio del Oso, within enclosure		33.1	6220.78	36.08	-106.22	5.17	Low Small	Intermediate 2
31RCebol000.1	Rio Cebolla above Rio de las Vacas		67	7201.8	35.82	-106.79	5.17	Low Small	Intermediate 2
29Canada005.6	Canada del Potrero at Rd 44 near El Rito		10.3	7474.12	36.4	-106.2	5.5	Low Small	Intermediate 2
29Coyote005.6	Coyote Creek at Forest Road 316		34.09	7136.18	36.13	-106.62	5.5	Low Small	Intermediate 2
48ThreeR057.1	Three Rivers at U.S.F.S. campground		6.5	6312.64	33.4	-105.89	5.5	Low Small	Intermediate 2
80Center000.1	Centerfire Creek at Forest Road 210		135.68	6670.27	33.83	-108.84	5.67	Low Small	Intermediate 2
30CanVal004.2	Canyon de Valle 2.9 miles above Water Canyon		4.63	7362.56	35.85	-106.33	6	Low Small	Intermediate 2
29Abiquiu001.8	Abiquiu Creek at U.S. HWY 84 bridge		43	6076.41	36.2	-106.32	6.33	Low Small	Intermediate 2
28RHondo012.1	Rio Hondo at Valdez bridge		39.1	7415.06	36.53	-105.58	6.5	Low Small	Intermediate 2
28Sandia011.2	Sandia Canyon 7 miles above Rio Grande, below TA 53		1.3	6788.39	35.87	-106.27	6.5	Low Small	Intermediate 2
33RPuerc464.3	Rio Puerco at Vallicitos		8.45	7339.6	36.04	-106.92	6.5	Low Small	Intermediate 2

Table D-1.**Appendix D. Revised Site Scores**

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort
50Glorie001.3	Glorieta Creek below ponds below HWY 63	32.2	6837.6	35.54	-105.68	6.67	Low Small	Intermediate	2
50Glorie001.4	Glorieta Creek between ponds below HWY 63	32.2	6834.32	35.54	-105.68	6.67	Low Small	Intermediate	2
50Glorie001.6	Glorieta Creek above ponds below HWY 63	32.2	6837.6	35.54	-105.68	6.67	Low Small	Intermediate	2
50Gallin114.6	Gallinas River at Montezuma, below lagoons	87	6726.05	35.65	-105.28	6.83	Low Small	Intermediate	2
50Tecolo065.6	Tecolote Creek below Blue Canyon Creek	16.8	7270.7	35.65	-105.44	7.17	Low Small	Intermediate	2
50Tecolo066.9	Tecolote Creek at San Geronimo	54.1	6758.86	35.58	-105.39	4.33	Low Small	Stressed	3
28Sandia012.1	Sandia Canyon 7.5 mi above Grande	1	7034.46	35.87	-106.29	7	Low Small	Stressed	3
28Sandia015.8	Sandia Canyon 10.1 miles above Rio Grande (in wetlands)	0.6	7237.89	35.88	-106.31	7	Low Small	Stressed	3
28Sandia016.1	Sandia Canyon 10.3 miles above Rio Grande (in wetlands)	0.7	7237.89	35.88	-106.31	7	Low Small	Stressed	3
57RRuido044.4	Rio Ruidoso below Carrizo Creek	60.1	6539.03	33.32	-105.65	7	Low Small	Stressed	3
57RRuido045.1	Rio Ruidoso above Carrizo Creek	52.1	6575.12	33.33	-105.65	7	Low Small	Stressed	3
77Taylor004.2	Taylor Creek below Wall Lake	97.9	6394.67	33.35	-108.08	7	Low Small	Stressed	3
28RHondo000.1	Rio Hondo above Rio Grande	73.6	6453.73	36.54	-105.71	7.17	Low Small	Stressed	3
80Whitew000.5	Whitewater Creek at Glenwood	51.9	4704.95	33.32	-108.88	7.17	Low Small	Stressed	3
80SanFra154.1	San Francisco River at Luna	67.5	7139.46	33.82	-108.99	7.33	Low Small	Stressed	3
02DryClim100.0	Dry Cimarron River near Oak Creek	136.22	6014.07	36.89	-103.86	7.5	Low Small	Stressed	3
57RRuido042.2	Rio Ruidoso 300m E. of closed WWTP	116	6430.76	33.33	-105.62	7.5	Low Small	Stressed	3
28LosAlta010.5	Los Alamos Canyon below TA 53	11.38	6512.79	35.87	-106.24	8	Low Small	Stressed	3
48ThreeR047.6	Three Rivers at County Road A-30	44.9	5243.04	33.36	-105.96	8	Low Small	Stressed	3
57RRuido048.1	Rio Ruidoso at HWY 37 Bridge	23.5	6791.67	33.33	-105.68	8	Low Small	Stressed	3
80Tularosa029.6	Rio Tularosa at HWY 70 near Alamogordo	116	5567.86	33.15	-105.89	8	Low Small	Stressed	3
28RedRiv014.5	Red River at Jumbug Cpgd.	113	7464.28	36.7	-105.57	8.17	Low Small	Stressed	3
07MoraRi132.9	Mora River at Cleveland Church	119.55	7342.88	35.99	-105.37	8.5	Low Small	Stressed	3
28RHondo003.9	Rio Hondo at HWY 3 Bridge	65.9	6752.3	36.54	-105.67	8.5	Low Small	Stressed	3
07Sapell044.4	Sapello River below Manueletas Creek (HWY 518)	140.2	6945.88	35.77	-105.25	8.83	Low Small	Stressed	3
28RSanBa000.1	Rio Santa Barbara above conf. Rio del Pueblo	60	7165.7	36.2	-105.73	8.83	Low Small	Stressed	3
29EIRito000.7	EI Rito Creek 0.5 mile above Chama River	133.41	5872.99	36.2	-106.22	9	Low Small	Stressed	3
28DPCan012.4	DP Canyon near airport	8.8	6913.07	35.87	-106.26	9.5	Low Small	Stressed	3
30SantaF032.8	Santa Fe River below WWTP	47	6269.99	35.63	-106.09	9.83	Low Small	Stressed	3
28RPriebT015.8	Rio Pueblo de Taos near Lower Ranchito	90.5	6798.23	36.4	-105.61	10	Low Small	Stressed	3
30SantaF028.3	Santa Fe River 2 mi. below WWTP (@ CRD 56)	93	6135.47	35.6	-106.12	10	Low Small	Stressed	3
50Tecolo042.3	Tecolote Creek at US I-25	120.5	6342.17	35.46	-105.28	10.17	Low Small	Stressed	3

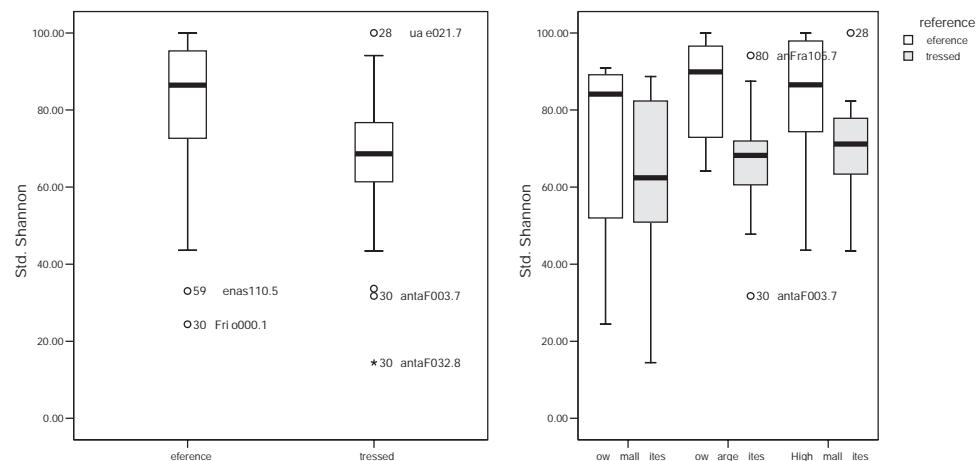
Appendix D. Revised Site Scores, continued.

Table D-2. Detailed changes.

Station ID	Site Description	Watershed area	elevation	Lat	Long	Score	Bioregion	Condition	Sort	Comments	Adjustment/Impact
77Willow000.6	Willow Creek above Gilita Creek	16	7930.18	33.41	-108.58	3	High	Small	Reference	1	adjust score to intermediate
29RValle037.8	Bio Valleito above NF boundary at Vallecitos Ranch	48	8783.24	36.64	-106.21	3.5	High	Small	Intermediate	2	Rd/campground only grazing
31EFJarm025.4	East Fork Jemez River near Cerro en Medio	5.8	8547.01	35.87	-106.45	3.5	High	Small	Intermediate	2	adjust score to reference only elk grazing
28RCost055.5	Rio Costilla below Costilla Reservoir	54.6	9331.16	36.87	-105.28	6	High	Small	Stressed	3	adjust score to intermediate
29RCar039.4	Rio Carrillo at diversion above NF boundary	24	8041.73	36.51	-106.4	6	High	Small	Stressed	3	adjust score to intermediate
29RChama161.1	Chama River at U.S. HWY 84 bridge below Chama	120.67	7766.13	36.88	-106.58	6	High	Small	Stressed	3	adjust score to intermediate
30Pajaro018.5	Pajaro Creek 0.3 miles above HWY 501	1.25	7910.49	35.87	-106.36	6	High	Small	Stressed	3	adjust score to intermediate
28RedRiv025.4	Red River above Hanson Creek (below Fawn Lakes CG)	72.06	8251.72	36.67	-105.47	6.17	High	Small	Stressed	3	adjust score to intermediate
29RChama157.0	Chama River below Rio Chama (@Unser's)	168	7690.66	36.85	-106.59	6.17	High	Small	Stressed	3	adjust score to intermediate
29Cannon002.4	Cannones Creek above HWY 84 (near Chama)	28.29	7651.29	36.81	-106.57	6.5	High	Small	Stressed	3	adjust score to intermediate
29RCham008.4	Rio Chamala above Rd 29 bridge on Sergeant WLA	36.6	7789.09	36.92	-106.59	7	High	Small	Stressed	3	adjust score to intermediate
28RedRiv024.9	Red River at Zwergel Dam	28.9	8891.51	36.67	-105.38	3.5	High	Small	2,75?	adjust score to intermediate	Rd
80Negrito000.1	Negrito Creek above the Tulerosa River	192.69	5797.53	33.68	-108.74	3	Low	Large	Reference	1	should be moved to low sm Reference
78GilaR052.6	Gila River above Margas Creek (near Bill Evans Lake)	261.9	4393.26	32.87	-108.59	7.17	Low	Large	Intermediate	2	adjust score to stressed thick fines
30SantaF000.1	Santa Fe River 100m above Rio Grande	262	5229.91	35.6	-106.34	8	Low	Large	Intermediate	2	WWTP/mine/listed
57RHondo130.7	Rio Hondo below Rio Ruidoso and Rio Bonito	620	5183.98	33.38	-105.27	8	Low	Large	Intermediate	2	adjust score to stressed
06Canadian348.3	Canadian River 0.25 mile below Cimarron River	2850	5626.92	36.3	-104.49	9	Low	Large	Stressed	3	adjust score to intermediate
29RioOso004.7	Rio del Oso - REMAP	39	5915.64	36.09	-106.19	4.5	Low	Small	Reference	1	adjust score to intermediate
29RioOso004.5	Rio del Oso outside exclosure (downstream)	38.6	5889.4	36.09	-106.18	5.17	Low	Small	Reference	1	adjust score to intermediate
28RHondo000.1	Rio Hondo above Rio Grande	73.6	6453.73	36.54	-105.71	7.17	Low	Small	Stressed	3	adjust score to intermediate

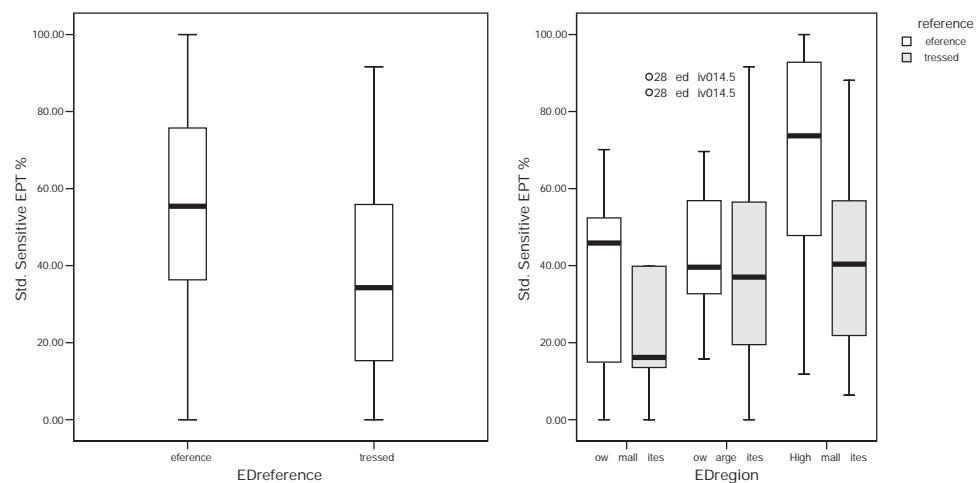
Appendix E – Comparisons of Metrics by Location

Total Biotic Integrity



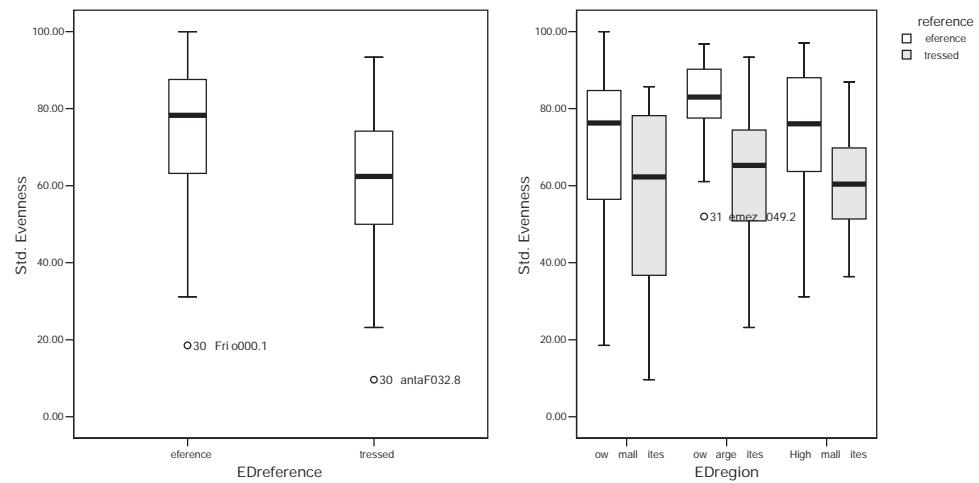
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OC 33.33 79.17 68.75



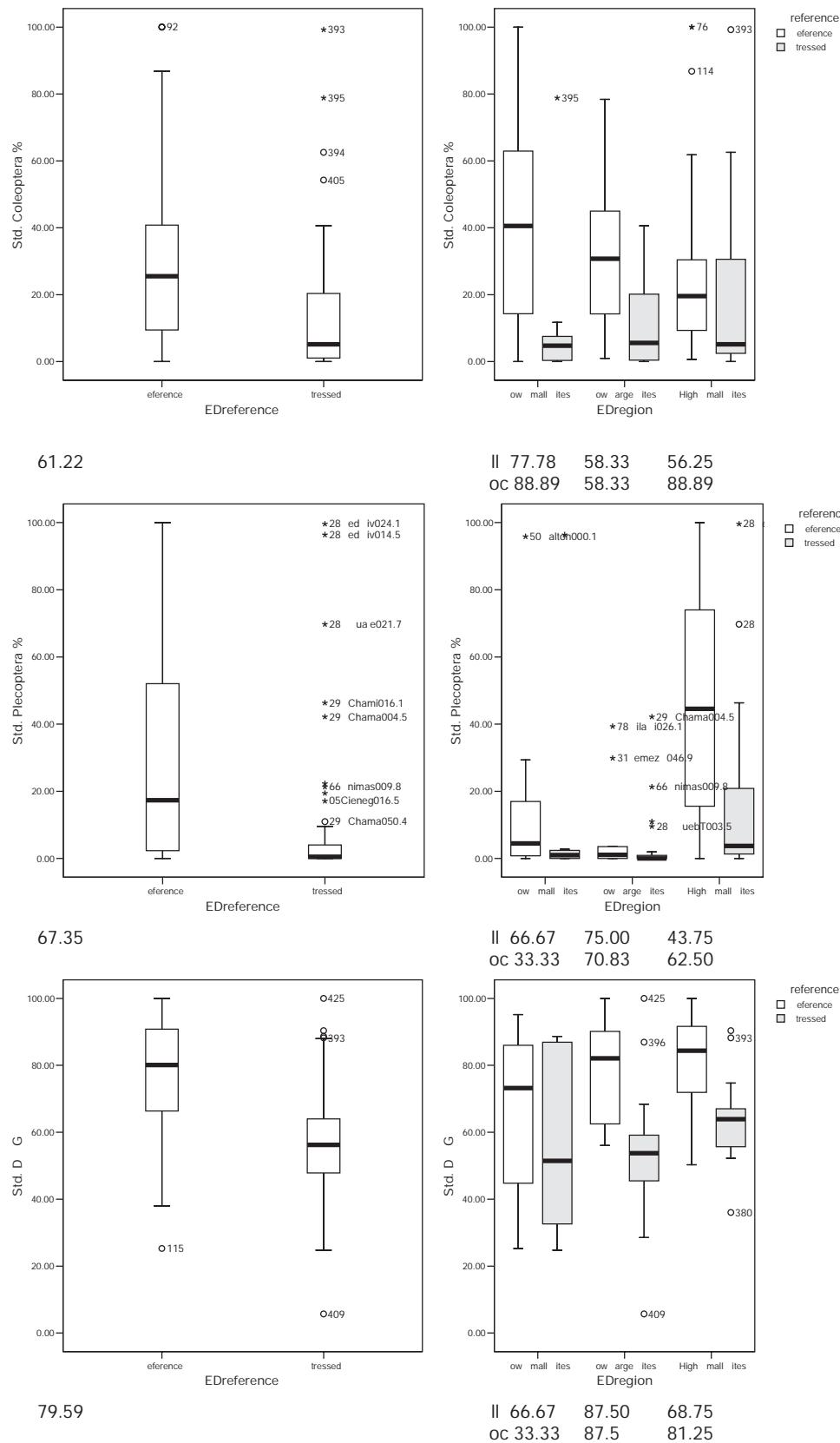
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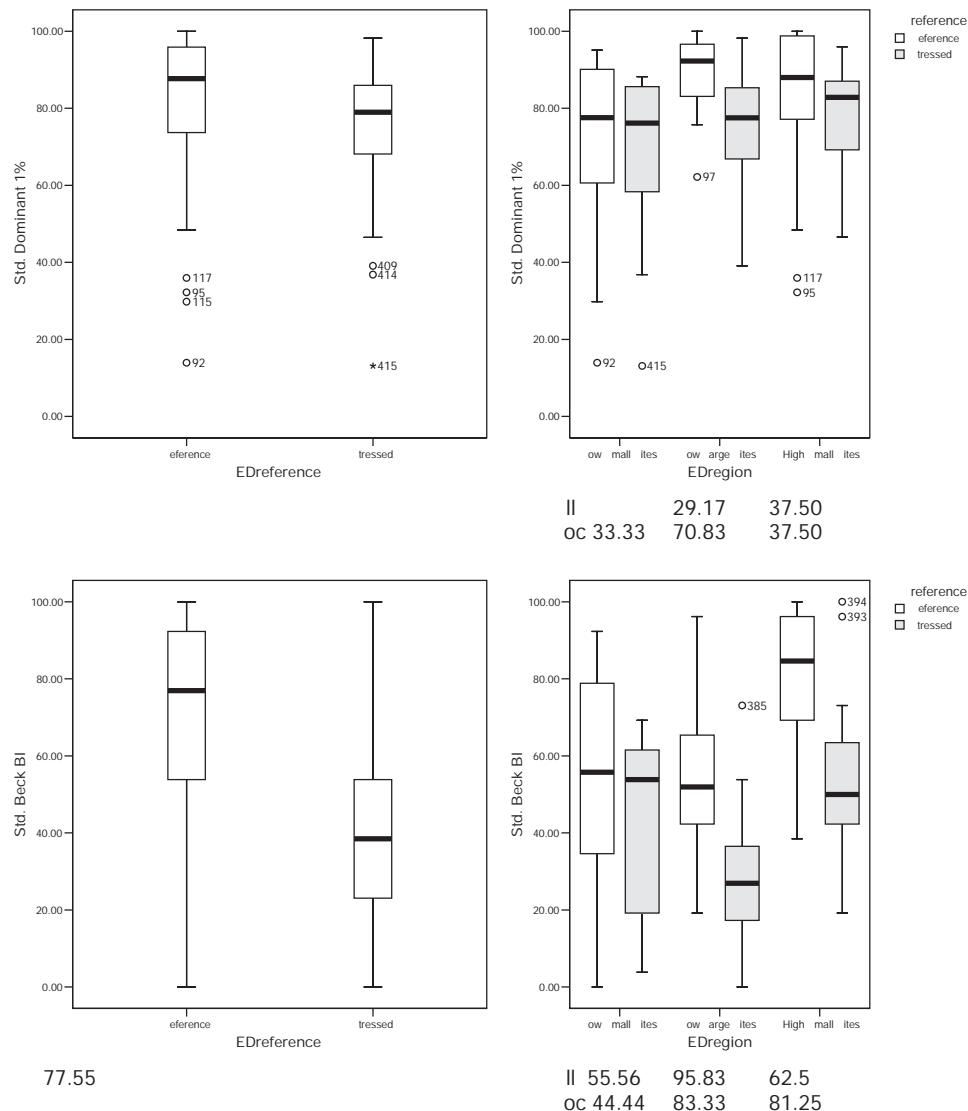
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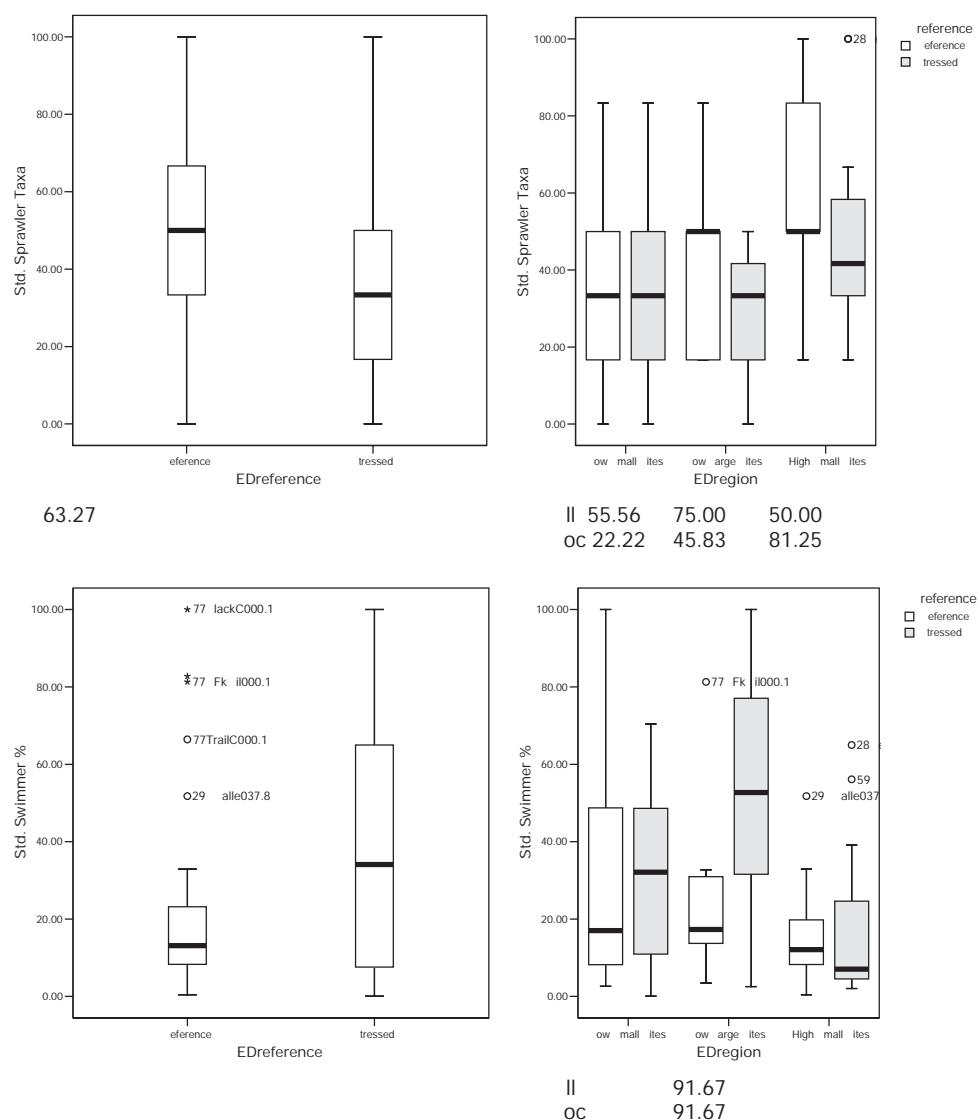
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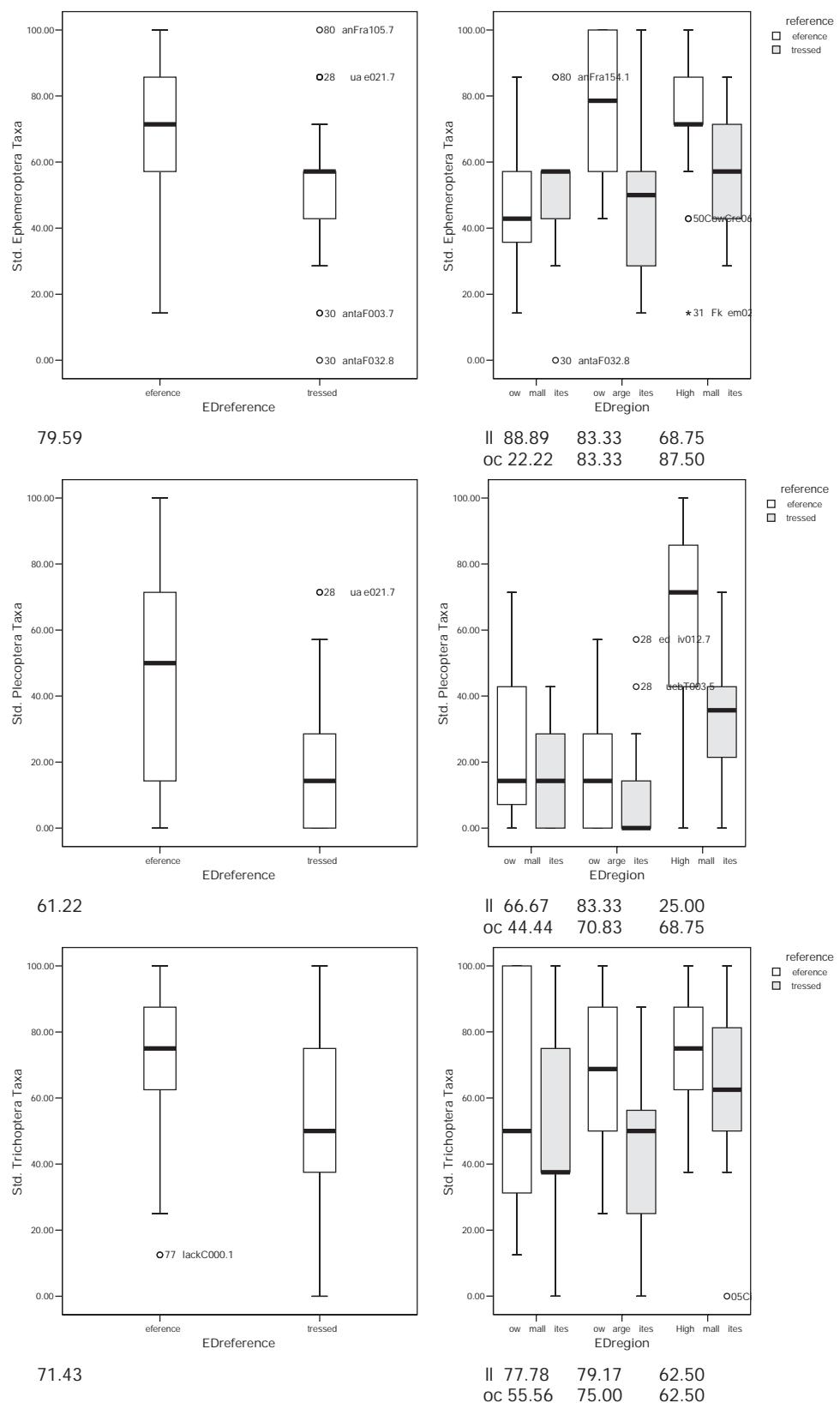


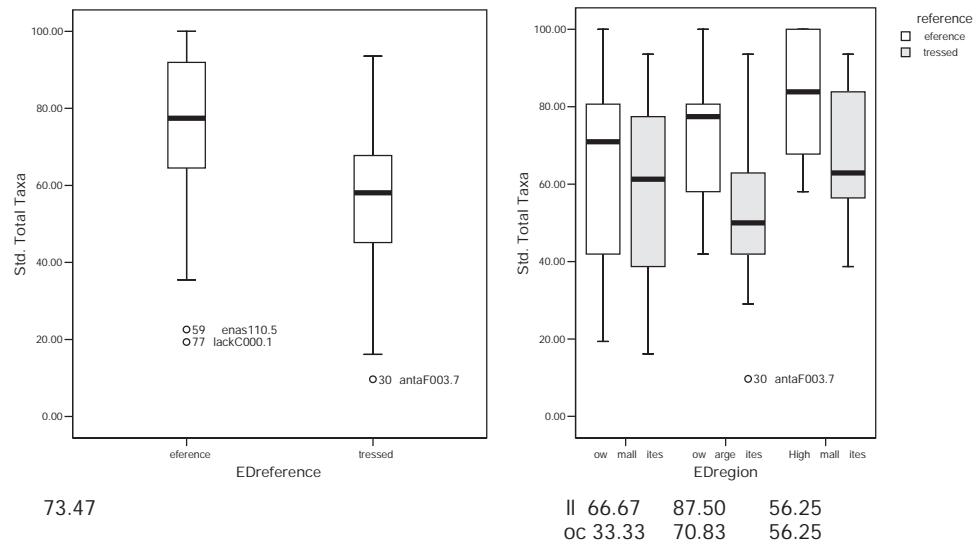


Habit

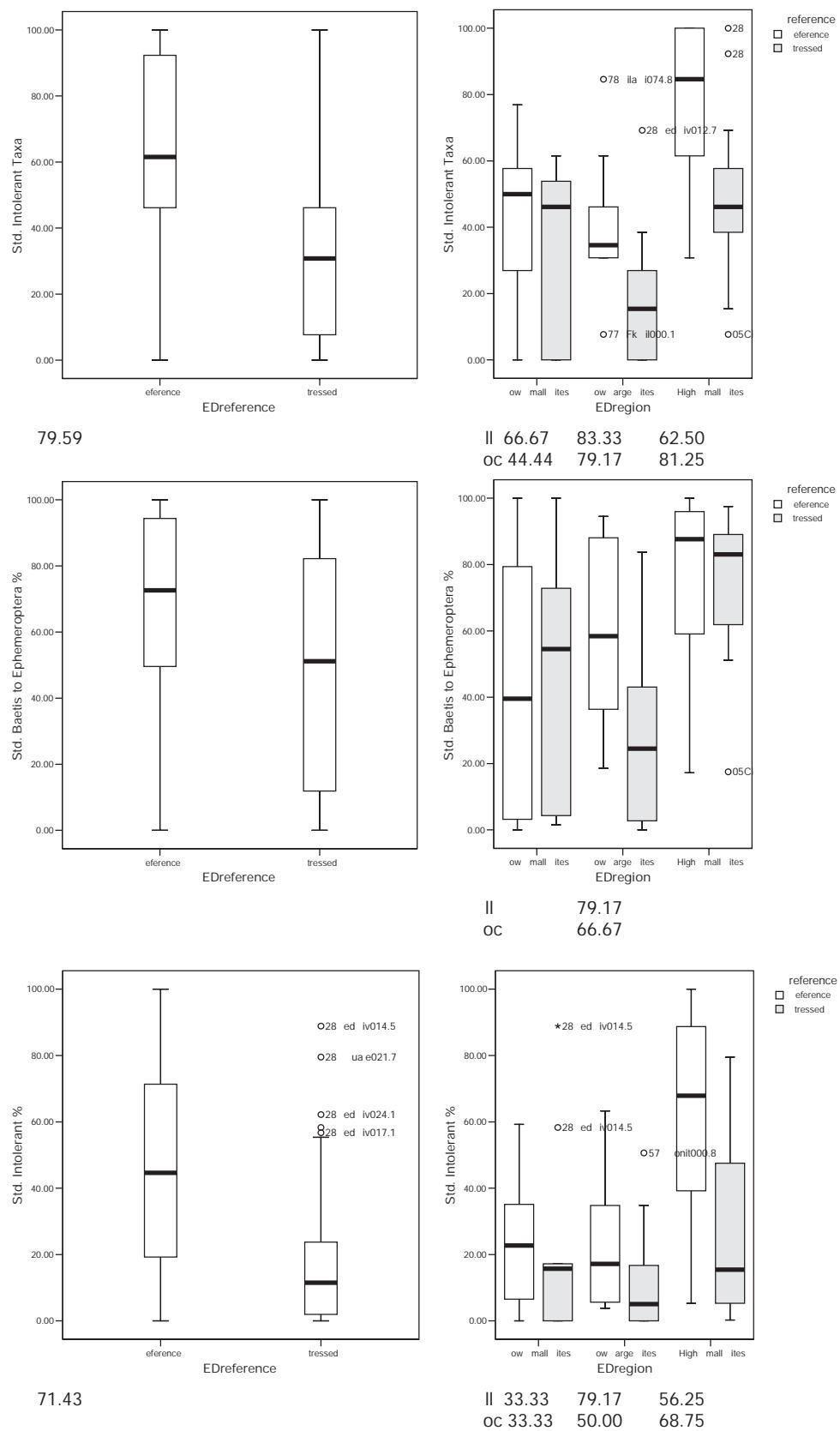


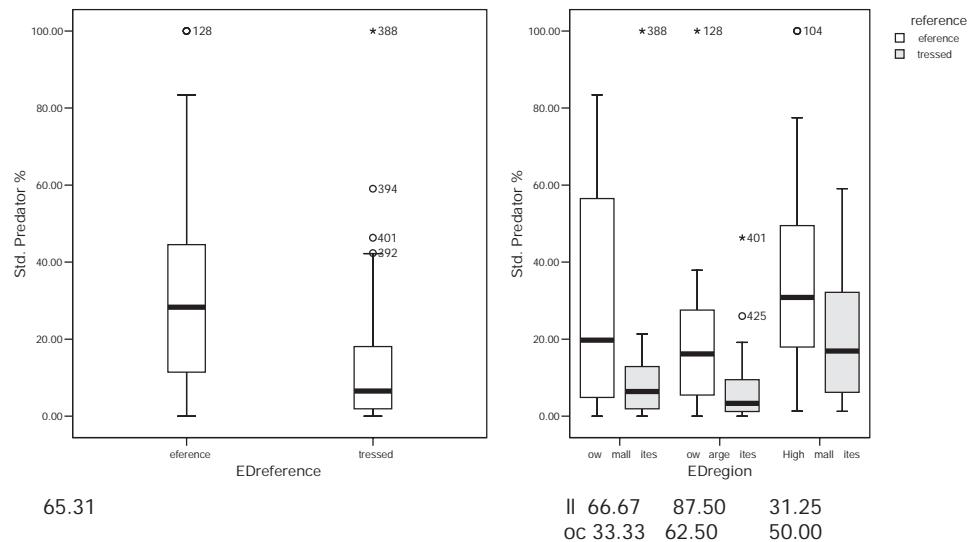
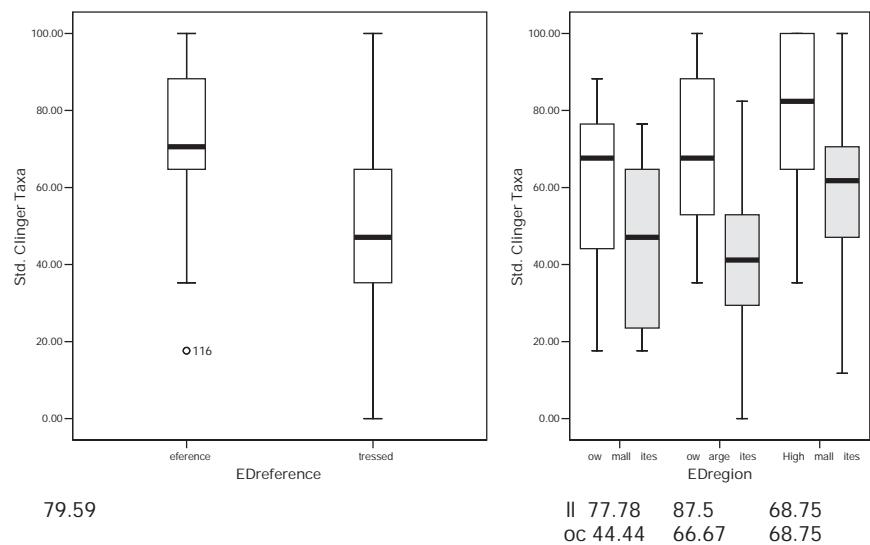
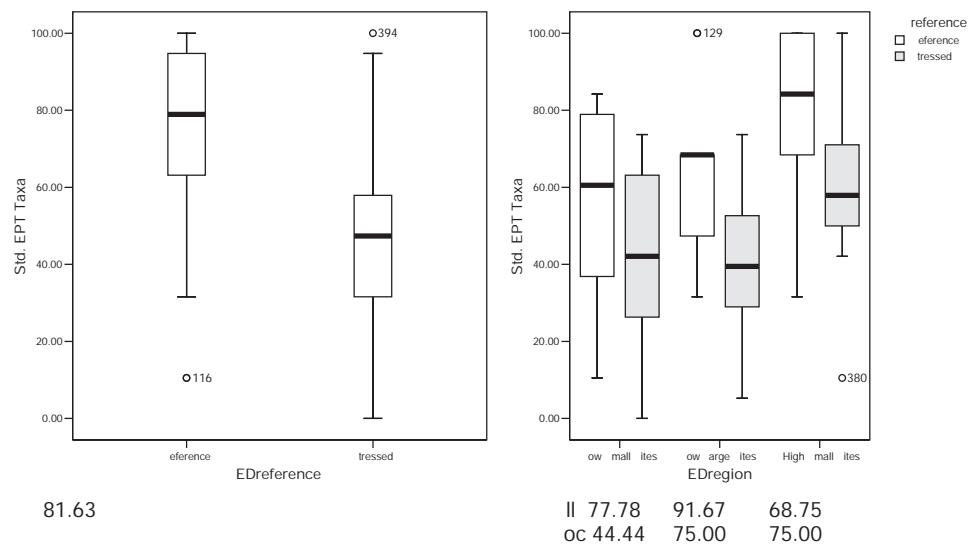
Taxonomic richness

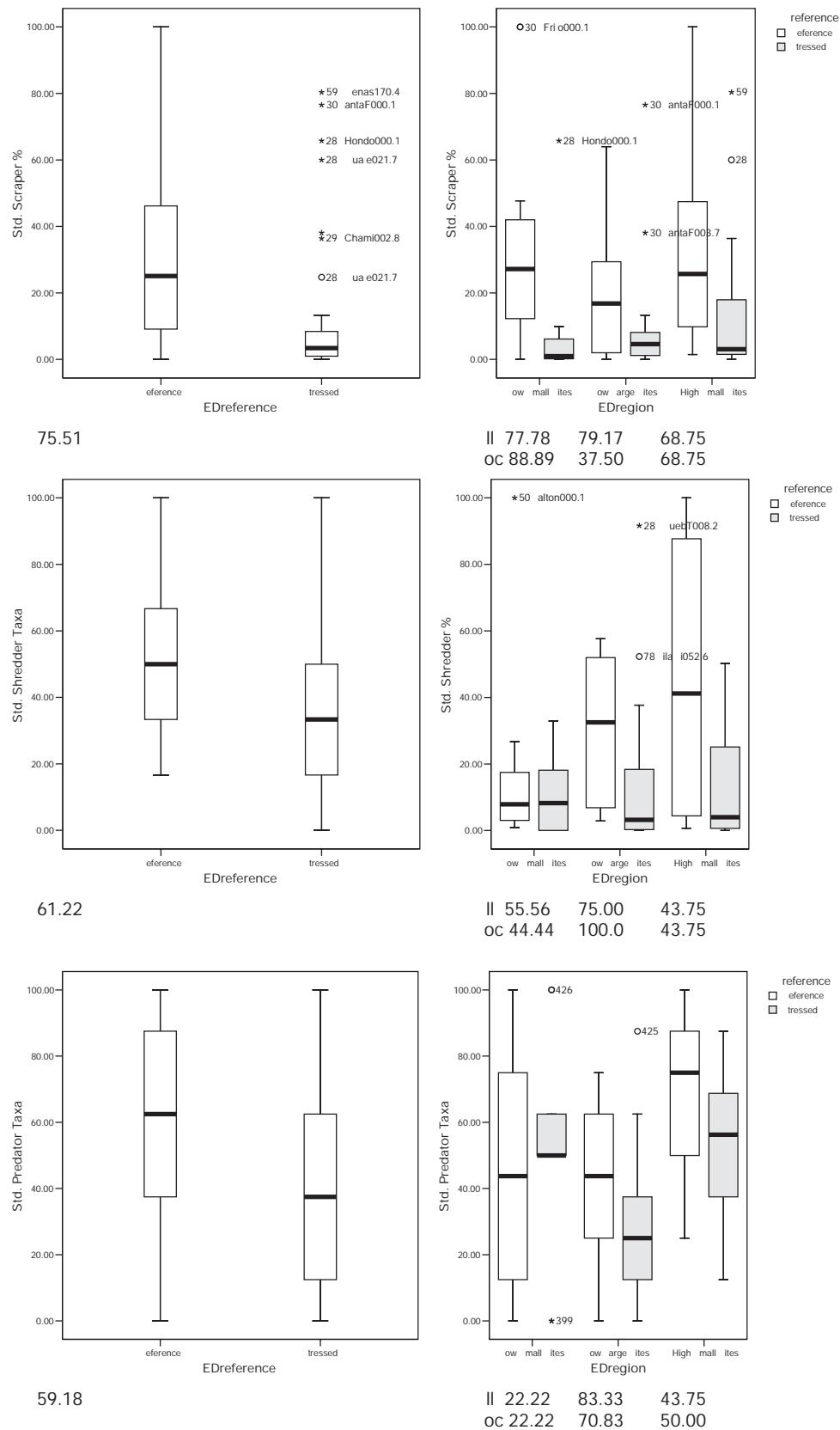


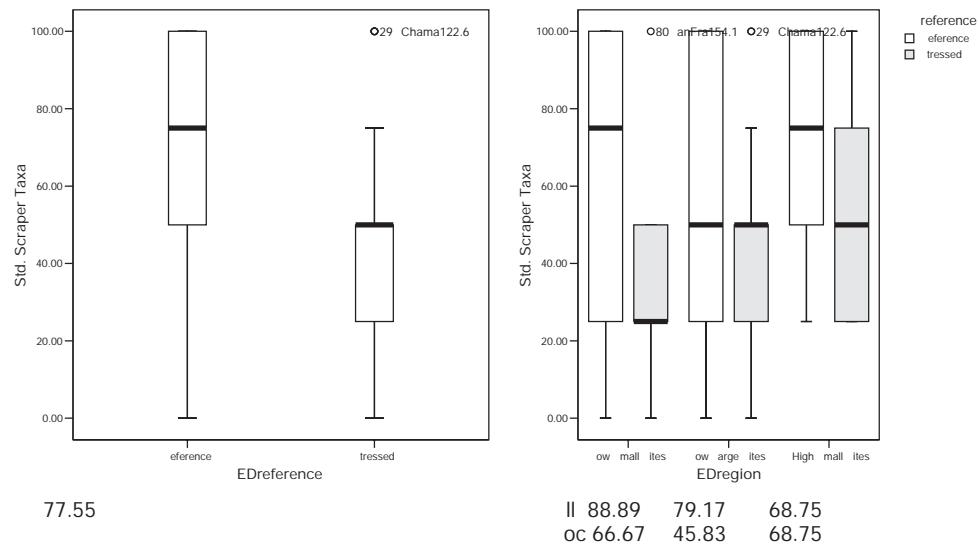


Tolerance









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Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Hirudinea	69290	568832	Annelida	Ciliatata	Oligochaeta			
Oligochaeta	68422	568832	Annelida	Ciliatata	Oligochaeta			
Eprobodella	69444	568847	Annelida	Ciliatata	Oligochaeta	Arhynchobdellida	Eprobodelliformes	
Limnodrilus	68638	68585	Annelida	Ciliatata	Oligochaeta	Haplotaxida	Tubificina	
Naididae	68854	68509	Annelida	Ciliatata	Oligochaeta	Haplotaxida	Tubificina	
Ophidionais serpentina	68996	68995	Annelida	Ciliatata	Oligochaeta	Haplotaxida	Tubificina	
Tubificidae	68585	68509	Annelida	Ciliatata	Oligochaeta	Haplotaxida	Tubificina	
Lumbriculidae	68440	68439	Annelida	Ciliatata	Oligochaeta	Lumbriculida		
Amphiploidae	111952	109226	Anthropoda	Insecta		Coleoptera	Adephaga	
Dytiscidae	111963	109226	Anthropoda	Insecta		Coleoptera	Adephaga	
Dytiscus	112118	111963	Anthropoda	Insecta		Coleoptera	Adephaga	
Hydaticus	112172	111963	Anthropoda	Insecta		Coleoptera	Adephaga	
Agabus	111966	111963	Anthropoda	Insecta		Coleoptera	Adephaga	
Hydroporus	112390	111963	Anthropoda	Insecta		Coleoptera	Adephaga	
Oreodytes	112314	111963	Anthropoda	Insecta		Coleoptera	Adephaga	
Laccophilus	112278	111963	Anthropoda	Insecta		Coleoptera	Adephaga	
Dineutus	112711	112653	Anthropoda	Insecta		Coleoptera	Adephaga	
Gyrinus	112654	112653	Anthropoda	Insecta		Coleoptera	Adephaga	
Halophilidae	111857	109226	Anthropoda	Insecta		Coleoptera	Adephaga	
Haliphus	111858	111857	Anthropoda	Insecta		Coleoptera	Adephaga	
Peltodytes	111923	111857	Anthropoda	Insecta		Coleoptera	Adephaga	
Noteiridae	112606	109226	Anthropoda	Insecta		Coleoptera	Adephaga	
Lampyridae	113835	113829	Anthropoda	Insecta		Coleoptera	Polyphaga	
Chrysomelidae	114509	114496	Anthropoda	Insecta		Coleoptera	Polyphaga	
Curculionidae	114666	114654	Anthropoda	Insecta		Coleoptera	Polyphaga	
Helichus	114006	113999	Anthropoda	Insecta		Coleoptera	Polyphaga	
Helichus striatus	114017	114006	Anthropoda	Insecta		Coleoptera	Polyphaga	
Postelichus immsi	193693	193691	Anthropoda	Insecta		Coleoptera	Polyphaga	
Elmidae	114093	113998	Anthropoda	Insecta		Coleoptera	Polyphaga	
Cleptelmis	114164	114093	Anthropoda	Insecta		Coleoptera	Polyphaga	
Dubiraphia	114126	114093	Anthropoda	Insecta		Coleoptera	Polyphaga	
Herierelmis	114237	114093	Anthropoda	Insecta		Coleoptera	Polyphaga	
Heterlimnius cor pullentus	114169	114167	Anthropoda	Insecta		Coleoptera	Polyphaga	
Microcyloopeus	114146	114093	Anthropoda	Insecta		Coleoptera	Polyphaga	
Naripus	114142	114093	Anthropoda	Insecta		Coleoptera	Polyphaga	
Oploservus	114177	114093	Anthropoda	Insecta		Coleoptera	Polyphaga	
Zaitzevia parvula	114206	114205	Anthropoda	Insecta		Coleoptera	Polyphaga	
Psephenidae	114069	113998	Anthropoda	Insecta		Coleoptera	Polyphaga	
Psphenius	114070	114069	Anthropoda	Insecta		Coleoptera	Polyphaga	
Hydrochus	113166	112811	Anthropoda	Insecta		Coleoptera	Polyphaga	
Heilochares	113150	112811	Anthropoda	Insecta		Coleoptera	Polyphaga	

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Hydrophilidae	112811	112752	Arthropoda		Insecta		Coleoptera	Polyphaga
Berosus	112812	112811	Arthropoda		Insecta		Coleoptera	Polyphaga
Cybbiodyta	113017	112811	Arthropoda		Insecta		Coleoptera	Polyphaga
Hydrobius	113196	112811	Arthropoda		Insecta		Coleoptera	Polyphaga
Tropisternus	112938	112811	Arthropoda		Insecta		Coleoptera	Polyphaga
Poduridae	99239	99238	Arthropoda		Insecta		Collembola	Anthropleona
Copepoda	85257	83677	Arthropoda	Maxillipoda			Copepoda	
Agathon	121230	121229	Arthropoda		Insecta		Diptera	
Chaetocladius	128520	128457	Arthropoda		Insecta		Diptera	
Saetheria	129735	129229	Arthropoda		Insecta		Diptera	
Tribelos	129820	129229	Arthropoda		Insecta		Diptera	
Stempellinella	129969	129872	Arthropoda		Insecta		Diptera	
Ephydriidae	146893	131750	Arthropoda		Insecta		Diptera	
Dolichopodidae	136824	131750	Arthropoda		Insecta		Diptera	
Empididae	135830	131750	Arthropoda		Insecta		Diptera	
Clinocera	135849	135844	Arthropoda		Insecta		Diptera	
Chelifera	136305	136304	Arthropoda		Insecta		Diptera	
Hemerodromia	136327	136304	Arthropoda		Insecta		Diptera	
Muscidae	150025	131750	Arthropoda		Insecta		Diptera	
Limnophora	150730	150729	Arthropoda		Insecta		Diptera	
Stratiomyidae	130150	130130	Arthropoda		Insecta		Diptera	
Euparyphus	130436	130408	Arthropoda		Insecta		Diptera	
Odontomyia	130573	130483	Arthropoda		Insecta		Diptera	
Atherix pachypus	130931	130929	Arthropoda		Insecta		Diptera	
Tabanidae	130934	130741	Arthropoda		Insecta		Diptera	
Chrysops	131078	131061	Arthropoda		Insecta		Diptera	
Tabanus	131527	131318	Arthropoda		Insecta		Diptera	
Deuterophlebia coloradensis	121288	121287	Arthropoda		Insecta		Diptera	Nematiocera
Blephariceridae	121227	121226	Arthropoda		Insecta		Diptera	Nematiocera
Bibiocephala grandis	121251	121250	Arthropoda		Insecta		Diptera	Nematiocera
Ceratopogonidae	127076	125808	Arthropoda		Insecta		Diptera	Nematiocera
Bezzia	127778	127076	Arthropoda		Insecta		Diptera	Nematiocera
Atrichopogon	127113	127076	Arthropoda		Insecta		Diptera	Nematiocera
Chironomidae	127917	125808	Arthropoda		Insecta		Diptera	Nematiocera
Chironominae	129228	127917	Arthropoda		Insecta		Diptera	Nematiocera
Chironomus	129254	129229	Arthropoda		Insecta		Diptera	Nematiocera
Chironomus plumosus	129303	129254	Arthropoda		Insecta		Diptera	Nematiocera
Cryptochironomus	129368	129229	Arthropoda		Insecta		Diptera	Nematiocera
Cryptotendipes	129394	129229	Arthropoda		Insecta		Diptera	Nematiocera
Dicrotendipes	129428	129229	Arthropoda		Insecta		Diptera	Nematiocera
Glyptotendipes	129483	129229	Arthropoda		Insecta		Diptera	Nematiocera

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Microendipes	129535	129229	Arthropoda		Insecta		Diptera	Nematoocera
Paracladopelma	129597	129229	Arthropoda		Insecta		Diptera	Nematoocera
Paratendipes	129623	129229	Arthropoda		Insecta		Diptera	Nematoocera
Phaenopsectra	129637	129229	Arthropoda		Insecta		Diptera	Nematoocera
Polyphemidium	129657	129229	Arthropoda		Insecta		Diptera	Nematoocera
Stictochironomus	129785	129229	Arthropoda		Insecta		Diptera	Nematoocera
Pseudochironomus	129851	129850	Arthropoda		Insecta		Diptera	Nematoocera
Cladotanytarsus	129873	129872	Arthropoda		Insecta		Diptera	Nematoocera
Micropsectra	129890	129872	Arthropoda		Insecta		Diptera	Nematoocera
Paratanytarsus	129935	129872	Arthropoda		Insecta		Diptera	Nematoocera
Rheotanytarsus	129952	129872	Arthropoda		Insecta		Diptera	Nematoocera
Stempelina	129962	129872	Arthropoda		Insecta		Diptera	Nematoocera
Sublettea	129975	129872	Arthropoda		Insecta		Diptera	Nematoocera
Tanytarsus	129978	129872	Arthropoda		Insecta		Diptera	Nematoocera
Diamesa	128355	128351	Arthropoda		Insecta		Diptera	Nematoocera
Pagastia	128401	128351	Arthropoda		Insecta		Diptera	Nematoocera
Poithastia	128408	128351	Arthropoda		Insecta		Diptera	Nematoocera
Poithastia longimana	128412	128408	Arthropoda		Insecta		Diptera	Nematoocera
Pseudodiamesa	128416	128351	Arthropoda		Insecta		Diptera	Nematoocera
Orthocladiinae	128457	127917	Arthropoda		Insecta		Diptera	Nematoocera
Heterotrissocladius	128737	128457	Arthropoda		Insecta		Diptera	Nematoocera
Paratrisocladus	129010	128457	Arthropoda		Insecta		Diptera	Nematoocera
Corynoneura	128563	128457	Arthropoda		Insecta		Diptera	Nematoocera
Thienemannella	129182	128457	Arthropoda		Insecta		Diptera	Nematoocera
Brilia	128477	128457	Arthropoda		Insecta		Diptera	Nematoocera
Cardiocladus	128511	128457	Arthropoda		Insecta		Diptera	Nematoocera
Cricotopus	128575	128457	Arthropoda		Insecta		Diptera	Nematoocera
Cricotopus (Nostococladus) nostocicola	568516	128575	Arthropoda		Insecta		Diptera	Nematoocera
Eukiefferiella	128689	128457	Arthropoda		Insecta		Diptera	Nematoocera
Hydrobaenus	128750	128457	Arthropoda		Insecta		Diptera	Nematoocera
Limnophyes	128776	128457	Arthropoda		Insecta		Diptera	Nematoocera
Lopescladius	128811	128457	Arthropoda		Insecta		Diptera	Nematoocera
Metriochasmus	128821	128457	Arthropoda		Insecta		Diptera	Nematoocera
Nanocladius	128844	128457	Arthropoda		Insecta		Diptera	Nematoocera
Orthocladius	128874	128457	Arthropoda		Insecta		Diptera	Nematoocera
(Symposiocladius)	568523	128874	Arthropoda		Insecta		Diptera	Nematoocera
Parakiefferiella	128968	128457	Arthropoda		Insecta		Diptera	Nematoocera
Parametriochasmus	128978	128457	Arthropoda		Insecta		Diptera	Nematoocera

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
<i>Paraphenocadius</i>	128989	128457	Arthropoda		Insecta		Diptera	Nematoocera
<i>Pseudosmittia</i>	129071	128457	Arthropoda		Insecta		Diptera	Nematoocera
<i>Rheocricotopus</i>	129086	128457	Arthropoda		Insecta		Diptera	Nematoocera
<i>Stiliocadius</i>	129152	128457	Arthropoda		Insecta		Diptera	Nematoocera
<i>Synorthocadius</i>	129161	128457	Arthropoda		Insecta		Diptera	Nematoocera
<i>Tvetenia</i>	129197	128457	Arthropoda		Insecta		Diptera	Nematoocera
<i>Podonominae</i>	127952	127917	Arthropoda		Insecta		Diptera	Nematoocera
<i>Parochlus kiefferi</i>	127989	127952	Arthropoda		Insecta		Diptera	Nematoocera
<i>Mondiamesa</i>	128440	128437	Arthropoda		Insecta		Diptera	Nematoocera
<i>Odontomesa</i>	128446	128437	Arthropoda		Insecta		Diptera	Nematoocera
<i>Prodiamesa</i>	128452	128437	Arthropoda		Insecta		Diptera	Nematoocera
<i>Tanyopodinae</i>	127994	127917	Arthropoda		Insecta		Diptera	Nematoocera
<i>Macropelopia</i>	128034	128020	Arthropoda		Insecta		Diptera	Nematoocera
<i>Radotanypus</i>		128020	Arthropoda		Insecta		Diptera	Nematoocera
<i>Abiatesmyia</i>	128079	128078	Arthropoda		Insecta		Diptera	Nematoocera
<i>Nilotanypus</i>	128202	128078	Arthropoda		Insecta		Diptera	Nematoocera
<i>Paramerina</i>	128207	128078	Arthropoda		Insecta		Diptera	Nematoocera
<i>Pentaneura</i>	128215	128078	Arthropoda		Insecta		Diptera	Nematoocera
<i>Thieremannimyia</i>	128236	128078	Arthropoda		Insecta		Diptera	Nematoocera
<i>Zavrelimyia</i>	128259	128078	Arthropoda		Insecta		Diptera	Nematoocera
<i>Proctadius</i>	128277	128270	Arthropoda		Insecta		Diptera	Nematoocera
<i>Tanypus</i>	128324	128323	Arthropoda		Insecta		Diptera	Nematoocera
<i>Culicidae</i>	125930	125808	Arthropoda		Insecta		Diptera	Nematoocera
<i>Culiseta</i>	126429	126233	Arthropoda		Insecta		Diptera	Nematoocera
<i>Dixidae</i>	125809	125808	Arthropoda		Insecta		Diptera	Nematoocera
<i>Dixa</i>	125810	125809	Arthropoda		Insecta		Diptera	Nematoocera
<i>Dixella</i>	125854	125809	Arthropoda		Insecta		Diptera	Nematoocera
<i>Simuliidae</i>	126640	125808	Arthropoda		Insecta		Diptera	Nematoocera
<i>Prosimulium</i>	126703	126648	Arthropoda		Insecta		Diptera	Nematoocera
<i>Simulium</i>	126774	126773	Arthropoda		Insecta		Diptera	Nematoocera
<i>Maruina</i>	125392	125391	Arthropoda		Insecta		Diptera	Nematoocera
<i>Perioma</i>	125514	125391	Arthropoda		Insecta		Diptera	Nematoocera
<i>Phychopteridae</i>	125763	125762	Arthropoda		Insecta		Diptera	Nematoocera
<i>Protanyderus</i>	125802	125799	Arthropoda		Insecta		Diptera	Nematoocera
<i>Protolasma fitchii</i>	125801	125800	Arthropoda		Insecta		Diptera	Nematoocera
<i>Cryptolabis</i>	120483	120397	Arthropoda		Insecta		Diptera	Nematoocera
<i>Molophilus</i>	120753	120397	Arthropoda		Insecta		Diptera	Nematoocera
<i>Prionocera</i>	119008	118841	Arthropoda		Insecta		Diptera	Nematoocera
<i>Tipulidae</i>	118840	118839	Arthropoda		Insecta		Diptera	Nematoocera
<i>Hesperoconopha</i>	120732	120397	Arthropoda		Insecta		Diptera	Nematoocera
<i>Ormosia</i>	120830	120397	Arthropoda		Insecta		Diptera	Nematoocera

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Rhaddomastix	120968	120397	Arthropoda		Insecta		Diptera	Nematoocera
Hexatoma	120094	120030	Arthropoda		Insecta		Diptera	Nematoocera
Limnophila	120164	120030	Arthropoda		Insecta		Diptera	Nematoocera
Antocha monticola	119660	119656	Arthropoda		Insecta		Diptera	Nematoocera
Limonia	119704	119655	Arthropoda		Insecta		Diptera	Nematoocera
Dicranota	121027	121026	Arthropoda		Insecta		Diptera	Nematoocera
Pedicia	121118	121026	Arthropoda		Insecta		Diptera	Nematoocera
Holorusia grandis	118891	118890	Arthropoda		Insecta		Diptera	Nematoocera
Tipula	119037	118841	Arthropoda		Insecta		Diptera	Nematoocera
Caudatella heterocaudata							Ephemeroptera	
heterocaudata	101354	101351	Arthropoda		Insecta		Ephemeroptera	
Paraleptophlebia	101187	101095	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Thraulodes	101128	101095	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Traverella	101096	101095	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Caenis	101478	101467	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Ephemerellidae	101232	568542	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Drunella coloradensis	101389	101365	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Drunella doddsii	101368	101365	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Drunella grandis	101370	101365	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Drunella spinifera	101385	101365	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Ephemerella	101233	101232	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Ephemerella altana	101252	101233	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Ephemerella inermis	101239	101233	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Ephemerella infrequens	101240	101233	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Serratella tibialis	101399	101232	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Timpangona hecuba	101318	101317	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Leptohyphidae	568545	568542	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Leptohyphes	101429	568545	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Tricorythodes	101405	568545	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Tricorythodes minutus	101413	101405	Arthropoda		Insecta		Ephemeroptera	Furcatergalia
Centroptilum	100873	100755	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Ametetus	100996	568544	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Acentrella insignificans	568572	100801	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Baetis	100800	100755	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Baetis bicaudatus	100823	100800	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Baetis tricaudatus	100817	100800	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Diphetor hageni	568598	568550	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Siphlonurus occidentalis	100955	100953	Arthropoda		Insecta		Ephemeroptera	Pisciforma
Hephaenidae	100504	609501	Arthropoda		Insecta		Ephemeroptera	Setisura
Cinygmulia	100557	100504	Arthropoda		Insecta		Ephemeroptera	Setisura
Epeorus	100626	100504	Arthropoda		Insecta		Ephemeroptera	Setisura

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
<i>Epeorus longimanus</i>	100637	100626	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Heptagenia</i>	100602	100504	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Heptagenia solitaria</i>	100621	100602	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Nixe</i>	100692	100504	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Nixe simplicoides</i>	568647	100692	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Rhithrogena</i>	100572	100504	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Rhithrogena hageni</i>	100583	100572	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Rhithrogena robusta</i>	100589	100572	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Rhithrogena undulata</i>	100591	100572	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Isonychia</i>	101041	609506	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Lachlania</i>	101030	101029	Arthropoda		Insecta		Ephemeroptera	Setisura
<i>Tubifex</i>	68622	68585	Arthropoda		Insecta		Haplaxiida	Tubificina
<i>Abedus</i>	103717	103683	Arthropoda		Insecta		Hemiptera	
<i>Belostoma</i>	103684	103683	Arthropoda		Insecta		Hemiptera	
<i>Lethocerus</i>	103699	103683	Arthropoda		Insecta		Hemiptera	
<i>Corixidae</i>	103364	103358	Arthropoda		Insecta		Hemiptera	
<i>Graptocorixa</i>	103547	103364	Arthropoda		Insecta		Hemiptera	
<i>Sigara</i>	103369	103364	Arthropoda		Insecta		Hemiptera	
<i>Trichocorixa</i>	103423	103364	Arthropoda		Insecta		Hemiptera	
<i>Gelastocoris</i>	103769	103768	Arthropoda		Insecta		Hemiptera	
<i>Gerridae</i>	103801	103358	Arthropoda		Insecta		Hemiptera	
<i>Gerris</i>	103829	103801	Arthropoda		Insecta		Hemiptera	
<i>Treptobates</i>	103811	103801	Arthropoda		Insecta		Hemiptera	
<i>Hydrometra</i>	103939	103938	Arthropoda		Insecta		Hemiptera	
<i>Macrovelia</i>	103991	103953	Arthropoda		Insecta		Hemiptera	
<i>Ambrysus mormon</i>	103626	103614	Arthropoda		Insecta		Hemiptera	
<i>Notonectidae</i>	103557	103358	Arthropoda		Insecta		Hemiptera	
<i>Notonecta</i>	103558	103557	Arthropoda		Insecta		Hemiptera	
<i>Veliidae</i>	103885	103358	Arthropoda		Insecta		Hemiptera	
<i>Microvelia</i>	103900	103885	Arthropoda		Insecta		Hemiptera	
<i>Rhagovelia</i>	103886	103885	Arthropoda		Insecta		Hemiptera	
<i>Noctuidae</i>	117318	117232	Arthropoda		Insecta		Lepidoptera	
<i>Pyralidae</i>	117641	117232	Arthropoda		Insecta		Lepidoptera	
<i>Petrophilida</i>	117682	117641	Arthropoda		Insecta		Lepidoptera	
<i>Corydalidae</i>	115023	115000	Arthropoda		Insecta		Megaloptera	
<i>Neotermes</i>	115048	115023	Arthropoda		Insecta		Megaloptera	
<i>Corydalus cornutus</i>	115034	115033	Arthropoda		Insecta		Megaloptera	
<i>Sialis</i>	115002	115001	Arthropoda		Insecta		Megaloptera	
<i>Aeshnidae</i>	101596	101594	Arthropoda		Insecta		Odonata	Anisoptera
<i>Aeschna</i>	101603	101596	Arthropoda		Insecta		Odonata	Anisoptera
<i>Boyeria</i>	101645	101596	Arthropoda		Insecta		Odonata	Anisoptera

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
<i>Opionaeeschna</i>	101655	101596	Arthropoda		Insecta		Odonata	Anisoptera
<i>Cordulegaster</i>	102027	102026	Arthropoda		Insecta		Odonata	Anisoptera
<i>Gomphidae</i>	101664	101594	Arthropoda		Insecta		Odonata	Anisoptera
<i>Erpetogomphus</i>	101725	101664	Arthropoda		Insecta		Odonata	Anisoptera
<i>Gomphus</i>	101665	101664	Arthropoda		Insecta		Odonata	Anisoptera
<i>Ophiogomphus</i>	101738	101664	Arthropoda		Insecta		Odonata	Anisoptera
<i>Progomphus</i>	101718	101664	Arthropoda		Insecta		Odonata	Anisoptera
<i>Libellulidae</i>	101797	101594	Arthropoda		Insecta		Odonata	Anisoptera
<i>Leucorrhinia</i>	101885	101797	Arthropoda		Insecta		Odonata	Anisoptera
<i>Libellula</i>	101893	101797	Arthropoda		Insecta		Odonata	Anisoptera
<i>Sympetrum</i>	101976	101797	Arthropoda		Insecta		Odonata	Anisoptera
<i>Hetaerina</i>	102048	102043	Arthropoda		Insecta		Odonata	Zygoptera
<i>Coenagrionidae</i>	102077	102042	Arthropoda		Insecta		Odonata	Zygoptera
<i>Argia</i>	102139	102077	Arthropoda		Insecta		Odonata	Zygoptera
<i>Enallagma</i>	102102	102077	Arthropoda		Insecta		Odonata	Zygoptera
<i>Hesperagrion</i>	181187	102077	Arthropoda		Insecta		Odonata	Zygoptera
<i>Grylliidae</i>	102281	102160	Arthropoda		Insecta		Orthoptera	Ensifera
<i>Capniidae</i>	102643	102467	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Capnia</i>	102688	609848	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Capnia confusa</i>	102702	102688	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Capnia gracilaria</i>	102712	102688	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Mesocapnia frisoni</i>	102776	102771	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Leuctridae</i>	102840	102467	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Perlomyia</i>	103239	609849	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Amphinemura</i>	102540	609851	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Amphinemura banksii</i>	102546	102540	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Malenka</i>	102567	609851	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Podmosta delicatula</i>	102606	102605	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Prostoia besametsa</i>	102585	102584	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Zapada</i>	102591	609852	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Zapada cinctipes</i>	102594	102591	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Zapada haysi</i>	102592	102591	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Taeniopterygidae</i>	102788	102467	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Taenionema</i>	102519	609853	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Taenionema pacificum</i>	102817	102519	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Taeniopteryx</i>	102789	609854	Arthropoda		Insecta		Plecoptera	Euholognatha
<i>Chloroperlidae</i>	103202	102467	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Alloperla severa</i>	103232	103203	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Plumiperla diversa</i>	103306	103305	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Suwallia</i>	103254	609855	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Sweilisa</i>	103273	609855	Arthropoda		Insecta		Plecoptera	Systellognatha

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
<i>Sweltsa borealis</i>	103281	103273	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Triznaka</i>	103308	609855	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Perlidae</i>	102914	102467	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Acroneuria abnormis</i>	102919	102917	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Hesperoperla pacifica</i>	102972	102971	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Claassenia sabulosa</i>	102932	102930	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Perlodidae</i>	102994	102467	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isoperla</i>	102995	609859	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isoperla mormona</i>	103007	102995	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isoperla quinquepunctata</i>	103045	102995	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isoperla sobria</i>	103037	102995	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Perlodinae</i>	102915	102994	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Megarcys signata</i>	103111	103110	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Skwala americana</i>	568735	103102	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Cultus aestivalis</i>	103138	103137	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Kogotus modestus</i>	103151	103149	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Diura knowltoni</i>	103096	103094	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isogenoides</i>	103124	609867	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isogenoides elongatus</i>	103130	103124	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Isogenoides zionensis</i>	103133	103124	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Pteronarcella badia</i>	102486	102485	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Pteronarcys californica</i>	102473	102471	Arthropoda		Insecta		Plecoptera	Systellognatha
<i>Agraylea</i>	115635	598244	Arthropoda		Insecta		Trichoptera	
<i>Alisotrichia</i>	181197	598245	Arthropoda		Insecta		Trichoptera	
<i>Agapetus</i>	117121	598218	Arthropoda		Insecta		Trichoptera	
<i>Anagapetus</i>	117154	598242	Arthropoda		Insecta		Trichoptera	
<i>Glossosoma</i>	117159	598243	Arthropoda		Insecta		Trichoptera	
<i>Culopilia</i>	115236	598220	Arthropoda		Insecta		Trichoptera	
<i>Protoptilia</i>	115221	598220	Arthropoda		Insecta		Trichoptera	
<i>Hydropsychidae</i>	115398	598158	Arthropoda		Insecta		Trichoptera	
<i>Arciopsyche grandis</i>	115530	115529	Arthropoda		Insecta		Trichoptera	
<i>Diplectroninae</i>	598190	115398	Arthropoda		Insecta		Trichoptera	
<i>Ceratopsyche cockerelli</i>	115602	115570	Arthropoda		Insecta		Trichoptera	
<i>Ceratopsyche oslari</i>	599457	115570	Arthropoda		Insecta		Trichoptera	
<i>Ceratopsyche venada</i>	599479	115570	Arthropoda		Insecta		Trichoptera	
<i>Cheumatopsyche</i>	115403	598191	Arthropoda		Insecta		Trichoptera	
<i>Hydropsyche</i>	115453	598191	Arthropoda		Insecta		Trichoptera	
<i>Hydropsyche occidentalis</i>	115513	115453	Arthropoda		Insecta		Trichoptera	
<i>Smicridea</i>	115544	598225	Arthropoda		Insecta		Trichoptera	
<i>Neureclipsis</i>	117095	598193	Arthropoda		Insecta		Trichoptera	
<i>Polyplectropus</i>	115395	598193	Arthropoda		Insecta		Trichoptera	

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Polycentropus	117044	598193	Arthropoda		Insecta		Trichoptera	
Psychomyia	115335	598196	Arthropoda		Insecta		Trichoptera	
Oxyethira	115779	598244	Arthropoda		Insecta		Trichoptera	
Neotrichia	115833	598246	Arthropoda		Insecta		Trichoptera	
Metricchia	598644	598247	Arthropoda		Insecta		Trichoptera	
Hydroptilidae	115629	598164	Arthropoda		Insecta		Trichoptera	
Hydroptila	115641	598244	Arthropoda		Insecta		Trichoptera	
Ochrotrichia	115714	598247	Arthropoda		Insecta		Trichoptera	
Leuotrichia	115630	598245	Arthropoda		Insecta		Trichoptera	
Mayetrichia	115811	598246	Arthropoda		Insecta		Trichoptera	
Ithytrichia	115823	598248	Arthropoda		Insecta		Trichoptera	
Staciobiella	115817	598247	Arthropoda		Insecta		Trichoptera	
Phylloicus aeneus	116545	116540	Arthropoda		Insecta		Trichoptera	
Leptoceridae	116547	598160	Arthropoda		Insecta		Trichoptera	
Ceraclea	116684	598230	Arthropoda		Insecta		Trichoptera	
Oecetis	116607	555650	Arthropoda		Insecta		Trichoptera	
Nectopsyche	116651	598234	Arthropoda		Insecta		Trichoptera	
Odontoceridae	116496	598160	Arthropoda		Insecta		Trichoptera	
Apataniidae	598182	598162	Arthropoda		Insecta		Trichoptera	
Amiocentrus	116933	116905	Arthropoda		Insecta		Trichoptera	
Ecdisomyia	116025	568759	Arthropoda		Insecta		Trichoptera	
Homophylax	116286	568767	Arthropoda		Insecta		Trichoptera	
Psychoglypha	115974	568767	Arthropoda		Insecta		Trichoptera	
Clistoronia	116276	568768	Arthropoda		Insecta		Trichoptera	
Brachycentridae	116905	598162	Arthropoda		Insecta		Trichoptera	
Brachycentrus	116906	116905	Arthropoda		Insecta		Trichoptera	
(Oligoplectodes)								
americanus	116912	598768	Arthropoda		Insecta		Trichoptera	
(Sphinctogaster) occidentalis	116918	598770	Arthropoda		Insecta		Trichoptera	
Micrasema	116958	116905	Arthropoda		Insecta		Trichoptera	
Lepidostomatidae	116793	598162	Arthropoda		Insecta		Trichoptera	
Lepidostoma	116794	598212	Arthropoda		Insecta		Trichoptera	
Limnephilidae	115933	598162	Arthropoda		Insecta		Trichoptera	
Dicosmoecus	116265	568759	Arthropoda		Insecta		Trichoptera	
Hesperophylax	116001	568768	Arthropoda		Insecta		Trichoptera	
Limnephilus	116069	568768	Arthropoda		Insecta		Trichoptera	
Psychoronia	116402	568768	Arthropoda		Insecta		Trichoptera	
Oligophlebodes	116039	568760	Arthropoda		Insecta		Trichoptera	
Neothremma	116388	568761	Arthropoda		Insecta		Trichoptera	
Chimarra	115273	598201	Arthropoda		Insecta		Trichoptera	

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Dolophilodes	115319	598200	Arthropoda		Insecta		Trichoptera	
Wormaldia	115258	598200	Arthropoda		Insecta		Trichoptera	
Hydrobiosidae	117225	598165	Arthropoda		Insecta		Trichoptera	
Atopsyche	117226	598250	Arthropoda		Insecta		Trichoptera	
Rhyacophilidae	115096	598165	Arthropoda		Insecta		Trichoptera	
Rhyacophila	115097	115096	Arthropoda		Insecta		Trichoptera	
Rhyacophila brunnea	115151	115097	Arthropoda		Insecta		Trichoptera	
Rhyacophila coloradensis	115156	115097	Arthropoda		Insecta		Trichoptera	
Rhyacophila hyalinata	115159	115097	Arthropoda		Insecta		Trichoptera	
Rhyacophila sibirica	568811	115097	Arthropoda		Insecta		Trichoptera	
Rhyacophila tucula	115189	115097	Arthropoda		Insecta		Trichoptera	
Rhyacophila valuma	115121	115097	Arthropoda		Insecta		Trichoptera	
Rhyacophila verrula	115125	115097	Arthropoda		Insecta		Trichoptera	
Helicopsyche (Feropsyché) borealis	117020	598759	Arthropoda		Insecta		Trichoptera	
Gumaga	117003	116982	Arthropoda		Insecta		Trichoptera	
Daphniidae	83872	609958	Arthropoda	Crustacea	Branchiopoda		Diplopoda	Cladocera
Hydrachnidae	83122	827770	Arthropoda		Arachnida		Trombidiformes	Prostigmata
Ostracoda	84195	82696	Arthropoda	Crustacea	Ostracoda			
Gammaridae	93745	93295	Arthropoda	Crustacea	Malacostraca		Amphipoda	Gammaridea
Gammarellus lacustris	93789	93773	Arthropoda	Crustacea	Malacostraca		Amphipoda	Gammaridea
Hyalella azteca	94026	94025	Arthropoda	Crustacea	Malacostraca		Amphipoda	Gammaridea
Orconectes virilis	97425	97421	Arthropoda	Crustacea	Malacostraca		Decapoda	Pleocyemata
Aseidae	92657	92650	Arthropoda	Crustacea	Malacostraca		Isopoda	Asellota
Caecidotea	92686	92657	Arthropoda	Crustacea	Malacostraca		Isopoda	Asellota
Gastropoda	69459	69458	Mollusca		Gastropoda			
Bivalvia	79118	69458	Mollusca		Bivalvia			
Physella virgata	76731	76698	Mollusca		Gastropoda			
Ancylidae	76568	76437	Mollusca		Gastropoda			
Ferrissia	76569	76568	Mollusca		Gastropoda			
Lymnaea	76484	76483	Mollusca		Gastropoda			
Physidae	76676	76437	Mollusca		Gastropoda			
Physa	76677	76676	Mollusca		Gastropoda			
Physella	76698	76676	Mollusca		Gastropoda			
Planorbidae	76591	76437	Mollusca		Gastropoda			
Gyraulus	76592	76591	Mollusca		Gastropoda			
Helisoma anceps	76600	76599	Mollusca		Gastropoda			
Corbicula	81385	81381	Mollusca		Bivalvia			Veneroida
Pisidiidae	81388	566875	Mollusca		Bivalvia			Veneroida
Pisidium	81400	81388	Mollusca		Bivalvia			Veneroida
Nemata	563956	202423	Nemata					

Appendix F: Master Taxa List

Final ID	TSN	ParTSN	Phylum	SubPhylum	Class	SubClass	Order	SubOrder
Gordius	64228	64227	Nematomorpha	Gordioidea			Gordea	
Turbellaria	53964	53963	Platyhelminthes	Turbellaria				
Phragocata crenophila	54543	54535	Platyhelminthes	Turbellaria			Tricladida	
Polyclelis coronata	54512	54510	Platyhelminthes	Turbellaria			Tricladida	
Tricladida	54468	53965	Platyhelminthes	Turbellaria			Tricladida	

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
Hirudinea							
Oligochaeta							
Erpobdella		Erpobdellidae				Erpobdella	
Limnodiulus		Tubificidae				Limnodiulus	
Naididae		Naididae					
Ophiontinales serpentina		Naididae				Ophiontinales	
Tubificidae		Tubificidae					
Lumbriculidae		Lumbriculidae					
Amphizoidae		Amphizoidae					
Dytiscidae		Dytiscidae				Dytiscus	
Dytiscus		Dytiscidae				Hydaticus	
Hydaticus		Dytiscidae					
Agabus		Dytiscidae	Colymbetinae			Agabus	
Hydroporus		Dytiscidae	Hydroporinae			Hydroporus	
Oreodytes		Dytiscidae	Hydroporinae			Oreodytes	
Laccophilus		Dytiscidae	Laccophilinae			Laccophilus	
Dineutus		Gyrinidae	Gyrininae			Dineutus	
Gyrinus		Gyrinidae	Gyrininae			Gyrinus	
Halophilidae		Halophilidae					
Haliphus		Halipidae				Haliphus	
Peltodytes		Halipidae				Peltodytes	
Noteridae		Noteridae					
Lampyridae		Lampyridae					
Chrysomelidae		Chrysomelidae	Chrysomelidae				
Curculionidae		Curculionoidea	Curculionidae				
Helichus		Dryopoidea	Dryopidae			Helichus	
Helichus striatus		Dryopoidea	Dryopidae			Helichus	
Postelichus immsi		Dryopoidea	Dryopidae			Postelichus	
Elmidae		Dryopoidea	Elmidae				
Cleptelmis		Dryopoidea	Elmidae			Cleptelmis	
Dubiraphia		Dryopoidea	Elmidae			Dubiraphia	
Heterelmis		Dryopoidea	Elmidae			Heterelmis	
Heterlimnius corpulentus		Dryopoidea	Elmidae			Heterlimnius	
Microcyloopepus		Dryopoidea	Elmidae			Microcyloopepus	
Narpus		Dryopoidea	Elmidae			Narpus	
Optioservus		Dryopoidea	Elmidae			Optioservus	
Zaitzevia parvula		Dryopoidea	Elmidae			Zaitzevia	
Psephenidae		Dryopoidea	Psephenidae				
Psphenus		Dryopoidea	Psephenidae			Psphenus	
Hydrochus		Hydrophiloidea	Hydrophilidae			Hydrochus	
HeLochares		Hydrophiloidea	Hydrobiinae			HeLochares	

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribe	Genus	SubGenus
Hydrophiliidae	Hydrophiloidea	Hydrophilidae	Hydrophilidae	Berosinae	Berosus	Berosus	
Berosus	Hydrophiloidea	Hydrophilidae	Hydrophilidae	Hydrobiinae	Cyphodiota	Cyphodiota	
Cyphodiota	Hydrophiloidea	Hydrophilidae	Hydrophilidae	Hydrobiinae	Hydrobius	Hydrobius	
Hydrobius	Hydrophiloidea	Hydrophilidae	Hydrophilidae	Hydrobiinae	Tropisternus	Tropisternus	
Tropisternus	Hydrophiloidea	Hydrophilidae	Hydrophilidae	Hydrophilinae	Poduriidae		
Poduriidae			Poduriidae				
Copepoda							
Agathon	Blephariceridae	Blepharicerinae	Blephariceridae	Blepharicerinae	Agathon	Agathon	
Chaetocadius	Chironomidae	Orthocladiinae	Chironomidae	Orthocladiinae	Saetheria	Saetheria	
Saetheria	Culicomorpha	Chironomidae	Chironomidae	Chironominae	Tribelos	Tribelos	
Tribelos	Culicomorpha	Chironomidae	Chironomidae	Chironominae	Stempellinella	Stempellinella	
Stempellinella	Culicomorpha	Chironomidae	Chironomidae	Chironominae			
Ephydriidae	Muscomorpha	Ephydriidae	Dolichopodidae				
Dolichopodidae	Muscomorpha	Dolichopodidae					
Empididae	Muscomorpha	Empididae	Empididae	Clinocerinae	Clinocera	Clinocera	
Clinocera	Muscomorpha	Empididae	Empididae	Hemerodromiinae	Cheifera	Cheifera	
Cheifera	Muscomorpha	Empididae	Empididae	Hemerodromiinae	Hemerodromia	Hemerodromia	
Hemerodromia	Muscomorpha	Muscidae	Muscidae	Muscidae	Muscidae	Hemerodromia	
Muscidae	Muscomorpha	Muscidae	Muscidae	Coenosialinae	Limnophorina	Limnophorina	
Limnophora	Muscomorpha	Stratiomyidae	Stratiomyidae	Stratiomyinae	Athericidae	Athericidae	
Stratiomyidae	Stratiomyomorpha	Stratiomyidae	Stratiomyidae	Stratiomyinae	Tabanidae	Tabanidae	
Euparyphus	Stratiomyomorpha	Stratiomyidae	Stratiomyidae	Stratiomyinae	Chrysopsinae	Chrysopsinae	
Odontomyia	Stratiomyomorpha	Stratiomyidae	Stratiomyidae	Stratiomyinae	Oxycerini	Oxycerini	
Athenix pachypus	Tabanomorpha	Tabanidae	Tabanidae	Stratiomyinae	Stratiomyinae	Stratiomyinae	
Tabanidae	Tabanomorpha	Tabanidae	Tabanidae	Stratiomyinae	Stratiomyinae	Stratiomyinae	
Chrysops	Tabanomorpha	Tabanidae	Tabanidae	Stratiomyinae	Stratiomyinae	Stratiomyinae	
Tabanus	Tabanomorpha	Tabanidae	Tabanidae	Stratiomyinae	Stratiomyinae	Stratiomyinae	
Deuterophlebia coloradensis	Blephariceromorpha	Deuterophlebiidae					
Blephariceridae	Blephariceromorpha	Blephariceridae					
Bibiocephala grandis	Blephariceromorpha	Blephariceridae					
Ceratopogonidae	Culicomorpha	Ceratopogonidae					
Ceratopogonidae	Culicomorpha	Ceratopogonidae					
Bezzia	Culicomorpha	Ceratopogonidae	Ceratopogonidae	Palpomyiini	Bezzia	Bezzia	
Atrichopogon	Culicomorpha	Ceratopogonidae	Ceratopogonidae	Forcipomyiinae	Atrichopogon	Atrichopogon	
Chironomidae	Culicomorpha	Chironomidae	Chironomidae				
Chironominae	Culicomorpha	Chironomidae	Chironomidae				
Chironomus	Culicomorpha	Chironomidae	Chironomidae				
Chironomus plumosus	Culicomorpha	Chironomidae	Chironomidae				
Cryptochironomus	Culicomorpha	Chironomidae	Chironomidae				
Cryptotendipes	Culicomorpha	Chironomidae	Chironomidae				
Dicrotendipes	Culicomorpha	Chironomidae	Chironomidae				
Glyptotendipes	Culicomorpha	Chironomidae	Chironomidae				

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribe	Genus	SubGenus
Microtendipes	Culicomorpha	Chironomidae	Chironominae	Chironomini	Microtendipes		
Paracladopelma	Culicomorpha	Chironomidae	Chironominae	Chironomini	Paracladopelma		
Paratendipes	Culicomorpha	Chironomidae	Chironominae	Chironomini	Paratendipes		
Phaenopsectra	Culicomorpha	Chironomidae	Chironominae	Chironomini	Phaenopsectra		
Polypedilum	Culicomorpha	Chironomidae	Chironominae	Chironomini	Polypedilum		
Stictochironomus	Culicomorpha	Chironomidae	Chironominae	Chironomini	Stictochironomus		
Pseudochironomus	Culicomorpha	Chironomidae	Chironominae	Pseudochironomini	Pseudochironomus		
Cladotanytarsus	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Cladotanytarsus		
Micropsectra	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Micropsectra		
Paratanytarsus	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Paratanytarsus		
Rheotanytarsus	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Rheotanytarsus		
Stempelina	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Stempelina		
Sublettea	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Sublettea		
Tanytarsus	Culicomorpha	Chironomidae	Chironominae	Tanytarsini	Tanytarsus		
Diamesa	Culicomorpha	Chironomidae	Diamesinae	Diamisini	Diamesa		
Pagastia	Culicomorpha	Chironomidae	Diamesinae	Diamisini	Pagastia		
Pothisastia	Culicomorpha	Chironomidae	Diamesinae	Diamisini	Pothisastia		
Pothisastia longimana	Culicomorpha	Chironomidae	Diamesinae	Diamisini	Pothisastia		
Pseudodiamesa	Culicomorpha	Chironomidae	Diamesinae	Diamisini	Pseudodiamesa		
Orthocladinae	Culicomorpha	Chironomidae	Orthocladinae	Orthocladinae	Heterotriassocladus		
Heterotriassocladus	Culicomorpha	Chironomidae	Orthocladinae	Orthocladinae	Paratriassocladus		
Paratriassocladus	Culicomorpha	Chironomidae	Orthocladinae	Orthocladinae	Corynoneura		
Corynoneura	Culicomorpha	Chironomidae	Orthocladinae	Corynoneurini	Thienemanniella		
Thienemanniella	Culicomorpha	Chironomidae	Orthocladinae	Corynoneurini	Brilia		
Brilia	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Cardiocadius		
Cardiocadius	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Lopescadius		
Cricotopus	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Cricotopus		
Cricotopus (Nostococadius) nostocicola	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Cricotopus	Nostococadius	
Eukiefferiella	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Eukiefferiella		
Hydrobaenus	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Hydrobaenus		
Limnophyes	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Limnophyes		
Lopescadius	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Lopescadius		
Metriocnemus	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Metriocnemus		
Nanocadius	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Nanocadius		
Orthocadius (Symposiocladius)	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Orthocadius	Symposiocladius	
Orthocadius	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Parakiefferiella		
Orthocadius	Culicomorpha	Chironomidae	Orthocladinae	Orthocladini/Metriocnemini	Parametriocnemus		

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
Paraphenocadius	Culicomorpha	Chironomidae	Orthocladiinae	Orthocladiini/Metriocnemini	Paraphenocadius		
Pseudosmittia	Culicomorpha	Chironomidae	Orthocladiinae	Orthocladiini/Metriocnemini	Pseudosmittia		
Rheocricotopus	Culicomorpha	Chironomidae	Orthocladiinae	Orthocladiini/Metriocnemini	Rheocricotopus		
Stiliocadius	Culicomorpha	Chironomidae	Orthocladiinae	Orthocladiini/Metriocnemini	Stiliocadius		
Synorthocadius	Culicomorpha	Chironomidae	Orthocladiinae	Orthocladiini/Metriocnemini	Synorthocadius		
Tvetenia	Culicomorpha	Chironomidae	Orthocladiinae	Orthocladiini/Metriocnemini	Tvetenia		
Podonominae	Culicomorpha	Chironomidae	Podonominae	Podonominae			
Parochlus kiefferi	Culicomorpha	Chironomidae	Podonominae	Podonominae	Parochlus		
Monodiamesa	Culicomorpha	Chironomidae	Prodiamesinae	Prodiamesinae	Monodiamesa		
Odontomesa	Culicomorpha	Chironomidae	Prodiamesinae	Prodiamesinae	Odontomesa		
Prodiamesa	Culicomorpha	Chironomidae	Prodiamesinae	Prodiamesinae	Prodiamesa		
Tanypodinae	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae			
Macropelopia	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Macropelopia		
Radotanypus	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Radotanypus		
Abiabesmyia	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Abiabesmyia		
Nilotanypus	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Nilotanypus		
Paramerina	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Paramerina		
Pentaneura	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Pentaneura		
Thienemannimyia	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Thienemannimyia		
Zavrelimyia	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Zavrelimyia		
Procladius	Culicomorpha	Chironomidae	Tanypodinae	Tanypodinae	Procladius		
Tanypus	Culicomorpha	Culicidae	Culicinae	Culicinae	Tanypus		
Culicidae	Culicomorpha	Culicidae	Culicinae	Culicinae	Culicidae		
Culiceta	Culicomorpha	Dixidae	Dixidae	Dixidae	Culiceta		
Dixidae	Culicomorpha	Dixidae	Dixidae	Dixidae	Dixa		
Dixa	Culicomorpha	Dixidae	Dixidae	Dixidae	Dixa		
Dixella	Culicomorpha	Dixidae	Dixidae	Dixidae	Dixella		
Simuliidae	Culicomorpha	Simuliidae	Simuliinae	Simuliinae	Simuliidae		
Prosimulium	Culicomorpha	Simuliidae	Simuliinae	Simuliinae	Prosimulium		
Simulium	Culicomorpha	Simuliidae	Simuliinae	Simuliinae	Simulium		
Maruina	Psychodomorpha	Psychodidae	Psychodinae	Psychodinae	Maruina		
Pericomia	Psychodomorpha	Psychodidae	Psychodinae	Psychodinae	Pericomia		
Ptychopteridae	Ptychopteromorpha	Ptychopteridae			Ptychopteridae		
Protanyderus	Ptychopteromorpha	Tanyderidae			Protanyderus		
Protolasa fitchii	Ptychopteromorpha	Tanyderidae			Protolasa		
Cryptolabis	Tipulomorpha	Tipulidae	Limoniinae	Eriopterini	Cryptolabis		
Molophilus	Tipulomorpha	Tipulidae	Limoniinae	Eriopterini	Molophilus		
Prionocera	Tipulomorpha	Tipulidae	Tipulinae	Tipulinae	Prionocera		
Tipulidae	Tipulomorpha	Tipulidae	Tipulinae	Tipulinae			
Hesperoconopha	Tipulomorpha	Tipulidae	Limoniinae	Eriopterini	Hesperoconopha		
Ormosia	Tipulomorpha	Tipulidae	Limoniinae	Eriopterini	Ormosia		

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribe	Genus	SubGenus
Rhabdomastix	Tipulomorpha	Tipulidae	Limoniinae	Eriopterini	Rhabdomastix		
Hexatoma	Tipulomorpha	Tipulidae	Limoniinae	Hexatomini	Hexatoma		
Limnophila	Tipulomorpha	Tipulidae	Limoniinae	Hexatomini	Limnophila		
Antocha monticola	Tipulomorpha	Tipulidae	Limoniinae	Limoniini	Antocha		
Limonia	Tipulomorpha	Tipulidae	Limoniinae	Limoniini	Limonia		
Dicranota	Tipulomorpha	Tipulidae	Limoniinae	Pediciini	Dicranota		
Pedicia	Tipulomorpha	Tipulidae	Limoniinae	Pediciini	Pedicia		
Holorusia grandis	Tipulomorpha	Tipulidae	Tipulinae	Tipulinae	Holorusia		
Tipula	Tipulomorpha	Tipulidae	Tipulinae	Tipulinae	Tipula		
Caudatella heterocaudata					Caudatella		
heterocaudata					Paraleptophlebia		
Paraleptophlebia	Lanceolata	Ephemerelloidea	Ephemerellidae				
Thraulodes	Lanceolata	Leptophlebiidae	Leptophlebiidae		Thraulodes		
Traverella	Lanceolata	Leptophlebiidae	Leptophlebiidae		Traverella		
Caenis	Pannota	Caenidae	Caenidae		Caenis		
Ephemerellidae	Pannota	Ephemerelloidea	Ephemerellidae		Ephemerella		
Drunella coloradensis	Pannota	Ephemerelloidea	Ephemerellidae		Drunella		
Drunella doddsii	Pannota	Ephemerelloidea	Ephemerellidae		Drunella		
Drunella grandis	Pannota	Ephemerelloidea	Ephemerellidae		Drunella		
Drunella spinifera	Pannota	Ephemerelloidea	Ephemerellidae		Drunella		
Ephemerella	Pannota	Ephemerelloidea	Ephemerellidae		Ephemerella		
Ephemerella altana	Pannota	Ephemerelloidea	Ephemerellidae		Ephemerella		
Ephemerella inermis	Pannota	Ephemerelloidea	Ephemerellidae		Ephemerella		
Ephemerella infrequens	Pannota	Ephemerelloidea	Ephemerellidae		Ephemerella		
Serratella tibialis	Pannota	Ephemerelloidea	Ephemerellidae		Serratella		
Timpanoga hecuba	Pannota	Ephemerelloidea	Ephemerellidae		Timpanoga		
Leptocephylidae	Pannota	Ephemerelloidea	Leptocephylidae				
Leptocephylidae	Pannota	Ephemerelloidea	Leptocephylidae		Leptocephylidae		
Leptocephylidae	Pannota	Ephemerelloidea	Leptocephylidae		Leptocephylidae		
Tricorythodes	Pannota	Ephemerelloidea	Leptocephylidae		Tricorythodes		
Tricorythodes minutus	Pannota	Ephemerelloidea	Leptocephylidae		Tricorythodes		
Centroptilum			Baetidae		Centroptilum		
Ametetus			Ametetidae		Ametetus		
Acentrella insignificans			Baetidae		Acentrella		
Baetis			Baetidae		Baetis		
Baetis bicaudatus			Baetidae		Baetis		
Baetis tricaudatus			Baetidae		Baetis		
Diphetor hageni			Baetidae		Diphetor		
Siphlonurus occidentalis			Siphlonuridae		Siphlonurus		
Heptageniidae			Heptageniidae		Heptageniidae		
Cinygmulidae			Heptageniidae		Cinygmulidae		
Epeorus			Heptageniidae		Epeorus		

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
<i>Epeorus longimanus</i>		Heptageniidae	Heptageniidae			<i>Epeorus</i>	
<i>Heptagenia</i>		Heptageniidae	Heptageniidae			<i>Heptagenia</i>	
<i>Heptagenia solitaria</i>		Heptageniidae	Heptageniidae			<i>Heptagenia</i>	
<i>Nixe</i>		Heptageniidae	Heptageniidae			<i>Nixe</i>	
<i>Nixe simplicoides</i>		Heptageniidae	Heptageniidae			<i>Nixe</i>	
<i>Rhithrogena</i>		Heptageniidae	Heptageniidae			<i>Rhithrogena</i>	
<i>Rhithrogena hageni</i>		Heptageniidae	Heptageniidae			<i>Rhithrogena</i>	
<i>Rhithrogena robusta</i>		Heptageniidae	Heptageniidae			<i>Rhithrogena</i>	
<i>Rhithrogena undulata</i>		Heptageniidae	Heptageniidae			<i>Rhithrogena</i>	
<i>Isonychia</i>		Isonychiidae	Isonychiidae			<i>Isonychia</i>	
<i>Lachlania</i>		Oligoneuriidae	Oligoneuriidae			<i>Lachlania</i>	
<i>Tubifex</i>		Tubificidae	Tubificidae			<i>Tubifex</i>	
<i>Abedus</i>		Belostomatidae	Belostomatidae			<i>Abedus</i>	
<i>Belostoma</i>		Belostomatidae	Belostomatidae			<i>Belostoma</i>	
<i>Lethocerus</i>		Belostomatidae	Belostomatidae			<i>Lethocerus</i>	
<i>Corixidae</i>		Corixidae	Corixidae			<i>Corixidae</i>	
<i>Graptocorixa</i>		Corixidae	Corixidae			<i>Graptocorixa</i>	
<i>Sigara</i>		Corixidae	Corixidae			<i>Sigara</i>	
<i>Trichocorixa</i>		Corixidae	Corixidae			<i>Trichocorixa</i>	
<i>Gelastocoris</i>		Gelastocoridae	Gelastocoridae			<i>Gelastocoris</i>	
<i>Gerridae</i>		Gerridae	Gerridae			<i>Gerridae</i>	
<i>Gerris</i>		Gerridae	Gerrinae			<i>Gerris</i>	
<i>Trepobates</i>		Gerridae	Trepobatinae			<i>Trepobates</i>	
<i>Hydrometra</i>		Hydrometridae				<i>Hydrometra</i>	
<i>Macrovelia</i>		Macroveliidae				<i>Macrovelia</i>	
<i>Ambrysus mormon</i>		Naucoridae	Ambrisinae			<i>Ambrysus</i>	
<i>Notonectidae</i>		Notonectidae	Notonectinae			<i>Notonecta</i>	
<i>Notonecta</i>		Notonectidae	Notonectinae				
<i>Veliidae</i>		Veliidae	Veliidae			<i>Veliidae</i>	
<i>Microvelia</i>		Microveliinae	Microveliinae			<i>Microvelia</i>	
<i>Rhagovelia</i>		Veliidae	Veliidae			<i>Rhagovelia</i>	
<i>Noctuidae</i>		Noctuidae	Noctuidae			<i>Noctuidae</i>	
<i>Pyralidae</i>		Pyralidae	Pyralidae			<i>Pyralidae</i>	
<i>Petrophilia</i>		Pyralidae	Pyralidae			<i>Petrophilia</i>	
<i>Corydalidae</i>		Corydalidae	Corydalidae			<i>Corydalidae</i>	
<i>Neotermes</i>		Corydalidae	Chauliodinae			<i>Neotermes</i>	
<i>Corydalus cornutus</i>		Corydalidae	Corydalinae			<i>Corydalus</i>	
<i>Sialis</i>		Sialidae	Sialidae			<i>Sialis</i>	
<i>Aeshnidae</i>		Aeshnidae	Aeshnidae			<i>Aeshnidae</i>	
<i>Aesthna</i>		Aesthniidae	Aesthniidae			<i>Aesthna</i>	
<i>Boyeria</i>		Aesthniidae	Aesthniidae			<i>Boyeria</i>	

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
<i>Opionaeasnna</i>			<i>Aeshnidae</i>			<i>Opionaeasnna</i>	
<i>Cordulegaster</i>			<i>Cordulegastridae</i>			<i>Cordulegaster</i>	
<i>Gomphidae</i>			<i>Gomphidae</i>				
<i>Erpetogomphus</i>			<i>Gomphidae</i>			<i>Erpetogomphus</i>	
<i>Gomphus</i>			<i>Gomphidae</i>			<i>Gomphus</i>	
<i>Ophiogomphus</i>			<i>Gomphidae</i>			<i>Ophiogomphus</i>	
<i>Progomphus</i>			<i>Gomphidae</i>			<i>Progomphus</i>	
<i>Libellulidae</i>			<i>Libellulidae</i>				
<i>Leucorrhinia</i>			<i>Leucorrhiniidae</i>			<i>Leucorrhinia</i>	
<i>Libellula</i>			<i>Libellulidae</i>			<i>Libellula</i>	
<i>Sympetrum</i>			<i>Libellulidae</i>			<i>Sympetrum</i>	
<i>Hetaerina</i>			<i>Calopterygidae</i>			<i>Hetaerina</i>	
<i>Coenagrionidae</i>			<i>Coenagrionidae</i>				
<i>Argia</i>			<i>Coenagrionidae</i>			<i>Argia</i>	
<i>Enallagma</i>			<i>Coenagrionidae</i>			<i>Enallagma</i>	
<i>Hesperagrion</i>			<i>Coenagrionidae</i>			<i>Hesperagrion</i>	
<i>Grylliidae</i>							
<i>Capniidae</i>			<i>Capniidae</i>			<i>Capnia</i>	
<i>Capnia</i>			<i>Capniidae</i>			<i>Capnia</i>	
<i>Capnia confusa</i>			<i>Capniidae</i>			<i>Capnia</i>	
<i>Capnia gracilaria</i>			<i>Capniidae</i>			<i>Capnia</i>	
<i>Mesocapnia frisoni</i>			<i>Capniidae</i>			<i>Mesocapnia</i>	
<i>Leuctridae</i>							
<i>Perlomyia</i>			<i>Leuctridae</i>			<i>Perlomyia</i>	
<i>Amphinemura</i>			<i>Nemouridae</i>			<i>Amphinemura</i>	
<i>Amphinemura banksii</i>			<i>Nemouridae</i>			<i>Amphinemura</i>	
<i>Malenka</i>			<i>Nemouridae</i>			<i>Malenka</i>	
<i>Podmosta delicatula</i>			<i>Nemouridae</i>			<i>Podmosta</i>	
<i>Prostoia besametsa</i>			<i>Nemouridae</i>			<i>Prostoia</i>	
<i>Zapada</i>			<i>Nemouridae</i>			<i>Zapada</i>	
<i>Zapada cinctipes</i>			<i>Nemouridae</i>			<i>Zapada</i>	
<i>Zapada haysi</i>			<i>Nemouridae</i>			<i>Zapada</i>	
<i>Taeniopterygiidae</i>			<i>Taeniopterygidae</i>				
<i>Taenionema</i>			<i>Taeniopterygidae</i>			<i>Taenionema</i>	
<i>Taenionema pacificum</i>			<i>Taeniopterygidae</i>			<i>Taenionema</i>	
<i>Taeniopteryx</i>			<i>Taeniopterygidae</i>			<i>Taeniopteryx</i>	
<i>Chloroperlidae</i>							
<i>Alloperla severa</i>			<i>Chloroperlidae</i>			<i>Alloperla</i>	
<i>Plumiperla diversa</i>			<i>Chloroperlidae</i>			<i>Plumiperla</i>	
<i>Suwallaia</i>			<i>Chloroperlidae</i>			<i>Suwallaia</i>	
<i>Sweltaia</i>			<i>Chloroperlidae</i>			<i>Sweltaia</i>	

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
<i>Sweltsa borealis</i>			Chloroperlidae	Chloroperlinae		<i>Sweltsa</i>	
<i>Triznaka</i>			Chloroperlidae	Chloroperlinae		<i>Triznaka</i>	
<i>Perlidae</i>			Perlidae				
<i>Acroneuria abnormis</i>			Perlidae	Acroneuriinae	Acroneuria		
<i>Hesperoperla pacifica</i>			Perlidae	Acroneuriinae	Acroneuriini	<i>Hesperoperla</i>	
<i>Claassenia sabulosa</i>			Perlidae	Perlinae	Perlini	<i>Claassenia</i>	
<i>Periodidae</i>			Periodidae				
<i>Isoperla</i>			Periodidae	Isoperlinae	Isoperla		
<i>Isoperla mormona</i>			Periodidae	Isoperlinae	Isoperla		
<i>Isoperla quinquepunctata</i>			Periodidae	Isoperlinae	Isoperla		
<i>Isoperla sobria</i>			Periodidae	Isoperlinae	Isoperla		
<i>Periodinae</i>			Periodidae	Periodinae	Periodinae		
<i>Megarcys signata</i>			Periodidae	Periodinae	Arcynopterygini	<i>Megarcys</i>	
<i>Skwala americana</i>			Periodidae	Periodinae	Arcynopterygini	<i>Skwala</i>	
<i>Cultus aestivalis</i>			Periodidae	Periodinae	Diplopternini	<i>Cultus</i>	
<i>Kogotus modestus</i>			Periodidae	Periodinae	Diplopternini	<i>Kogotus</i>	
<i>Diura knowltoni</i>			Periodidae	Periodinae	Periodini	<i>Diura</i>	
<i>Isogenoides</i>			Periodidae	Periodinae	Periodini	<i>Isogenoides</i>	
<i>Isogenoides elongatus</i>			Periodidae	Periodinae	Periodini	<i>Isogenoides</i>	
<i>Isogenoides zionensis</i>			Periodidae	Periodinae	Periodini	<i>Isogenoides</i>	
<i>Pteronarcella badia</i>			Pteronarcidae	Pteronarcinae	Pteronarcellini	<i>Pteronarcella</i>	
<i>Pteronarcys californica</i>			Pteronarcidae	Pteronarcinae	Pteronarcyni	<i>Pteronarcys</i>	
<i>Agrylea</i>			Hydroptilidae	Hydroptilinae	Hydroptilini	<i>Agrylea</i>	
<i>Alisotrichia</i>			Hydroptilidae	Hydroptilinae	Leucotrichili		
<i>Agapetus</i>			Glossosomatidea	Agapetinae		<i>Agapetus</i>	
<i>Anagapetus</i>			Glossosomatidea	Glossosomatinae	Anagapetini	<i>Anagapetus</i>	
<i>Glossosoma</i>			Glossosomatidea	Glossosomatinae	Glossosomatini	<i>Glossosoma</i>	
<i>Culoptilia</i>			Glossosomatidea	Glossosomatinae	Culoptilia		
<i>Protoptilia</i>			Glossosomatidea	Protoptilinae		<i>Protoptilia</i>	
<i>Hydropsychidae</i>			Hydropsychoidea	Hydropsomatidae	Protoptilinae		
<i>Arciopsycye grandis</i>			Hydropsychoidea	Hydropsychidae			
<i>Diplectroninae</i>			Hydropsychoidea	Hydropsychidae	Arctopsychinae	<i>Arctopsycche</i>	
<i>Ceratopsyche cockerelli</i>			Hydropsychoidea	Hydropsychidae	Diplectroninae		
<i>Ceratopsyche oslari</i>			Hydropsychoidea	Hydropsychidae	Hydropsychinae	<i>Ceratopsyche</i>	
<i>Ceratopsyche venada</i>			Hydropsychoidea	Hydropsychidae	Hydropsychinae	<i>Ceratopsyche</i>	
<i>Cheumatopsyche</i>			Hydropsychoidea	Hydropsychidae	Hydropsychinae	<i>Cheumatopsyche</i>	
<i>Hydropsyche</i>			Hydropsychoidea	Hydropsychidae	Hydropsychinae	<i>Hydropsyche</i>	
<i>Hydropsyche occidentalis</i>			Hydropsychoidea	Hydropsychidae	Hydropsychinae	<i>Hydropsyche</i>	
<i>Smicridea</i>			Hydropsychoidea	Hydropsychidae	Smicrideinae	<i>Smicridea</i>	
<i>Neureclipsis</i>			Hydropsychoidea	Polycentropodidae	Polycentropodinae	<i>Neureclipsis</i>	
<i>Polyplectropus</i>			Hydropsychoidea	Polycentropodidae	Polycentropodinae	<i>Polyplectropus</i>	

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
Polycentropus	Hydropsychoidea	Polycentropodidae	Polycentropodinae			Polycentropus	
Psychomyia	Hydropsychoidea	Psychomyiidae	Psychomyiinae			Psychomyia	
Oxyethira	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Oxyethira	
Neotrichia	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Neotrichia	
Metricchia	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Metricchia	
Hydroptiliidae	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Ochrotrichia	
Hydroptila	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Hydroptila	
Ochrotrichia	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Ochrotrichia	
Leucotrichia	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Leucotrichia	
Maystrichia	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Neotrichia	
Ithytrichia	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Ithytrichia	
Staciobiella	Hydroptiloidea	Hydroptilidae	Hydroptilinae			Staciobiella	
Phylloicus aeneus	Leptoceroidea	Leptoceridae	Calamoceratinae			Phylloicus	
Leptoceridae	Leptoceroidea	Leptoceridae	Leptocerinae				
Ceraclea	Leptoceroidea	Leptoceridae	Leptocerinae	Atripsodini	Ceraclea		
Oecetis	Leptoceroidea	Leptoceridae	Leptocerinae	Atripsodini	Oecetis		
Nectopsyche	Leptoceroidea	Leptoceridae	Leptocerinae	Nectopsychini	Nectopsyche		
Odontoceridae	Leptoceroidea	Odontoceridae					
Apataniidae	Limnephiloidea	Apataniidae					
Amiocentrus	Limnephiloidea	Brachyceridae					
Eccisomyia	Limnephiloidea	Limnephilidae	Dicosmoecinae			Eccisomyia	
Homophylax	Limnephiloidea	Limnephilidae	Limnephilinae	Chilosigmini	Homophylax		
Psychoglypha	Limnephiloidea	Limnephilidae	Limnephilinae	Chilosigmini	Psychoglypha		
Clistoronia	Limnephiloidea	Limnephilidae	Limnephilinae	Limnephilini	Clistoronia		
Brachyceritidae	Limnephiloidea	Brachyceritidae					
Brachycentrus	Limnephiloidea	Brachyceritidae					
(Oligoplectrodes)							
americanus	Limnephiloidea	Brachyceritidae					
(Sphinctogaster) occidentalis	Limnephiloidea	Brachyceritidae					
Micrasema	Limnephiloidea	Brachyceritidae					
Lepidostomatidae	Limnephiloidea	Lepidostomatidae					
Lepidostoma	Limnephiloidea	Lepidostomatidae	Lepidostomatinae			Lepidostoma	
Limnephiliidae	Limnephiloidea	Limnephiliidae					
Dicosmoecus	Limnephiloidea	Limnephiliidae	Dicosmoecinae			Dicosmoecus	
Hesperophylax	Limnephiloidea	Limnephiliidae	Limnephilinae	Limnephilini	Hesperophylax		
Limnophilus	Limnephiloidea	Limnephiliidae	Limnephilinae	Limnephilini	Limnophilus		
Psychoronia	Limnephiloidea	Limnephiliidae	Limnephilinae	Limnephilini	Psychoronia		
Oligophlebodes	Limnephiloidea	Uenoidae	Thremmatinae			Oligophlebodes	
Neothremma	Limnephiloidea	Uenoidae	Ueninae			Neothremma	
Chimarra	Philopotamoidea	Philopotamidae	Chimarrinae			Chimarra	

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribes	Genus	SubGenus
Dolophilodes		Philopotamoidea	Philopotamidae	Philopotaminae		Dolophilodes	
Wormaldia		Philopotamoidea	Philopotamidae	Philopotaminae		Wormaldia	
Hydrobiosidae		Rhyacophiloidea	Hydrobiosidae	Hydrobiosinae			
Atopsyche		Rhyacophiloidea	Hydrobiosidae	Hydrobiosinae	Hydrobiosini	Atopsyche	
Rhyacophilidae		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila brunnea		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila coloradensis		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila hyalinata		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila sibirica		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila tucula		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila valuma		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Rhyacophila verrula		Rhyacophiloidea	Rhyacophilidae	Rhyacophilidae		Rhyacophila	
Heliopsyche (Feropsyche) borealis		Sericostomatoidea	Heliopsychidae			Heliopsyche	Feropsyche
Gumaga		Sericostomatoidea	Sericostomatidae			Gumaga	
Daphniidae		Anomopoda	Daphniidae				
Hydrachnidae			Hydrachnidae				
Ostracoda							
Gammaridae							
Gammareus lacustris						Gammareus	
Hyalella azteca						Hyalella	
Orconeutes virilis		Stenopodidea	Astacoidea				
Asellidae			Asellidae				
Caecidotea			Asellidae			Caecidotea	
Gastropoda							
Bivalvia							
Physella virgata			Physidae			Physella	
Ancylidae			Ancylidae			Ferrissia	
Ferrissia			Ancylidae			Ferrissia	
Lymnaea			Lymnaeidae			Lymnaea	
Physidae			Physidae				
Physa			Physidae			Physa	
Physella			Physidae			Physella	
Planorbidae			Planorbidae				
Gyraulus			Planorbidae			Gyraulus	
Helisoma anceps			Planorbidae			Helisoma	
Corbicula		Corbiculoidae	Corbiculidae			Corbicula	
Pisidiidae		Corbiculoidae	Pisidiidae				
Pisidium		Corbiculoidae	Pisidiidae			Pisidium	
Nemata							

Appendix F: Master Taxa List

Final ID	InfraOrder	SuperFamily	Family	SubFamily	Tribe	Genus	SubGenus
Gordius			Gordiidae			Gordius	
Turbellaria							
Phagocata crenophila				Planariidae		Phagocata	
Polycelis coronata				Planariidae		Polycelis	
Tricladida							

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	TolVal	FFG	Habit
Hirudinea			10	Predator	
Oligochaeta			8	Collector	
Epibdella			10	Predator	
Limnodrilus			8	Collector	
Naididae			8	Collector	Burrower
Ophidionais serpentina	serpentina		8	Collector	Burrower
Tubificidae			8	Collector	Burrower
Lumbiculidae			8	Collector	Burrower
Amphizoidae				Predator	
Dytiscidae			5	Predator	Climber
Dytiscus			4	Predator	Swimmer
Hydaticus			9	Predator	Swimmer
Agabus			8	Predator	Swimmer
Hydroporus			5	Predator	Swimmer
Oreodytes			5	Predator	Swimmer
Laccophilus			5	Predator	Swimmer
Dineutus			4	Predator	Swimmer
Gyrinus			5	Predator	Swimmer
Halophilidae			7	Shredder	Clinger
Haliphus			8	Shredder	Clinger
Peltodyles			8	Shredder	Clinger
Noteiridae			7	Predator	Clinger
Lamypyridae				Collector	
Chrysomelidae			4	Collector	Clinger
Curculionidae			6	Collector	Clinger
Helichthus			5	Shredder	Clinger
Helichthus striatus	striatus		5	Shredder	Clinger
Postelichthus immsi	immsi			Shredder	
Elmidae			4	Collector	Clinger
Cleptelmis			4	Collector	Clinger
Dubiraphia			6	Collector	Clinger
Heterelmis			4	Collector	Clinger
Heterlimnius corpulentus	corpulentus		4	Collector	Clinger
Microcyllionopus			3	Shredder	Clinger
Naripus			4	Shredder	Clinger
Oploservus			4	Scraper	Clinger
Zaizevia parvula	parvula		4	Scraper	Clinger
Psephenidae			4	Scraper	Clinger
Pspheenus			4	Scraper	Clinger
Hydrochus			6	Collector	Swimmer
Heiochares			4	Collector	

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	TolVal	FFG	Habit
Hydropsychidae			5	Predator	Swimmer
Berosus			5	Collector	Swimmer
Cyphodiota			5	Collector	Burrower
Hydrobius			8	Collector	Climber
Tropisternus			5	Collector	Climber
Poduridae			8	Collector	
Copepoda			8	Filterer	
Agathon		0	Scraper	Clinger	
Chaetocladius		8	Collector	Sprawler	
Saetheria		8	Collector	Burrower	
Tribelos		8	Collector	Burrower	
Stempellinella		8	Collector	Clinger	
Ephydriidae		6	Collector	Burrower	
Dolichopodidae		4	Predator	Sprawler	
Empididae		6	Predator	Sprawler	
Clinocera		6	Predator	Clinger	
Cheirifera		6	Predator	Sprawler	
Hemerodromia		6	Predator	Sprawler	
Muscidae		6	Predator	Sprawler	
Limnophora		6	Predator	Burrower	
Stratiomyidae		8	Collector	Sprawler	
Euparyphus		5	Collector	Sprawler	
Odontomyia		7	Collector	Sprawler	
Athenix pachypus	pachypus	4	Predator		
Tabanidae		6	Predator	Sprawler	
Chrysops		6	Predator	Sprawler	
Tabanus		6	Predator	Sprawler	
Deuterophlebia coloradensis	coloradensis	0	Scraper	Clinger	
Blephariceridae		0	Scraper		
Bibiocephala grandis	grandis	0	Scraper		
Ceratopogonidae		6	Predator	Sprawler	
Bezzia		6	Predator	Burrower	
Atrichopogon		6	Predator	Sprawler	
Chironomidae		8	Collector	Burrower	
Chironominae		8	Collector		
Chironomus		8	Collector	Burrower	
Chironomus plumosus	plumosus	8	Collector		
Cryptochironomus		8	Predator	Sprawler	
Cryptotendipes		8	Collector	Burrower	
Dicrotendipes		8	Collector	Burrower	
Glyptotendipes		8	Collector	Burrower	

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	ToVal	FFG	Habit
Microendipes			8	Collector	Clinger
Paracladopelma			8	Collector	Sprawler
Paratendipes			8	Collector	Burrower
Phaenopsectra			8	Scraper	Burrower
Polyphemidium			8	Shredder	Climber
Stictochironomus			8	Collector	Burrower
Pseudochironomus			5	Collector	Burrower
Cladotanytarsus			8	Collector	Climber
Micropsectra			8	Collector	Climber
Paratanytarsus			6	Collector	Sprawler
Rheotanytarsus			8	Collector	Clinger
Stempellina			8	Collector	Climber
Sublettea			8	Collector	Climber
Tanytarsus			6	Collector	Climber
Diamesa			8	Collector	Sprawler
Pagastia			8	Collector	Sprawler
Poithastia			2	Collector	Sprawler
Poithastia longimana	longimana		8	Collector	Sprawler
Pseudodiamesa			8	Collector	Sprawler
Orthocladiinae			8	Collector	Burrower
Heterotissocladius			8	Collector	Sprawler
Paratrissocladius			8	Collector	Sprawler
Corynoneura			8	Collector	Sprawler
Thienemannella			6	Collector	Sprawler
Brilia			8	Shredder	Burrower
Cardiocladius			8	Predator	Clinger
Cricotopus			8	Shredder	Clinger
Cricotopus (Nostococadius)	nostococcola		8	Shredder	
Nostococcola			8	Collector	Sprawler
Eukiefferiella			8	Scraper	Sprawler
Hydrobaenus			8	Collector	Sprawler
Limnophyes			8	Shredder	Sprawler
Lopescladius			8	Collector	Burrower
Metriocnemus			8	Collector	Sprawler
Nanocladius			8	Collector	Sprawler
Orthocladius			8	Collector	Sprawler
Orthocladius (Symposiocladius)			8	Shredder	
Parakiefferiella			8	Collector	Sprawler
Parametriocnemus			8	Collector	Sprawler

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	ToVal	FFG	Habit
<i>Paraphenocadius</i>			8	Collector	Sprawler
<i>Pseudosmittia</i>			8	Collector	Sprawler
<i>Rheocricotopus</i>			8	Collector	Sprawler
<i>Stilocadius</i>			8	Collector	Sprawler
<i>Synorthocadius</i>			8	Collector	Sprawler
<i>Tvetenia</i>			8	Collector	Sprawler
<i>Podonominae</i>			8	Collector	Sprawler
<i>Parochlus kiefferi</i>	<i>kiefferi</i>		8	Collector	Sprawler
<i>Mondiamesa</i>			8	Collector	Sprawler
<i>Odontomesa</i>			4	Scraper	Sprawler
<i>Prodiamesa</i>			8	Collector	Burrower
<i>Tanydinae</i>			8	Collector	Burrower
<i>Macropelopia</i>			8	Predator	Sprawler
<i>Radotanypus</i>			8	Collector	Sprawler
<i>Abiatesmyia</i>			8	Predator	Sprawler
<i>Nilotanypus</i>			6	Collector	Sprawler
<i>Paramerina</i>			8	Collector	Sprawler
<i>Pentaneura</i>			8	Predator	Sprawler
<i>Thienemannimyia</i>			8	Predator	Sprawler
<i>Zavrelimyia</i>			8	Collector	Sprawler
<i>Procladius</i>			8	Predator	Sprawler
<i>Tanypus</i>			8	Collector	Sprawler
<i>Culicidae</i>			8	Filterer	Swimmer
<i>Culiceta</i>				Filterer	Swimmer
<i>Dixidae</i>			1	Filterer	Swimmer
<i>Dixa</i>			1	Filterer	Swimmer
<i>Dixella</i>			8	Filterer	Swimmer
<i>Simuliidae</i>			6	Collector	Clinger
<i>Prosimilium</i>			6	Collector	Clinger
<i>Simulium</i>			6	Collector	Clinger
<i>Maruina</i>			10	Scraper	Clinger
<i>Pericomia</i>			4	Collector	Burrower
<i>Plychopteridae</i>			8	Collector	Burrower
<i>Protanyderus</i>			8	Collector	Sprawler
<i>Protoplasa fitchii</i>	<i>fitchii</i>		8	Collector	
<i>Cryptolabis</i>			3	Predator	Burrower
<i>Molophilus</i>			3	Shredder	Burrower
<i>Phronocera</i>			3	Shredder	Burrower
<i>Tipulidae</i>			3	Shredder	Burrower
<i>Hesperoconopa</i>			3	Shredder	Burrower
<i>Ormosia</i>			3	Predator	Burrower

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	ToVal	FFG	Habit
Rhaddomastix			3	Predator	Sprawler
Hexatoma			2	Predator	Burrower
Limnophila			3	Shredder	Burrower
Antocha monticola	monticola		3	Collector	
Limonia			3	Shredder	Burrower
Dicranota			3	Predator	Sprawler
Pedicia			3	Predator	Burrower
Holorusia grandis	grandis		3	Shredder	
Tipula			4	Shredder	Burrower
Caudatella heterocaudata	heterocaudata	heterocaudata	1	Scraper	
heterocaudata			1	Collector	Swimmer
Paraleptophlebia			2	Collector	Clinger
Thraulodes			4	Filterer	Clinger
Traverella			7	Collector	Sprawler
Caenis			1	Collector	Clinger
Ephemerellidae			1	Scraper	
Drunella coloradensis	coloradensis		1	Scraper	Clinger
Drunella doddsii	doddsi		1	Scraper	Clinger
Drunella grandis	grandis		1	Scraper	Clinger
Drunella spinifera	spinifera		1	Scraper	Clinger
Ephemerella			1	Collector	Clinger
Ephemerella altana	altana		1	Shredder	
Ephemerella inermis	inermis		1	Collector	Clinger
Ephemerella infrequens	infrequens		1	Shredder	Clinger
Serratella tibialis	tibialis		1	Collector	Clinger
Timpanoga hecuba	hecuba		1	Scraper	Clinger
Leptophyphidae			4	Collector	
Leptophyphes			4	Collector	Clinger
Tricorythodes			4	Collector	Sprawler
Tricorythodes minutus	minutus		4	Collector	Clinger
Centroptilum			2	Collector	Clinger
Ametetus			0	Collector	Swimmer
Acentrella insignificans	insignificans		4	Collector	Swimmer
Baetis			4	Collector	Swimmer
Baetis bicaudatus	bicaudatus		4	Collector	Climber
Baetis tricaudatus	tricaudatus		4	Collector	Swimmer
Diphetor hageni	hageni		4	Collector	Clinger
Siphlonurus occidentalis	occidentalis		7	Collector	Swimmer
Heptageniidae			4	Scraper	Clinger
Cinygmulia			4	Scraper	Clinger
Epeorus			0	Collector	Clinger

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	ToVal	FFG	Habit
<i>Epeorus longimanus</i>	<i>longimanus</i>		0	Collector	Clinger
<i>Heptagenia</i>			4	Scraper	Clinger
<i>Heptagenia solitaria</i>	<i>solitaria</i>		4	Scraper	Clinger
<i>Nixe</i>			4	Scraper	Clinger
<i>Nixe simplicoides</i>	<i>simplicoides</i>		4	Scraper	
<i>Rhithrogena</i>			0	Collector	Clinger
<i>Rhithrogena hageni</i>	<i>hageni</i>		0	Collector	
<i>Rhithrogena robusta</i>	<i>robusta</i>		0	Collector	
<i>Rhithrogena undulata</i>	<i>undulata</i>		0	Collector	
<i>Isonychia</i>			2	Filterer	Swimmer
<i>Lachlania</i>			2	Filterer	Clinger
<i>Tubifex</i>			8	Collector	Burrower
<i>Abedus</i>			8	Predator	Climber
<i>Belostoma</i>			10	Predator	Climber
<i>Lethocerus</i>				Predator	Climber
<i>Corixidae</i>			10	Predator	Swimmer
<i>Graptocorixa</i>				Predator	Swimmer
<i>Sigara</i>			9	Predator	Swimmer
<i>Trichocorixa</i>			5	Predator	Swimmer
<i>Gelastocoris</i>				Predator	Sprawler
<i>Gerridae</i>			5	Predator	Skater
<i>Gerris</i>			6	Predator	Skater
<i>Trepobates</i>			10	Predator	Skater
<i>Hydrometra</i>				Predator	Skater
<i>Macrovelia</i>				Predator	Climber
<i>Ambrysus mormon</i>	<i>mormon</i>		5	Predator	
<i>Notonectidae</i>			8	Predator	
<i>Notonecta</i>			7	Predator	Swimmer
<i>Veliidae</i>			6	Predator	Skater
<i>Microvelia</i>			6	Predator	Skater
<i>Rhagovelia</i>			6	Predator	Skater
<i>Noctuidae</i>			5	Shredder	Burrower
<i>Pyralidae</i>			5	Shredder	Climber
<i>Petrophilia</i>			5	Shredder	Clinger
<i>Corydalidae</i>			3	Predator	Clinger
<i>Neotermes</i>			3	Predator	Clinger
<i>Corydalus cornutus</i>	<i>cornutus</i>		3	Predator	Clinger
<i>Sialis</i>			4	Predator	Burrower
<i>Aeshnidae</i>			5	Predator	Climber
<i>Aeschna</i>			5	Predator	Climber
<i>Boyeria</i>			5	Predator	Climber

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	ToVal	FFG	Habit
<i>Opionaeasnna</i>			5	Predator	
<i>Cordulegaster</i>			3	Predator	Burrower
<i>Gomphidae</i>			3	Predator	Burrower
<i>Erpetogomphus</i>			3	Predator	Burrower
<i>Gomphus</i>			5	Predator	Burrower
<i>Ophiogomphus</i>			1	Predator	Burrower
<i>Progomphus</i>			3	Predator	Burrower
<i>Libellulidae</i>			9	Predator	Sprawler
<i>Leucorrhinia</i>			9	Predator	Climber
<i>Libellula</i>			9	Predator	Sprawler
<i>Sympetrum</i>			10	Predator	Sprawler
<i>Hetaerina</i>			6	Predator	Climber
<i>Coenagrionidae</i>			9	Predator	Climber
<i>Argia</i>			7	Predator	Clinger
<i>Enallagma</i>			9	Predator	Climber
<i>Hesperagrion</i>			5	Predator	Climber
<i>Grylliidae</i>			7	Shredder	
<i>Capniidae</i>			1	Shredder	Sprawler
<i>Capnia</i>			1	Shredder	Sprawler
<i>Capnia confusa</i>			1	Shredder	
<i>Capnia gracilaria</i>			1	Shredder	
<i>Mesocapnia frisoni</i>			1	Shredder	
<i>Leuctridae</i>			0	Shredder	Sprawler
<i>Perlomyia</i>			0	Shredder	Sprawler
<i>Amphinemura</i>			2	Shredder	Sprawler
<i>Amphinemura banksi</i>			2	Shredder	
<i>Malenka</i>			2	Shredder	Sprawler
<i>Podmosta delicatula</i>			2	Shredder	
<i>Prostoia besametsa</i>			2	Shredder	Sprawler
<i>Zapada</i>			2	Shredder	Sprawler
<i>Zapada cinctipes</i>			2	Shredder	Clinger
<i>Zapada haysi</i>			2	Shredder	
<i>Taeniopterygidae</i>			2	Scraper	Sprawler
<i>Taenionema</i>			2	Scraper	Sprawler
<i>Taenionema pacificum</i>			2	Scraper	
<i>Taeniopteryx</i>			2	Scraper	Sprawler
<i>Chloroperlidae</i>			1	Predator	Clinger
<i>Alloperla severa</i>			1	Predator	
<i>Plumiperla diversa</i>			1	Predator	
<i>Suwellaia</i>			1	Predator	Clinger
<i>Sweftisa</i>			1	Predator	Clinger

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	TolVal	FFG	Habit
<i>Sweltsa borealis</i>	borealis		1	Predator	Clinger
<i>Triznakia</i>			1	Predator	Clinger
<i>Perlidae</i>			1	Predator	Clinger
<i>Acroneuria abnormis</i>	abnormis		0	Predator	Clinger
<i>Hesperoperla pacifica</i>	pacifica		1	Predator	Clinger
<i>Caenassenia sabulosa</i>	sabulosa		1	Predator	Clinger
<i>Perlodidae</i>			2	Predator	Clinger
<i>Isoperla</i>			2	Predator	Clinger
<i>Isoperla mormona</i>	mormona		2	Predator	
<i>Isoperla quinquepunctata</i>	quinquepunctata		2	Predator	
<i>Isoperla sobria</i>	sobria		2	Predator	
<i>Periodinae</i>			2	Predator	
<i>Megarcys signata</i>	signata		2	Predator	
<i>Skytala americana</i>	americana		2	Predator	
<i>Culitus aestivalis</i>	aestivalis		2	Predator	
<i>Kogotus modestus</i>	modestus		2	Predator	
<i>Diura knowltoni</i>	knowltoni		2	Predator	Clinger
<i>Isogenoides</i>			0	Predator	
<i>Isogenoides elongatus</i>	elongatus		0	Predator	
<i>Isogenoides zionensis</i>	zionensis		0	Predator	
<i>Pteronarcella badia</i>	badia		0	Shredder	Clinger
<i>Pteronarcella californica</i>	californica		0	Shredder	Clinger
<i>Agraylea</i>			8	Piercer	Clinger
<i>Alticottichia</i>			4	Scraper	
<i>Agapetus</i>			0	Scraper	Clinger
<i>Anagapetus</i>			0	Scraper	Clinger
<i>Glossosoma</i>			0	Scraper	Clinger
<i>Culoptilia</i>			1	Scraper	Clinger
<i>Protocptilia</i>			1	Scraper	Clinger
<i>Hydropsychidae</i>			4	Filterer	Clinger
<i>Arciopsychye grandis</i>	grandis		2	Filterer	Clinger
<i>Diplectroninae</i>			0	Filterer	
<i>Ceratopsyche cockerelli</i>	cockerelli		5	Filterer	
<i>Ceratopsyche oslari</i>	oslari		5	Filterer	
<i>Ceratopsyche venada</i>	venada		5	Filterer	
<i>Cheumatopsyche</i>			5	Filterer	Clinger
<i>Hydropsyche</i>			5	Filterer	Clinger
<i>Hydropsyche occidentalis</i>	occidentalis		5	Filterer	
<i>Smicridea</i>			5	Filterer	Clinger
<i>Neureclipsis</i>			5	Predator	Clinger
<i>Polyplectropus</i>			6	Predator	

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	ToVal	FFG	Habit
Polycentropus			6	Predator	Clinger
Psychomyia			2	Collector	Clinger
Oxyethira			3	Piercer	Clinger
Neotrichia			2	Scraper	Clinger
Metricchia			4	Scraper	
Hydroptilidae			4	Scraper	Clinger
Hydroptilia			4	Scraper	Clinger
Ochnotrichia			4	Collector	Clinger
Leuotrichia			2	Scraper	Clinger
Maytrichia			4	Scraper	Clinger
Ithytrichia			4	Scraper	Clinger
Staciobiella			4	Collector	Climber
Phylloicus aeneus	aeneus		4	Shredder	
Leptoceridae			4	Collector	Climber
Ceraecea			4	Shredder	Sprawler
Oecetis			8	Predator	Clinger
Nectopsyche			4	Shredder	Climber
Odontoceridae			3	Scraper	Sprawler
Apataniidae			4	Shredder	
Amiocentrus			1	Collector	Clinger
Ecdisomyia			4	Collector	Clinger
Homophylax			4	Shredder	
Psychoglypha			0	Collector	Clinger
Clistoronia			4	Collector	
Brachycentridae			1	Filterer	Clinger
Brachycentrus			1	Filterer	Clinger
(Oligoleptodes)					
americanus	americanus		1	Filterer	
(Sphinctogaster)					
occidentalis	occidentalis		1	Filterer	Clinger
Micrasema			1	Shredder	Clinger
Lepidostomatidae			1	Shredder	Climber
Lepidostoma			1	Shredder	Climber
Limnephilidae			4	Shredder	Climber
Dicosmoecus			4	Scraper	Sprawler
Hesperophylax			3	Shredder	Sprawler
Limnophilus			3	Shredder	Climber
Psychoronia			2	Shredder	Sprawler
Oligophlebodes			4	Scraper	Clinger
Neothremma			4	Scraper	Clinger
Chimarra			4	Filterer	Clinger

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	TolVal	FFG	Habit
Dolophilodes			2	Filterer	Clinger
Wormaldia			0	Filterer	Clinger
Hydrobiosidae			0	Predator	Clinger
Atoptyche			0	Predator	Clinger
Rhyacophilidae			0	Predator	Clinger
Rhyacophila			0	Predator	Clinger
Rhyacophila brunea			0	Predator	Clinger
Rhyacophila coloradensis	coloradensis		0	Predator	Clinger
Rhyacophila hyalinata	hyalinata		0	Predator	Clinger
Rhyacophila sibirica	sibirica		0	Predator	Clinger
Rhyacophila tucula	tucula		0	Predator	Clinger
Rhyacophila valuma	valuma		0	Predator	Clinger
Rhyacophila verrula	verrula		0	Predator	Clinger
Helicopsyche (Feropsyché)	borealis		3	Scraper	
Gumaga			3	Shredder	Sprawler
Daphniidae			6	Filterer	
Hydrachnidae			8	Predator	
Ostracoda			8	Filterer	
Gammaridae			4	Collector	
Gammareus lacustris	lacustris		4	Collector	
Hyalella azteca	azteca		8	Collector	
Orconeutes virilis			6	Collector	
Asellidae			8	Collector	
Caecidotea			8	Collector	
Gastropoda			8	Scraper	
Bivalvia			6	Filterer	
Physella virgata	virgata		8	Scraper	
Ancylidae			6	Scraper	
Ferrissia			8	Scraper	Clinger
Lymnaea			6	Scraper	
Physidae			8	Scraper	
Physa			8	Scraper	
Physella			8	Scraper	
Planorbidae			8	Scraper	
Gyraulus			8	Scraper	
Helisoma anceps	anceps		8	Scraper	
Corbicula			6	Filterer	
Pisidiidae			6	Filterer	
Pisidium			6	Filterer	
Nemata			8	Predator	

Appendix F: Master Taxa List

Final ID	Species	SubSpecies	TolVal	FFG	Habit
Gordius			8	Predator	
Turbellaria			4	Collector	
Phragocata crenophila	crenophila		4	Collector	
Polyclelis coronata	coronata		4	Collector	
Tridacida			4	Collector	

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Appendix G: Values of New exico Stream Samples

BnsSampleID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
23	28 ed iv014.5	11/25/1980	en 0/a	98.95833333	0	0.220610/67	1.141227823	63.020833333	56.770833333	0	0	0
24	28 ed iv024.9	11/25/1980	en 0/a	79.78835979	0	0.345141/78	3.065163212	79.78835979	73.712169312	0	9.947089947	0
25	28 ed iv027.8	11/25/1980	en 0/a	92.15116279	0	0.292024754	2.738046503	69.85462555	56.58914729	0	0	0
26	28 ed iv028.5	11/25/1980	en 0/a	86.56387665	0	0.335497529	1.961394141	78.456120088	56.16740088	0	0	0
27	50 ecos 782.1	04/08/1981	en 0/a	72.4147981	0	0.251684433	4.5088938626	69.62809917	62.19008264	0	0.516528926	0
28	50 ecos 803.7	04/08/1981	en 0/a	85.65737052	0	0.3609521833	4.485117678	84.16334661	80.57768924	0	0.597609562	0
29	31 emez 046.9	04/11/1981	en 0/a	86.83127572	0	0.256382886	2.366621989	23.45679012	23.45679012	0	2.469135802	0
30	31 Cebol000.1	04/11/1981	en 0/a	85.733232323	0	0.342780607	3.296096733	55.80808081	55.80808081	0	0.126262626	0.378787879
31	31 acas000.5	04/11/1981	en 0/a	52.38095238	0	0.266058055	2.822764742	10.20408163	10.20408163	0	0.340136054	0
32	29 esum002.4	04/17/1981	en 0/a	80.67226891	0	0.250748489	3.742937896	80.67226891	79.55182073	0	0	0
33	50 ecos 803.7	06/26/1981	en 0/a	79.66804979	0	0.302582493	3.779742458	75.24204703	68.3264177	0	0.138312586	0
34	50 ecos 803.7	08/13/1981	en 0/a	82.88135593	0	0.291596895	3.761683237	82.54237288	78.47457627	0	1.355932203	0
35	29 esum002.4	09/125/1981	en 0/a	84.36293436	0	0.267018605	3.2000012676	84.16988417	83.01158301	0	0	0
36	31 emez 049.2	09/25/1981	en 0/a	61.49870801	0	0.26040182	3.006808072	12.53229974	12.40310078	0	2.454780362	0.129798966
37	31 Cebol000.1	09/25/1981	en 0/a	80.59097173	0.210970464	0.384008161	4.057646285	44.092827	41.13924051	0	0.843881857	0.210970464
38	31 acas004.2	09/25/1981	en 0/a	83.44481605	0.668896321	0.277237731	2.971726019	15.2173913	15.2173913	0	1.337792642	0.16722408
39	50 ecos 803.7	10/07/1981	en 0/a	88.80105402	0	0.2791633715	4.22195303	86.29776021	76.8115942	0	1.712779974	0
40	77 obbie001.9	05/29/1986	en 0/a	63.18181818	0	0.367853077	3.151867617	61.36363636	60.49454545	0	0.909090909	0
41	77 ogoll038.8	05/29/1986	en 0/a	53.01724138	0	0.4305791	3.855519106	51.72413793	51.29310345	0	0	0
42	77 TrailC000.1	05/29/1986	en 0/a	67.54116611	0	0.270897488	2.484319473	67.30310263	66.34844869	0	0	0.715990453
43	77 ogoll037.2	05/30/1986	en 0/a	60.91269841	0	0.299392423	3.374807973	60.91269841	60.71428571	0	0	0.198412698
44	77 ogoll042.0	05/31/1986	en 0/a	15.42416452	0	0.1598153705	2.177898971	15.42416452	15.42416452	0	0	0
45	77 ogoll029.9	06/01/1986	en 0/a	74.19351839	0	0.362606905	2.296322564	73.118277957	73.118277957	0	0	0
46	07 ora 1170.9	07/15/1986	en 0/a	64.47091801	0	0.308968429	2.478202277	53.25858444	52.41765943	0	0.420462509	0
47	77 TrailC000.1	10/07/1986	en 0/a	32.19814241	0	0.404380883	4.327017031	32.19814241	28.48297214	0	0	0.263157895
48	77 TrailC000.1	10/08/1986	en 0/a	35.12658228	0	0.421594265	4.517228019	35.12658228	32.91139241	0	0.316455696	6.3229113924
49	28 Cost025.6	03/31/1987	en 0/a	71.58469945	0	0.470393386	3.07132019	67.21311475	46.44808743	0	0.546448087	0
50	48 Three 033.3	06/02/1987	en 0/a	55.26315789	0	0.409548337	1.374537889	42.10526316	42.10526316	0	0.2368421053	0
51	48 Three 047.6	06/02/1987	en 0/a	55.35714286	0	0.392196753	1.738978489	44.64285714	44.64285714	0	0	0
52	48 Three 057.1	06/02/1987	en 0/a	89.47368421	0	0.454452924	2.720717416	87.71929825	87.71929825	0	3.50877193	0
53	80 Tularo029.6	06/02/1987	en 0/a	66.66666667	0	0.579380164	0.910239227	66.66666667	66.66666667	0	0	0
54	50 Tecolo042.3	06/08/1987	en 0/a	70.68965517	0.862068966	0.500776517	4.207346278	59.48275862	59.48275862	0	0.862068966	3.448275862
55	50 Tecolo065.6	06/08/1987	en 0/a	66.76646707	0	0.44426287	4.129997883	55.68862275	50.5988024	0	0.598802395	0
56	50 Tecolo066.9	06/08/1987	en 0/a	59.5959596	0	0.4299943918	4.039529686	37.37373737	37.03703704	0	0	0.673400673
57	50 Tecolo072.3	06/08/1987	en 0/a	68.35443038	0	0.446808992	3.657604248	66.66666667	56.54008439	0	0	0
58	49 acram049.1	06/23/1987	en 0/a	90.24390244	0	0.263529284	1.6624467	90.24390244	90.24390244	0	0	0
59	49 acram051.6	06/23/1987	en 0/a	92.99363057	0	0.32356585	2.175527145	92.99363057	92.99363057	0	3.821656051	0
60	49 acram061.8	06/23/1987	en 0/a	68.59903382	0	0.389924533	2.437780396	68.11594203	68.11594203	0	29.46859903	0
61	49 acram066.9	06/23/1987	en 0/a	82.95454545	0.568181818	0.373822639	3.094487869	81.25	81.25	0	5.681818182	0.568181818
62	49 acram068.7	06/23/1987	en 0/a	42.34693878	0	0.320703213	1.894615908	42.34693878	42.34693878	0	0.3163265306	0
63	49 acrom060.3	06/23/1987	en 0/a	76.666666667	0	0.139360313	0.9624005	74.50980392	74.50980392	0	0	0
64	49 cott 000.1	06/23/1987	en 0/a	93.44262295	0	0.403693902	1.702800969	72.13114754	72.13114754	0	0	0
65	80 anFra028.6	07/07/1987	en 0/a	80.66666667	0.444054888	3.39278335	68	68	68	0	1.333333333	0.666666667
66	80 anFra049.1	07/07/1987	en 0/a	57.771261	0	0.341197638	2.91501073	36.95014663	36.95014663	0	0	0
67	80 anFra105.7	07/07/1987	en 0/a	83.33333333	0	0.376611391	3.218902298	83.06010929	60.6557377	0	0	0

Appendix G: Values of New Mexico Stream Samples

BnsSamplD	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	NonPct
68	80_anFra115.7	07/07/1987	en 0 a	89.91596639	0	0.346310897	2.741092481	89.49579832	50.84033613	0	0	0
69	80_anFra154.1	07/07/1987	en 0 a	70.03257329	0	0.393972472	3.6666938764	50.81433225	50.81433225	0	0.3225732899	0
70	80Tularo029.6	07/07/1987	en 0 a	68.42105263	0	0.3912010989	4.5740213255	56.84210526	56.84210526	0	1.052631579	0
71	80 hitew000.5	07/07/1987	en 0 a	71.96696977	6.060606061	0.492398553	3.072006655	60.60606061	60.60606061	0	8.3333333333	0.75757578
72	77_Fk_ll000.1	07/22/1987	en 0 a	85.82059552	0	0.441404261	3.2666746291	61.94029851	61.94029851	0	0	0
73	77_llla_i131.3	07/22/1987	en 0 a	86.09865347	0	0.224215247	0.345948791	3.770294665	68.16143498	0	0.224215247	0
74	77_ogoll042.0	07/22/1987	en 0 a	59.97854077	0	0.281909318	3.071373088	59.97854077	59.12017167	0	0	0
75	77_Fk_ll000.3	07/22/1987	en 0 a	78.57142857	0.892857143	0.5002458466	3.814772556	50	50	0	0.892857143	0
76	78_llla_i074.8	07/22/1987	en 0 a	80.74712644	0.574712644	0.357738744	3.075765075	48.85057471	48.85057471	0	0.574712644	0
77	77_ogoll038.8	07/24/1987	en 0 a	60.16096579	0	0.414591326	4.187746314	58.3501006	56.53923541	0	0	0.402414487
78	29Canada005.6	08/08/1987	en 0 a	66.22073579	0	0.357103949	2.806799119	66.22073579	66.22073579	0	0.334448161	0
79	28NFKTes002.1	09/15/1987	en 0 a	93.29268293	0	0.419156134	4.488164841	87.5	86.8902439	0	0	0
80	28_Nambe005.1	09/15/1987	en 0 a	80.35714286	0	0.436044856	4.969129634	59.64285714	55.71428571	0	0	0
81	28_Nambe005.1	09/15/1987	en 0 a	77.59562842	0	0.44454252	4.031107749	49.72677596	42.07650273	0	0	0
82	77_ogoll038.8	09/15/1987	en 0 a	46.21212121	0	0.362531	3.509277734	43.93939394	40.34090909	0	0	0.94669697
83	77_TrailC000.1	09/15/1987	en 0 a	50.71428571	0	0.4845932888	3.440151785	50.71428571	40.71428571	0	0	3.571428571
84	50_llorv000.1	09/22/1987	en 0 a	35.45611015	0	0.338674601	2.985191522	33.21858864	32.70223752	0	7.056798623	0
85	50_llorv004.8	09/22/1987	en 0 a	71.60326087	0	0.365806808	3.564389246	65.82880435	50.95108696	0	3.2608969565	0
86	50_allin19.7	09/22/1987	en 0 a	50.11441648	0	0.37686112	3.838726039	26.08695652	25.05720824	0	1.255881236	0
87	50_allin31.8	09/22/1987	en 0 a	64.63560335	0	0.390158499	4.309176654	34.64755078	0	0.716845878	0	
88	50_allin41.9	09/22/1987	en 0 a	84.55743879	0	0.463649473	4.14358344	74.95291902	58.94538606	0	1.694915254	0
89	50Tecolo071.6	09/27/1987	en 0 a	38.5629915	0	0.348134804	4.207749198	36.76470588	31.69934641	0	1.633386928	0
90	50Tecolo072.0	09/27/1987	en 0 a	43.08681672	0	0.3431143861	3.948288995	42.76527331	35.69131833	0	2.572347267	0
91	50Tecolo072.8	09/27/1987	en 0 a	60.70863071	0	0.4010569688	4.371855615	59.45945946	45.32224532	0	1.247401247	0
92	50Tecolo074.1	09/27/1987	en 0 a	70.90909091	0	0.353416446	3.654678744	70.48128342	49.41176471	0	4.598830481	0
93	50_right000.6	09/27/1987	en 0 a	17.85714286	0.162337662	0.257331715	3.892112532	17.20779221	14.12337662	0	1.785714286	0
94	50_right001.0	09/27/1987	en 0 a	49.57983193	1.422107304	0.268434251	3.676434119	49.51519069	46.47705236	0	9.049773756	0
95	50_right02.6	09/27/1987	en 0 a	71.86147186	0	0.4095663399	4.04232111	70.995671	70.56277056	0	2.597402597	0
96	31_emez_043.1	10/13/1987	en 0 a	65.88235294	0	0.361037056	3.431152272	35.88235294	28.82352941	0	0.882352941	0
97	31_emez_046.9	10/13/1987	en 0 a	66.12903226	0	0.305823856	2.739030377	29.23387097	21.16935484	0	0	0
98	31_emez_058.9	10/13/1987	en 0 a	78.73239437	0	0.247651957	2.437068431	78.73239437	27.18309859	0	0.281690141	0
99	31_emez_071.3	10/13/1987	en 0 a	77.38927739	0	0.353274297	3.5533132004	37.87878788	31.23543124	0	0	0.116550117
100	31_uada000.1	10/13/1987	en 0 a	33.21342926	0.119904077	0.223823886	2.676089116	18.46522782	16.78657074	0	0.119904077	0.239808153
101	04Canadi429.9	03/21/1988	en 0 a	75.363231884	0	0.370615059	3.000345719	25.60386473	25.60386473	0	0	0.483091787
102	06Canadi232.6	03/21/1988	en 0 a	21.40381282	0	0.15308093	2.269185073	11.17850953	11.17850953	0	0.606585789	8.67 -02
103	06Canadi274.8	03/21/1988	en 0 a	45.41723466	0	0.239338766	2.123009133	23.25581395	23.25581395	0	0.136798906	0.410396717
104	06Canadi348.3	03/21/1988	en 0 a	29.18454936	0	0.268185486	2.278576989	19.95708155	19.95708155	0	0.214592275	0
105	04Canadi409.4	03/23/1988	en 0 a	81.40703518	0	0.311897021	2.644850517	76.38190955	76.38190955	0	0	0
106	50Tecolo071.6	04/07/1988	en 0 a	0.3741871513	4.509880646	38.02816901	34.0042414	0	7.645875252	0		
107	50Tecolo072.0	04/07/1988	en 0 a	49.52531646	0	0.418643537	5.272225638	49.20886076	43.82911392	0	2.215189873	0
108	50Tecolo072.8	04/07/1988	en 0 a	58.59030837	0	0.432934865	5.058585854	58.149777974	48.60499266	0	0.734214391	0
109	50Tecolo074.1	04/07/1988	en 0 a	50.3653348	0	0.310840536	3.827636922	50.3659348	41.45043247	0	1.929474385	0
110	50_right000.6	04/07/1988	en 0 a	42.33128334	0	0.287778633	3.857998161	40.7954601	38.34355828	0	1.687116564	0
111	50_right000.7	04/07/1988	en 0 a	32.98611111	0	0.336325421	3.993153801	32.75462963	26.85185185	0	3.356481481	0
112	50_right002.6	04/07/1988	en 0 a	6.145251397	0	0.316692689	3.277180575	6.145251397	4.469273743	0	10.61452514	0

Appendix G: Values of New exico Stream Samples

BnsSampleID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
113	50_l orv004.8	04/12/1988	en 0'a	64.41947566	0	0.338426656	4.588772151	60.29962547	57.49063367	0	4.775280899	0
114	50_l orv000.1	04/14/1988	en 0'a	13.84180791	0	0.2050217171	3.16996908	13.48870056	13.4180791	0	6.355932203	0
115	50_allin19.7	04/14/1988	en 0'a	52.95055827	0	0.416683899	4.812957196	40.35087719	40.35087719	0	9.728867624	0.159489633
116	50_allin131.8	04/14/1988	en 0'a	46.59090909	0	0.321558012	3.896297756	36.74242424	24.84848485	0	3.257575758	0
117	50_allin141.9	04/14/1988	en 0'a	68.84902635	0	0.475067289	4.981859388	64.682805988	57.34126984	0	6.1507193651	0
118	57Corriz001.3	05/10/1988	en 0'a	45.23809524	0	0.438805866	2.140371091	45.23809524	45.23809524	0	2.380952381	2.380952381
119	57Corriz001.4	05/10/1988	en 0'a	89.75501114	0	0.245930345	2.128696787	59.24276169	59.24276169	0	0	0.2222717149
120	57_rinds001.5	05/10/1988	en 0'a	62.5	0	0.436009472	2.164042561	53.125	53.125	0	0	15.625
121	57_uido044.4	05/10/1988	en 0'a	83.77192982	0	0.231211483	1.657658328	80.26315789	80.26315789	0	0	0
122	57_uido045.1	05/10/1988	en 0'a	96.23430962	0.418410042	0.352270254	2.556394262	74.89539749	64.0167364	0	0.418410042	0.418410042
123	29_Chama165.4	06/01/1988	en 0'a	67.39130435	0	0.2976112022	3.216970511	64.94565217	58.15217391	0	0.384963768	0
124	29_Chama166.4	06/14/1988	en 0'a	66.8202765	0	0.389907195	3.159911159	64.51612903	63.13364055	0	0.460829493	0
125	29_Chama166.4	06/14/1988	en 0'a	73.80952381	0	0.491833018	3.308326584	72.22222222	69.04761905	0	0	0
126	29_Chama002.6	06/14/1988	en 0'a	70.85427136	0	0.373721081	3.501920882	66.33165829	62.31155779	0	6.783919598	0
127	29_Chama017.8	06/14/1988	en 0'a	62.37113402	0	0.345431417	3.227118022	59.79381443	48.96907216	0	0.515463918	0
128	29_e_toC000.1	06/14/1988	en 0'a	55.68181818	0	0.436780461	3.4812998853	30.11363636	22.15909091	0	8.52227273	0.568181818
129	29NaborC003.6	06/15/1988	en 0'a	77.89046653	0	0.287774557	2.902987399	30.02028398	29.20892495	0	1.21703854	0
130	29_Chama004.0	06/15/1988	en 0'a	84.22939068	0	0.315197201	3.3740511756	29.390681	9.318996416	0	3.94265233	0
131	50Holy_h011.1	06/21/1988	en 0'a	86.7219917	0	0.2214322533	1.618661454	86.7219917	86.7219917	0	4.771784232	0
132	50_inso006.9	06/21/1988	en 0'a	68.557142857	0	0.410072179	4.197335879	66.32653061	47.55102041	0	1.224489796	0
133	500CaveCr003.4	06/22/1988	en 0'a	65.55819477	0	0.432232748	4.30276019	62.47030879	37.52969121	0	4.038004751	0
134	50_scur002.4	06/22/1988	en 0'a	59.531717258	0	0.392293558	3.508498899	59.531717258	34.44816054	0	0	0
135	50Horse003.4	06/23/1988	en 0'a	65.547804949	0	0.4566885581	4.142929318	51.82926629	32.3170729	0	2.743902439	0
136	50_Chima007.2	06/25/1988	en 0'a	73.52941176	0	0.443868506	3.31959771	73.52941176	61.11111111	0	0.326797386	0
137	50_adre000.4	06/26/1988	en 0'a	62.8742515	0	0.387329508	4.612341766	61.22754491	33.53293413	0	0.449101796	0
138	29_Chama157.0	06/29/1988	en 0'a	77.02020202	0.252525253	0.347758017	3.510875398	69.6969697	21.21212121	0	0.25225253	0
139	29_Chama161.1	06/29/1988	en 0'a	72.62569832	0	0.459079009	4.421367937	62.5698324	37.98882682	0	0.279329609	0
140	29_Chama165.4	06/29/1988	en 0'a	66.92209451	0	0.377821325	4.202227582	64.49553001	57.72669221	0	0.383141762	0
141	29_Chama002.8	06/29/1988	en 0'a	91.22807018	0	0.394420989	3.306322908	42.10526316	39.78128655	0	0.584795322	0
142	29_biqui001.8	07/11/1988	en 0'a	60.25641026	0	0.463674216	2.295310611	56.41025641	56.41025641	0	0	2.564102564
143	29_Chama004.5	07/11/1988	en 0'a	95.93908629	0	0.181757707	1.880342518	59.89847716	59.56067668	0	0.169204738	0
144	29_Chama050.4	07/11/1988	en 0'a	22.02643172	0	0.1784158	0.653798047	22.02643172	22.02643172	0	0	0
145	29_Chama161.1	07/11/1988	en 0'a	74.45887446	0	0.359253838	1.4699334949	62.33766234	62.33766234	0	2.597402597	0
146	29_Chama019.3	07/12/1988	en 0'a	92.62899263	0	0.210540881	1.497799935	91.15479115	91.15479115	0	3.931203931	0
147	29_Chama019.3	07/12/1988	en 0'a	75.9259293	0	0.3155888246	1.964839392	72.59259259	72.59259259	0	0	0
148	29_l_it0000.7	07/13/1988	en 0'a	68.42105263	0	0.625022562	2.377362903	52.63157895	52.63157895	0	10.52631579	0
149	29_oCa026.1	07/13/1988	en 0'a	75.0977357	0.130378096	0.203605947	1.806552329	7.04041721	7.04041721	0	0.130378096	0.130378096
150	28_anCru019.1	07/19/1988	en 0'a	76.57657658	0	0.391523583	3.331681447	64.41441441	61.71171171	0	0	0
151	28_Cost048.9	08/19/1988	en 0'a	82.13161894	0	0.324594985	3.405623126	81.06416275	68.70109546	0	0.312989045	0
152	28_Cost052.2	08/19/1988	en 0'a	59.67741935	0	0.34986886	3.602017598	57.99120235	29.98533724	0	7.33	-02
153	28_Cost055.5	08/19/1988	en 0'a	68.60986547	0	0.24715299	2.361461644	68.53512706	68.08669656	0	1.046337818	0
154	28_Cost057.9	08/19/1988	en 0'a	32.84993695	6.31 -02	0.279987121	3.664012545	30.45397226	27.30138714	0	0.504413619	0
155	30_FkFr000.1	09/15/1988	en 0'a	69.2307923	0	0.405082498	3.70956392	68.52071006	62.2485207	0	9.46745621	0
156	30_Fr0018.4	09/15/1988	en 0'a	64.35224386	0	0.391344699	4.523532878	58.2557155	52.41320914	0	7.197290432	8.47 -02
157	30_FkFr000.1	09/15/1988	en 0'a	65.49560853	0	0.395588902	3.891717639	63.23713927	57.34002509	0	7.151819322	0

Appendix G: Values of New exico Stream Samples

BnsSamplID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
158	28 ed iv014.5	09/21/1988	en 0 a	100	0	0.403908957	1.176056415	100	66.666666667	0	0	0
159	28 ed iv024.1	09/21/1988	en 0 a	96	0	0.359682572	2.584885611	71.55555556	36.444444444	0	0.444444444	0
160	28 ed iv024.9	09/21/1988	en 0 a	90.32258065	0	0.429882421	4.009362875	90.32258065	70	0	0.64516129	0
161	28 ed iv027.8	09/21/1988	en 0 a	94.318182	0	0.385678369	2.707668885	74.43181818	16.47727273	0	0.568181818	0
162	28 ed iv028.5	09/28/1988	en 0 a	93.33333333	0	0.337174967	2.038662178	90.37037037	48.14814815	0.740740741	1.4481481481	0
163	31 Fk em010.1	10/20/1988	en 0 a	66.76714393	0.527505652	0.322688428	3.424733428	43.55689525	40.24114544	0	4.973624717	0
164	31 Fk em015.0	10/20/1988	en 0 a	79.48823772	0	0.259542752	3.299587625	25.4230293	20.47049113	0	1.403211915	0
165	50 l orv000.1	10/22/1988	en 0 a	26.94300518	0	0.343158043	3.190147551	23.83419689	19.17098446	0	20.7253886	0
166	50 l orv004.8	10/22/1988	en 0 a	68.60902256	0	0.420934281	4.620303837	68.04511278	53.94136842	0	3.947368421	0
167	50 allin19.7	10/22/1988	en 0 a	53.88127854	0	0.443935451	3.781514664	37.67123288	37.67123288	0	20.54194521	0.456621005
168	50 allin131.8	10/22/1988	en 0 a	45.87525151	0	0.373178314	4.670947812	40.64386318	31.18712274	0	2.012072435	0
169	50 allin141.9	10/22/1988	en 0 a	83.81742739	0	0.441556961	4.208519779	75.31120332	53.1120332	0	5.394190871	0
170	50 right000.7	10/22/1988	en 0 a	42.16738197	0	0.327102836	4.38767584	41.63090129	28.54077253	0	0.321888412	0
171	50 right002.6	10/22/1988	en 0 a	25.0343879	0	0.217528165	4.856633339	24.34662999	20.222008253	0	0.687757909	0
172	28 Costl048.9	03/28/1989	en 0 a	90.05235602	0	0.487859321	3.998268614	87.95811518	74.86910995	0	3.141361257	0
173	28 Costl052.2	03/28/1989	en 0 a	89.62655602	0	0.423126631	3.828765268	85.89211618	62.65560166	0	0.829875519	0
174	28 Costl055.5	03/28/1989	en 0 a	85.61643836	0.684931507	0.171709144	1.203947353	85.61643836	85.61643836	0	0.684931507	0
175	04 erme 002.9	04/10/1989	en 0 a	56.75567676	0	0.302622776	1.486347831	31.53153153	31.53153153	0	0.900090091	0
176	04 erme 045.4	04/10/1989	en 0 a	65.24216524	0	0.184599742	1.194379002	60.11396011	60.11396011	0	0	0
177	04 erme 073.7	04/10/1989	en 0 a	90.09009099	0	0.232865565	2.166155859	68.06930693	68.06930693	0	0.495049505	0.742574257
178	50 l orv000.1	04/11/1989	en 0 a	65.76354668	0	0.331029172	2.99682678	65.51724138	65.27093596	0	6.157635468	0
179	50 l orv004.8	04/11/1989	en 0 a	70.38461538	0	0.474329172	4.316017638	70	64.23076923	0	3.84153846	0
180	50 allin119.7	04/11/1989	en 0 a	72.50509169	0	0.310326324	3.550423363	62.93279022	62.93279022	0	4.684317719	0
183	50 allin131.8	04/11/1989	en 0 a	55.50755954	0	0.4333318674	4.887802885	49.4600432	42.76457883	0	0.8639307886	0
184	50 allin141.9	04/11/1989	en 0 a	70.12195122	0	0.475458486	4.315543116	55.79268293	49.69512195	0	3.353558537	0
185	50 right002.6	04/16/1989	en 0 a	8.542713568	0	9.37 -02	2.545062889	8.542713568	8.542713568	0	0.125628141	0
186	28 Costl057.9	05/02/1989	en 0 a	28.13411079	1.822157434	0.282555866	3.04539375	22.52186589	20.911836735	0	1.822157434	0
187	28 ua e021.7	05/22/1989	en 0 a	60.17316017	0	0.36018094	3.748636093	59.30735931	57.14285714	0	0	0
188	29 lo so004.5	05/22/1989	en 0 a	67.34693878	0	0.332626146	2.287290851	31.97278912	24.48979592	0	0.34036054	0
189	29 lo so008.8	05/22/1989	en 0 a	82.60869565	0	0.399833686	3.759574273	55.43478261	51.08695652	0	1.086956522	0
190	28 Fri 0004.8	05/23/1989	en 0 a	78	0	0.39656655	3.208565819	74.5	70.5	0	0	0
191	30 antaf057.4	05/23/1989	en 0 a	82.65582656	0	0.382245339	3.552820587	79.94579946	76.42276423	0	0	0
192	50 CowCre064.0	05/23/1989	en 0 a	86.2962963	0	0.380351091	2.543085778	86.2962963	77.03703704	0	0	0
193	50 Holy h0006	05/26/1989	en 0 a	68.21705426	0	0.397855235	3.524421484	67.7002584	64.08268734	0	0	0
194	50Holy h002.1	05/26/1989	en 0 a	67.49379653	0	0.369421111	3.333924237	66.50124069	63.5235732	0	0	0
195	31 Fk em010.1	05/29/1989	en 0 a	75.32808399	0	0.361853771	4.402526294	64.04199475	60.19247594	0	0.699912511	0
196	31 Fk em015.0	05/29/1989	en 0 a	89.54593453	0	0.368111952	4.0856223525	70.64413939	69.6937698	0	1.795142555	0
197	28 edio013.3	05/30/1989	en 0 a	89.0070922	0	0.440532322	4.431125803	86.87943262	58.15602837	0	0.354606929	0
198	28 edio016.9	05/30/1989	en 0 a	80.66666667	0	0.34437878	2.794056877	80.666666667	16.666666667	0	2	0
199	28 edio017.5	05/30/1989	en 0 a	52.49169435	0	0.271962753	3.281118014	52.49169435	32.72425249	0	0	0
200	29 uerc037.5	05/31/1989	en 0 a	61.65803109	0	0.368842878	3.910371547	61.65803109	48.57512953	0	0.259067358	0
201	31 acas017.4	05/31/1989	en 0 a	68.35164835	0	0.370696304	3.757987304	68.35164835	65.27472527	0	0.21978022	0
202	33 uerc464.3	06/20/1989	en 0 a	87.86407767	0.485436893	0.343375194	2.815380749	82.52427184	81.55339806	0	0.48536893	0
203	28 rand595.7	07/10/1989	en 0 a	90.15151515	0	0.22801715	2.552201988	28.78787789	28.59848485	0	0.18993939	0
204	28 rand647.9	07/10/1989	en 0 a	82.7027027	0	0.296526695	3.2129856	37.83783784	35.40540541	0	1.351351351	0

Appendix G: Values of New exico Stream Samples

BnsSamplD	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct	
205	28 rand572.8	07/12/1989	en 0 a	87.27733369	0	0.228717817	2.1716165771	20.3562341	19.84732824	0	0	0	
206	28 Costl048.9	08/17/1989	en 0 a	76.78339818	0	0.306597397	3.1589928447	44.83787289	29.31258106	0	0.518806744	0	
207	28 Costl052.2	08/17/1989	en 0 a	70.92651757	0	0.342093089	3.105903367	70.60702875	34.98402556	0	0.159744409	0	
208	28 Costl055.5	08/17/1989	en 0 a	27.763019095	0	5.40 -02	1.169306961	2.763819095	1.501537688	0	0	0	
209	28 Costl057.9	08/17/1989	en 0 a	24.21823021	0.598802395	0.29135561	4.101039559	21.62341983	18.89554225	0	0.598802395	0	
210	66 nimmas09.8	08/22/1989	en 0 a	91.29213483	0	0.270004991	2.723436366	29.7752809	18.53932584	0	0	0	
211	66 nimmas054.6	08/22/1989	en 0 a	70.44198895	0.552486188	0.365414441	3.055174303	58.28729282	42.81767956	0	0.828729282	0	
212	67 a lat033.8	08/22/1989	en 0 a	78.37837838	0	0.404434002	2.548024853	43.24324324	23.42342342	0	0.900909001	0.900909001	
213	05Cimmar044.5	09/13/1989	en 0 a	61.67664671	0.598802395	0.300101862	2.54005778	56.28742515	56.28742515	0	29.34131737	0	
214	05Cimmar050.8	09/13/1989	en 0 a	57.84946237	0	0.363815987	3.581873334	40.43010753	37.20430108	0	0	0	
215	05Cimmar077.2	09/13/1989	en 0 a	77.18120805	1.006711409	0.244743144	2.190840804	32.38255034	6.879194631	0	5.033557047	0	
216	28 uebT008.2	09/22/1989	en 0 a	30	0	0.351572351	2.574438364	6.52173913	6.52173913	0	2.608956552	0	
217	28 uebT013.2	09/22/1989	en 0 a	79.82583454	0.290275762	0.253443118	2.7542977	35.70391872	12.04644412	0	0.290275762	0.145137881	
218	28 uebT015.8	09/22/1989	en 0 a	72.04301075	0.860215054	0.311986153	2.442186364	35.2688172	12.68817204	0	0.7956989247	0	
219	50 allin141.9	10/26/1989	en 0 a	59.25925926	0	0.458234473	5.011146873	51.85185185	35.18518519	0	4.732510288	0	
220	50 l orv000.1	10/27/1989	en 0 a	32.03463203	0.865800866	0.461682658	4.961030453	29.43722944	27.70562771	0	12.98701299	0.865800866	
221	50 l orv004.8	10/27/1989	en 0 a	57.31343284	0	0.388107794	3.995526417	54.47761194	48.9955223888	0	5.074626866	0	
222	50 allin19.7	10/27/1989	en 0 a	72.74741507	0	0.335370564	4.160415381	45.34711965	41.50664697	0	0.960118168	0.369276219	
223	50 allin131.8	10/27/1989	en 0 a	56.89045936	0	0.339965657	4.448359537	42.40282686	39.57597173	0	1.413427562	0	
224	28 edio013.3	10/29/1989	en 0 a	88.51963746	0	0.451056896	4.308771104	85.19637462	77.94561934	0	0.604229607	0	
225	28 edio016.9	10/29/1989	en 0 a	83.89261745	0	0.500887725	4.196687717	83.89261745	55.03355705	0	0.67114094	0	
226	28 edio017.5	10/29/1989	en 0 a	67.38295304	0	0.356276548	3.629000435	67.38295034	56.10728255	0	0.134228188	0	
227	28 ua e021.7	10/31/1989	en 0 a	62.57309942	0	0.435332498	4.289243337	59.21602632	52.63157895	0	0.14619883	0	
228	31 Fk em010.1	10/31/1989	en 0 a	73.23799742	5.413687436	0.3413638682	3.049430554	45.96527068	42.39019467	0	7.660878447	0	
229	31 Fk em015.0	10/31/1989	en 0 a	62.64090177	1.93236715	0.3688999913	3.887220185	52.81803543	48.93330113	0	12.39935588	0	
230	500CowCre064.0	10/31/1989	en 0 a	82.6388889	0	0.3666651117	2.831921824	82.63888889	76.5625	0	0	0	
231	28 Fri 0004.8	11/02/1989	en 0 a	89.09090909	0	0.456199089	4.031415928	76.62337662	69.09090909	0	0	0	
232	501Hol h000.6	11/02/1989	en 0 a	79.1011236	0	0.483016859	5.575530639	77.30337079	69.66292135	0	0.898876404	0	
233	501Hol h002.1	11/02/1989	en 0 a	81.48688047	0	0.440905712	5.206038444	77.25947522	66.47230321	0	1.603498542	0	
234	29 lo so004.5	11/04/1989	en 0 a	25.66371681	0	0.290779809	2.115333115	19.46902655	19.46902655	0	0	0	
235	29 io so008.8	11/04/1989	en 0 a	70.83333333	0	0.458233561	1.887947883	62.5	58.33333333	0	0	0	
236	29 uerc037.5	11/04/1989	en 0 a	61.075268882	0	0.377955146	3.2566248486	61.07526882	58.27956989	0	0	0	
237	31 acas017.4	11/04/1989	en 0 a	87.97385621	0	0.352431341	4.518156777	87.58169935	81.96078431	0	0	0	
238	30 antaF057.4	11/05/1989	en 0 a	78.9017341	0	0.434993359	5.199105911	62.42774566	48.12138728	0	0.289017341	0	
239	50 l orv000.1	04/14/1990	en 0 a	27.00729927	0	0.236897218	2.159973193	27.00729927	26.52068127	0	0.729927007	0	
240	50 l orv004.8	04/14/1990	en 0 a	50.97087379	0	0.470493857	3.819948648	47.8153398	41.99029126	0	0.1213592233	0	
241	50 allin19.7	04/14/1990	en 0 a	69.49541284	0.688073394	0.369564596	3.784362271	61.23853211	0	5.963302752	0.229357798		
242	50 allin131.8	04/14/1990	en 0 a	51.85873606	0	0.364352348	4.453026373	48.32713755	42.37918216	0	7.80669145	0	
243	50 allin141.9	04/14/1990	en 0 a	50.8955224	0	0.506717119	4.292623124	54.47761194	42.91044776	0	8.955223881	0	
244	28 Costl048.9	04/16/1990	en 0 a	79.15273133	0	0.357239726	3.52990187	72.79821628	59.86622074	0	0.334448161	0	
245	28 Costl048.9	04/16/1990	en 0 a	79.12946429	0	0.359197631	3.677584457	72.76785714	59.82142857	0	0.334821429	0	
246	28 Costl052.2	04/16/1990	en 0 a	48.76712329	0	0.394946738	3.559383959	46.57534247	37.26027397	0	0.821917808	0	
247	28 Costl055.5	04/16/1990	en 0 a	19.22005571	0	0.144373895	1.824687224	18.66295265	17.96657382	0	0	0	
248	28 Costl057.9	04/16/1990	en 0 a	28.14594192	5.063291139	0	0.282548968	3.332101753	24.94415488	23.08265078	0	5.063291139	0
249	30 antaF057.4	04/27/1990	en 0 a	58.87681159	0	0.431797565	5.702023606	53.44202899	44.02173913	0	0.543478261	0	

Appendix G: Metric Values of New exico Stream Samples

BnsSampleID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
250	07_anuel020.9	05/07/1990	en 0'a	67.41573034	0	0.458230201	3.8596749/8	64.04494382	61.23595506	0	5.617977528	0
252	07_apell000.1	05/07/1990	en 0'a	61.32404181	0	0.34876805	3.003808361	32.40418118	32.40418118	0	2.090592334	0.696684111
253	07_apell044.4	05/07/1990	en 0'a	76.90288714	0	0.361417528	3.533688795	48.03149606	48.03149606	0	1.312335958	2.362204724
254	07_apell069.8	05/07/1990	en 0'a	25.7221458	0.275103164	0.349254054	4.553093755	25.44704264	25.0343879	0	1.100412655	0
255	50_allin075.8	06/11/1990	en 0'a	56.1821957	3.225806452	0.357249156	2.872158281	19.89247312	19.89247312	0	17.74193548	1.075268817
256	50_allin101.8	06/11/1990	en 0'a	0.826797201	0.636132316	0.177474964	1.766279398	48.058905852	48.058905852	0	32.315152163	0.318066158
257	50_allin102.1	06/11/1990	en 0'a	68.51851852	1.851851852	0.372373513	2.857948207	45.55555556	45.55555556	0	12.222222222	1.481481481
258	50_allin114.6	06/11/1990	en 0'a	63.51791531	0.325732899	0.397711656	3.317706501	61.23778502	52.76872964	0	0.325732899	0.9777198697
259	500CowCte064.0	06/15/1990	en 0'a	79.53488312	0	0.363356747	2.968442875	79.53488312	77.90697674	0	0.23295814	0
260	501Holy_h000.6	06/16/1990	en 0'a	60.2605832	0	0.440152552	4.016171027	58.30618893	52.76872964	0	3.25732899	0
261	501Holy_h002.1	06/16/1990	en 0'a	49.51768489	0	0.470854674	4.52978015	49.51768489	42.1221865	0	3.8585209	0
262	28_Fri0004.8	06/17/1990	en 0'a	54.91452991	0	0.385543719	4.879263998	48.07692308	42.52136752	0	0.641025641	0
263	28_edio013.3	06/23/1990	en 0'a	79.56989247	0	0.516268895	4.401284914	75.80645161	40.886021505	0	2.150537634	0
264	28_edio016.9	06/23/1990	en 0'a	84.43113772	0	0.422199485	3.32161402	81.43712575	26.94610778	0	0	0
265	28_edio017.5	06/23/1990	en 0'a	58.28402367	0	0.359845601	3.091165744	58.28402367	38.75739645	0	3.25443787	0
266	02_ryCim003.2	06/26/1990	en 0'a	34.48275862	6.034482759	0.348994235	2.314040453	25	25	0	6.896551724	0
267	02_ryCim003.2	06/26/1990	en 03	35.655217391	0	0.487258678	3.161267558	29.56521739	29.56521739	0	0.86965217	0.86965217
268	02_ryCim049.8	06/26/1990	en 0'a	64.40677966	0.211864407	0.376849127	2.923511684	34.11016949	34.11016949	0	10.80508475	0.211864407
269	02_ryCim049.8	06/26/1990	en 03	49.47368421	1.052631579	0.530161272	3.074303573	41.05263158	41.05263158	0	6.315789474	2.105263158
270	02_ryCim100.0	06/26/1990	en 0'a	61.73913043	2.608695652	0.479945181	4.229434455	52.60869565	52.7391304	0	16.52173913	0
271	02_ryCim100.0	06/26/1990	en 03	66.41221374	1.908396947	0.411101882	3.771318385	64.50381679	64.50381679	0	6.488549618	0
272	02_ryCim103.6	06/26/1990	en 0'a	0	0	0.314643038	1.122498913	0	0	0	16.27906977	0
273	02_ryCim103.6	06/26/1990	en 03	35.38461538	0	0.476559453	2.156005042	30.76923077	30.76923077	0	0	0
274	28_ue021.7	07/02/1990	en 0'a	44.95967748	0	0.329985358	3.866686414	44.95967742	40.72580645	0	4.032258065	0
275	29_uerc037.5	07/06/1990	en 0'a	79.10447761	0	0.367943188	4.296534623	79.10447761	68.28358209	0	1.305970149	0
276	31_Fk_em010.1	07/07/1990	en 0'a	58.7069844	3.649635036	0.403075128	5.534605718	51.1991658	48.59228363	0	7.090719499	0.104275287
277	31_Fk_em015.0	07/07/1990	en 0'a	49.58968347	2.813599062	0.397287181	4.741612111	42.43845252	41.38335287	0	6.682297773	0.117233294
278	31_acas012.6	07/07/1990	en 0'a	81.3559322	0	0.361397215	2.8979068895	81.3559322	80.2259887	0	0	0
279	801Negril000.1	07/12/1990	en 0'a	65.38461538	3.846153846	0.437726596	3.8896860314	54.54545455	53.14685315	0	3.846153846	0.34965035
280	80Tularo001.3	07/12/1990	en 0'a	52.7777778	2.314814815	0.453290153	4.464885012	39.35185185	39.35185185	0	2.77777778	1.388888889
281	80Tularo050.8	07/12/1990	en 0'a	72.68292683	0	0.43022861	3.381545417	46.34146341	46.34146341	0	0	1.463414634
282	45_imbre127.4	08/22/1990	en 0'a	43.11594203	1.811594203	0.290162841	1.957155773	43.11594203	43.11594203	0	2.898550725	0
283	59_enas110.5	09/12/1990	en 0'a	6.040268456	0	0.178192992	1.199053634	3.355704698	3.355704698	0	0	0
284	59_enas170.4	09/12/1990	en 0'a	94.4444444	0.617283951	0.378835998	2.751790645	72.83950617	69.13580247	0	3.086419753	0
285	28_ue021.7	11/01/1990	en 0'a	52.37341772	0	0.334187148	4.186767418	51.42405063	48.57594937	0	0.31645696	0
286	29_io_so004.5	11/01/1990	en 0'a	33.78378378	0	0.346913781	2.555723429	25.67567568	20.27027027	0	1.351351351	0
287	29_io_so008.8	11/01/1990	en 0'a	15.15151515	0	0.306672188	2.048004436	11.363633636	5.305030303	0	19.6969697	0
288	28_edio013.3	11/11/1990	en 0'a	94.35897436	0	0.383258005	3.413616823	89.23076923	72.82051282	0	0.512820513	0
289	28_edio016.9	11/11/1990	en 0'a	80.99117354	0	0.507494829	3.753291523	80.991173554	52.0661157	0	1.652892562	0
290	28_edio17.5	11/11/1990	en 0'a	63.411217923	0	0.361742059	4.09778438	63.411217923	52.2696011	0	0.550206327	0
291	501Holy_h000.6	11/11/1990	en 0'a	65.2021027	0	0.450808043	5.482879866	60.81081081	56.08108108	0	1.013513514	0
292	501Holy_h002.1	11/11/1990	en 0'a	63.97058824	0	0.459943907	5.5564823	56.98529412	49.63235294	0	8.455882353	0
293	500CowCte064.0	11/13/1990	en 0'a	61.19733925	0	0.325262287	2.945282859	61.19733925	59.86696231	0	0	0
294	29_uerc037.5	11/15/1990	en 0'a	64.76725522	0	0.401883058	4.349232909	63.964687	58.42696629	0	1.123595506	0
295	31_Fk_em010.1	11/15/1990	en 0'a	74.24042272	2.50990753	0.325708515	3.277564466	33.68560106	30.51519155	0	3.698811096	0

Appendix G: Metric Values of New exico Stream Samples

BsnSamplID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	NonPct
296	31 Fk em015_0	11/15/1990	en 0 a	84.15121774	0.6117957107	0.232865102	4.04054701	21.59214831	20.21083242	0	1.781170483	0
297	31 acas012_6	11/15/1990	en 0 a	88.94472362	0	0.314049348	3.59829447	88.94472362	78.72696817	0	0	0
298	28 Fri 0004.8	11/17/1990	en 0 a	83.45864662	0	0.448524176	4.119282745	63.90977444	56.76691729	0	0	0
299	30 antaf057_4	11/20/1990	en 0 a	84.7673314	0	0.44584369	4.629722925	73.31782299	66.56891496	0	0	0
300	28Cabres005_4	04/01/1991	en 0 a	85.83569405	0	0.461674618	4.261507905	79.32011331	67.42209632	0	0	0
301	28Columb000_1	04/01/1991	en 0 a	85.20408163	0	0.489165005	4.168154999	82.65306122	72.44897959	0	1.020408163	0
302	29Cannon002_4	04/22/1991	en 0 a	79.20792079	0	0.36019574	2.600148784	67.32673267	65.34653446	0	0.99009901	0
303	29Coyote005_6	04/22/1991	en 0 a	63.79310345	0	0.526944713	2.95534255	55.17241379	55.17241379	0	0	0
304	29 ncind009_7	04/22/1991	en 0 a	45.91439689	0	0.386102328	4.14483414	41.63424125	40.885603113	0	0.389105058	0
305	29 alii045_1	04/22/1991	en 0 a	93.33333333	0	0.467701954	4.429075893	86.66666667	69.44444444	0	0	0
306	29 oleo009_5	04/22/1991	en 0 a	88.23529412	0	0.626291181	3.815021672	86.2745098	56.8627451	0	0	0
307	29 uerc037_5	04/24/1991	en 0 a	57.0902025941	0	0.393498894	4.446484661	56.53715322	54.88029466	0	16.7587477	0
308	80 anFra028_6	06/16/1991	en 03	28.27868852	0.204918033	0.296760691	2.746225174	14.95901639	14.95901639	0	6.967213115	0.204918033
309	50CaveCr001_9	06/29/1991	en 01a	82.87671233	0	0.500478765	3.812499951	80.82191781	70.54794521	0	6.164383562	0
310	31 Cebol005_6	07/11/1991	en 01a	52.26824458	0	0.337069899	3.211040325	43.19526627	42.80078895	0	1.775147929	3.550295858
311	50 ior000_3	07/14/1991	en 03	79.71014493	0	0.582375858	3.778837396	71.01449275	53.62318841	0	4.347826087	0
312	29 Chama089_5	07/28/1991	en 01a	94.617838686	0	0.185874093	2.391309687	91.01184069	90.04305705	0	0.538213132	0
313	29 Chama089_5	07/28/1991	en 03	95.88744589	0	0.235099472	2.281778491	92.42424242	91.77489177	0	1.298701299	0.216450216
314	29 Chama18_1	07/28/1991	en 0 a	49.68992248	0	0.248488888	2.652743025	41.9379845	41.9379845	0	2.868217054	0
315	29 Chama18_1	07/28/1991	en 03	73.42281879	0	0.236304913	2.326685451	49.93288591	49.79865772	0	0.805369128	0
316	50 ecos 51_2	07/31/1991	en 03	90.32800673	0.588730025	0.21828446	3.389415019	30.6980656	30.61396131	0	1.26156434	1.26156434
317	29 Chama090_1	08/01/1991	en 01a	74.39613527	0	0.450136653	3.7504321748	55.07246377	47.8260696	0	5.797101449	0
318	29 Chama090_1	08/01/1991	en 03	71.55963303	0	0.511354344	2.984216978	55.96330275	48.62385321	0	8.256880734	0
319	29 Chama122_6	08/01/1991	en 01a	35.94948128	0	0.199135394	1.947063192	29.45421741	29.45421741	0	2.751465945	0
320	29 Chama122_6	08/01/1991	en 03	20.534294	0	0.243740237	2.085519342	17.98298906	17.98298906	0	17.49696233	0
321	60 ecos 011_3	08/05/1991	en 01a	0	0	0.273411542	0.656917478	0	0	0	0	38.0952381
322	60 ecos 011_3	08/05/1991	en 01a	0	0	0.293138656	0.571999335	0	0	0	0	27.27272727
323	60 ecos 050_2	08/07/1991	en 03	57.77777778	4.444444444	0.460380155	2.364275799	11.11111111	11.11111111	0	4.444444444	4.444444444
324	60 ecos 050_2	08/07/1991	en 01a	33.88429752	5.785123967	0.43913644	2.710710544	13.2231405	9.97355372	0	7.438016529	3.305785124
325	60 ecos 093_2	08/07/1991	en 03	66.12903226	12.90322581	0.380801628	2.180689835	11.29032258	8.064516129	0	14.51612903	8.064516129
326	60 ecos 093_2	08/07/1991	en 01a	72.03065134	7.662835249	0.224808435	1.797100668	4.980842912	1.149425287	0	11.11111111	1.149425287
327	78 illa i074_8	08/16/1991	en 03	79.28994083	0	0.4012115	3.6063360035	64.79289941	64.79289941	0	8.284023669	0.887573964
328	09Canadio062_4	08/23/1991	en 03	0.917431193	0	0.127586742	0.98722494	0.917431193	0.917431193	0	1.834862385	0.917431193
329	29 Chama143_8	08/28/1991	en 01a	93.507194	9.69 -02	0.176213248	1.873400239	14.8255814	14.8255814	0	0.290697674	0
330	29 Chama050_4	08/29/1991	en 01a	98.42190764	4.64 -02	0.169908971	2.270429376	88.88337172	71.89603156	0	0.324901369	0
331	29 Chama147_1	08/29/1991	en 01a	70.16949153	0	0.34518008	3.918420039	41.52542373	37.62711864	0	0.3338983051	0
332	29 Chama166_4	08/29/1991	en 01a	50.4056199	0	0.390479362	4.437597599	23.98609502	9.269988413	0	4.05561993	0
333	28 rand541_2	09/09/1991	en 01a	72.76264591	0	0.3023337622	2.7031527	25.68093385	20.23346304	0	1.945525292	0
334	29 Cham008_4	09/13/1991	en 01a	93.52941176	0.130718954	0.25038851	3.545604582	12.2875817	11.69934641	0	0.326797386	0
335	29 olvad009_8	10/10/1991	en 01a	32.99492386	0	0.305870205	2.342566595	19.0353299	18.27411168	0	5.076142132	0
336	29 Chama089_5	11/09/1991	en 01a	14.28571429	0.7142857174	0.258238262	1.8212568827	14.28571429	14.28571429	0	1.428571429	0
337	29 Chama122_6	11/10/1991	en 03	65.34090909	0	0.307720149	1.934054918	58.52272727	55.11363636	0	0	0
338	29 Chama122_6	11/10/1991	en 01a	53.68620038	9.45 -02	0.185190289	2.153892577	51.1342155	51.1342155	0	0.945179584	0
339	29 Chama122_6	11/10/1991	en 03	60.36036036	0	0.280409782	2.461050162	51.05105105	50.9009009	0	5.255252525	0
340	29 Chama118_1	11/22/1991	en 01a	12.20472441	0.524934383	0.259601332	2.41110437	11.28608924	10.23622047	0	16.79790026	0

Appendix G: Values of New Mexico Stream Samples

BnsSampleID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	NonPct
341	29 Chama18.1	11/22/1991	en 03	18.99441341	0	0.292564403	1.870578743	16.75977654	15.64245581	0	18.7150838	0
342	29 Chama090.1	11/24/1991	en 0/a	12.25382932	0	0.1935333517	1.959284951	11.37765558	10.94091904	0	1.094091904	0
343	29 Chama090.1	11/24/1991	en 03	56.39097744	0	0.297135474	2.337634028	48.62155388	47.36842105	0	1.253132832	0
344	50 ecos	512.6	en 03	67.49379653	0	0.236499967	2.540314894	55.58312655	55.58312655	0	0.248138958	0.124069479
345	28NEFK H00005.5	04/02/1992	en 01/a	80.37383178	0	0.419055633	5.024741547	80.37383178	68.84735202	0	0.31152648	0
346	28 Hondo000.1	04/02/1992	en 01/a	66.07275427	0	0.342155357	3.747067308	47.21603563	46.25092799	0	0.816629547	0
347	28 Hondo003.9	04/02/1992	en 01/a	80.36809816	0	0.39492058	4.683188371	71.983364008	65.23517382	0	1.431492843	0
348	28 Hondo012.1	04/02/1992	en 01/a	74.26210153	0	0.401500647	4.746576784	66.23376623	59.85832349	0	0.472255018	0
349	28 Hondo014.8	04/02/1992	en 01/a	89.46138831	0	0.457422718	5.283331869	89.22716628	77.98594848	0	0.93676815	0
350	28 Hondo022.4	04/02/1992	en 0/a	65.05295008	0	0.373307337	4.157841622	64.44780635	44.62934947	0	0.15128593	0
351	28 Hondo026.7	04/02/1992	en 01/a	31.69291339	0	0.222452904	2.407518604	31.69291339	11.81102362	0	0	0
352	28 Hondo026.9	04/02/1992	en 01/a	89.33333333	0	0.409106628	3.543152033	89.33333333	48	0	0	0
353	28 ed iv005.3	04/10/1992	en 01/a	63.34661355	0	0.378349987	2.895690213	60.55776892	51.79282869	0	0.398406375	0
354	28 ed iv009.8	04/10/1992	en 01/a	90.42553191	0	0.362938667	2.421150405	84.04255319	81.91489362	0	0	0
355	28 ed iv014.5	04/10/1992	en 01/a	95.34883721	0	0.180332243	2.020498044	95.34883721	94.18604651	0	0	0
356	28 ed iv024.1	04/10/1992	en 01/a	92.88256228	0	0.28930605	1.77356704	92.52669039	85.76512456	0	0	0
357	28 ed iv024.9	04/10/1992	en 01/a	89.375	0	0.383691361	3.887403871	88.75	69.58333333	0	0.208333333	0
358	28 ed iv027.8	04/10/1992	en 01/a	93.9516129	0	0.33575757913	2.720630064	91.93548387	89.11290323	0	0.403225806	0
359	28 ed iv028.5	04/10/1992	en 0/a	91.21495327	0	0.360027096	3.342742492	84.29906542	73.8317757	0	0	0
360	28 ed iv028.5	04/10/1992	en 01/a	91.97530864	0	0.372820304	2.940798178	89.19753086	83.33333333	0	0	0
361	28 ed iv031.1	04/10/1992	en 01/a	92.22222222	0	0.3723778289	3.273725566	87.77777778	73.1111111	0	0	0
362	28 igTes013.2	05/13/1992	en 01/a	59.6735751	0	0.368623447	3.759977641	59.06735751	49.48186528	0	0.259067358	0
363	28 edio013.3	05/13/1992	en 01/a	75.10729614	0	0.343718851	4.231642979	74.67811159	72.31759657	0	0.643776824	0
364	28 edio016.9	05/13/1992	en 01/a	72.45179063	0	0.350773522	3.3930494	72.45179063	36.36363636	0	0.550964187	0
365	28 edio017.5	05/13/1992	en 01/a	42.28310502	0	0.243027368	3.143526426	42.28310502	37.07762557	0	0.913242009	0
366	77 lackC000.1	05/21/1992	en 02	93.07359307	0	0.381334713	4.04232111	90.90909091	67.53246753	0	0	0
367	77 Fk ii000.1	05/21/1992	en 02	64.18604651	0	0.382191987	3.351557097	60	60	0	0	0
368	77 Fk ii035.4	05/21/1992	en 02	84.90566038	0	0.440270044	3.002076304	82.0754717	65.09433962	0	0	0.943396226
369	06Canada232.6	06/17/1992	en 03	63.93348624	0	0.222597798	2.277618488	58.42889908	58.42889908	0	0.229357798	5.73 -02
370	80 anFra105.7	07/14/1992	en 01/a	80.78817734	0	0.387373447	2.634943959	66.00985222	49.75369458	0	8.374384236	0
371	80 anFra115.7	07/14/1992	en 01/a	86.90909091	0	0.336613519	2.218729211	81.633636364	72.54545455	0	0	0
372	800Center000.1	07/15/1992	en 01/a	45.06472492	0	0.242922185	2.9495889146	43.60841424	16.66666667	0	3.0744333657	8.09 -02
373	80 anFra154.1	07/15/1992	en 01/a	81.59509202	0	0.385748065	3.283279234	66.564417178	66.564417178	0	1.226993865	0
374	77 Fk ii055.0	07/30/1992	en 03	34.68446602	2.621359223	0.190448283	2.643084445	1.796116505	1.796116505	0	14.15048544	4.85 -02
375	77 ilow000.6	07/30/1992	en 03	41.64133379	0	0.268666346	3.045831038	39.0070922	36.877943262	0	0.40526849	0.303951368
376	77 illia000.1	08/03/1992	en 01/a	46.22641509	0	0.310898561	2.24023275	45.75471698	45.28301887	0	0	0
377	77 ironCr000.1	08/03/1992	en 0/a	51.86915888	0	0.40510079	2.98175019	49.06542056	49.06542056	0	0.934579439	0.46728972
378	77 Fk ii054.8	08/03/1992	en 01/a	37.54789272	0	0.392116229	2.355828128	34.86590038	33.33333333	0	0	0
380	77 Fk ii000.1	08/04/1992	en 02	75.4601227	0	0.316497404	2.355828128	73.00613497	25.76687117	0	1.226993865	0
381	77 Taylor004.2	08/04/1992	en 01/a	39.6039604	4.290429043	0.284843953	3.433808663	14.35643564	13.53135314	0	5.610561056	0
383	77 Turkey001.8	08/05/1992	en 03	54.26829268	0.609756098	0.423170728	3.529504205	49.3902439	39.02439024	0	0.609756098	1.219512195
384	77 Fk ii000.1	10/07/1992	en 02	60.58558559	0.675675676	0.358297579	2.952840886	26.12612613	16.44144144	0	5.18018018	0.45045045
385	77 Fk ii035.4	10/07/1992	en 02	77.77777778	0.35842239	0.293171996	2.486143399	73.83512545	68.4878136	0	3.225806452	5.017921147
386	77 lackC000.1	03/26/1993	en 02	34.92063492	0	0.3553633799	2.172268245	33.33333333	33.33333333	0	0	0
387	77 Fk ii000.1	03/26/1993	en 02	78.31325301	0	0.421663614	2.036733342	43.373349398	43.373349398	0	0	0

Appendix G: Metric Values of New exico Stream Samples

BsnSamplD	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
388	77_fk_il035_4	04/07/1993	en 02	87.96992481	0	0.132743338	0.613453134	85.71428571	4.517278195	0	0	0
389	79Clario000.1	05/04/1993	en 0 a	4.545454545	0	0.3029646465	1.063721069	4.545454545	4.545454545	0	0	30.90909091
390	36_luewa012_9	06/01/1993	en 03	51.875	4.375	0.369592059	3.120492083	34.375	34.375	0	0	17.5
391	36_luewa013_5	06/01/1993	en 03	52.43902439	0	0.3240243786	2.179705241	47.15447154	47.15447154	0	1.219512195	2.032520325
392	Carly012_4	06/21/1993	en 01 a	6.25	0	0.274081773	2.190893328	6.25	6.25	0	0	0
393	28_os_la010_5	06/21/1993	en 01 a	27.51233585	0	0.204969073	1.872504656	27.51233585	27.182866556	0	0.164744646	0
394	28 os la021_0	06/21/1993	en 01 a	92.75	0	0.229141823	2.991946401	92.75	92.75	0	0.25	0
396	28_andia011_2	06/21/1993	en 01 a	89.57219251	0	8.00 -02	1.208933478	89.57219251	89.57219251	0	5.614973262	0
397	28Comanc000.1	06/24/1993	en 03	37.72151899	0	0.250183483	2.119393024	32.233628692	31.64556962	0	0.421940928	0
398	28Comanc007_7	06/24/1993	en 03	62.5433526	0	0.341041532	3.105255057	47.28323699	41.73410405	0	0.231213873	0
399	64_an ua111_0	07/14/1993	en 03	94.98861048	0	0.177021377	1.327894554	65.9453303	65.9453303	0	0	0
400	57_uidd001_3	07/26/1993	en 01 a	64.88294314	0	0.328287746	2.346099489	45.48494983	45.37772575	0	0	0
401	57_uidd019_8	07/26/1993	en 01 a	85.46712803	0	0.342243877	2.647170929	80.27681661	79.93079585	0	1.038062284	0
402	57_uidd030_1	07/26/1993	en 01 a	70.53872054	0	0.305973341	3.131419743	46.63299663	23.23232323	0	0.336700337	0
403	57_uidd031_4	07/26/1993	en 01 a	73.2832618	0	0.282604317	2.340093781	46.99570815	34.54935622	0	1.931330472	0
404	57_uidd042_2	07/26/1993	en 01 a	78.20512821	0	0.294922754	2.175213318	57.8525641	30.44871795	0	0.801282051	0
405	57_uidd048_1	07/26/1993	en 01 a	69.40509915	0	0.28532799	2.727365059	62.03966006	53.255779037	0	0.566572238	0
406	57_uidd052_5	07/26/1993	en 01 a	79.48717949	0	0.369822379	3.565398086	76.55677656	72.16117216	0	0.366330366	0
407	50_lorv000.1	08/02/1993	en 0 a	43.89022431	0	0.376307652	3.670360623	42.89276808	42.1446384	0	0	0
408	50_allin14_6	08/02/1993	en 01 a	89.45386664	0.188323917	0.318127513	4.621689221	66.85499058	66.66666667	0	0.564971751	2.071563089
409	50_allin19_7	08/02/1993	en 01 a	57.51445987	0	0.3750494697	4.276107381	56.64739884	56.0936416	0	0.289017341	0.289017341
410	50_allin13_8	08/02/1993	en 01 a	80.7916667	0	0.317502379	4.945329568	67.1875	48.4375	0	0.520833333	0
411	50_allin141_9	08/03/1993	en 01 a	82.87671233	0	0.417048257	3.699297298	82.19178082	76.36983031	0	0.342465753	0
412	05Cleneg018_5	09/07/1993	en 01 a	22.54428341	1.771336554	0.182295881	1.710376882	22.54428341	22.54428341	0	0.1272141707	0.3222061192
413	05Cleneg019_3	09/07/1993	en 01 a	25.95419847	0.381679389	0.312528618	3.034420703	19.84732824	19.08396947	0	0.177489016	0
414	05Cleneg021_9	09/07/1993	en 01 a	47.73869247	0	0.379174816	4.009052437	43.71859296	33.91959799	0	0.1507537688	0
415	05Cleneg006_3	09/08/1993	en 01 a	68.70109546	0	0.279702152	2.476816819	22.0657277	5.007824726	0	0	0.938967136
416	05Cleneg016_5	09/08/1993	en 01 a	51.08481262	0.986193294	0.339416738	3.211040325	19.72386588	15.7790927	0	0.315581854	0.788954635
417	05_ontle_000_5	09/08/1993	en 01 a	7.177033493	0.28708134	0.23991057	2.301571401	6.315789474	6.315789474	0	0.356937799	0
418	05_oren003_7	09/08/1993	en 01 a	42.30055559	0	0.304596253	2.702824922	27.27272727	26.90166976	0	0.147124304	0.371057514
419	05_mill001_4	09/08/1993	en 01 a	17.21713913	0.347826087	0.236292648	3.776928294	16.69565217	15.30434783	0	0.217391304	0
420	28_ed_iv000_9	09/20/1993	en 03	55.42168675	0	0.300991329	2.093195479	33.53413655	26.10441767	0	0	0
421	28_rand663_4	09/20/1993	en 03	68.37524178	0	0.233125527	2.161012727	29.98065764	29.98065764	0.580270793	0.87040619	0
422	29_Chama004_5	10/01/1993	en 01 a	73.15175097	0	0.3297975305	2.16252216	40.85603113	39.68871595	0	0.778210117	0
423	30_nchoC000_1	10/13/1993	en 03	33.94625177	3.5336067893	0.262276999	2.591056324	33.38048091	33.38048091	0	0.3536067893	2.97029703
424	30_Fri_0000_1	10/14/1993	en 01 a	6.765676568	0	9.28 -02	3.0985796963	6.188118812	5.198019802	0	0.330033003	8.25 -02
425	30_arif015_8	07/22/1994	en 0 a	26.55709343	0	0.249322132	2.552206428	25.51903114	23.26989619	0	0.3200692042	0
426	77_lamon038_2	08/02/1994	en 01 a	82.805492986	0	0.415040662	4.268375851	79.86425339	77.8280543	0	0.678733032	0
427	30_ullido000_1	08/09/1994	en 01 a	29.3975936	0	0.36199809	2.985927067	16.1457831	12.04819277	0	0.48192711	0
428	31_uada008_2	08/10/1994	en 01 a	60.14669927	0	0.445079202	3.990877416	49.38875306	39.1198044	0	0.97799511	0
429	31_an_n005_3	08/10/1994	en 01 a	53.64963504	0.182481752	0.420369972	3.805733005	33.02919708	29.74452555	0	0.2554744526	0
431	31_emez_049_2	08/16/1994	en 03	72.79411765	0	0.379293368	2.6462227	47.79411765	47.79411765	0	2.205882353	1.470588235
433	31_uada001_1	08/16/1994	en 01 a	55.75221239	0	0.452102988	4.243123604	26.10619469	25.663371681	0	0.150424779	2.654867257
434	31_emez_064_6	08/17/1994	en 01 a	52.5625	0	0.263287991	3.388562884	9.8125	8.875	0	1.75	0.125
435	64Nava0009_7	09/20/1994	en 01 a	87.662333766	1.298701299	0.43536365086	3.375056575	36.36363636	35.064935056	0	1.298701299	0

Appendix G: **etrie** values of New exico Stream Samples

BnsSampleID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	NonPct
436	641Nava 0015.5	09/20/1994	en 0 a	88.333333333	0.6666666667	0.350745204	2.629833381	38	35	0	0.6666666667	0.3333333333
437	641Nava 0015.5	09/20/1994	en 0 a	89.47368421	0	0.426829675	1.97633801	40	33.68421053	0	2.105263158	0
438	641Nava 0023.3	09/20/1994	en 0 a	73.45132743	0	0.388379857	4.291108743	54.86725664	48.96755162	0	0.294985251	0
439	641Nava 0023.3	09/20/1994	en 0 a	78.43137255	0	0.494295711	3.891914769	42.15686275	39.21568627	0	0	0
440	641Nava 0029.4	09/20/1994	en 0 a	85.40540541	2.432432432	0.259625535	2.705672084	62.43243243	61.35135125	0	2.432432432	0
441	641Nava 0029.4	09/20/1994	en 0 a	92.23300971	0	0.379699973	2.589148133	43.68932039	33.00970874	0	0	0
442	30 antaF003.7	10/06/1994	en 0 a	65.796334465	0	0.249533996	1.355180414	34.33420366	9.921671018	0	1.436031332	0.130548303
443	30 antaF021.2	10/06/1994	en 0 a	28.38709677	0	0.255981016	1.399750025	26.4516129	23.70967742	0	5.806451613	0
444	30 antaF028.3	10/07/1994	en 0 a	5.660377358	0	0.127756357	1.548034208	5.578342904	5.578342904	0	0	0
445	30 antaF032.8	10/07/1994	en 0 a	0	0	0.048199516	1.235751873	0	0	0	0.305903946	3.06 -02
446	77 Fk il035.4	06/02/1995	en 02	69.8630137	0.342465753	0.255685165	2.446619878	68.83561644	11.64383562	0	3.424657534	0
447	77 Fk il000.1	06/05/1995	en 02	75.2173913	0	0.334498005	2.39054991	72.60869565	70	0	8.260869565	0
448	80 anFra028.6	09/11/1995	en 01a	78.85117493	0	0.357980385	3.362455002	45.69190601	44.38642298	0	1.305483029	0
450	80 anFra105.7	09/11/1995	en 01a	82.09666987	0.436681223	0.4676229096	5.153005616	56.76855895	48.47161572	0	1.310043668	0.873362445
451	80 anFra115.7	09/11/1995	en 01a	80.35363458	0	0.389486546	4.171715501	60.5108055	60.31434185	0	1.571709234	0.589390963
452	80 anFra154.1	09/11/1995	en 01a	60.53921569	0.367647059	0.331535092	4.176335285	31.8627451	31.25	0	1.102941176	0.12254902
453	45 imbre085.7	09/12/1995	en 01a	81.9706499	0	0.316323881	3.080656538	45.49266247	17.40041929	0	1.257861635	0
454	45 imbre094.6	09/12/1995	en 01a	83.034597701	0.86206896	0.324233747	3.246640913	55.74712644	21.55172414	0	2.873563218	0
455	45 imbre104.8	09/12/1995	en 0 a	90.83769334	0	0.240589575	2.69114686	44.5026178	7.591623037	0	0.261780105	0
456	45 imbre127.4	09/12/1995	en 0 a	56.61375661	0	0.260654121	1.907760899	55.02645503	55.02645503	0	0.529100529	0
457	641Nava 0009.7	09/20/1995	en 01a	85.0074747126	0	0.454077431	3.134860733	65.51724138	56.32183908	0	1.149425287	0
458	30 antaF000.1	10/01/1995	en 01a	48.50065203	0.461446023	0.380374521	33.76729699	19.81747066	0	30.638985267	1.434159061	
459	30 antaF003.7	10/01/1995	en 01a	15.92309801	16.66666667	0.116082343	0.270901895	15.92039801	0	84.0796199	0	
460	30 antaF012.7	10/01/1995	en 01a	38.32599119	3.083700441	0.318959269	1.474667995	18.06167401	6.167400881	0	17.62114537	0
461	30 antaF015.3	10/01/1995	en 01a	56.02838679	1.418439716	0.374267129	1.61656661	29.78723404	11.347157173	0	12.05673759	0
462	77 Fk il000.1	10/03/1995	en 02	62.633736264	0	0.436410308	2.660246896	48.35164835	40.65934066	0	1.098901099	1.098901099
463	77 Fk il035.4	10/03/1995	en 02	76.47058824	0	0.363197495	2.162174872	26.47058824	16.666666667	0	1.960784314	0
464	77 Fk il000.1	05/07/1996	en 02	79.7979798	0.336700337	0.384563126	3.863897961	73.73737374	73.73737374	0	1.01010101	1.01010101
465	77 Fk il035.4	05/07/1996	en 02	77.2260274	0	0.307119	2.04084805	47.94520548	38.356164438	0	0	0
466	50 ecos 739.5	10/17/1996	en 01a	49.23928077	0.691562932	0.344679227	5.084822813	33.05670816	26.14107884	0	13.48547718	6.92 -02
467	28 os la021.5	02/25/1997	en 01a	32.99256506	0	0.233808851	3.294654217	28.81040892	23.51301115	0	0	0
468	50 alton000.1	03/06/1997	en 01a	91.96141479	0	0.387993735	3.136001642	88.10289389	85.885209003	0	3.215434084	0
469	28 Namb001.1	05/09/1997	en 03	94.73684211	0	0.257944008	2.111398014	50	49.12280702	0	0.877192982	0
470	28 Namb004.0	05/09/1997	en 03	92.22222222	0	0.314426437	2.000084595	85.5555556	82.222222222	0	0	0
471	28 Namb005.1	05/09/1997	en 03	84	0	0.44023802	3.257208614	79	73	0	5	0
472	50 lorie001.3	05/20/1997	en 01a	62.17008798	2.4926668622	0.305872987	3.678144201	61.58357771	61.58357771	0	7.91788563	1.026392962
473	50 lorie001.4	05/20/1997	en 0 a	25.90673575	1.036226943	0.237892734	2.910306634	24.455958555	24.455958555	0	4.559585492	0.72588601
474	50 lorie001.6	05/20/1997	en 01a	51.99115044	0.110619469	0.32111174	3.085136837	38.60619469	38.60619469	0	2.32300885	1.438053097
475	77 lackC000.1	05/20/1997	en 02	70.76923077	0	0.25910312	2.630957556	30.23504274	17.62820513	0	6.837606838	0
476	77 Fk il000.1	05/20/1997	en 02	40.97995546	0.445434298	0.328852287	3.60240947	38.9150111	36.98017817	0	7.126948775	1.336302895
477	77 Fk il035.4	05/20/1997	en 02	40.75907591	0.165016502	0.285508198	2.809479815	33.66336634	26.40264026	0	8.250825083	0
478	80Tularo029.6	08/13/1997	en 03	80.55555556	0.378793532	2.232442506	19.44444444	2.777777778	0	11.1111111	0	
479	57 oniti025.7	09/02/1997	en 01a	63.31877729	0	0.352083571	2.392466893	55.45851528	49.78165939	0	0	0
480	57 oniti053.1	09/02/1997	en 01a	50.38167939	17.17557252	0.36116161	1.795865898	38.54961832	0	23.66412214	1.908326947	
481	57 oniti061.1	09/02/1997	en 01a	84.49197861	0	0.328156632	2.676296943	68.44919786	68.44919786	0	0.534759358	0

Appendix G: Values of New exico Stream Samples

BsnSamplID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
482	57 onil000.8	09/03/1997	en 0/a	53.68421053	0	0.371466631	2.858763328	50	35.78947368	0	0.526315789	1.052631579
483	57 Hondo0117.1	09/03/1997	en 0/a	82.47011952	0	0.374802113	2.533728937	54.18326693	43.8247012	0	0.398406375	0
484	57 Hondo130.7	09/03/1997	en 0/a	79.92831541	0	0.343670279	2.308561728	49.22930681	34.40860215	0	0.358422939	0
485	57 uido001.3	09/03/1997	en 0/a	82.58706468	0	0.364780205	2.639863301	37.81094527	35.82089552	0	0	0
486	77 iamton038.1	09/13/1997	en 0/a	74.9146517	0	0.269599351	3.765698319	73.89078498	72.8668942	0	0	0.170648464
487	77 iamton039.3	09/13/1997	en 0/a	83.6451432	0	0.196046008	3.290526108	82.02247191	77.52808989	0	0	0
488	77 iamton040.1	09/13/1997	en 0/a	80.363633636	0	0.347751898	3.026649957	69.81818182	69.81818182	0	0	0
489	50 allton000.1	09/15/1997	en 0/a	68.05111821	0	0.426902808	4.002643004	51.11821086	44.08945687	0	0.319488818	0
490	77 lackC000.1	10/07/1997	en 02	62.5	0	0.519454883	1.803368801	50	0	0	6.25	0
491	77 Fk il000.1	10/07/1997	en 02	66.66666667	0	0.666971227	3.337543831	29.62962963	25.92592593	0	14.81481481	0
492	77 Fk il035.4	10/07/1997	en 02	74.41860465	0	0.485759425	2.658725857	44.18604651	9.302325581	0	6.976744186	2.325581395
493	80 hite 008.8	09/01/1998	en 0/a	66.76470588	0	0.342056642	2.916479431	52.64705882	38.52941176	0	0	0.294117647
494	80 anFra028.6	09/24/1998	en 0/a	42.9794269	0	0.347683559	3.07425771	32.9512894	30.08595989	0	0	0
495	80 Negrit000.1	09/29/1998	en 0/a	81.69014085	0	0.401611243	3.540465783	40.49295775	39.08450704	0	2.464788732	0
496	05Cleneg006.3	10/05/1998	en 03	84.49367089	0.949367089	0.341698713	3.127311706	39.24050633	36.70886076	0	1.265822785	1.898734177
497	05Cleneg021.9	10/05/1998	en 0/a	29.34782609	0	0.283582918	4.739269962	16.30434783	10.32608696	0.815217391	2.71717391304	0
498	05 onil027.2	10/06/1998	en 03	59.55414013	0.318471338	0.403230463	3.652559505	56.68789809	54.14012739	0	0.636942675	0
499	05IN onil027.5	10/06/1998	en 03	72.50859107	0	0.443051626	3.877797715	52.9209622	45.01718213	0	1.374570447	4.810996564
500	05IN onil000.1	10/07/1998	en 03	79.32330827	0	0.381710242	2.865587996	22.93233083	20.30075188	0	0.37593985	6.015037594
501	05 ayado033.8	10/07/1998	en 03	61.53846154	0	0.43513978	3.508498399	37.12374582	36.78929766	0	1.337792642	0
502	05 onil000.1	10/08/1998	en 03	85.71428571	0	0.384944194	3.952415939	20.68965517	15.7635468	0	0	1.477832512
503	05 onilC023.8	10/08/1998	en 03	93.59516129	0	0.2997735401	2.9022053226	15.72580645	15.72580645	0	0	1.209677419
504	29 Chama157.0	10/19/1998	en 0/a	68.301886779	3.018867925	0.447650397	4.122063383	37.73584906	37.3584905	0	3.018867925	0
505	29 Chama161.1	10/19/1998	en 0/a	73.50993377	0	0.365142551	3.327246796	37.08609272	35.43046358	0	0	0
506	29 Chami002.6	10/19/1998	en 0/a	84.95573221	0.294985251	0.288636075	3.089598295	37.46312684	37.46312684	0	0.589970501	0
507	29 Chami002.8	10/19/1998	en 0/a	70.74074074	2.59259293	0.396707097	3.03656997	18.51851852	18.51851852	0	2.592592593	0
508	29 Tierr026.1	10/19/1998	en 03	94.25675676	0	0.417529051	4.744867712	42.22972973	32.09459459	0	0.337337838	0
509	29 Chama165.4	10/20/1998	en 0/a	87.83783784	0	0.446275567	5.096333857	51.688918919	37.5	0	0	0
510	29NaborC000.1	10/21/1998	en 03	83.46252323	0	0.3365148523	3.356559189	28.68217054	17.05426357	0	0.2558397933	0
511	29 raz001.6	10/21/1998	en 03	79.13043478	5.507246377	0.377304534	3.593709314	23.76811594	23.47826087	0	5.797101449	0
512	29 raz0015.4	10/21/1998	en 03	90.84507042	0	0.389103749	3.363442494	63.02816901	47.18309859	0	0	0
513	29 Chami016.1	10/21/1998	en 0/a	91.57509158	0	0.300763919	3.030588373	17.94817195	5.491505495	0	0	0
514	28 edio013.3	11/01/1998	en 0/a	91.0543131	0	0.426228218	4.002643004	88.17891374	78.227476038	0	0.638977636	0
515	28 edio016.9	11/01/1998	en 0/a	68.93203883	0	0.443398347	2.804910499	68.93203883	61.16504854	0	0.970873786	0
516	28 edio017.5	11/01/1998	en 0/a	55.665149137	0	0.31045681	3.216820633	55.65149137	51.09890011	0	2.197802198	0
517	31 Fk em000.1	11/02/1998	en 03	65.59139785	0	0.483806146	4.794705127	53.40501792	33.69175627	0	8.960573477	0.358422939
518	31 an n008.4	11/02/1998	en 03	63.15789474	0.263157895	0.464999907	5.050359446	44.73684211	20.52631579	0	25.78947368	0
519	31 emez 049.2	11/03/1998	en 03	68.68327402	0.3558717886	0.410825031	3.54713408	30.96085409	28.82562278	0	13.52313167	0.355871886
520	31 Cebolo15.9	11/03/1998	en 03	37.16216216	0	0.276279894	2.63603734	36.14864865	35.81081081	0	2.364864865	0
521	31 uada000.1	11/03/1998	en 0/a	68.62745098	0	0.3936551048	4.193176055	37.58169935	27.7777778	0	9.803921569	0.653594771
522	31 acas012.2	11/03/1998	en 03	74.69512195	10	0	4.142921392	62.5	50	0	1.219512195	0
523	31 ulphu000.2	11/03/1998	en 03	68.93203883	0	0.232673939	1.947116913	10	10	0	1.176470588	0
524	31 enras000.3	11/04/1998	en 03	88.16326531	0	0.311566988	2.744411921	55.10204082	42.85714286	0	1.428571429	0.408163265
525	31 acas000.5	11/04/1998	en 03	77.70491803	3.278688525	0.516247085	5.244469388	67.86885246	30.16393443	0	9.836065574	0.327868852
526	31 acas011.1	11/04/1998	en 03	64.11609499	1.055408971	0.451108423	3.87366059	41.42480211	34.30079156	0	6.860158311	0.527704485

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
527	31 Cebol000.1	11/05/1998	en 03	72.84768212	0	0.480885735	4.202838059	49.66887417	35.43046358	0	0.993377483	0.333125828
528	31 an n000.1	11/05/1998	en 03	74.13249211	0	0.482758119	4.167461253	63.72239748	34.38485804	0	8.517350158	0
529	08Concha039.1	07/15/1999	en 03	44.78527607	0	0.262413883	1.900845872	15.95092025	15.95092025	0	0	1.840490798
530	29 io so004.7	08/17/1999	en 01a	91.11111111	0	0.103076955	0.788091933	91.11111111	91.11111111	0	0	2.222222222
531	29Coyote017.5	08/17/1999	en 03	64.39169139	0	0.3859886468	3.264558294	64.39169139	61.12759644	0	0	0
532	29Coyote017.5	08/20/1999	en 03	56.31768953	0	0.39544018	3.556176697	56.31768953	53.42960289	0	1.083032491	0
533	29 alio48.3	08/24/1999	en 03	69.23076923	0	0.297966248	3.683923844	69.23076923	64.54849498	0	0	0
534	29 alio48.3	08/24/1999	en 01a	47.25738397	0	0.291689676	2.194562549	44.7257384	30.80168776	0	0	0
535	29 alio48.3	08/24/1999	en 03	68.54460094	0	0.445121423	3.730443964	68.54460094	59.62441315	0	0	0
536	29 alle037.8	08/31/1999	en 03	50	0	0.450037046	3.310098753	47.058823535	45.88235294	0	8.823529412	0
537	29 alle037.8	08/31/1999	en 03	72.59036145	0	0.278382087	2.928441818	65.96385542	64.75903614	0	0.602409639	0
538	29 itTus003.4	09/01/1999	en 03	18.9516129	0.403225806	0.300761907	2.176504051	18.9516129	18.9516129	0	5.64516129	0
539	29 itTus003.4	09/01/1999	en 03	8.906882591	2.024291498	0.220677132	2.541116934	8.906882591	8.906882591	0	2.834008097	0
540	29 CanI039.4	09/02/1999	en 03	84.888372093	1.162779098	0.430004816	2.918497175	75.58139535	72.09302326	0	2.325581395	0
541	29 CanI039.4	09/02/1999	en 03	58.88157895	0	0.352840312	3.498321338	21.05263158	16.44736842	0	0.657894737	0
542	29Chihu001.3	09/07/1999	en 03	52.69230769	0	0.484677334	4.495851706	52.69230769	47.69230769	0	1.153846154	0
543	29Chihu001.3	09/07/1999	en 03	75.63739377	0	0.401839299	4.4319688221	75.63739377	66.57223796	0	0.566572238	0
544	29 olvad009.0	09/08/1999	en 03	73.1629393	2.236421725	0.283860235	1.740279567	73.1629393	73.1629393	0	6.389776358	0.638977636
545	29 olvad009.0	09/08/1999	en 03	59.25925926	2.880658336	0.408552049	3.276861216	56.37860082	56.37860082	0	7.818930041	0.823045267
546	29 I lto050.2	09/09/1999	en 03	84.31372549	0	0.343350374	3.843744177	82.67973856	77.45098039	0	1.307189542	0
547	29 I lto050.2	09/09/1999	en 03	63.31168831	0	0.403662693	4.537442799	30.51948052	20.45454545	0	0.324675325	0
548	29 Chama118.1	09/10/1999	en 03	84.13173653	0	0.209743104	1.892911696	70.959868263	70.959868263	0	0.299401198	0
549	28 ed iv014.5	09/13/1999	en 01a	75.80465161	0	0.236536858	2.667465349	70.96774194	69.83870968	0	0.3222680645	0
550	28 ed iv017.1	09/13/1999	en 01	70.43288687	0	0.212662094	2.52825623	69.40572267	62.80264123	0	3.008070433	0
551	28 ed iv005.3	09/14/1999	en 01a	86.96581197	7.12 -02	0.193108262	2.392878462	50.56980057	50.21367521	0	7.12 -02	0
552	28 ed iv012.7	09/14/1999	en 01	79.1681736	0	0.203858888	2.552813329	46.039783	44.84629295	0	0.325497288	0
553	28Columb000.1	09/15/1999	en 03	64.7004958	0	0.345336089	3.285424598	59.64303421	49.57858205	0	3.073872087	0
554	28 ed iv014.5	09/15/1999	en 01a	62.559233	0	0.184005573	2.159269955	62.03259827	10.64237776	0	23.34611697	0
555	28 ed iv024.9	09/15/1999	en 01a	40.92016238	0	0.245154604	2.918763073	40.62246279	21.67794317	0	7.090663058	0
556	77 Fk i000.5	09/15/1999	en 01a	84.55486542	0	0.300142514	2.711432257	84.55486542	75.85921325	0	1.739130435	0
558	28 ed iv019.6	09/16/1999	en 01	57.81021898	0	0.26392992	3.031944109	56.64233577	40.58394161	0	4.01459854	0
559	28 ed iv024.1	09/16/1999	en 01a	80.03141654	5.24 -02	0.210112864	3.152677617	78.721174	36.53039832	0	8.542976939	0
560	28 ed iv025.4	09/16/1999	en 01	43.28808446	0	0.211486997	2.388653718	42.44343891	27.63197587	0	3.46907994	0
561	28Cabres005.4	09/17/1999	en 03	67.80159731	8.41 -02	0.282713749	3.602333052	63.80832282	37.95712484	0	0.588482556	0
562	29 io so004.7	09/24/1999	en 03	94.58128079	0	6.93 -02	1.693892545	94.58128079	94.58128079	0	0.492610837	1.477832512
563	29 io so004.7	09/24/1999	en 03	83.10810811	0	0.194014404	3.163244808	82.43243243	82.09459459	0	0	2.36464865
564	29 biqui001.8	09/27/1999	en 03	48.72881356	5.508474576	0.365620184	3.660434785	48.72881356	48.72881356	0	6.3555932203	4.237788136
565	29 biqui001.8	09/27/1999	en 03	29.75460123	1.533742331	0.32847109	3.110475064	29.14110429	29.14110429	0	1.5333742331	2.45598773
566	29 alli005.5	09/29/1999	en 03	85.71428571	0	0.210758096	0.513898342	85.71428571	85.71428571	0	0	0
567	29 alli005.5	09/29/1999	en 03	27.27272727	0	0.822490874	2.91922674	18.18181818	18.18181818	0	9.090909091	9.090909091
568	29 alli048.3	09/30/1999	en 03	62.4413145	0	0.448668515	3.357399568	62.44131455	45.07042254	0	0.469483568	0
569	29 alli048.3	09/30/1999	en 03	82.65893954	0	0.49061612	3.492913155	75.722544335	47.39884393	0	0	0
570	29 CanI039.4	10/01/1999	en 03	77.00348432	3.832752613	0.424650242	4.417365331	62.7177003	55.40069686	0	4.181184669	0
571	29 CanI039.4	10/01/1999	en 01a	83.11258278	1.655629139	0.334622647	4.202838059	20.52980132	16.22516556	0	1.986754967	0
572	29 CanI039.4	10/01/1999	en 03	81.40703518	1.507537688	0.451430256	4.156193669	41.20603015	34.17085427	0	2.010050251	0

Appendix G: Values of New exico Stream Samples

BnsSampleID	StationID	CollDate	Coll_ith	EPTPct	GastrPct	Evenness	D_g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
573	29 olvad009.0	10/04/1999	en 03	30.86956522	10	0.4875989492	4.781099819	23.47826087	22.608869565	0	0.1608695652	2.173913043
574	29 olvad009.0	10/04/1999	en 0/a	96.2962963	0.37037037	0.234353155	2.679326444	29.25925926	28.51851852	0	1.111111111	0
575	29 olvad009.0	10/04/1999	en 03	46.8	1.2	0.418686841	3.26006775	33.6	23.2	0	2.8	0
576	29 Tusas000.2	10/06/1999	en 03	52.2556391	0	0.311783504	2.865587996	39.09774436	39.09774436	0	2.631578947	0.37593985
577	29 Chama090.1	10/08/1999	en 01/a	80.79470199	0.331125592	0.16202122	1.926300771	80.13245033	80.13245033	0	0.993377483	0
578	29 Chama079.5	10/10/1999	en 03	100	0	0.193156559	1.744505433	85.63218391	83.90804598	0	0	0
579	29 Chama079.5	10/10/1999	en 03	90.87136929	0	0.24527794	2.370188023	75.5186722	73.85892116	0	0	0
580	29 edio002.7	10/12/1999	en 03	67.10526316	12.5	0.436529365	2.985739796	32.233684211	31.57894737	0	13.15789474	0
581	29 Nutri027.5	10/13/1999	en 03	66.66666667	3.418803419	0.273996841	1.469916911	53.84615385	53.84615385	0	3.418803419	0.854700855
582	29 lito035.9	10/15/1999	en 03	79.49526814	0.630914826	0.410076911	5.035682347	47.6340694	47.31861199	0	1.577287066	0
583	29 lito035.9	10/15/1999	en 03	88.85448916	0.92879257	0.336070639	3.634694306	57.2755418	50.77399381	0	1.238390093	0
584	04 erme 073.7	10/20/1999	en 01/a	81.30841121	0	0.471042996	3.424050092	42.99065421	29.90654206	0	0	0
585	29 alle037.8	10/20/1999	en 03	56.77419355	2.258064516	0.463226815	5.403923875	38.38709677	22.90322581	0	4.838709677	0
586	29 alle037.8	10/20/1999	en 03	68.75	0.390625	0.459980609	4.688758883	47.265625	30.859375	0	1.171875	0
587	29 Tusas028.5	10/21/1999	en 03	84.57446809	0.5319114894	0.2840916	3.055509851	81.91489362	81.91489362	0	0.531914894	0
588	29 Tusas028.5	10/21/1999	en 03	90.140834507	2.34741784	0.418218039	2.611310775	47.88732394	46.94835681	0	2.34741784	0
589	30 a arid015.8	06/15/2000	en 01/a	29.26829268	0	0.282687255	2.042335691	29.26829268	28.04878049	0	1.219512195	0
590	30 a arid016.3	06/15/2000	en 01/a	67.85714286	0	0.530249545	3.3853803322	67.85714286	64.28571429	0	4.761904762	0
591	77 onner002.4	07/06/2000	en 03	0	14.28571429	0.656265789	1.541695027	0	0	0	14.28571429	0
592	77 onner002.4	07/06/2000	en 03	0	0	0.405410191	1.803366801	0	0	0	6.25	0
593	29 alli048.3	07/13/2000	en 03	73.79032258	0	0.468307601	3.990257427	73.79032258	41.53225806	0	0	0
594	29 alli048.3	07/13/2000	en 03	73.79032258	0	0.468307601	3.990257427	73.79032258	41.53225806	0	0	0
595	07 ora 1132.9	07/15/2000	en 01/a	46.98275862	0	0.378746102	3.488332681	44.82758621	40.51724138	0	0	0
596	07 ora 1146.6	07/15/2000	en 03	47.58064516	0	0.336124076	1.995128713	44.75806452	44.75806452	0	0	0
597	07 ora 1147.1	07/15/2000	en 03	37.12121212	0	0.355784251	3.048808317	29.92424242	29.50545455	0	0	0
598	07 ora 1179.1	07/15/2000	en 03	63.87434555	0	0.464415432	4.379056101	62.82722513	58.11518325	0	2.094240838	0
599	78 ila i074.8	07/18/2000	en 03	12.8	30.4	0.505523093	4.142232897	8.8	8	0	30.4	8
600	78 ila i074.8	07/18/2000	en 03	47.91666667	10	0.492401153	4.926432917	41.25	39.58333333	0	10.416666667	6.666666667
601	77 Fk il010.0	07/20/2000	en 03	44.44444444	0	0.693126721	1.820478453	44.44444444	44.44444444	0	0	0
602	77 Fk il010.0	07/20/2000	en 03	79.59183673	0	0.377998478	3.999085147	27.75510204	26.53061224	0	1.224489796	0
603	77 obcat000.8	07/22/2000	en 03	28.57142857	33.16326531	0.377586411	2.652462272	28.57142857	28.57142857	0	33.16326531	12.24489796
604	77 lackC028.3	07/29/2000	en 03	91.6	0	0.223619203	2.535568025	91.6	91.2	0	0	0.4
605	77 lackC028.3	07/29/2000	en 03	72.19917012	0	0.373418687	3.099476645	58.09128631	56.01659751	0	0	0
606	77 Fk il012.1	07/31/2000	en 03	64	4	0.645456209	2.796007206	56	56	0	4	0
607	77 CubCrie005.6	08/08/2000	en 03	66.16541353	0	0.509608709	3.680718805	66.16541353	48.12030075	0	0	0.751879699
608	77 Fk il038.1	08/09/2000	en 03	29.77099237	0.381679389	0.318340045	3.052972026	29.77099237	29.77099237	0	1.526717557	1.145038168
609	77 Fk il038.1	08/09/2000	en 03	51.34228188	0	0.423478089	4.037146319	26.17449664	26.17449664	0	0.33557047	0.6714094
610	77 Fk il028.3	08/12/2000	en 03	80.67226891	0	0.377178374	4.203084742	80.67226891	73.1092437	0	0.420168067	3.781512605
611	77 Fk il028.3	08/12/2000	en 03	68.66359447	0	0.430903455	3.53166359447	68.66359447	64.51612903	0	0	0
612	77 llow000.6	08/15/2000	en 03	69.819811982	0	0.3867479505	2.96149462	68.91891892	68.91891892	0	0.9099090901	1.351351351
613	77 llow000.6	08/15/2000	en 03	57.80590717	0	0.365394266	3.291843823	54.43037975	53.58649789	0	2.53164557	0
614	28 Fernad008.2	09/06/2000	en 03	26.69491525	0	0.461447605	4.20950003	26.69491525	25	0	6.779661017	0
615	28 anc011.1	09/07/2000	en 03	42.857142857	0	0.438118601	3.903420199	32.25806452	24.42396313	0	0.460829493	0
616	28 anc015.6	09/07/2000	en 03	34.07407407	0	0.360581068	3.9974103	28.39506173	20.24691358	0	0.987654321	0
617	28 rand650.8	09/08/2000	en 03	66.44736842	0	0.357777036	2.798657071	34.86842105	15.46052632	0	1.644736842	0

Appendix G: Metric Values of New exico Stream Samples

BsnSamplD	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct	
618	28 uebt000.1	09/08/2000	en 0'a	37.43315508	0	0.29754525	2.531963594	25.93582888	17.11229947	0	0.802139037	0	
619	77 illow000.6	09/12/2000	en 03	35.4366932	0.970873786	0.479937494	4.8709993299	35.4366932	31.06796117	0	3.398058252	0.970873786	
620	77 illow000.6	09/12/2000	en 0'a	65.16853933	0.449438202	0.319141417	2.78776532	48.31460674	48.31460674	0	0.898876404	0	
621	77 illow000.6	09/12/2000	en 03	43.08943089	1.219512195	0.408594918	3.814484171	39.024289024	36.99186992	0	3.658536585	0	
622	78 ila i074.8	09/12/2000	en 03	8.088235294	75	0.32166609	3.2566894769	5.141058824	5.141058824	0	75.7329412	2.941176471	
623	77 ila i074.8	09/12/2000	en 03	46.9387755	22.95918367	0	0.3744794646	3.031385454	46.93877551	46.93877551	0	22.95918367	1.020408163
624	77 lackC028.3	09/13/2000	en 03	66.367713	0	0.317385852	3.513851752	65.02242152	61.883340807	0	0	0.448430493	
625	77 lackC028.3	09/13/2000	en 03	62.56410256	0	0.42051188	3.2233971444	57.94871795	48.20512821	0	0	1.025641026	
626	78 ila i074.8	09/15/2000	en 03	55.55555556	5.185185185	0.36977493	3.751057022	53.7037037	53.7037037	0	5.185185185	0.740740741	
627	77 ila i092.0	09/16/2000	en 03	17.76649746	17.25888325	0.460167194	3.785581822	15.2284264	14.21319797	0	17.76649746	13.70558376	
628	77 ila i092.0	09/16/2000	en 03	25.17066803	2.040816327	0.430298885	3.005751453	21.76870748	20.40816327	0	2.040816327	20.40816327	
629	78 ila i026.1	09/18/2000	en 03	50	0	1	2.790553133	50	50	0	0	0	
630	78 ila i026.1	09/18/2000	en 03	46.25	0	0.531649794	2.738458937	32.5	28.75	0	1.25	7.5	
631	78 ila i026.1	09/19/2000	en 03	60.86956522	0	0.69993557	3.508218878	56.52173913	56.52173913	0	4.347826087	4.347826087	
632	78 ila i026.1	09/19/2000	en 03	65.26315789	0	0.465035015	3.892090599	61.75438596	56.84210526	0	0	11.92982456	
633	78 ila i026.1	09/19/2000	en 0'a	70.83333333	0	0.484995852	4.278848137	56.48148148	54.62962963	0	0.925925926	5.555555556	
634	77 Fk il010.0	09/21/2000	en 03	38.70967742	6.451612903	0.67697869	3.7856686791	19.35483871	12.90322581	0	6.451612903	6.451612903	
635	77 Fk il010.0	09/21/2000	en 03	47.72727273	0	0.572196689	3.796899966	43.18181818	23.836363636	0	0	1.136363636	
636	77 Fk il010.0	09/21/2000	en 0'a	48.40764331	0	0.4749627929	2.966627929	39.49044586	32.48407643	0	0	1.27388535	
637	05 onil004.0	09/22/2000	en 0'a	65.2389524	0	0.437631656	3.927356964	45.71428571	42.85714286	0	5.238905238	0	
638	78 ila i052.6	09/22/2000	en 03	82.90879211	0	0.257435186	3.378309855	76.72866223	76.88286623	0	0.1642338537	1.972062449	
639	78 ila i052.6	09/22/2000	en 0'a	67.738451538	0	0.395240214	2.939231298	58.46153846	58.46153846	0	0.613384615	1.538461538	
640	27 ucer013.0	09/25/2000	en 03	87.39495798	0	0.418048065	4.5684847469	83.61345538	40.75630252	0	0.420168067	0	
641	27 an n025.3	09/26/2000	en 03	69.18238994	0.943396226	0.224653756	3.644535358	67.29559748	67.29559748	0	5.974842767	0.314465409	
642	27 inos000.8	09/27/2000	en 03	64.98054475	2.33463035	0.441654208	4.32504432	20.23346304	19.45525292	0	2.33463035	0	
643	27 inos011.3	09/27/2000	en 03	70.80745342	1.242236025	0.385425746	4.675687763	24.8447205	23.60248447	0	1.863334037	0	
644	05 onil004.0	09/29/2000	en 03	69.23076923	0	0.41201929	4.066053332	48.29059829	39.95726496	0	0	0	
645	05 onil007.2	09/29/2000	en 03	79.94505495	0	0.4635207071	4.578479824	68.95604396	59.34065934	0	1.648351648	0	
646	05 onil007.2	09/29/2000	en 0'a	68.57142857	0	0.460378663	3.817308549	62.04081633	57.14285714	0	6.12244898	0	
647	29 olvad009.0	09/29/2000	en 03	23.07692308	24.88687783	0.432478241	3.519716068	22.62443439	22.62443439	0	25.7918552	5.882352941	
648	29 olvad009.0	09/29/2000	en 0'a	45.37815126	3.361344538	0.47641153	4.5684847469	24.78991597	22.26890756	0	3.781512605	2.941176471	
649	29 olvad009.0	09/29/2000	en 03	46.77966102	3.050847458	0.350873433	3.340967528	31.18644068	30.84745763	0	3.389830508	3.728813559	
650	29 alle037.8	10/06/2000	en 03	59.01606071	0.353355889	0.397866764	4.6054841279	23.67491166	20.49469965	0	2.120141343	0	
651	29 alle037.8	10/06/2000	en 03	37.41258741	1.048951049	0.363310905	4.243287615	31.11888112	25.87412587	0	8.391608392	0	
652	29 alle037.8	10/06/2000	en 0'a	69.45701357	2.714932127	0.308523499	4.268375851	23.30316742	21.26696833	0	4.751131222	0	
653	28Casias00.6	10/13/2000	en 03	71.94570136	0	0.451642139	4.260708925	69.23076923	43.889140271	0	0	0	
654	31 Fk em025.4	10/16/2000	en 0'a	82.78601695	0.211864407	0.15607785	2.386231968	9.639830508	9.639830508	0	5.402542373	0.105232203	
655	28 Cost025.6	10/26/2000	en 03	74.149655986	0.340136054	0.3482058	4.046745351	22.10884354	13.60544218	0	2.040816327	0	
656	31 aram008.0	10/26/2000	en 0'a	72.515184834	6.042654028	0.360360166	4.07303088	22.27488152	22.03791469	0	13.27014218	0	
657	31 Indio000.2	10/26/2000	en 0'a	28.20512821	0.27259465	3.088664136	13.15496098	7.246376812	0	6.577480491	0		
658	31 an n036.8	10/26/2000	en 0'a	9.174311927	4.587155969	0.291880501	2.159458303	9.174311927	9.021406728	0	65.29051988	0	
659	28Comanc001.1	10/30/2000	en 03	74.81481481	0	0.360881431	3.03656997	61.85185185	57.40740741	0	1.111111111	0	
660	28Comanc007.7	10/30/2000	en 03	67.77408638	0	0.373830868	3.50440489	34.2192691	24.58471761	0	1.328903654	0	
661	28 Cost048.6	10/30/2000	en 03	68.32298137	0	0.430371468	3.290298796	58.38509317	30.1242236	0	0	0	
662	28 rand731.6	10/30/2000	en 03	74.75409836	1.639344262	0.333231127	2.971865986	14.09836066	12.45901639	0	6.557377049	0	

Appendix G: Values of New exico Stream Samples

BnsSamplID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
663	28 Hondo000.1	10/30/2000	en 0'a	37.87878.88	2.27272.273	0.429259981	4.124858311	17.42424242	10.98484848	0	5.303030303	0
664	28 Hondo014.8	10/30/2000	en 0'a	85.71428571	0	0.487114361	4.702112929	84.92063492	45.23809524	0	0.793650794	0
665	28 uebT003.5	10/30/2000	en 0'a	53.40909091	0	0.42323359	4.124858311	35.22727273	23.48484848	0	11.74242424	0
666	28 Ferna032.5	10/31/2000	en 03	48.64864865	0	0.446171345	4.597387765	47.10447761	47.02102703	0	2.702702703	0
667	28 i llad000.8	10/31/2000	en 03	77.23880123	0	0.4510011237	3.756045234	40.67164179	0	2.985074627	0	
668	05 onilio004.0	11/11/2000	en 03	38.98305085	0	0.425729012	2.72497768	31.3559322	22.88135593	0	1.694915254	0
669	05 onilio004.0	11/11/2000	en 0'a	50.87719298	0	0.533505149	3.21539331	40.35087719	26.31578947	0	1.754385965	0
670	05 onilio007.2	11/11/2000	en 03	32.35294118	0	0.380215039	4.158856906	29.90196078	22.79411765	0	5.637254902	0
671	05 onilio007.2	11/11/2000	en 0'a	21	0	0.395888226	3.963522482	19	11.5	0	6.5	0
672	50 eaver000.1	08/27/2001	en 0'a	36.2745098	0	0.477519298	4.108132257	33.33333333	22.54901961	0	0	0
673	50 l orv012.6	08/27/2001	en 0'a	31.96202532	0	0.338054627	3.648530323	30.69620253	18.98734177	0	0.316455696	0
674	50Holing000.1	08/27/2001	en 0'a	40.78212291	0	0.454603251	4.241057215	39.10614525	28.49162011	0	0	0
675	30Capull012.7	09/12/2001	en 03	48.6631016	0	0.411440691	3.440953212	25.13368984	22.99465241	0	0.534759358	13.36898396
676	28 an a017.9	09/15/2001	en 0'a	80.83623693	0	0.442573753	3.710586799	79.44250871	69.333797909	0	0	0
677	28 Chupa015.2	10/04/2001	en 03	79.65367965	0	0.389594264	4.593546716	78.35497835	35.06493506	0	0.432900433	0
678	28 rand624.3	10/04/2001	en 03	91.09131403	0	0.18573114	2.6199334507	16.48106904	15.3674833	0	0.668151448	0
679	28 edio007.2	10/04/2001	en 03	87.96630498	0	0.400076628	3.828765268	79.25311203	41.07883817	0	0	0
680	28 uema003.1	10/04/2001	en 03	25.7042235	0	0.266761734	2.832372627	9.85915493	8.0958591549	0.352112676	1.056338028	0.352112676
681	28 anCru019.1	10/04/2001	en 03	62.76595745	0	0.390383841	3.544900642	49.64539007	41.13475177	0	0.709219858	0
682	28Tresuq023.4	10/04/2001	en 03	71.54811715	0	0.46997772	4.199790573	52.71966527	33.389121339	0	0	0
683	28 mbudo000.8	10/05/2001	en 0'a	79.85347985	0	0.289571911	2.674048564	42.12454212	41.02564103	0	0.732600733	0
684	28 mbudo005.15	10/05/2001	en 03	68.81355932	0	0.3720557	2.285925151	25.42372881	25.42372881	0	0	0
685	28 uebI000.3	10/05/2001	en 03	60.86956522	0.790513834	0.415966778	2.710815863	23.3201581	23.3201581	0	2.371541502	0
686	28 uebI012.4	10/05/2001	en 03	44.7257384	0	0.374290314	3.291843823	36.70886076	18.56540084	0	5.063291139	0
687	28 uebI019.0	10/05/2001	en 03	60.23166023	0	0.397265929	4.139051946	49.03474903	34.74903475	0	0.386100386	0
688	28 an a000.1	10/05/2001	en 0'a	70	0	0.391592684	4.207734097	31.66666667	29.66666667	0	0.333333333	0
689	28 Namb005.1	10/11/2001	en 03	81.93832599	0	0.48101873	4.0553336902	63.87665198	37.88546256	0	0	0
690	28 rand541.2	10/17/2001	en 0'a	87.09677419	0	0.352014853	2.720630064	61.29032258	60.88109677	0	0.806451613	0
691	28 rand541.2	10/18/2001	en 0'a	82.42811502	0	0.346652134	3.13250322	64.85623003	64.53674121	0	2.236421725	0.319488818
692	29 io so004.7	10/22/2001	en 0'a	66.66666667	0	0.871049064	2.232442506	50	50	0	16.66666667	16.66666667
693	29 io so004.7	10/22/2001	en 03	19.04761905	0	0.383213839	1.689541968	19.04761905	19.04761905	0	38.0952381	0
694	29 io so004.7	10/22/2001	en 03	27.27272727	0	0.842328277	2.91922674	27.27272727	27.27272727	0	0	0.90909091
695	29 alli048.3	10/23/2001	en 0'a	60.98843323	0	0.309966004	4.083112298	60.98843323	56.3617245	0	0	0
696	29 alli048.3	10/23/2001	en 03	70.71129707	0	0.430468131	3.651991903	68.20083682	62.34309623	0	0	0
697	29 olvod009.0	10/24/2001	en 03	42.442424242	1.683501684	0.424675762	4.215161412	37.71043771	32.65993266	0	2.356902357	11.78451178
698	29 olvod009.0	10/24/2001	en 03	62.02090592	2.43902439	0.401111268	4.594059847	61.32404181	60.6271777	0	4.181184669	9.756097561
699	29 olvod009.0	10/24/2001	en 0'a	61.6	1.12	0.392725885	5.28134694	35.52	35.52	0	1.76	2.4
700	29 olvod009.0	10/24/2001	en 03	64.02877698	0.71942446	0.388765376	4.2646774929	61.51079137	57.553956683	0	1.798561151	5.7553956683
701	29 alle037.8	10/25/2001	en 01	65.08626969	0	0.378675467	3.671922958	40.0862069	37.93103448	0	0.862068966	0
702	29 alle037.8	10/25/2001	en 01	69.09090909	0.606060606	4.3237090105	4.308702494	40.60606061	35.15151515	0	2.424242424	0
703	29 alle037.8	10/25/2001	en 01	65.98639456	0	0.486151311	4.007668604	47.61904762	42.885714286	0	8.163263506	0
704	30 alis030.9	10/31/2001	en 03	69.0821256	0	0.297009083	3.187867326	69.0821256	66.666666667	0	0.483091787	0
705	30 alis050.4	10/31/2001	en 03	71.63636364	0	0.212778592	2.492535259	70.90909091	69.81818182	0	0.363336364	3.633636364
706	30 Fri0003.0	11/01/2001	en 03	30.76923077	0	0.304662722	2.655035307	25.64102564	11.28205128	0	2.051282051	0.512820513
707	77 ilow000.6	11/05/2001	en 03	47.49034749	0	0.36889072	3.959093165	47.49034749	47.1042471	0	1.158301158	0.772200772

Appendix G: **etrie** values of New Mexico Stream Samples

BnsSamplID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
708	77 ilow000.6	11/05/2001	en 03	55.87301587	1.26984127	0.443808971	4.519716939	54.92063492	53.99825397	0	7.9336507937	1.904161905
709	77 ilow000.6	11/05/2001	en 03	72.01646091	0.823045267	0.3887317461	3.823004752	65.8436214	65.43209877	0	4.938271605	0
710	77 ilow000.6	11/05/2001	en 01	51.39318885	0.309597523	0.404346442	4.636212261	42.41486068	41.17647059	0	6.965944272	0
713	77 lackC016.8	11/06/2001	en 01	82.0785305	0.17921147	0.27793204	4.427326179	78.45104659	77.955698925	0	0.716845878	0
716	77 lackC028.3	11/06/2001	en 03	56.81818182	0	0.49117228	3.8681109836	45.4545445	40.9990991	0	0	0
717	77 lackC028.3	11/06/2001	en 03	21.42857143	0	0.205963582	3.585651915	21.42857143	16.45021645	0	0	0.216450216
718	77 lackC028.3	11/06/2001	en 03	36.52849741	0	0.296292174	2.854342546	36.013036269	29.53367876	0	0	0
719	78 ila i074.8	11/07/2001	en 01	75.04873294	0.194931774	0.431750142	4.647230462	48.34307992	44.63937622	0	0.584795322	1.754385965
720	78 ila i074.8	11/07/2001	en 03	73.38403042	0	0.4325244652	4.127667661	55.51330798	54.75285171	0	0.760456274	1.140484411
723	78 ila i074.8	11/07/2001	en 03	60.61643836	0	0.418865307	3.875454312	52.05479452	47.94520548	0	0.342465753	1.02239726
724	78 ila i074.8	11/07/2001	en 03	51.34099617	1.149425287	0.447734079	5.571010209	48.65900383	45.59386973	0	2.66817992337	9.578544061
725	77 Fk il000.5	11/08/2001	en 01	74.10805301	0	0.399664612	5.080878543	36.59531091	29.66360856	0	3.975535168	3.058103976
728	77 Fk il010.0	11/08/2001	en 03	46.85314685	0	0.504261159	5.304109518	31.46853147	22.0217203	0	0.699306699	8.741238741
729	77 Fk il010.0	11/08/2001	en 03	64.081632365	0.8116326531	0.448956698	4.54441494	63.67346939	63.22530612	0	7.346938776	11.83673469
730	77 Fk il010.0	11/08/2001	en 03	53.48837209	0	0.519755801	5.042356166	42.24806202	25.19379845	0	1.937984496	7.364341085
731	78 ila i026.1	11/09/2001	en 01a	64.65661642	0	0.388576544	3.59829447	52.7638191	48.74371859	0	2.680067002	16.75041876
732	78 ila i026.1	11/09/2001	en 03	64.06926407	0	0.418195435	3.3073533635	60.17316017	57.14285714	0	6.926406926	8.658008658
733	78 ila i026.1	11/09/2001	en 03	83.41013825	0	0.4399007709	3.15991159	71.88940092	71.88940092	0	1.843317972	8.755760369
734	78 ila i026.1	11/09/2001	en 03	68.01801802	0	0.422726228	3.701868275	63.96396396	62.61261261	0	3.603603604	20.27027027
735	05Climmar018.4	03/28/1991	en 03	41.53846154	0	0.277076717	2.853155339	35.76923077	35.76923077	0	0.384615385	0.256410256
736	05Climmar072.7	03/29/1991	en 03	84.28390368	0	0.282351238	3.802326031	67.36375158	64.88897934	0	0.570342205	0
737	56 ecos 301.0	04/17/1991	en 03	29.05662019	12.45283019	0.3525059598	2.509082039	27.54716981	27.54716981	0	12.45283019	3.018867925
738	59 enas 138.4	06/12/1991	en 03	27.972070955	2.729044833	0.225996644	1.874975745	27.972070955	27.972070955	9.75	-0.2	9.941520468
739	60 arkCa085.1	06/13/1991	en 03	28.01724138	1.149425287	0.31817304	3.513945197	8.764367816	7.3221586207	0	1.293103448	2.729885057
740	07Coyote040.0	06/19/1991	en 03	70.16129032	0	0.475794491	4.149135217	59.67741935	59.67741935	0	0	0.806451613
741	60 ecos 124.7	06/30/1991	en 03	50.88300221	0.220750552	0.221367762	2.056090349	2.869757174	2.869757174	0	3.97350934	10.37521594
742	58 Feli 114.1	07/12/1991	en 03	66.97247706	1.834862385	0.474219456	2.771058622	54.12844037	54.12844037	0	10.09174312	0.917431193
743	07 apell057.4	07/30/1991	en 03	81.5575987	0	0.296849351	2.525789564	66.52244456	66.52244456	0	1.24391563	0
744	50 ecos 575.0	07/31/1991	en 03	44.9197861	0.802139037	0.387687025	3.207153886	19.2513369	19.2513369	0	18.44919786	1.604278075
745	52 ecos 483.8	08/01/1991	en 03	0.555555556	9.444444444	0.319649017	2.503390722	0.555555556	0.555555556	0	38.8888889	8.333333333
746	62 elawa001.0	08/05/1991	en 03	79.16666667	0	0.363862482	1.573289902	70.83333333	70.83333333	0	12.5	8.333333333
747	62 elawa001.0	08/06/1991	en 01a	75	9.375	0.509860098	2.308312065	59.375	56.25	0	9.375	0
748		08/07/1991	en 03	0	0			0	0	0	0	0
749	41 rand204.5	08/14/1991	en 03	42.76315789	0	0.333486886	0.995246599	32.89473684	32.89473684	0	0	0
750	62 ecos 002.7	08/15/1991	en 03	57.89473684	0	0.250940265	1.871840946	0.4784689	0.4784689	0	0.956937799	5.741626794
751	77 Fk il010.0	08/15/1991	en 03	72.58883249	1.776649746	0.396932912	3.346523707	43.14720812	42.63959391	0	3.299492386	4.822235025
752	09Canad184.1	08/23/1991	en 03	7.60	-02	0	5.00	-02	0.583574504	7.60	-02	0.152091255
753	50 ecos 784.7	09/10/1991	en 03	87.4015748	0	0.385387792	2.210762835	85.82677165	55.11811024	0	0	0
754	50 ecos 787.8	09/10/1991	en 03	78.61217676	0	0.265409422	2.223575838	78.61217676	59.8265896	0	6.069364162	0
755	66 nimas048.0	09/12/1991	en 03	81.7679558	0	0.31126174	1.731269624	71.21701823	71.21701823	0	2.209944751	2.209944751
756	28Casias000.6	09/18/1991	en 03	28.14594192	5.063291139	0.282548968	3.332101733	24.94415488	23.08265078	0	5.063291139	0
757	28 Costi046.7	09/19/1991	en 03	48.95666132	0.642054575	0.359802017	2.797399933	44.14125201	9.149277689	0	1.284109149	0
758	75 esca009.7	06/16/1992	en 03	22.43150685	0	0.187193191	2.544013689	12.956621	12.89954338	0	5.71	-02
759	75 esca024.8	06/16/1992	en 03	15	3.333333333	0.410235636	2.442393367	15	0	6.666666667	0	
760	06Canad1322.5	06/17/1992	en 03	48.11742183	0	0.241957613	2.174823679	22.84620294	22.84620294	0	1.595405233	1.021059349

Appendix G: **etric values of New exico Stream Samples**

BnsSampleID	StationID	CollDate	Coll eth	EPTPct	GastrPct	Evenness	D g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	donPct
761	04Canadian363.5	06/19/1992	en 03	89.498322776	6.69 -02	0.15905477	2.73602247	79.26421405	79.26421405	0	0.602006689	1.07034114
762	04Canadian402.9	06/25/1992	en 03	53.16804408	1.101928375	0.351138945	2.71443952	45.73002755	45.73002755	0	0.917355372	0.27582094
763	07 ora i078.7	06/26/1992	en 03	85.55045872	7.65 -02	0.226664258	3.065666066	61.85015291	61.85015291	0	0.611620795	0.76455994
764	56 ecos 194.6	07/08/1992	en 03	70.39473584	0.493421053	0.116814393	2.244497392	1.677631579	1.677631579	0	0.493421053	1.315789474
765	80 anFrat159.3	07/15/1992	en 03	53.64965504	0.182481752	0.420369971	3.805733005	33.02919708	29.74452555	0	2.554744526	0
766	78 illa i003.5	07/28/1992	en 03	67.21044046	1.549755302	0.343348049	3.937277971	66.47634584	66.47634584	0	2.20228385	1.549755302
767	60 lue p003.4	08/05/1992	en 03	1.6705334343	0.510440835	4.95 -02	1.563406694	0.139211137	0.139211137	0	93.688909513	1.438515081
768	77 Fk il000.3	08/15/1992	en 03	67.5852069	0.344827586	0.412959258	4.24326273	45.34482759	36.72413793	0	0.689655172	0
769	50 acksC008.4	08/16/1992	en 03	49.88066826	0	0.39416168	3.974911077	42.48210024	28.40095465	0	0.954653938	0
770	50 ecos 828.4	08/25/1992	en 03	49.45054945	0	0.473228793	4.035352232	44.50549451	34.06593407	0	1.098901099	0
771	50 ecos 802.1	09/08/1992	en 03	94.91525424	0	0.301211218	2.779737013	94.29892142	78.42835131	0	0	0
772	80 TroutC002.1	09/22/1992	en 03	83.90804598	0	0.33994189	2.687023486	24.13793103	24.13793103	0	1.149425287	1.149425287
773	42 rand087.9	09/29/1992	en 03	31.42277338	0	0.156418334	1.966867918	8.472588684	8.472588684	0	0.674289065	0.703659581
774	09/30/1992	en 03	0	0	0	0	0	0	0	0	0	0
775	32 rand322.1	10/01/1992	en 03	44.28571429	0	0.371061638	1.883019644	44.28571429	44.28571429	1.428571429	1.428571429	1.428571429
776	05 ccrys007.0	05/12/1993	en 03	66.66666667	0	0.416528084	4.7788334243	66.43518519	38.888888889	0	0	0
777	48 altCr021.7	09/16/1993	en 03	61.84210526	0	0.36259075	1.385446665	35.52631579	35.52631579	0	0	0
778	30 a ar000.1	10/13/1993	en 01a	73.96963124	0	0.3408817439	3.42387692	47.28850325	47.28850325	0	1.084986968	3.470715835
779	32 rand294.5	10/13/1993	en 03	61.62790698	2.325581395	0.414129333	2.46949761	61.62790698	1.162790698	3.4888372093	2.325581395	
780	30 a ar012.6	07/22/1994	en 01a	23.046875	0	0.265564449	3.0456689531	21.6796875	21.6796875	0	5.078125	0
781	30 a ar016.1	07/22/1994	en 01a	46.75615213	0	0.371719208	2.7857168	45.86129754	35.34675615	0	13.87024609	0
782	50 ecos 687.4	08/11/1994	en 03	86.2745098	0	0.477005359	2.289013003	64.70588235	56.8627451	0	7.843137255	0
783	31 an n009.1	08/17/1994	en 03	0	0.22458359	1.104962913	0	0	0	0.354609929	0.354609929	
784	09Canadian039.0	11/15/1995	en 03	1.453488372	0	0.189052858	1.369712519	0.290697674	0.290697674	0	0	0
785	28 andia012.1	03/20/1996	en 01a	92.8125	0	0.186315272	1.38688537	50.3125	50.3125	0	0	0.625
786	28 andia016.1	03/28/1996	en 01a	0	0	0.213747788	0.946395456	0	0	0	0	14.21319797
787	07Coyote011.8	04/11/1996	en 03	40	0	0.655458754	1.242669869	40	40	0	0	0
788	07Coyote047.9	04/11/1996	en 03	21.843371797	1.474654378	0.2513663319	2.289201961	7.649769585	7.649769585	0	31.88940092	0
789	28 andia015.8	04/30/1996	en 01a	0.893945551	0	7.03 -02	1.664890133	0.893945551	0.893945551	4.06 -02	4.022754978	2.153596099
790	59 guaCh050.2	07/16/1996	en 03	22.17659138	0.410677618	0.282067946	2.908731696	21.97125257	21.97125257	0	52.97741273	2.6694404517
791	30Can al003.7	05/12/1997	en 01a	48.99451554	0	0.357278329	3.330981131	34.73491773	34.73491773	0	0.182815356	5.850091408
792	08Tremen026.2	07/16/1997	en 03	51.41843972	3.90070922	0.453537833	4.253880771	40.07092199	37.23404255	0	6.028368794	3.191489362
793	16 eneca048.5	07/17/1997	en 03	24.27184466	0	0.395097619	3.7535840999	20.38834951	17.96116505	0	16.50485437	0.4853436893
794	10 alo l005.1	07/23/1997	en 03	45.82933845	0.67114094	0.338359705	4.028866019	30.29721956	30.29721956	0	2.780441035	0.383309108
795	51 guaNe004.2	07/28/1997	en 03	58.6206896	0	0.440236106	1.723949821	50	50	0	1.724137931	0
796	56Coillon025.9	07/28/1997	en 03	11.2244898	0.565513592	4.143977049	10.20408163	8.163265306	8.163265306	0	36.73469388	7.142857143
797	60Chosa 004.5	08/26/1997	en 03	30.6122449	10.20408163	0.542737729	2.569491712	30.6122449	24.48979592	0	32.65306122	12.24489796
798	60 rapev013.0	08/27/1997	en 03	31.61290323	2.580645161	0.436622031	3.569003124	27.09677419	20.64516129	0	29.67741935	11.61290323
799	40 lamos054.9	09/18/1997	en 03	29.8245614	0	0.292461234	2.122958509	24.9122807	17.89473684	0	0.350877193	4.912280702
800	36 an 0015.0	10/01/1997	en 03	81.69934641	8.32 -02	0.174715669	0	0	0	0	100	0
801	10UleCre145.0	10/16/1997	en 03	53.68421053	0	0.389383934	3.239931772	7.368421053	7.368421053	0	5.263157895	0
802	32 rand373.5	10/21/1997	en 03	4.032258065	0	0.1282950571	1.244740565	3.225806452	0	0	1.612903226	0
807	30 a arid18.5	05/25/2000	en 01a	34.7985348	0	0.347720565	2.85595607	34.7985348	27.10622711	0	30.03633004	0
812	30Can al004.0	05/25/2001	en 01a	40.50343249	0	0.333022901	2.631607863	40.50343249	40.50343249	0	11.21281465	0.457665904
813	30Can al004.0	05/25/2001	en 03	6.3333333333	0	0.188514555	1.75322254	6.3333333333	5.6666666667	0	0	0

Appendix G: Stream Values of New Mexico Stream Samples

BnsSamplD	StationID	CollDate	Coll_ith	EPTPct	GastrPct	Evenness	D_g	EPTnHPct	EPTsenPct	IsoPct	NonInPct	domPct
814	300Can al004.2	05/25/2001	en 0'a	26.29310345	0	0.31463326	3.121134514	26.29310345	26.29310345	0	10.34482759	3.879310345
815	300Can al003.7	06/01/2001	en 03	25.86805556	0	0.327656916	3.303908795	25.86805556	25.86805556	0	26.5625	5.208333333
816		06/01/2001	en 03	0	0	0	0	0	0	0	0	0
817	300Can al003.7	06/15/2001	en 01'a	43.18181818	0	0.320449126	2.966463639	43.18181818	43.18181818	0	0	2.727272727
818	rand535.1	02/17/2003	en 03	4.032258065	0	0.128295071	1.244740555	3.225806452	0	0	1.612903226	0

Appendix G: Values of New exico Stream Samples

BenthSamplID	LigoPct	RthChlPct	PlecoPct	TanyIPct	TnytChlPct	TrichPct	CrChlPct	ChiPct	CrlolPct	DipPct	EphemPct	Shane	Shan
23	0	4.6875	0	42.708333333	0	0	0	0	0	1.041666667	51.5625	1.159860086	1.673324394
24	0	20.31746032	0	39.5761958	0	0	0	0	0	6.137566138	19.89417989	2.364630159	3.411440204
25	0	4.554263556	0	69.96124031	0	0	0	0	0	7.751937984	17.63565891	2.026433924	2.923526173
26	0	10.13215859	0	23.1277533	0	0	0	0	0	11.89427313	53.30396476	2.05260649	2.961285203
27	0	12.91322314	0	12.08677686	0	0	0	0	0	11.26033058	47.41735537	2.4179121	3.488309796
28	0	4.980079681	0	40.43824701	0	0	0	0	0	12.5498008	40.23904382	2.494810279	3.599250417
29	2.469135802	0	6.998884774	0	63.78600823	0	0	0	0	9.053497942	16.04938272	1.408326947	2.031786303
30	0.126262626	0	6.818181818	0	58.45959596	0	0	0	0	8.207070707	20.45454545	2.287910207	3.30075671
31	0.340136054	0	6.8027221088	0	42.85714286	0	0	0	0	42.85714286	2.721088435	1.696579568	2.44764693
32	0	8.963585434	0	64.42577031	0	0	0	0	0	18.20728291	7.2822913165	1.473833364	2.1262292085
33	0	4.564315353	0	58.22959889	0	0	0	0	0	16.87143555	16.87143555	1.992023718	2.873882739
34	1.186440678	0	2.372881356	0	52.54237288	0	0	0	0	14.74576271	27.96610169	1.860423921	2.684024364
35	0	0	12.35521236	0	59.07335907	0	0	0	0	12.35521236	12.93436293	1.668859673	2.407655574
36	2.454780362	0	0.516795866	0	51.9379845	0	0	0	0	13.95348837	9.013927649	1.732081422	2.498865278
37	0.632911392	0	8.016877637	0	61.814134599	0	0	0	0	9.282700422	10.75949367	2.365953896	3.413349953
38	0.6668896321	0	0.501672241	0	69.899966555	0	0	0	0	0.6668896321	3.177257525	13.04347826	1.772544593
39	1.185770751	0	6.719367589	0	68.24769433	0	0	0	0	6.192358366	13.83399209	1.851414253	2.671026161
40	0	0	1.818181818	0	43.63636364	0	0	0	0	22.7272723	17.7272723	1.98406249	2.862397115
41	0	0	3.017241379	0	29.31034483	0	0	0	0	34.05172414	20.68965517	2.345251276	3.3833482385
42	0	0	6.92124105	0	51.31264916	0	0	0	0	26.73031026	9.307875895	2.359735579	
43	0	0	1.984126984	0	47.61904762	0	0	0	0	32.14285714	11.3092381	1.81723646	2.622718029
44	0	0	0	0	3.341902314	0	0	0	0	80.71979434	12.08226221	0.933071687	1.374991797
45	0	0	6.92124105	0	9.677419355	0	0	0	0	25.2688172	64.51612903	1.892081136	2.729696071
46	0.420462509	0	2.873160477	0	24.386822551	0	0	0	0	30.69376314	37.21093203	2.24413954	3.237608985
47	0	0	0	4.643962848	0	0	0	0	0	48.91640867	12.38390093	2.3336372147	3.370672511
48	0.316455696	0	4.744835443	0	21.51888734	0	0	0	0	35.75949367	8.880759494	2.4266587905	3.500826337
49	0.546448087	0	24.04371585	0	26.2295082	0	0	0	0	24.04371585	21.31147541	2.450507829	3.535335492
50	23.68421053	0	0	13.15789474	0	0	0	0	0	21.05263158	42.10526316	1.489767364	2.149279988
51	0	0	0	0	0	0	0	0	0	41.07142857	42.85714286	1.578729863	2.277625745
52	3.50877193	0	7.01754386	0	0	0	0	0	0	5.263157895	70.1754386	1.83737647	2.650773922
53	0	0	66.66666667	0	0	0	0	0	0	33.33333333	0	0.636514168	0.918295834
54	0	0	0.862068966	0	12.06896552	0	0	0	0	0.862068966	20.68965517	57.75862069	2.380486338
55	0.598802395	0	4.1916167766	0	14.670658668	0	0	0	0	18.26347305	47.90419162	2.581674178	3.724568533
56	0	0	0	2.02020202	0	0	0	0	0	37.03703704	25.25252525	2.447985506	3.53169655
57	0	0	8.016877637	0	0	0	0	0	0	16.03375527	51.89873418	2.443178441	3.52471421
58	0	0	18.69918699	0	0	0	0	0	0	1.62601626	69.10569106	1.268151498	1.829555877
59	1.910828025	0	35.66878981	0	1.910828025	0	0	0	0	1.910828025	1.27388535	55.41401274	2.360290346
60	17.39130435	0	30.9178744	0	0	0	0	0	0	11.111111	1.449275362	22.70531401	2.079357836
61	4.545454545	0	50.55818182	0	0	0	0	0	0	10.7945455	22.7272723	1.93284397	2.788504411
62	0.510204082	0	13.775102	0	0	0	0	0	0	22.95918367	28.06122449	1.692708328	2.442061911
63	0	0	3.3333333333	0	0	0	0	0	0	23.1372549	70	0.868829427	1.253455906
64	0	0	0	19.67213115	0	0	0	0	0	4.918032787	26.22295082	1.659533471	2.394202497
65	0	0	0	1.3333333333	0	0	0	0	0	1.3333333333	14	.62	2.224997095
66	0	0	0	0	0	0	0	0	0	34.31085044	23.16715543	1.989824527	2.870709977
67	0	0	0	1.092896175	0	0	0	0	0	12.84153005	54.3715847	2.222998948	3.207109558

Appendix G: Values of New exico Stream Samples

BentSampleID	LigoPct	RthChnPct	PlecoPct	TanyIPct	TrichPct	TnytChnPct	CrChChnPct	CrofPct	DipPct	EphemPct	Shane
68	0	1.680672269	0	0	40.33613445	0	0	3.781512605	47.89915966	1.895106964	2.734061419
69	0.325732899	0	1.302931596	0	0	21.49837134	0	0	23.77850163	47.23127036	3.2555037934
70	0	0	1.578947368	0	0	13.68421053	0	0	12.63157895	53.15789474	2.671370087
71	0	0	3.03030303	0	0	28.78787879	0	8.333333333	18.18181818	40.15151515	3.468494539
72	0	0	0	0	0	27.6119403	0	0	3.731342384	58.20895522	2.161927355
73	0	0	0	0	0	22.19730942	0	0.224215247	4.260089686	63.901345229	2.110397967
74	0	0	6.86695279	0	0	46.88841202	0	0	37.66094421	6.223175966	1.927508244
75	0	0	0	0	0	30.35714286	0	0.892857143	10.71428571	2.360409554	3.405351159
76	0	0	0	0	0	36.20689655	0	0.574712644	6.32183908	44.54022989	2.093559566
77	0	0	10.26156942	0	0	13.07847082	0	0	30.58350101	36.82092555	2.57402757
78	0	0	10.70234114	0	0	40.80267559	0	0	21.40468227	14.71571906	2.056505099
79	0	0	21.03658537	0	0	23.7804878	0	0	5.487804878	48.47560976	2.428177188
80	0	0	5.357142857	0	0	25.71428571	0	0	19.28571429	49.28571429	2.457021023
81	0	0	6.0109289962	0	0	45.35519126	0	0	19.67213115	26.22295082	2.315838102
82	0	0	0.757575758	0	0	31.06060606	0	0	0	37.5	14.39393939
83	0	0	3.571428571	0	0	13.57142857	0	0	24.28571429	33.57142857	2.39468675
84	0	7.056798623	0	1.204819277	0	0	11.35972461	0	0	35.11187608	22.891566627
85	1.494565217	0	14.74184783	0	0	39.87771739	0	0	17.86684783	16.98369565	3.849590607
86	1.258581236	0	0	0	0	38.44393593	0	0	29.0617849	11.67048055	2.552510658
87	0.119474313	0	3.8232178017	0	0	40.62126643	0	0	19.11589008	20.1911589	3.278873244
88	1.129943503	0	22.59887006	0	0	28.24858757	0	0	7.721280603	33.70998117	2.625698057
89	0.653594771	0	13.29902915	0	0	12.41839065	0	0.490196078	35.29411765	12.58169935	3.1958315636
90	1.8222019314	0	15.00535906	0	0	11.25401929	0	0.643086817	13.18327974	16.82743837	2.346556761
91	1.247401247	0	32.22453222	0	0	11.22661123	0	0	9.771309771	17.25571726	2.476874602
92	0.213903743	0	30.48128342	0	0	28.77005348	0	0	3.101604278	14.11764706	11.65775401
93	0.974025974	0	8.603896104	0	0	5.681818182	0	0	0.487012987	42.53246753	3.571428571
94	5.300581771	0	10.08403361	0	0	38.00904977	0	0	3.555268261	15.38461538	1.486748546
95	0.432900433	0	51.94805195	0	0	12.121212	0	0	1.298701299	20.77922078	7.792207792
96	0.294117647	0	2.647058824	0	0	43.52941176	0	0	0	28.52941176	19.70588235
97	0	0	8.266112032	0	0	37.7016129	0	0	0	31.85483871	20.16129032
98	0.281690141	0	1.690140845	0	0	50.998591549	0	0	0	17.88732394	26.05633803
99	0	0	7.226107226	0	0	61.655501166	0	0	0	15.03496503	8.508158508
100	0	0	5.87529976	0	0	15.70743405	0	0	0.119904077	64.50839329	11.63069544
101	0	0	0	6.280193237	0	0	53.62318841	0	0	15.94202899	15.4589372
102	0.259965338	0	0.173310225	0	0	10.31195841	0	0	0.346620451	75.82322357	10.91854419
103	0	0	0	0	0	22.70861833	0	0	0.1367898906	49.38440492	22.70861833
104	0	0	0	0	0	13.5193133	0	0	0.214592275	67.59656652	15.66523605
105	0	0	51.75879397	0	0	5.527638191	0	0	0	16.08040201	24.12060302
106	5.633802817	0	6.438631791	0	0	7.042263521	0	0	2.012072435	35.01006036	24.5472837
107	2.215189873	0	8.386075949	0	0	17.8860759	0	0	0	23.57594937	24.050663291
108	0.734214391	0	20.70484581	0	0	12.33480176	0	0	0	22.1732746	25.55066079
109	0.133067199	0	14.50432468	0	0	22.28875582	0	0	1.663339987	44.04524285	13.57285429
110	0.460122699	0	7.515337423	0	0	33.8957052	0	0	1.226993865	34.50920245	0.920245399
111	1.388888889	0	8.101851852	0	0	18.75	0	0	1.967592593	33.91203704	6.134259259
112	1.675977654	0	2.234636872	0	0	3.910614525	0	0	1.642807161	2.370069744	0

Appendix G: Values of New exico Stream Samples

BnsSamplD	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	Tnyt ChlPct	TrichPct	CrCh ChlPct	CrlolPct	DipPct	EphemPct	Shane	Shan
113	3.838951311	0	6.554307116	0	0	38.01498127	0	0.187265918	21.91011236	19.85018727	2.360032848	3.404807686
114	6.285310734	0	0.4223728814	0	0	1.34180791	0	0	77.54237288	12.07627119	1.454904011	2.098982801
115	9.409888357	0	1.913875598	0	0	26.47527911	0	0.318979266	29.02711324	24.56140351	2.683838715	3.871960804
116	1.136363636	0	10.37878788	0	0	22.5	0	7.58	-0.02	30.37878788	13.71212121	2.310518765
117	4.96031746	0	11.9047619	0	0	20.83333333	0	0.992063492	14.08730159	36.11111111	2.956142437	4.2648120517
118	0	0	42.85714286	0	0	0	0	2.380952381	47.61904762	2.380952381	1.640111354	2.366180517
119	0	0	10.69042316	0	0	32.96213808	0	0	9.576837416	46.10244989	1.501902247	2.166786924
120	0	0	29.6875	0	0	32.8125	0	0	17.1875	0	1.813312418	2.616056834
121	0	0	1.754385965	0	0	4.824561404	0	0	15.35087719	77.19298246	1.255327053	1.811054114
122	0	0	7.112970711	0	0	28.87029289	0	0.418410042	2.510460251	60.25104603	1.929195206	2.783240357
123	0	0	6.046195652	0	0	40.82880435	0	0	21.58061594	20.51630435	2.497854601	3.603642446
124	0.460829493	0	1.382488479	0	0	9.216589862	0	0	30.87557604	56.22119816	2.097660685	3.026284668
125	0	0	3.968253968	0	0	6.349206349	0	0	20.63492063	63.49206349	2.378643126	3.431656641
126	2.763819095	0	0.7535768844	0	0	11.05527638	0	0.020100503	19.09547739	59.04522613	2.237263315	3.227688689
127	0.515463918	0	2.577319588	0	0	7.216494845	0	0	34.53608247	52.57731959	1.8119683709	2.625248663
128	8.522727273	0	6.818181818	0	0	34.09090909	0	0	13.06818182	14.77272727	2.2583366382	3.25813398
129	1.21703854	0	0.202839757	0	0	49.0872211	0	0	17.03853955	28.60040568	1.784348781	2.574271138
130	3.94265233	0	0.716845878	0	0	56.63082437	0	0	7.885304659	26.88172043	1.77494219	2.560700296
131	4.7771784232	0	44.19087137	0	0	4.979253112	0	0	8.506224066	37.55186722	1.3677997813	1.97360366
132	1.224489796	0	15.51020408	0	0	11.42857143	0	0	28.7755102	41.63265306	2.5401533316	3.664666592
133	4.038904751	0	14.25178147	0	0	5.700712589	0	0	22.09026128	45.60570071	2.611823792	3.768065232
134	0	0	12.04013378	0	0	2.67555284	0	0	32.107552341	44.81605351	3.22622296	
135	2.743902439	0	13.1097561	0	0	17.68292683	0	0	8.536585366	34.75609756	2.6455917579	3.816781851
136	0	0	23.52941176	0	0	29.73856209	0	0	26.14379085	20.26143791	2.540519171	3.665194409
137	0.449101796	0	3.892215569	0	0	12.4251497	0	0	30.8332335	46.55688623	2.519302739	3.634585568
138	0	0	3.282828283	0	0	19.19191919	0	0	0.252525253	20.95959596	54.54545455	2.080084747
139	0.279329609	0	6.424581006	0	0	27.09497207	0	0	20.67039106	39.10614525	2.699629257	3.894741741
140	0	0	6.002554278	0	0	40.61302682	0	0	21.71136654	20.30651341	2.517473624	3.631946713
141	0	0	0	0	0	53.80116959	0	0	0	2.339181287	37.426900558	2.0277980025
142	0	0	0	0	0	3.846153846	0	0	0	1.282051282	56.41025641	2.020093548
143	0	0	0.338409475	0	0	89.00169205	0	0	0	3.72250423	6.598984772	1.159944245
144	0	0	0	0	0	0	0	0	0	77.97356828	22.02643172	1.0911565208
145	2.597402597	0	7.359307359	0	0	12.12121212	0	0	0	22.94372294	54.97835498	1.955209452
146	3.931203931	0	30.71253071	0	0	1.71990172	0	0	0	3.43980344	60.1965602	1.26510082
147	0	0	5.185185185	0	0	4.074074074	0	0	24.07407407	66.66666667	1.766796165	2.548948066
148	10.52631579	0	5.263157895	0	0	15.789473368	0	0	0	47.36842105	1.840340796	2.6555050539
149	0	0	0	0	0	69.23076923	0	0	0	12.64667536	5.8867014342	1.352449818
150	0	0	4.954954955	0	0	30.63063063	0	0	0	21.62162162	40.99099099	1.05117625
151	0.312989045	0	4.851330203	0	0	8.607198748	0	0	0	12.9804538	68.85758998	2.121816887
152	0	0	6.451612903	0	0	13.85630499	0	0	0	27.71260997	39.36950147	2.525415301
153	1.046337818	0	37.36920777	0	0	9.715994021	0	0	0	30.19431988	21.52466368	1.779237233
154	0	0	2.269861286	0	0	17.90668348	0	0	6.31	-0.02	31.39974779	12.67339218
155	4.852071006	0	20.47337278	0	0	4.615384615	0	0	12.5443787	23.78698225	2.729988666	3.93854111
156	3.640982218	0	20.15241321	0	0	16.17273497	0	0	0	14.73327688	28.02709568	2.768434715
157	5.520702635	0	18.31869511	0	0	28.23086575	0	0	0	8.281053952	18.94604768	2.642871966

Appendix G: Values of New exico Stream Samples

BnsSamplID	LigoPct	Rth ChlPct	PlecoPct	TanyPct	TrichPct	Tryt ChlPct	CrCh ChlPct	CroPct	DipPct	EphemPct	Shane
158	0	26.666666667	0	0	0	0	0	0	0	73.333333333	1.313774088
159	0.444444444	0	27.555555556	0	0	55.111111111	0	0	0	13.333333333	1.981937064
160	0.64516129	0	20.64516129	0	0	31.61290323	0	0	0	2.222222222	2.810480917
161	0	38.068182	0	0	24.4318182	0	0	0	0	4.193548387	3.557760399
162	0	0	17.03103704	0	0	4.444444444	0	0	0	4.545454545	2.87694142
163	1.7332328526	0	3.7678975103	0	0	26.90278824	0	0	0	1.481481481	2.962962963
164	0.742880726	0	2.8888988000	0	0	59.2653735	0	0	0	31.81818182	1.994143834
165	20.7253886	0	1.03626943	0	0	19.43005181	0	0	0	11.67973586	2.386125067
166	2.819548872	0	11.46616541	0	0	28.19548872	0	0	0	6.416683938	2.386125067
167	19.8630137	0	6.849315068	0	0	33.333333333	0	0	0	9.398496241	3.811678803
168	2.012072435	0	7.042253521	0	0	13.27967807	0	0	0	8.684931507	8.675799087
169	4.97953112	0	30.49792531	0	0	23.4439834	0	0	0	15.2917505	25.55331992
170	0.214592275	0	12.76824034	0	0	23.17956567	0	0	0	5.186721992	29.87551867
171	0.412654746	0	12.65474553	0	0	3.163686382	0	0	0	0	1.433277085
172	3.141361257	0	27.7486911	0	0	18.32460733	0	0	0	0	2.316911156
173	0.829875519	0	14.93775934	0	0	19.50207469	0	0	0	0	3.342596235
174	0	0	7.534246575	0	0	0.684931507	0	0	0	0	3.935548332
175	0	0	0	0	0	27.02702703	0	0	0	39.63963964	2.067781742
176	0	0	0.284900285	0	0	5.128205128	0	0	0	34.75783476	3.895438689
177	0.495049505	0	0.99009901	0	0	22.52457248	0	0	0	8.6633663337	2.316911156
178	6.157635468	0	3.448275862	0	0	28.32512315	0	0	0	0	2.016199308
179	3.846153846	0	11.5384615	0	0	11.5384615	0	0	0	6.153846154	2.397522866
180	4.6684317719	0	2.851323829	0	0	15.68228106	0	0	0	17.31160896	1.924776761
183	0.863930886	0	9.071274298	0	0	12.09503324	0	0	0	19.2224622	2.320763646
184	3.353658537	0	14.63414634	0	0	30.48780488	0	0	0	15.85365854	3.348154203
185	0.125628141	0	2.010050251	0	0	5.40201005	0	0	0	91.33165829	1.234558624
186	0	0	0.874635569	0	0	14.358460058	0	0	0	1.822157434	1.425211101
187	0	0	3.463203463	0	0	19.26406926	0	0	0	0	2.05614988
188	0	0	7.142857143	0	0	38.0952381	0	0	0	0	34.75783476
189	1.086956522	0	3.260869565	0	0	34.7826087	0	0	0	0	2.067781742
190	0	0	2	0	0	11.5	0	0	0	0	0
191	0	0	7.317073171	0	0	8.943089431	0	0	0	13.27913279	3.031297678
192	0	0	22.96296296	0	0	28.33333333	0	0	0	9.814814815	3.2393005184
193	0	0	3.617571059	0	0	20.93023256	0	0	0	29.19896641	3.453376712
194	0	0	2.23325062	0	0	10.91811414	0	0	0	27.79156328	3.420039097
195	0.699912511	0	2.537182852	0	0	37.70778653	0	0	0	14.61067367	3.197205259
196	1.795142555	0	2.6339915523	0	0	55.64941922	0	0	0	4.64625132	3.675931222
197	0.354609929	0	6.73758652	0	0	49.64539007	0	0	0	8.156028369	2.485442422
198	2	0	26.666666667	0	0	11.333333333	0	0	0	16.666666667	2.345302236
199	0	0	3.65448505	0	0	28.73754153	0	0	0	43.3548773	2.51120625
200	0	0	6.476683938	0	0	24.35233161	0	0	0	0.129533679	3.453810946
201	0	0	4.615384615	0	0	29.67032967	0	0	0	21.0989011	2.268771632
202	0	0	6.310679612	0	0	47.57281553	0	0	0	0.485436893	2.63353607
203	0	0	1.325757576	0	0	79.54545455	0	0	0	8.901515152	2.062276971
204	1.081081081	0	0.540540541	0	0	71.89189189	0	0	0	12.43243243	1.753511502

Appendix G: Values of New exico Stream Samples

BnsSamplID	LigoPct	RthChlPct	PlecoPct	TanyIPct	TrichPct	TnytChlPct	CrChlPct	ChiPct	DipPct	EphemPct	Shane
205	0	0	1.781170483	0	75.57251908	0	0	11.95928753	9.923664122	1.366316691	1.971178314
206	0.129701686	0	2.204928664	0	0	0	0	19.71465629	62.6459144	2.038163953	2.940449028
207	0	0	1.597444089	0	0	0	0	19.16932907	58.30670927	2.20285726	3.178051245
208	0	0	0.502512563	0	0	0	0	96.73366834	2.261306533	0.323211099	0.466295049
209	0	0	1.31071191	0	0	0	0	0.598802395	30.13972056	5.854956753	2.131329919
210	0	0	5.898876404	0	0	0	0	0	7.303370787	13.48314607	1.586260616
211	0.276243094	0	4.972375691	0	0	0	0	0.552486188	28.176779558	16.02209945	2.152891877
212	0.900900901	0	0	0	0	0	0	0	18.91891892	37.83783784	1.904694149
213	25.1497006	0	0	0	0	0	0	4.191616766	1.796407186	1.19760479	1.535919471
214	0	0	1.720430108	0	0	0	0	0	26.23655914	28.38709677	2.234571403
215	0	0	0.503355705	0	0	0	0	5.033557047	17.28187919	29.86577181	1.563967593
216	2.173913043	0	0	0	0	0	0	0	34.34782609	3.47826087	1.911878329
217	0	0	0.145137881	0	0	0	0	0.290275762	4.934687954	34.252539991	1.656311928
218	1.290322581	0	0	0	0	0	0	0	6.666666667	8.817204301	34.838709668
219	3.909465021	0	8.641975309	0	0	0	0	0	0	22.22222222	26.13168724
220	11.68831169	0	1.2998701299	0	0	0	0	19.91341991	0	27.70562771	10.82251082
221	4.029850746	0	9.253531343	0	0	0	0	0	0	1.298701299	2.512669875
222	0.886262925	0	0.443131462	0	0	0	0	7.39 -02	12.9985229	6.720827179	2.418296254
223	1.060070671	0	4.946996466	0	0	0	0	0	16.377202059	20.02355713	2.292748803
224	0.604229607	0	27.49244713	0	0	0	0	0	8.4591214502	19.93957704	2.617085502
225	0.67114094	0	47.6510671	0	0	0	0	0	0	13.42818179	11.40939597
226	0	0	21.87919463	0	0	0	0	0	0	26.17449664	5.7711812081
227	0	0	19.29824561	0	0	0	0	0	0	15.93567251	14.47368421
228	2.145045965	0	4.085801839	0	0	0	0	0	0	6.537282942	38.50868233
229	9.500805153	0	1.610305958	0	0	0	0	0	0	2.898550725	20.12882448
230	0	0	25.52083333	0	0	0	0	0	0	13.54166667	30.03472222
231	0	0	12.98701299	0	0	0	0	0	0	10.64935065	35.58441558
232	0.674157303	0	11.91011236	0	0	0	0	0	0	0.224719101	13.25842697
233	1.311953353	0	20.99125364	0	0	0	0	0	0	0	21.123595551
234	0	0	0	0	0	0	0	0	0	0	0.145777255
235	0	0	4.166666667	0	0	0	0	0	0	0	6.268221574
236	0	0	3.440860215	0	0	0	0	0	0	0	16.03498542
237	0	0	14.50980392	0	0	0	0	0	0	0	5.751633997
238	0.144508671	0	25.14450867	0	0	0	0	0	0	0	17.6300578
239	0.729927007	0	3.163017032	0	0	0	0	0	0	0	23.84428224
240	12.13592233	0	7.281553398	0	0	0	0	0	0	0	15.53398058
241	5.04587156	0	5.275229358	0	0	0	0	0.917431193	12.3853211	49.31192661	3.240410499
242	7.80669145	0	6.691449814	0	0	0	0	0	0	0	6.691449814
243	8.955223881	0	7.462686567	0	0	0	0	0	0	0	22.01492537
244	0.334448161	0	16.44944259	0	0	0	0	0	0	0	13.8238573
245	0.3344821429	0	16.40625	0	0	0	0	0	0	0	13.83928571
246	0.821917808	0	1.369863014	0	0	0	0	0	0	0	30.1369863
247	0	0	3.064066852	0	0	0	0	0	0	0	80.77994429
248	0	0	1.042442293	0	0	0	0	0	0	0	48.7714073
249	0.3622318841	0	11.95652174	0	0	0	0	0	0	0	38.4057971

Appendix G: Values of New exico Stream Samples

BsnSamplID	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	TrichPct	CrCh ChlPct	Cr olPct	DipPct	EphemPct	Shan e	Shan
250	5.617977528	0	2.809988764	0	13.48314607	0	0	24.71910112	51.12359551	2.37449718	3.425606833
252	1.393728223	0	0.696864111	0	34.49477352	0	0.696864111	34.84320557	26.13240418	1.973846578	2.84765867
253	1.312335958	0	5.774728215	0	0	0	31.496606299	0	15.7480315	39.63254593	2.147831862
254	0.412654746	0	0.962861073	0	0	0	13.6740028	0	0.687757909	64.64942347	3.098666377
255	14.24731183	0	0	0	0	0	44.35483871	0	3.494623856	22.84946237	11.82795699
256	31.67938931	0	0	0	0	0	0.508905852	0	0.6336132316	65.20356234	1.69188446
257	10.37037037	0	0	0	0	0	30.37037037	0	1.8518511852	14.4444444	3.31943219
258	0	0	0	0	0	0	29.31596091	0	0.325732899	26.38436482	34.2019544
259	0.23255814	0	16.27906977	0	0	0	24.883372093	0	0	14.883372093	38.37209302
260	3.25732899	0	5.211726384	0	0	0	13.68078176	0	0	26.38436482	41.36807818
261	3.215434084	0	5.466237942	0	0	0	11.5755627	0	0	32.15434084	32.47588424
262	0.4217350427	0	5.982905983	0	0	0	10.04273504	0	0	43.37606838	38.88888889
263	2.150537634	0	8.064516129	0	0	0	34.40860215	0	0	13.44086022	37.09677419
264	0	0	3.592814371	0	0	0	21.55688623	0	0	10.7744311	59.28143713
265	0.295857988	0	6.213017751	0	0	0	27.5147929	0	0.295857988	29.28994083	24.55621302
266	0	0	0	0	0	0	10.34482759	0	6.8965511724	50.86206897	24.13793103
267	0.869565217	0	0	0	0	0	7.8226086957	0	0	26.95652174	27.82608696
268	5.720338983	0	0	0	0	0	36.22881356	0	5.084745763	1.694915254	28.1779661
269	0	0	0	0	0	0	17.89413684	0	6.315789474	10.52631579	31.57894737
270	1.304347826	0	0	0	0	0	19.13043478	0	0	15.2173913	12.60869565
271	0	0	0	0	0	0	7.2519098397	0	6.488549618	18.70229008	59.16030534
272	15.11627907	0	0	0	0	0	0	1.162790698	41.86046512	0	1.401529367
273	0	0	0	0	0	0	23.07692308	0	0	36.92307692	12.30769231
274	0	0	14.11290323	0	0	0	5.846774194	0	2.620967742	6.048387097	25
275	0.186567164	0	30.41044776	0	0	0	21.455223388	0	0	14.552233881	27.23880597
276	3.232533889	0	23.26338895	0	0	0	9.5933326382	0	3.753910323	19.49947862	25.86027112
277	3.86869871	0	5.861664713	0	0	0	11.95779601	0	2.813590962	18.05392732	31.77022274
278	0	0	6.779661017	0	0	0	33.89830508	0	0	5.649717514	40.6779661
279	0	0	0	0	0	0	52.7972028	0	0	3.8461538476	10.13986014
280	0	0	0	0	0	0	24.53703704	0	0	2.314814815	4.62962963
281	0	0	0	0	0	0	37.07317073	0	0	0	4.87804878
282	0.724637681	0	0	0	0	0	7.246376812	0	1.811594203	52.17391304	35.86956522
283	0	0	0	0	0	0	2.6845633758	0	0	0	89.26174497
284	0	0	6.172839506	0	0	0	35.18518519	0	1.851851852	1.851851852	53.08641975
285	0.158227848	0	5.379746835	0	0	0	36.23417722	0	0.158227848	12.8164557	10.75949367
286	1.351351351	0	6.756756757	0	0	0	8.108108108	0	0	62.16216216	18.91891892
287	19.6969697	0	6.06060606061	0	0	0	5.303030303	0	0	60.6060606061	3.787878788
288	0	0	6.66666666667	0	0	0	68.20512821	0	0.512820513	3.076923077	19.48717949
289	1.652892562	0	1.652892562	0	0	0	24.7933843	0	0	14.87603306	13.2231405
290	0.412654746	0	16.78129298	0	0	0	37.82668501	0	0.137551582	30.26134801	8.803301238
291	0.506756757	0	11.48648649	0	0	0	38.68213243	0	0	27.19594595	15.03378378
292	7.536764706	0	12.31617647	0	0	0	34.55882353	0	0.551470588	18.38235294	17.09558824
293	0	0	8.647450111	0	0	0	47.00665188	0	0	33.92461197	5.532337251
294	0	0	16.05136437	0	0	0	28.08988764	0	0	0.561797753	30.73836276
295	1.188903567	0	2.906208719	0	0	0	42.27212682	0	0	2.50990753	15.45574637
											29.06208719

Appendix G: Values of New exico Stream Samples

BnsSamplID	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	Tnyt ChlPct	TrichPct	CrCh ChlPct	CrofPct	DipPct	EphemPct	Shane	Shan
296	1.0905172541	0	4.870956016	0	63.46782988	0	0.690657943	8.905852417	15.81243184	1.844226349	2.660656209	
297	0	0	6.532663317	0	0	45.058662647	0	0	3.685092127	37.35343384	2.00737401	2.896033421
298	0	0	26.69172932	0	0	24.43669023	0	0	16.16541353	32.33082707	2.504333083	3.61298892
299	0	0	36.36363636	0	0	24.34017595	0	0	12.34017554	24.04692082	2.600108003	3.751162921
300	0	0	9.065155807	0	0	35.97733711	0	0	13.03161647	40.79320113	2.708399402	3.907394385
301	1.020408163	0	27.55102041	0	0	12.75510204	0	0	7.653061224	44.89795918	2.581868986	3.724849582
302	0.99009901	0	1.98019802	0	0	20.79207921	0	0	15.84158416	56.43564356	1.662346749	2.398825941
303	0	0	1.724137931	0	0	20.68965517	0	0	22.4137931	41.37931034	2.139628976	3.086832113
304	0.389105058	0	1.556420233	0	0	36.57587549	0	0	21.40077821	7.782101167	2.142511194	3.090990274
305	0	0	15.55555556	0	0	58.33333333	0	0	4.444444444	19.444444444	2.428756066	3.503954332
306	0	0	15.68627451	0	0	19.60784314	0	0	3.921568627	52.94117647	2.462467718	3.552589965
307	16.57458564	0	6.445672192	0	0	34.80662983	0	0	25.78268877	15.83793738	2.477790554	3.574862054
308	0	0	0	0	0	14.54918033	0	0.204919033	4.713114754	13.7295082	1.837042278	2.650291784
309	6.1641383562	0	9.589041096	0	0	17.80821918	0	0	4.794520548	55.47945205	2.494189287	3.598354515
310	0.788954635	0	0.986193294	0	0	33.53057199	0	0.986193294	38.65877712	17.75147929	2.099443576	3.028856836
311	2.898850725	0	20.28988507	0	0	24.633768116	0	0	13.04347826	34.7826087	2.46584141	3.557457173
312	0.430570506	0	1.184068891	0	0	9.79547901	0	0	4.843918192	83.63832078	1.399121864	2.018506174
313	1.2998701299	0	1.515151515	0	0	12.12121212	0	0	2.597402597	82.25108225	1.442468068	2.081041528
314	2.480620155	0	0	0	0	13.02325581	0	0	46.20155039	36.66666667	1.779774043	2.567671185
315	0.805369128	0	0.268456376	0	0	29.66442953	0	0	25.23489933	43.48993289	1.726569269	2.490912922
316	0.504625736	0	0	0	0	72.91841884	0	0.756938604	4.205214466	17.40958789	1.545643424	2.22989103
317	5.797101449	0	6.763285024	0	0	23.67149758	0	0	18.84057971	43.96135266	2.4052187	3.463120465
318	8.2566880734	0	7.33949541	0	0	24.7706422	0	0	19.26605505	39.44954128	2.39894112	3.469940457
319	2.345511953	0	0	0	0	8.334609833	0	0	61.07352278	27.60487145	1.534121194	2.213269039
320	17.49696233	0	0	0	0	4.2527339	0	0	61.36087485	16.2818955	1.6336217536	2.360562925
321	0	0	0	0	0	0	0	0	4.761904762	0	0.832407574	1.20091028
322	0	0	0	0	0	0	0	0	21.21212121	0	1.024961528	1.478706914
323	0	0	0	0	0	46.666666667	0	4.444444444	15.55555556	11.1111111	1.752511865	2.528340177
324	1.652892562	0	0	0	0	20.66115702	0	5.785123967	41.32231405	13.22231405	2.1060066389	3.038324973
325	1.612903226	0	0	0	0	54.83870968	0	12.90322581	3.2225806452	11.29032258	1.571619492	2.267367648
326	0	0	0	0	0	67.04980843	0	11.1111111	5.3633984674	4.980842912	1.250951123	1.804740982
327	8.284023669	0	0	0	0	15.38461538	0	0	6.50887574	63.90532544	2.33627298	3.370529442
328	0.917431193	0	0	0	0	0.917431193	0	0.917431193	96.33027523	0	0.775426573	1.118704071
329	9.69 -02	0	1.937984496	0	0	78.668217054	0	9.69 -02	2.131782946	12.8875969	1.2227788478	1.764110873
330	0.278486888	0	3.040148526	0	0	12.94964029	0	4.64 -02	1.206776514	82.43211882	1.421876619	2.051334347
331	0.169491525	0	5.084145763	0	0	42.54237288	0	0	16.27118644	22.54237288	2.202291209	3.177234606
332	0.115874855	0	13.67323291	0	0	28.04171495	0	0	24.21784473	8.690614137	3.808429852	
333	1.945525292	0	2.723735409	0	0	49.41634241	0	0	22.17898833	20.62256809	1.67769447	2.420401492
334	0.196078431	0	1.176470588	0	0	81.50326797	0	0.130718954	4.31372549	10.8496732	1.836104707	2.648939155
335	0	0	8.121827411	0	0	14.72081218	0	0	5.076142132	12.18228426	1.823308195	2.630477691
336	0.714285714	0	0.714285714	0	0	3.57114285714	0	0.714285714	84.28571429	10	1.276121152	1.841053658
337	0	0	6.818181818	0	0	10.22272273	0	0	34.65909091	48.29545455	1.591062105	2.295417409
338	0.189035917	0	0	0	0	3.780718336	0	9.45 -02	45.36862004	49.90548204	1.289690288	1.860629783
339	4.504504505	0	0.15015015	0	0	17.56756757	0	0	34.38438438	42.64264264	1.823025222	2.630069447
340	16.27296588	0	1.181102362	0	0	0.5249334333	0	0	70.73490814	9.973753281	1.722700964	2.485332137

Appendix G: Values of New exico Stream Samples

BentSampleID	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	TrichPct	Tryt ChlPct	CrCh ChlPct	CroPct	DipPct	EphemPct	Shane
341	18.7150838	0	1.117318436	0	0	2.51396648	0	0	62.01117318	15.36312849	1.720434624
342	1.094091904	0	0.437636761	0	0	1.094091904	0	0	86.65207877	10.72210066	1.18533152
343	1.253132832	0	1.754385965	0	0	9.022556391	0	0	42.10526316	45.61403509	1.779532889
344	0.124069479	0	0	0	0	16.37717122	0	0.124069479	29.15632754	51.11662531	2.567323275
345	0.31152648	0	25.54517134	0	0	27.10280374	0	0	18.38006231	27.7258561	2.76484138
346	0	0	11.65553081	0	0	33.92724573	0	0.816629547	22.12323682	20.4899773	2.465445953
347	0.613496933	0	3.067484663	0	0	43.14928425	0	0.204498978	8.1799591	34.15132924	2.445491385
348	0.118063754	0	7.556080283	0	0	35.06493506	0	0	23.96694215	31.64108619	2.706797194
349	0.702576112	0	16.62763466	0	0	23.65339578	0	0	8.430913349	49.18032787	2.770510606
350	0	0	25.56732224	0	0	20.72617247	0	0	34.49319213	18.75945537	2.4246165954
351	0	0	14.76377953	0	0	3.937007874	0	0	68.30708661	12.99212598	1.385988693
352	0	0	29.33333333	0	0	11.46666667	0	0	10.13333333	48.53333333	2.424744721
353	0	0	7.171314741	0	0	33.46613546	0	0	33.46613546	22.70916335	2.090555049
354	0	0	5.319148936	0	0	48.93617021	0	0	9.574468085	36.17021277	1.648937354
355	0	0	0	0	0	83.72093023	0	0	3.488372093	11.62790698	0.803262439
356	0	0	1.4233487544	0	0	67.97153025	0	0	7.117437722	23.48754448	1.631210118
357	0	0	8.75	0	0	37.08333333	0	0	4.583333333	43.541666667	2.368828394
358	0	0	4.435483871	0	0	43.9516129	0	0	4.838709677	45.56451613	1.851177328
359	0	0	4.299065421	0	0	43.73831776	0	0	4.112149533	43.17757009	2.4261786251
360	0	0	4.320987654	0	0	47.83950617	0	0	4.62962963	39.81481481	2.155178554
361	0	0	7.111111111	0	0	41.1111111	0	0	6.444444444	44	1.282060757
362	0.259067358	0	0	4.42487047	0	0	26.42487047	0	0	37.8238342	16.83937824
363	0.643776824	0	8.369098712	0	0	30.68669528	0	0	21.88841202	36.05150215	2.111872429
364	0.550964187	0	9.641873278	0	0	12.39669421	0	0	26.44628099	50.41322314	2.067600445
365	0	0	5.205479452	0	0	28.21917808	0	0	53.88127854	8.88384474489	1.70082938
366	0	0	0	0	0	40.69264069	0	0	5.627705628	52.38095238	2.0753382798
367	0	0	0.465116279	0	0	11.1627907	0	0	31.1627907	52.55813953	2.052614281
368	0	0	0	0	0	57.54716981	0	0	14.1509434	27.35849057	2.053172537
369	0.172018349	0	0.114678899	0	0	5.733944954	0	0	5.73 -02	16.91513761	58.08486239
370	6.896551724	0	0	0	0	18.22660099	0	0	0.492610837	7.3899162562	62.56157635
371	0	0	0	0	0	5.272727273	0	0	0	7.63363636	81.63636364
372	0.242718447	0	0	0	0	2.265372168	0	0	2.83171521	51.05177994	42.79935275
373	0.920245399	0	0.920245399	0	0	15.64417178	0	0	0	12.26993865	65.03067485
374	0	0	0	0	0	33.54368932	0	0	14.10194175	50.77669903	1.140776699
375	0	0	4.356636272	0	0	11.34751773	0	0	0	5.268490375	25.93718338
376	0	0	0.471698113	0	0	20.28301887	0	0	0	45.28301887	25.47169811
377	0	0	0	0	0	5.607476636	0	0	0	33.17757009	46.26168224
378	0	0	1.915708812	0	0	13.40996169	0	0	0	42.52873563	22.22222222
380	0.613496933	0	0	0	0	7.36196319	0	0	19.01840491	68.09815951	1.612158718
381	0.660066007	0	0	0	0	26.4024026	0	0	4.785478548	45.04950495	13.20132013
383	0	0	0	0	0	21.95121951	0	0	0.609756098	28.65853659	32.31707317
384	0	0	0	0	0	46.62162162	0	0	0.675675676	27.47747748	13.96396396
385	0	0	0	0	0	53.76344086	0	0	0.358422939	11.82795699	24.01433692
386	0	0	3.174603175	0	0	4.761904762	0	0	0	65.07936508	26.98412698
387	0	0	3.614457831	0	0	34.93975904	0	0	0	18.07228916	39.75903614

Appendix G: Values of New exico Stream Samples

BnsSamplID	LigoPct	RthChlPct	PlecoPct	TanyIPct	TnytChlPct	TrichPct	CrChlPct	ChiPct	CrofPct	DipPct	EphemPct	Shane
388	0	0	0	0	0	2.255639098	0	0	0	12.03007519	85.71428571	0.936541738
389	0	0	0	0	0	0	0	0	0	64.54545455	4.54545455	2.054512239
390	0	0	0	0	0	18.4375	0	0	17.5	20.9375	33.4375	2.1319256336
391	1.219512195	0	0.406504065	0	0	5.284552846	0	0	0	42.27642276	46.74796748	3.075718542
392	0	0	0	0	0	0	0	0	0	72.916666667	6.25	1.2510046464
393	0.16474464646	0	9.884678748	0	0	0	0	0	0	65.89785832	17.62776771	1.804818199
394	0.25	0	60	0	0	0.75	0	0	0	4.125	32	1.531724117
395	5.614973262	0	0	0	0	1.336898396	0	0	0	1.203208556	88.23529412	0.529316242
397	0.421940928	0	0.2535164557	0	0	25.907173	0	0	0	52.48945148	11.56118143	2.554541323
398	0.231213873	0	3.23699422	0	0	37.3404046	0	0	0	10.98265896	21.96531792	2.3063716331
399	0	0	4.44191344	0	0	29.384796583	0	0	0	5.011389522	61.16173121	1.1997883331
400	0	0	3.344481605	0	0	30.60200669	0	0	0	24.24749164	30.93645485	2.098937495
401	0.3446020761	0	13.84083045	0	0	11.76470588	0	0	0	0.692041522	8.996539792	59.8615977
402	0.168350168	0	5.21189855219	0	0	24.24242424	0	0	0	0.168350168	26.26262626	41.07744108
403	1.287553648	0	0.853369099	0	0	26.287553365	0	0	0	0.6437766824	23.81974249	46.13733906
404	0.641025641	0	2.403846154	0	0	25.48076923	0	0	0	0.16025641	11.05769231	50.32051282
405	0.5666572238	0	2.266288952	0	0	55.52407932	0	0	0	0	11.61473088	1.673867537
406	0.3666300366	0	20.87912088	0	0	38.0962381	0	0	0	0.564102564	20.51282051	2.074508204
407	0	0	0	0	0	13.21695761	0	0	0	28.17955112	30.67331671	2.25557355
408	0.188323917	0	0	0	0	76.83615819	0	0	0	0.376647834	12.61770245	1.996174437
409	0.289017341	0	0	0	0	23.41040462	0	0	0	0	23.9843931	34.10404624
410	0.520833333	0	8.854166667	0	0	31.77083333	0	0	0	0	11.979166667	40.10416667
411	0.342465753	0	5.479452055	0	0	29.10958904	0	0	0	0	11.64383562	48.28767123
412	10.78904992	0	0	0	0	0	0	0	0	0	1.93236715	62.64090177
413	17.36641221	0	0.954198473	0	0	8.015267176	0	0	0	0.381679389	51.71755725	16.98473282
414	3.768844221	0	2.512562814	0	0	9.296482412	0	0	0	11.30653266	5.27638191	35.92964824
415	0	0	0.4469483568	0	0	46.79186228	0	0	0	0	21.28325509	21.43974961
416	1.57790927	0	4.7333727811	0	0	31.755242406	0	0	0	1.57790927	29.1913215	14.59566075
417	0.765550239	0	0	0	0	4.976076555	0	0	0	0	34.92822967	38.27751196
418	14.47124304	0	1.113172542	0	0	16.14100186	0	0	0	0	30.05655863	25.04638219
419	0.347826087	0	2.086956522	0	0	4.173913043	0	0	0	0.695652174	33.56521739	10.95652174
420	0	0	0.7630522088	0	0	26.706822731	0	0	0	0	13.65461847	21.08433735
421	0.290135397	0	0	0	0	41.4893617	0	0	0	0.580270793	23.79110251	26.88588008
422	0.3889105058	0	11.67315175	0	0	32.29571984	0	0	0	0	25.68093385	29.18287938
423	0	0	0	0	0	16.12446959	0	0	0	0	3.536067893	53.88967468
424	0.330033003	0	1.732673267	0	0	3.382838284	0	0	0	0	3.712871287	1.650165017
425	3.200692042	0	3.6333217993	0	0	5.103806228	0	0	0	0	45.84775087	17.8200692
426	0	0	7.013574661	0	0	14.25339367	0	0	0	0	15.38461538	61.53846154
427	0	0	4.096385542	0	0	15.42168675	0	0	0	0.48192771	46.5060241	9.3879518072
428	0	0	10.51344743	0	0	11.49144254	0	0	0	0	7.334963325	2.676579544
429	2.372262774	0	2.554744526	0	0	25.72992701	0	0	0	0.182481752	19.16058394	25.36493655
430	2.205882353	0	0	0	0	0	0	0	0	0	0	16.17647059
431	15.04424779	0	0	0	0	31.4159292	0	0	0	0	19.91150442	24.33628319
432	0.4375	0	0.375	0	0	46.75	0	0	1.125	0	33.5625	5.4375
433	0	0	1.298701299	0	0	66.23376623	0	0	0	0	2.1298701299	2.80239951
434	0	0	1.298701299	0	0	0	0	0	0	0	0	3.163705147

Appendix G: Values of New exico Stream Samples

BnsSamplID	LigoPct	RthChlPct	PlecoPct	TanyIPct	TnytChlPct	TrichPct	CrCh	ChiPct	CrofPct	DipPct	EphemPct	Shane	Shan			
436	0	0	3	0	0	74	0	0.6666666667	8.6666666667	11.3333333333	2.000574346	2.886218689				
437	0	0	6.315789474	0	0	61.05263158	0	0	7.368421053	22.10526316	1.943729796	2.804209337				
438	0.294985251	0	5.604719764	0	0	46.60766962	0	0	20.3539823	21.23893805	2.262701089	3.26438764				
439	0	0	3.921568627	0	0	50.98039216	0	0	15.68627451	23.52941176	2.28610426	3.29815123				
440	0	0	1.081081081	0	0	78.91891892	0	0	2.432432432	4.054054054	5.405405405	1.535296381	2.214964475			
441	0	0	10.67961165	0	0	63.10679612	0	0	0	3.883495146	18.44660194	1.759806472	2.538864071			
442	1.436031332	0	0	0	0	38.12010444	0	0	0	32.50652742	27.67624021	1.657200528	2.390834984			
443	5.806451613	0	0	0	0	10.96774194	0	0	0	65.80645161	17.41935484	1.645886124	2.374511749			
444	0	0	0	0	0	0.410172272	0	0	0	94.17555373	5.250205086	0.907809347	1.309692043			
445	0.305903946	0	0	0	0	0	0	0	99.54114408	0	0	0.390042024	0.562711694			
446	0.3424765753	0	0	0	0	3.767123288	0	0	0.342465753	19.8630137	66.09589041	1.45146173	2.09401664			
447	1.739130435	0	0	0	0	3.913043478	0	0	0	15.65217391	71.30434783	1.819026679	2.624300769			
448	1.305483029	0	0	0	0	40.7310705	0	0	0	7.049608355	38.12010444	2.129279858	3.071901491			
450	0.873362445	0	0	0	0	30.56788559	0	0	0.436681223	6.986899563	51.52838428	2.540932871	3.6665791253			
451	1.571709234	0	0	0	0	22.78978389	0	0	0	3.536345776	57.56385069	2.427454653	3.50207679			
452	0.490196078	0	0	0	0	33.45588235	0	0	0.367647059	30.88235294	27.08333333	2.222748628	3.206748423			
453	1.257861635	0	0	0	0	40.25157233	0	0	0	0	15.30398323	41.71907757	1.950963525	2.814645402		
454	2.011494253	0	0	0	0	27.582069	0	0	0.862068966	12.93103448	55.45977011	1.897481539	2.737487207			
455	0.261780105	0	0	0	0	46.8583874	0	0	0	7.853403141	43.97905759	1.430406217	2.063639955			
456	0.529100529	0	0	0	0	15.87301587	0	0	0	41.7989418	40.74074074	1.366282991	1.9771129695			
457	1.149425287	0	9.195402299	0	0	25.28735632	0	0	0	13.79103045	50.57471264	2.027868086	2.9255595231			
458	4.172099087	0	0	0	0	22.55541069	0	0	26.46675359	7.04041721	25.9424412	3.342440883				
459	0	0	0	0	0	0	0	0	84.07960199	0	15.92039801	0.857006508	1.23639904			
460	14.0969163	0	0	0	0	20.26431718	0	0	3.524229075	44.05286344	18.06167401	1.730338091	2.496350183			
461	10.63829787	0	0	0	0	26.24113475	0	0	1.418439716	30.4964539	29.78723404	1.8521518154	2.672099383			
462	1.098901099	0	0	0	0	15.38461538	0	0	0	23.07692308	47.25274725	1.968585586	2.840068663			
463	0	0	0	0	0	54.90196078	0	0	0	13.7254902	21.56862745	1.679778543	2.423408173			
464	0.336700337	0	0.3336700337	0	0	18.51851852	0	0	0	0.3336700337	13.8047138	60.94276094	2.189599432	3.158924243		
465	0	0	0	0	0	52.2260274	0	0	0	0	19.8630137	25	1.956317618	2.822369725		
466	0.207468888	0	7.123098202	0	0	35.20055325	0	0	0.691562932	16.66666667	6.9115629322	2.523453512	3.640573867			
467	0	0	5.8555018587	0	0	11.33828996	0	0	0	67.00743494	15.79925651	1.632220932	2.354797045			
468	3.215434084	0	20.25723473	0	0	27.65273312	0	0	0	4.180064309	44.05144695	2.22700369	3.21288718			
469	0.8771192982	0	5.263157895	0	0	45.61403509	0	0	0	4.385964912	43.85964912	1.221674012	1.762503038			
470	0	0	4.444444444	0	0	7.77777778	0	0	0	7.77777778	80	1.414859123	2.04121024			
471	5	0	9	0	0	8	0	0	0	0	11	67	2.027371005	2.924878095		
472	3.519061584	0	0	0	0	14.2228739	0	0	2.785923754	27.41935484	47.94721408	1.998580313	2.879374496			
473	2.07253886	0	0	0	0	5.284974093	0	0	1.450777202	68.39378238	20.62176166	1.634829343	2.358560185			
474	1.548672566	0	0	0	0	24.77876106	0	0	0.22123838	43.14159292	27.21238938	2.18575282	3.153374754			
475	5.128205128	0	0.534188034	0	0	13.9957265	0	0	6.153846154	16.23931624	1.772683917	2.55742296				
476	4.231625835	0	0	0	0	4.231625835	0	0	0.445434298	46.54788419	36.74832962	2.008308446	2.897376636			
477	0.666066007	0	0	0	0	17.82178218	0	0	0.330033003	47.68976898	22.93729373	1.829216762	2.63901952			
478	0	0	0	0	0	63.88888889	0	0	11.1111111	5.555555556	16.666666667	1.357413795	1.953334151			
479	0	0	0	0	0	9.170305677	0	0	0	31.87772926	54.14847162	1.913124249	2.760054867			
480	6.488549618	0	0	0	0	11.83206107	0	0	0	20.61068702	38.54961832	2.011069763	2.901360374			
481	0.534759358	0	1.069518717	0	0	21.39037433	0	0	0	7.486631016	62.03208556	1.716622985	2.476563468			

Appendix G: Values of New exico Stream Samples

BsnSamplID	LigoPct	ChlPct	PlecoPct	TanyIPct	Tnyt	ChlPct	TrichPct	CrCh	ChiPct	CrofPct	DipPct	EphemPct	Shane	Shan	
482	0	0	0	0	0	6.315789474	0	0.526315789	35.26315789	47.36842105	1.949094354	2.811948759			
483	0	0	0	0	0	32.270916333	0	0.398406375	8.366533865	50.19920319	2.070951436	2.987751367			
484	0	0	0	0	0	39.4265233	0	0.358422939	11.46953405	40.50179211	1.935280124	2.792019038			
485	0	0	0	0	0	56.71641791	0	0	8.457711443	25.870646771	1.935454652	2.790952205			
486	0	0	0	0	0	59.21501706	0	0	8.020477816	14.675776792	1.718244062	2.478902135			
487	0	0	0	0	0	74.40699126	0	0	6.991260924	4.744069913	1.310736347	1.890992828			
488	0	0	0	0	0	60.72727273	0	0	0	12.363363636	19.63636364	1.953242807	2.817933712		
489	0.319488818	0	26.51757188	0	0	24.9201278	0	0	0	17.57188498	16.61341853	2.453070279	3.539032326		
490	0	0	0	0	0	12.5	0	0	0	25	50	1.44023475	2.077819531		
491	0	0	3.703703704	0	0	37.03703704	0	0	14.81481481	25.92592593	2.198228358	3.17137315			
492	0	0	4.651162791	0	0	30.23255814	0	0	13.95348837	39.53488372	1.8207038404	2.635859245			
493	0	0	15.88235294	0	0	15	0	0	15.88235294	35.88235294	1.993289563	2.876488023			
494	0	0	0	0	0	10.88825215	0	0	0	30.37249284	32.09169054	2.035712244	2.936911959		
495	2.4464788732	0	0.704225352	0	0	52.46478873	0	0	0	5.281690141	28.52112676	2.268691565	3.272303007		
496	0.316455696	0	25.94936709	0	0	45.25316456	0	0	0.949367089	6.962025316	13.29113924	1.966729704	2.837391191		
497	1.630434783	0	6.25	0	0	18.75	0	0	1.0869565522	6.25	4.347826087	1.675431397	2.417136568		
498	0.318471338	0	24.52229299	0	0	15.2866242	0	0	0.318471338	13.05732484	19.745222293	2.318330396	3.344643765		
499	1.374570447	0	31.271747766	0	0	24.39852543	0	0	4.467353952	16.83848797	2.5135751	3.626322332			
500	0.31593985	0	0	0	0	58.64661654	0	0	0.751879699	20.67669173	2.131277728	3.074783809			
501	1.337792642	0	0	0	0	46.48829431	0	0	28.76254181	15.05016722	2.480489762	3.578590278			
502	0	0	0	0	0	66.00985222	0	0	0	3.9408867	13.79310345	2.071322504	2.988286705		
503	0	0	5.911330049	0	0	79.03225806	0	0	0	3.629032258	13.70967742	1.652577442	2.38495023		
504	0	0	3.396226415	0	0	54.71698113	0	0	3.018867795	13.96226415	10.188677925	2.497768274	3.603517902		
505	0	0	2.649006623	0	0	49.66887417	0	0	0	7.947019868	21.19205298	2.085119889	3.008192124		
506	0.294985251	0	0	0	0	49.85250737	0	0	0.294985251	5.014749263	35.10324484	1.668337762	2.406902615		
507	0	0	0	0	0	55.92592593	0	0	2.592592593	0.740740741	14.81481481	2.220933722	3.204130067		
508	0	0	5.743243243	0	0	65.54054054	0	0	0	3.716216216	22.97297297	2.375890382	3.427685272		
509	0	0	14.52102703	0	0	56.41891892	0	0	0	4.72972973	16.89189189	2.539468339	3.663678453		
510	0.258397933	0	14.9870801	0	0	55.55555556	0	0	0	3.100775194	12.91989664	2.005120275	2.892277078		
511	0.289855072	0	0.289855072	0	0	60.86956522	0	0	5.507246377	8.405797101	17.97101449	2.204795805	3.180847974		
512	0	0	9.85915493	0	0	46.12676056	0	0	5.985915493	34.85915493	21.98037055	3.171097159			
513	0	0	12.82051282	0	0	75.451787546	0	0	8.058608059	3.296703297	1.687126721	2.434090354			
514	0.638977636	0	27.15654952	0	0	49.52076677	0	0	6.389776358	14.376996881	2.449193949	3.533439964			
515	0.970873786	0	30.09708738	0	0	31.06796117	0	0	0	23.30097087	7.766990291	2.055031172	2.964783281		
516	0.156985871	0	15.69858713	0	0	29.12087912	0	0	0.235478807	35.94976452	10.83202512	2.219740374	3.20240843		
517	7.52688172	0	7.168458781	0	0	24.37215986	0	0	1.433691756	12.54480287	34.05017921	2.724414867	3.930499817		
518	23.15789474	0	19.73684211	0	0	23.68421053	0	0	2.631578947	4.473684211	19.73684211	2.762179077	3.984982057		
519	12.8113879	0	0.711743772	0	0	44.83985765	0	0	0.711743772	6.40569395	23.1316726	2.316377231	3.341825944		
520	0.337837838	0	1.689189189	0	0	11.48648649	0	0	0.2027027027	8.108108108	23.98648649	1.572131907	2.268106905		
521	9.150326797	0	8.980392157	0	0	37.90849673	0	0	0.326797386	4.248366013	29.73856209	1.253118511	3.250562902		
522	0.609756098	0	8.841463415	0	0	17.98780488	0	0	0	19.51219512	47.86585366	2.459333928	3.548068861		
523	0.588235294	0	0	0	0	0	0	0	0	80.58823529	0	1.194966452	1.723972174		
524	1.224489796	0	0.816326531	0	0	33.26530612	0	0	0.204081633	0.816326531	54.08163265	1.92997229	2.784361364		
525	6.2229508197	0	30.81967213	0	0	11.80327869	0	0	3.606557377	5.901639344	35.08196721	2.95309428	4.260414472		
526	5.80474934	0	4.221635858	0	0	24.53825858	0	0	1.055408971	9.234828496	35.35620053	2.678472596	3.864219132		

Appendix G: Values of New exico Stream Samples

BsnSamplD	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	Tnyt ChlPct	TrichPct	CrCh ChlPct	CrlolPct	DipPct	EphemPct	Shane	Shan
527	0.662251656	0	15.23178808	0	38.41059603	0	0.331125828	13.90728477	19.20529801	2.746062892	3.961731317	
528	7.886435331	0	23.02839117	0	0	21.13564669	0	0.630914826	7.570977918	29.96845426	2.780156588	4.010918122
529	0	0	0	0	0	28.83435583	0	0	50	15.95092025	1.518562097	2.190822006
530	2.222222222	0	0	0	0	0	0	0	0	6.666666667	91.11111111	0.392379177
531	0	17.21068249	0	0	2.37388724	0	0	0	0	4.747774481	44.8071712166	3.24013616
532	0.722021661	0	23.82671729	0	0	7.220216606	0	0	0	6.859205776	25.27075812	2.2239362495
533	0	0	5.685618729	0	0	3.678929766	0	0	0	26.08695652	59.86622074	1.698539782
534	0	0	1.6877763713	0	0	5.907172996	0	0	0	52.32067511	39.66244726	1.594976692
535	0	0	9.85915493	0	0	12.20651277	0	0	0	29.57746479	46.47887324	2.388425997
536	8.823529412	0	0.588235294	0	0	4.117647059	0	0	0	31.17647059	45.29411765	2.31129956
537	0.602409639	0	0	0	0	11.74698795	0	0	0	20.78313253	60.84337349	1.616045587
538	3.225806452	0	0	0	0	3.225896452	0	0	0	2.419354839	51.61290323	15.72580645
539	0.809176599	0	0.4048583	0	0	1.619433198	0	0	0	2.024291498	77.32793522	6.882591093
540	1.162790698	0	11.62790698	0	0	12.79099767	0	0	0	1.162790698	8.139534884	60.46511628
541	0.6557894737	0	5.921052632	0	0	38.48684211	0	0	0	34.86842105	14.47368421	2.017197838
542	1.153846154	0	28.07692308	0	0	2.307692308	0	0	0	33.84615385	22.30769231	2.695139686
543	0.283286119	0	43.3427762	0	0	4.815864023	0	0	0	19.83002833	27.47875354	2.357377409
544	0	0	0	0	0	21.4057508	0	0	0	6.389776338	18.21086262	51.75711885
545	0	0	1.646090535	0	0	18.10699588	0	0	0	7.818930041	17.69547325	39.506167284
546	1.307189542	0	8.823529412	0	0	52.94117647	0	0	0	7.843137255	22.54901961	1.965195083
547	0	0	12.66233766	0	0	42.85714286	0	0	0	0.324675325	17.85714286	7.792207792
548	0.299401198	0	1.197640479	0	0	13.1735269	0	0	0	14.07185629	69.76047904	1.218846752
549	0	0	0.4838970968	0	0	11.93538387	0	0	0	21.77419355	63.38709677	1.684820491
550	0	0	0.440205429	0	0	3.595011005	0	0	0	26.412320575	66.39765224	1.682282765
551	0	0	0.356125356	0	0	41.16809117	0	0	0	7.12	-0.02	11.111111
552	0	0	0.542495479	0	0	36.888969259	0	0	0	0	14.03254973	41.73598553
553	2.776400595	0	14.32821021	0	0	14.0803173	0	0	0	0	14.27863163	36.29152206
554	0	0	0.287631831	0	0	8.197507191	0	0	0	0	12.46404602	54.07478428
555	2.462787551	0	5.331529093	0	0	9.228687415	0	0	0	0	49.8782138	26.35994587
556	0	0	37.01863354	0	0	14.45134576	0	0	0	0	12.46376812	33.08488613
558	0.6556934307	0	0.437956204	0	0	16.56934307	0	0	0	0	37.51824818	40.80291971
559	0.366887631	0	0.314465409	0	0	27.62054507	0	0	0	5.24	-0.02	10.32494759
560	0.9653309201	0	0.512820513	0	0	6.274309804	0	0	0	6.03	-0.02	52.760181
561	0	0	6.179066835	0	0	29.50819672	0	0	0	0.25220681	28.58343842	32.11433375
562	0	0	0.492610837	0	0	0.492610837	0	0	0	0	3.448275862	93.59605911
563	0	0	1.688918919	0	0	3.716216216	0	0	0	0	8.445945946	77.70270727
564	0.847457627	0	0	0	0	0.423728814	0	0	0	0	5.508474576	23.30508475
565	0	0	0	0	0	0.920245399	0	0	0	0	1.533742331	57.36196319
566	0	0	0	0	0	0	0	0	0	0	0	85.71428571
567	0	0	0	0	0	0.90909091	0	0	0	0	54.54545455	18.18181818
568	0	0	10.3286385	0	0	23.94366197	0	0	0	0	18.77934272	28.16901408
569	0	0	10.98265896	0	0	30.63383815	0	0	0	0	4.624277457	41.04046243
570	0	0	40.76655052	0	0	17.42160279	0	0	0	0	4.181184669	9.407665505
571	0.331125828	0	3.642384106	0	0	75.82781457	0	0	0	0	1.655629139	5.298013245
572	0.502512563	0	19.59798995	0	0	46.23115578	0	0	0	0	1.5377688442	15.57788945

Appendix G: Values of New exico Stream Samples

BentSampleID	LigoPct	RthChlPct	PlecoPct	TanyIPct	TnytChlPct	TrichPct	CrChlPct	ChiPct	DipPct	EphemPct	Shane
573	0.434782609	0	1.739130435	0	19.13043478	0	15.2173913	24.34782609	0	2.651601715	3.825452645
574	0.740740741	0	1.851851852	0	72.59259259	0	0.37037037	0	21.85185185	1.312007851	1.89282722
575	0	0	9.6	0	0	0	2.8	46.8	17.2	2.311763028	3.335169056
576	2.255639098	0	0	16.54135338	0	0	43.60902256	35.71428571	1.740842043	2.511504183	
577	0.6662251656	0	0.6662251656	0	2.317880795	0	0.331125828	18.21192053	77.81456954	0.925210352	1.334796286
578	0	0	2.298850575	0	0	0	0	0	0	0.996505368	1.437653353
579			0.2074688797	0	0	0	0	0	9.128630705	70.954357681	1.345299693
580			0	17.10526316	0	0	0	12.5	17.10526316	13.81758947	2.193071376
581	0	0	0	0	0	0	0	0	3.418803419	29.05982906	52.99145299
582	0.315457413	0	2.208201893	0	0	0	0	0	14.1955836	32.49211356	2.361592651
583	0	0	3.715170279	0	0	0	0	0	0.92879257	7.430340557	49.53560372
584	0	0	13.08411215	0	0	0	0	0	14.01869159	24.29906542	2.201102874
585	2.580645161	0	1.290322581	0	0	0	0	0	2.258064516	33.87096774	31.61290323
586	0.390625	0	1.953125	0	0	0	0	0	0.390625	26.171875	36.71875
587	0	0	3.191489362	0	0	0	0	0	0.531914894	9.042553191	75.53191489
588	0	0	2.816901408	0	0	0	0	0	2.34741784	0	37.55868545
589	1.219512195	0	7.317073171	0	0	0	0	0	0	2.43902439	17.07317073
590	2.380952381	0	28.57142857	0	0	0	0	0	9.523809524	29.76190476	3.349438591
591	0	0	0	0	0	0	0	0	14.28571429	57.14285714	0
592	6.25	0	0	0	0	0	0	0	0	0	1.277034259
593	0	0	14.51612903	0	0	0	0	0	0	0	1.842370993
594	0	0	14.51612903	0	0	0	0	0	0	0	1.621640762
595	0	0	13.36206897	0	0	0	0	0	0	0	3.725010595
596	0	0	9.274193548	0	0	0	0	0	0	0	3.725010595
597	0	0	7.573757576	0	0	0	0	0	0	0	2.976179669
598	0	0	30.36649215	0	0	0	0	0	0	0	2.67596882
599	0	0	0	0	0	0	0	0	0	0	0
600	0.416666667	0	0	0	0	0	0	0	0	0	0
601	0	0	0	0	0	0	0	0	0	0	0
602	0	0	0	0	0	0	0	0	0	0	0
603	0	0	0	0	0	0	0	0	0	0	0
604	0	0	0	0	0	0	0	0	0	0	0
605	0	0	2.904564315	0	0	0	0	0	0	0	0
606	0	0	0	0	0	0	0	0	0	0	0
607	0	0	6.015037594	0	0	0	0	0	0	0	0
608	1.145038168	0	0	0	0	0	0	0	0.381679389	54.58015267	27.09923664
609	0.33557047	0	0.33557047	0	0	0	0	0	16.77852349	23.82550336	2.412594264
610	0.420168067	0	0	0	0	0	0	0	9.663865546	70.16806723	2.064022156
611	0	0	0	0	0	0	0	0	0	0	2.97754529
612	0.900900901	0	0	0	0	0	0	0	4.054054054	59.90990991	2.089482803
613	2.53164557	0	2.109704641	0	0	0	0	0	11.392405056	49.78902954	1.997997819
614	0.847457627	0	13.98305085	0	0	0	0	0	31.3559322	6.779961017	2.521272099
615	0	0	1.843317972	0	0	0	0	0	0	23.96313364	22.58064516
616	0	0	5.679012346	0	0	0	0	0	0	11.1111111	2.164888012
617	0	0	0.6557894737	0	0	0	0	0	0	0	2.950919062

Appendix G: Values of New exico Stream Samples

BnsSamplD	LigoPct	Rth ChlPct	PlecoPct	TanyPct	TrichPct	CrCh ChlPct	CrCh Pct	DipPct	EphemPct	Shane
618	0	0	0	0	0	15.50802139	0	0	55.34759358	21.92513369
619	2.427184466	0	3.398058252	0	0	0.970873786	24.75728155	24.27184466	2.55047535	3.689039798
620	0.449438202	0	0	0	0	0.449438202	19.3258427	11.68539326	1.946148067	2.807698165
621	2.43902439	0	0	0	0	0.7317073171	0	1.219512195	19.91869919	35.77235772
622	0.735294118	0	0	0	0	0	7.352941176	0	1.470588235	0.735294118
623	0	0	0	0	0	0	34.69387755	0	22.959183675	4.59183675
624	0	0	0	0	0	0	4.035874439	0	0	26.9058296
625	0	0	0	0	0	0	7.692307692	0	0	27.17947818
626	0	0	0	0	0	0	46.666666667	0	5.185185185	19.25925926
627	0	0	0	0	0	0	4.568527919	0	17.76649746	18.78172589
628	0	0	0	0	0	0	5.442176871	0	2.040816327	3.401360544
629	0	0	0	0	0	0	0	0	0	16.66666667
630	1.25	0	0	0	0	0	13.75	0	0	20
631	0	0	0	0	0	0	13.043478226	0	4.347826087	26.08695652
632	0	0	0	0	0	0	4.561403509	0	0	2.105263158
633	0.925925926	0	0	0	0	0	18.51851852	0	0	1.851851852
634	0	0	0	0	0	0	29.03225806	0	6.451612903	32.25806452
635	0	0	0	0	0	0	12.5	0	0	17.04545455
636	0	0	0	0	0	0	14.64968153	0	0	12.7388535
637	5.238095238	0	11.9047619	0	0	0	24.76190476	0	0	5.714285714
638	0.1643384537	0	0	0	0	0	7.723911257	0	0	2.382908792
639	0.615384615	0	0	0	0	0	14.15384615	0	0	6.769230769
640	0	0	32.77310924	0	0	0	10.92136975	0	0	0.420168067
641	3.773584906	0	0	0	0	0	4.088050314	0	0	2.201257862
642	0	0	0	0.77321017	0	0	50.97276265	0	0	2.33463035
643	0.621118012	0	3.416149068	0	0	0	53.72670807	0	0	1.242236025
644	0	0	25.64102564	0	0	0	26.28205128	0	0	0
645	1.648351648	0	24.72527473	0	0	0	18.40659341	0	0	4.67032967
646	6.12244898	0	22.441897959	0	0	0	19.59183673	0	0	0.408163265
647	0	0	0	0	0	0	0.904977376	0	0	25.7918552
648	0	0	0.420168067	0	0	0	27.73109244	0	0	3.781512605
649	0	0	0.338983051	0	0	0	20.33898305	0	0	3.050847458
650	1.766784452	0	2.120141343	0	0	0	41.34275618	0	0	0.35335689
651	7.342657343	0	1.048951049	0	0	0	11.88811189	0	0	1.048951049
652	2.036199095	0	2.036199095	0	0	0	48.86877828	0	0	2.714932127
653	0	0	11.76470588	0	0	0	10.40723982	0	0	0
654	0.529661017	0	0	0	0	0	76.85381356	0	0	4.872881356
655	1.020408163	0	8.843537415	0	0	0	56.12244898	0	0	0.340136054
656	5.331753555	0	0.118483412	0	0	0	59.5260664	0	0	7.93838626
657	6.020066689	0	5.01672408	0	0	0	20.51282051	0	0	0.557413601
658	2.599388379	0	0.152905199	0	0	0	6.116207951	0	0	62.6911315
659	0	0	4.074074074	0	0	0	60	0	0	8.148148148
660	0	0	13.62126246	0	0	0	39.20265781	0	0	0
661	0	0	9.316770186	0	0	0	15.52795031	0	0	20.80745342
662	2.950819672	0	0	61.31147541	0	0	61.31147541	0	0	3.606557377
										17.70491803

Appendix G: Values of New exico Stream Samples

BsnSamplID	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	Tnyt ChlPct	TrichPct	CrCh ChlPct	CrofPct	DipPct	EphemPct	Shane	Shan
663	0.757575758	0	0.757575758	0	0	29.54545455	0	4.166666667	22.72727223	7.575757576	2.393531807	3.453136468
664	0.792650794	0	10.31746032	0	0	17.06349206	0	8.333333333	58.333333333	2.693464317	3.883847613	
665	10.98484848	0	2.651515152	0	0	20.833333333	0	0.757575758	25	29.92424242	2.359928955	3.404657801
666	1.081081081	0	41.62162162	0	0	4.32424324	0	0	14.05405405	2.702702703	2.32917318	3.360286596
667	0	0	8.955323881	0	0	31.34328358	0	0	9.32835829	36.94029851	2.521542045	3.637816204
668	1.694915254	0	10.16949153	0	0	28.81355932	0	0	47.45762712	0	0	2.031018853
669	0	0	15.78947368	0	0	35.0877193	0	0	8.771929825	0	0	2.156988669
670	5.637254902	0	8.823529412	0	0	14.46078431	0	0	38.97058824	9.0688627451	2.285574184	3.297386541
671	6.5	0	9	0	0	9.5	0	0	36.5	2.5	2.097541465	3.026112669
672	0	0	1.960784314	0	0	16.666666667	0	0	27.45098039	17.64705882	2.20851377	3.186211864
673	0.316455696	0	3.791468354	0	0	13.60759494	0	0	26.89873418	14.55696203	1.94575529	2.801731507
674	0	0	3.910614525	0	0	11.73184358	0	0	31.2849162	25.1396648	2.358202454	3.402166985
675	0.534759358	0	2.139037433	0	0	38.5026738	0	0	34.75935829	8.021390374	2.152290942	3.105094668
676	0	0	14.28571429	0	0	17.42160279	0	0	0	10.452996167	49.128919886	2.504738282
677	0	0	46.75324675	0	0	27.70562771	0	0	0	6.926406926	5.194805195	2.120334722
678	0.6668151448	0	0.445434298	0	0	77.95100223	0	0	0	6.681514477	12.69487751	1.134264323
679	0	0	50.20746888	0	0	8.713692946	0	0	0	10.37344398	29.04564315	1.636397513
680	0.704225352	0	2.816901408	0	0	15.84507042	0	0	0	15.49295775	7.042253521	1.506930162
681	0.709219858	0	2.482269504	0	0	24.46808511	0	0	0	23.04964539	35.81560284	2.202509351
682	0	0	13.38912134	0	0	31.79916318	0	0	0	7.949790795	26.35983264	2.573813008
683	0.732600733	0	0.366320366	0	0	40.65934066	0	0	0	17.21611722	38.82738883	1.624345469
684	0	0	0	0	0	53.22033898	0	0	0	8.474576271	15.59322034	3.052557461
685	1.581027668	0	0	0	0	50.19762846	0	0	0	0.7905138324	15.41501976	10.67193676
686	5.063291139	0	3.375527426	0	0	18.14345992	0	0	0	3.797468354	23.20675105	2.04664195
687	0	0	3.861003861	0	0	41.31274131	0	0	0	10.42471042	15.05791506	2.207538462
688	0	0	0.666666667	0	0	46	0	0	0	15.333333333	23.333333333	2.233559489
689	0	0	11.01321586	0	0	28.63436123	0	0	0	6.167400881	42.2907489	2.609845114
690	0.806451613	0	2.016129032	0	0	29.83830968	0	0	0	9.677419355	55.24193548	1.940808811
691	1.9116932907	0	2.236421725	0	0	18.84984026	0	0	0	12.4600639	61.34185304	1.991933596
692	0	0	33.33333333	0	0	33.33333333	0	0	16.66666667	0	0	0
693	36.50793651	0	0	0	0	19.04761905	0	0	1.587301587	33.33333333	0	1.587706565
694	0	0	0	0	0	27.272272727	0	0	0	45.45454545	0	2.019814992
695	0	0	11.67192429	0	0	35.33123028	0	0	0	33.01787592	13.98527865	2.125610191
696	0	0	0	13.80753138	0	0	44.769837448	0	0	21.75732218	12.13389121	2.357443031
697	0	0	4.377704377	0	0	13.46801347	0	0	2.356902357	16.16161616	24.57912458	2.417990336
698	1.045296167	0	0.3449432056	0	0	4.87804878	0	0	3.135888502	13.58885017	56.79442509	3.275036172
699	0.16	0	10.08	0	0	42.24	0	0	1.6	11.68	9.28	3.64752059
700	0.71942446	0	3.237410072	0	0	7.194244604	0	0	1.079136691	12.23021583	53.5971223	2.187824241
701	0.862068966	0	4.31034828	0	0	8.87931034	0	0	30.60344828	31.89655172	2.062545818	2.97564623
702	1.818181818	0	4.84484848	0	0	32.12121212	0	0	0.606060606	26.666666667	32.12121212	2.20980268
703	8.163265306	0	2.040816327	0	0	28.57142857	0	0	0	19.727891116	35.37414966	2.426105343
704	0.483091787	0	2.899550725	0	0	3.8647343	0	0	0	26.57004831	62.31884058	1.583865921
705	0.3636336364	0	0.3636336364	0	0	1.454545455	0	0	0	19.63636364	69.81818182	1.195128647
706	2.051282051	0	1.538461538	0	0	15.8974359	0	0	0	3.58974359	13.33333333	1.606486397
707	0.3886100386	0	5.019305019	0	0	9.652509653	0	0	0	44.4015444	32.81853282	2.049953881

Appendix G: Values of New exico Stream Samples

BsnSamplD	LigoPct	rh ChlPct	PlecoPct	TanyIPct	Tnyt ChlPct	TrichPct	CrCh ChlPct	CrofPct	DipPct	EphemPct	Shane	Shan		
708	6.349206349	0	8.8888888889	0	0	13.3333333333	0	1.26984127	25.71428571	33.65079365	2.5530433344	3.683262972		
709	3.703703704	0	2.880658436	0	0	9.87654321	0	1.234567901	14.40329218	59.25925926	2.135325802	3.080623945		
710	6.346749226	0	8.049535604	0	0	19.3498452	0	0.619195046	23.99380805	23.99380805	2.616444754	3.7774731871		
713	0.17921147	0	0.358422939	0	0	12.72401434	0	0.17921147	12.00716846	68.99641577	1.75774199	2.535885652		
716	0	0	3.409090909	0	0	27.84090909	0	0	43.18181818	25.56818182	2.559417433	3.663604973		
717	0	0	4.545454545	0	0	2.813852814	0	0	73.16017316	14.06926407	1.263702924	1.823137942		
718	0	0	6.735751295	0	0	5.958549223	0	0	61.139896337	23.834196889	1.764668004	2.545877779		
719	0.389863548	0	0.584195322	0	0	47.95321637	0	0.194931774	0.389863548	26.51072125	2.694239984	3.888966664		
720	0.769456274	0	0.380228137	0	0	35.36121673	0	0	5.323193916	37.64258555	2.410093985	3.47703064		
723	0.342465753	0	0.342465753	0	0	27.39726027	0	0	28.42465753	32.87671233	2.377795223	3.430433377		
724	1.53256705	0	1.494925287	0	0	8.812260536	0	1.149425287	21.07279693	41.37931034	2.491425422	3.594367102		
725	3.975535168	0	0.101936799	0	0	53.21100917	0	0	5.198776758	20.79510703	2.753118639	3.971910608		
728	0.34965035	0	0	0	0	23.77622378	0	0	6.643356643	23.07692308	2.852096985	4.114706177		
729	6.530612245	0	1.224489796	0	0	40	0	0.816326531	5.714285714	22.857142886	2.46982672	3.563206761		
730	0.775193798	0	0.3875956899	0	0	25.19379845	0	0	16.66666667	27.90697674	2.886182955	4.163881836		
731	2.6680067002	0	10.88777219	0	0	14.40536013	0	0	13.06532663	39.36348409	2.4833749062	3.5833292455		
732	6.926406926	0	8.225108225	0	0	7.359307359	0	0	19.04761905	48.48484848	2.27599424	3.283365604		
733	1.843317972	0	5.529953917	0	0	22.58064516	0	0	5.529953917	55.29953917	2.366658321	3.414366223		
734	3.603603604	0	8.108108108	0	0	6.306306306	0	0	5.405405405	53.6036036	2.283853428	3.294904015		
735	0	0	0	0	0	35.38461538	0	0	49.87179487	6.753846154	1.845131657	2.661962292		
736	0.443599493	0	9.252217997	0	0	20.72243346	0	0.126742712	11.40684411	54.30925222	1.979210097	2.999666095		
737	0	0	0	0	0	1.509433962	0	12.45283019	49.43396226	27.54716981	1.974371793	2.845669503		
738	7.115009747	0	0	0	0	2.2417154	0	0	2.826510721	62.08576998	25.73099415	1.56692892	2.260600583	
739	0	0	0	0	0	24.28160962	0	0	1.293103448	58.90804598	3.7556332184	2.082553798	3.004490037	
740	0	0	0	0	0	29.838709968	0	0	0	4.838709677	40.32258065	2.293463415	3.308768295	
741	1.434878587	0	0	0	0	48.78581796	0	0	2.538631347	31.89845475	2.097130243	1.50730179	2.174567817	
742	8.256880734	0	0	0	0	37.6146789	0	0	1.834862385	11.00917431	29.35779817	2.22472844	3.209604688	
743	0.9194159	0	0.9194159	0	0	15.63007031	0	0	12.27690644	65.00811249	2.233019629	3.221566345		
744	13.90374332	0	0	0	0	25.93582888	0	0	4.545454545	26.20320856	18.98395722	2.296757103	3.313520083	
745	1.666666667	0	0	0	0	0.555555556	0	0	37.22222222	42.7777778	0	1.659923555	2.394763481	
746	4.166666667	0	0	0	0	8.333333333	0	0	8.333333333	0	70.833333333	1.156374554	1.668295834	
747	0	0	0	0	0	18.75	0	0	9.375	6.25	56.25	1.767040446	2.549300488	
748	0	0	0	0	0	0	0	0	0	0	0	0	0	
749	0	0	0	0	0	9.868421053	0	0	23.68421053	32.89473684	1.675398273	2.41708878		
750	0	0.4784689	0	0	0	57.89473684	0	0	23.4497608	0	1.340606775	1.934086746		
751	0	0	0	0	0	53.8071066	0	0	3.299492386	3.807106599	18.78172589	2.372210369	3.422376135	
752	0.152091255	0	0	0	0	7.60	-02	0	0	99.7338403	0	0.428550468	0.618267635	
753	0	0	0	0	0	10.23622047	0	0	0	7.08661473	45.66929134	1.866890563	2.693353758	
754	6.06936162	0	12.71676301	0	0	0	0	0	11.8471098	65.89595376	1.55169939	2.238669807		
755	2.209944751	0	2.209944751	0	0	11.04971236	0	0	9.392265193	68.50828729	1.618093234	2.334415084		
756	0	0	1.042442293	0	0	22.48696947	0	0	5.063291139	48.7714073	4.616530156	2.035104489	2.936035154	
757	0.642054575	0	17.01444623	0	0	6.902086677	0	0	0.642054575	36.7576244	25.04012841	2.315162813	3.34007391	
758	5.71 -02	0	0.285388128	0	0	15.52511416	0	0	73.74429224	6.621004566	1.398054833	2.01696775		
759	0	0	0	0	0	0	0	0	0	15	1.679666667	53.333333333	15	2.423217023
760	0	0	0	0	0	26.99425654	0	0	1.595405233	7.211231653	21.12316528	1.780062379	2.568087167	

Appendix G: Values of New exico Stream Samples

BsnSamplID	LigoPct	Rth ChlPct	PlecoPct	TanyIPct	Tnyt ChlPct	TrichPct	CrCh ChlPct	CrlolPct	DipPct	EphemPct	Shane	Shan
761	0.468227425	0	0	0	0	15.85294281	0	0.1337792776	4.949832776	73.64548495	1.162671519	1.677380435
762	1.652892562	0	0	0	0	7.713498623	0	8.26446281	31.12947658	45.45454545	2.069154511	2.9866024568
763	0.382262997	0	1.070336391	0	0	23.92966361	0	0.229357798	11.31498471	60.55045872	1.626444841	2.346463907
764	0	0	0	0	0	69.30921053	0	0.493421053	27.10526316	1.0855526316	0.936806205	1.351525666
765	2.372262774	0	2.554744526	0	0	25.72992701	0	0.182481752	19.16058394	25.36496355	2.6509968759	3.824539482
766	0.653528548	0	0	0	0	10.27732463	0	1.549755302	26.34584013	56.93311582	2.441723814	3.522662838
767	0.185614849	0	0	0	0	1.62412993	0	93.50348028	3.109048724	4.64	-0.2	0.379706306
768	0	0	0	0	0	39.31034483	0	0.344827586	24.82758621	28.27586207	2.6271671361	3.790928442
769	0.715990453	0	12.88782816	0	0	22.91169451	0	0	31.26491647	14.08114558	2.377989807	3.433467143
770	0.549450549	0	17.58241758	0	0	10.98901099	0	0.549450549	26.92307692	20.87912088	2.462685804	3.552904596
771	0	0	5.701078582	0	0	21.7257319	0	0	4.160246533	67.48844376	1.950473367	2.813938255
772	1.149425287	0	0	0	0	64.36781609	0	0	11.49425287	19.54022989	1.518149247	2.190226391
773	0	0	0	0	0	23.4828496	0	0.674289065	66.60803283	7.944884198	1.2172425729	1.835722289
774	0	0	0	0	0	0	0	0	0	0	0	0
775	0	0	0	0	0	2.857142857	0	1.428571429	52.85714286	41.42857143	1.576453602	2.274341794
776	0	0	4.62962963	0	0	9.027777778	0	0	28.7037037	53.00925926	2.5271669683	3.646656517
777	0	0	0	0	0	26.31578947	0	0	22.36842105	35.52631579	1.570283852	2.265440725
778	0	0	0	0	0	72.6681128	0	1.084598698	9.978308026	1.301518438	2.09076155	3.01633132
779	0	0	0	0	0	15.11627907	0	3.488372093	8.139534884	46.51162791	1.844676055	2.661304997
780	5.078125	0	12.6953125	0	0	8.984375	0	0	7.6171875	1.36771875	1.656677244	2.390080044
781	13.87024609	0	18.34451902	0	0	4.0266845638	0	0	20.58165548	24.38478747	2.265142865	3.267910379
782	7.843137255	0	3.921568627	0	0	21.56882745	0	0	3.921568627	60.78431373	1.875855567	2.706287523
783	0	0	0	0	0	0	0	0.354609929	21.45390071	0	1.422749228	2.053593255
784	0	0	0	0	0	1.162790698	0	0	83.72093023	0.2909697674	1.104189997	1.593009433
785	0.625	0	0	0	0	44.0625	0	0	0	3.4375	48.75	1.074726298
786	14.21319797	0	0	0	0	0	0	0	64.46700508	0	0	1.12927331
787	0	0	0	0	0	40	0	0	0	0	0	1.0549201618
788	0.737327189	0	0	0	0	16.58986175	0	31.15207373	45.06912442	5.253456221	1.756883479	2.534647083
789	3.535148314	0	0	0	0	0	0	4.06	-02	91.10117838	0.893945551	0.568631744
790	3.901437372	0	2.05338809	0	0	3.696098563	0	49.07597536	20.73921971	16.42710472	1.745510949	2.51823999
791	0	0	13.16270567	0	0	15.72212066	0	0	0.182815356	41.68190128	20.10968921	2.252442931
792	0.354609929	0	0	0	0	40.42553191	0	0	5.673758885	7.80141844	10.99290718	2.558818306
793	11.65048544	0	2.427184466	0	0	5.825242718	0	0	4.854368932	12.62135922	16.01941748	2.105031189
794	2.109300096	0	0.383509108	0	0	21.18881824	0	0	0.67114094	41.13135187	24.2569511	2.351551381
795	0	0	0	0	0	32.7582069	0	0	1.724137931	36.20689655	25.86206897	2.57889474
796	1.020408163	0	0	0	0	1.020408163	0	35.71428571	27.55102041	10.20408163	2.592861139	3.740707907
797	0	0	0	0	0	0	0	32.65306122	16.32653061	30.6122449	2.11223771	3.047314869
798	0	0	0	0	0	29.67741935	0	0	57.89473684	24.9122807	1.653133959	2.38496164
799	0.350877193	0	0	0	0	4.912280702	0	0	100	0	0	0.475921951
800	0	0	0	0	0	0	0	4.736842105	28.94736842	0.526315789	2.043106876	2.947580159
801	0.526315789	0	0	0	0	53.15789474	0	0	92.74193548	3.2255806452	0.618418364	0.892189107
802	1.612903226	0	0	0	0	0.806451613	0	0	0	0	0	0
807	0.183150183	0	10.98901099	0	0	4.578754579	0	29.85347985	22.89377289	19.23076923	3.161738649	3.161738649
812	0.457665904	0	11.8993135	0	0	25.40045767	0	10.75514874	14.18764302	3.2033661327	2.024756991	2.92110687
813	0	0	5	0	0	0	0	0	0	0	0	1.55125209

Appendix G: Values of New Mexico Stream Samples

BnsSamplD	LigoPct	RthChlPct	PlecoPct	TanytPct	TrichPct	CrChlPct	CrOilPct	DipPct	EphemPct	Shane	Shan
814	0	0	0	0	0.431034483	0	10.34482759	50	25.86206897	1.713726914	2.472385321
815	0	0	8.333333333	0	0	4.861111111	0	26.5625	28.99305556	12.67361111	2.082622637
816	0	0	0	0	0	0	0	0	0	0	3.00458935
817	0	0	36.36363636	0	0	0.454545455	0	0	45.45454545	6.3363636364	1.728383234
818	1.612903226	0	0	0	0.806451613	0	0	92.74193548	3.2255806452	0.618418364	0.892189107

Appendix G: Benthic Values of New exico Stream Samples

BentSampleID	Shan_10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oITax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
23	0.503120835	0	0	0.520833333	0	0	2	0	1	50	0	36.31578947	
24	1.02694583	0	0	3.80952381	4.126984127	0	11	0	1	34.60317476	1.595744681	0	
25	0.880069071	0	0	6.492248062	9.69 -02	0	8	0	1	29.36046512	6.593406593	24.60567823	
26	0.891435672	0	0	5.066079295	1.54185022	0	5	0	1	36.34361233	4.545454545	8.905852417	
27	1.050085883	0	0	3.099173554	15.80578512	0	14	0	2	33.47107438	70.58822529	3.851640514	
28	1.083482337	0	0	4.980079681	1.195219124	0	16	0	2	27.58964143	26.48514851	1.744186047	
29	0.611628622	0	0	6.58436214	0	0	5	0	2	63.37448856	56.41025641	72.98578199	
30	0.993626778	0	0	3.787878788	5.303030303	0	13	0	2	22.85353535	67.283395062	26.65684831	
31	0.7366815145	0	0	40.6462585	1.530612245	0	8	0	2	40.6462585	25	25.64935065	
32	0.640077697	0	0	15.40616246	1.120448179	0	11	0	1	62.18487395	19.23076923	0	
33	0.865124909	0	0	14.2461964	3.319502075	0	11	0	2	49.23928077	27.04918033	5.555555556	
34	0.807971843	0	0	11.86440678	1.016949153	0	10	0	3	48.98305085	45.45454545	0.408997955	
35	0.724776547	0	0	10.81081081	3.281853282	0	9	0	1	55.21235521	0	0.228832952	
36	0.752233404	0	0	13.04909561	6.2015503888	0	6	0	2	48.19121447	75.71428571	78.36134454	
37	1.027520721	0	0	4.430379747	9.071729958	0	10	0	3	20.04219409	94.11764706	21.46596859	
38	0.762806336	0	0	1.170568562	4.515050167	0	5	0	4	36.12040134	85.8974359	38.47695391	
39	0.804058994	0	0	0.263504611	3.293807642	0	10	0	3	59.68379447	9.5233809524	2.818991098	
40	0.861667391	0	0	20.90909091	13.18181818	0	6	0	1	37.72727273	15.38461538	0	
41	1.018529688	0	0	13.36206897	9.051724138	0	7	0	1	26.72413793	14.58533333	2.433902439	
42	0.710351191	0	0	24.34367542	4.057279236	0	4	0	1	49.1646778	33.33333333	0.35335689	
43	0.789215767	0	0	25.79365079	6.547619048	0	8	0	2	44.84126984	19.29824561	0	
44	0.413913775	0	0	79.69151671	3.856041131	0	2	0	1	79.69151671	27.65957447	0	
45	0.821720397	0	0	22.58064516	0.537633409	0	5	0	1	30.10752688	19.16666667	1.449275362	
46	0.974617419	0	0	19.13104415	4.414856342	0	5	0	2	22.00420463	59.13370998	16.73913043	
47	1.014673531	0	0	38.6996904	13.62229102	0	8	0	1	38.6996904	2.5	0	
48	1.053853737	0	0	30.06329114	21.51898734	0	7	0	2	30.06329114	0	0	
49	1.064242028	0	0	14.20765027	3.8251336612	0	6	0	2	18.57923497	23.07692308	6.1066870229	
50	0.646997746	0	0	13.15789474	0	0	0	0	2	42.10526316	100	23.80952381	
51	0.6856333668	0	0	10.71428571	3.571428571	0	3	0	1	41.07142857	95.83333333	19.35483871	
52	0.797962462	0	0	1.754385965	1.754385965	0	6	0	2	43.85964912	62.5	1.960784314	
53	0.276434591	0	0	0	0	0	1	0	0	66.66666667	0	0	
54	1.0338332081	0	0	5.172413793	2.586206897	0	5	0	3	28.44827586	49.25373134	12.19512195	
55	1.121206849	0	0	9.580838323	14.37125749	0	11	0	2	18.56287425	38.75	16.59192825	
56	1.063146597	0	0	0	15.82491582	1.01010101	0	9	0	1	20.2020202	80	27.11864407
57	1.061058915	0	0	5.063291139	15.61181435	0	10	0	1	25.3164557	25.20322023	2.469135802	
58	0.550751198	0	0	0	8.130081301	0	4	0	0	60.97560976	88.23529412	0	
59	0.710518193	0	1.910828025	0.636942675	1.910828025	0	5	0	3	36.94267576	8.045977011	0	
60	0.903053656	0	11.1111111	0	0.483091787	0	4	0	2	25.60386473	74.46808511	0.704225352	
61	0.839423471	0	0	3.409090909	0	0	6	0	6	44.31818182	75	2.054794521	
62	0.735133886	0	0	21.93877551	3.06122449	0	4	0	2	31.12244898	81.81818182	0	
63	0.3771327826	0	0	0.3921568863	0.196078431	0	2	0	1	70	100	2.813299233	
64	0.720726767	0	0	3.2786688525	1.639344262	0	2	0	1	26.2295082	93.75	22.80701754	
65	0.96630396	0.666666667	0	9.333333333	2.666666667	0	5	0	2	30	48.38709677	15	
66	0.864169812	0	0	34.01759531	5.571847507	0	3	0	2	40.50632911	35.02538071		
67	0.965436176	0	0	9.836065574	2.1857235	0	5	0	2	22.40437158	37.68844221	0	

Appendix G: Benthic values of New exico Stream Samples

BentSampleID	Shan_10	AmpH_Pct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
68	0.823034497	0	0	3.781512605	3.361344538	0	5	0	2	38.65546218	50	0	
69	0.979864055	0	0	20.52117264	2.605863192	0	6	0	2	22.80130293	48.27586207	23.72093023	
70	1.160161288	0	0	3.157894737	10	0	7	0	3	19.47368421	36.63366337	16.15384615	
71	1.044167556	2.272727273	0	9.090909091	0.757575758	0	3	0	2	18.19181818	45.28301887	15.78947368	
72	0.938913121	0	0	1.492537313	5.970149254	0	4	0	1	23.88059701	20.51282051	20.8656522	
73	0.916534192	0	0	0.448430493	2.69058296	0	6	0	3	37.44394619	23.15789474	18.22916667	
74	0.837106194	0	0	35.6223176	2.360515021	0	10	0	1	35.6223176	12.06896552	0	
75	1.025112845	0	0	0	7.142857143	2.678571429	0	4	0	2	24.10714286	14.81481481	30.68181818
76	0.909221367	0	0	5.459770115	1.149422827	0	5	0	4	28.73563218	21.93548387	35.23131673	
77	1.11788597	0	0	0	18.91348089	8.853118712	0	9	0	2	19.31589537	1.092896175	3.010033445
78	0.884071957	0	0	0	20.06688963	4.013377926	0	8	0	2	30.76923077	6.818181818	0
79	1.054543954	0	0	3.35365537	1.2195712195	0	15	0	1	28.04878049	57.86163522	6.209150327	
80	1.067070672	0	0	11.07142857	0.357142857	0	15	0	1	21.42857143	43.47826087	25.7777778	
81	1.005755709	0	0	10.38251366	2.732240437	0	8	0	1	27.86885246	79.16666667	35.91349296	
82	0.9987039198	0	0	25.56818182	14.583333333	0	6	0	1	25.56818182	72.36842105	4.918032787	
83	1.0399999241	0	0	0	17.85714286	21.42857143	0	7	0	1	22.14285714	27.65957447	0
84	0.936156248	0	0	0	19.27710843	21.51462995	0	5	0	2	21.34251291	81.20300752	6.310679612
85	1.158842244	0	0	0	13.72282609	7.269021739	0	11	0	3	15.69293448	24.8	8.064516129
86	1.108541294	0	0	0	25.05720824	11.67048055	0	6	0	3	25.05720824	40.19607843	14.38356164
87	1.140326177	0	0	0	9.916367981	15.53166069	0	11	0	3	17.4432497	27.21893491	26.987061
88	1.263065432	0	0	0	4.708097928	6.0263653248	0	14	0	3	12.9435028	22.4636872	11.35587461
89	0.970165159	0	0	0.490196078	32.51633987	0	12	0	3	32.51633987	32.4673247	4.661016949	
90	0.1019096653	0	0	0.643056817	4.394426581	41.15755627	0	10	0	4	40.72883173	23.56687898	0.746268657
91	1.075692972	0	0	0	2.702702703	28.27442827	0	10	0	3	28.06652807	39.75903614	2.054794521
92	1.049933688	0	0	3.101604278	10.48128342	10.37433155	0	13	0	3	21.92513369	27.52293578	0.60331825
93	0.777847589	0	0	0.324675325	40.74675325	37.82467532	0	10	0	4	40.74675325	63.63633664	3.63636336
94	0.856168444	0	0	2.133160957	12.28183581	25.985771893	0	10	0	6	36.58694247	47.82608696	0.1303718096
95	0.9668056046	0	0	1.298701299	12.12121212	4.761904762	0	10	0	4	37.66233766	0	1.204819277
96	0.913957695	0	0	0	26.76470588	2.058823529	0	5	0	4	30	26.86567164	45.53571429
97	0.824342599	0	0	0	23.99193548	2.016129032	0	4	0	2	36.899516129	52	55.79268293
98	0.70611971	0	0	0	4.788732394	3.098591549	0	4	0	3	50.14084507	81.08108108	0
99	1.036325661	0	0	0	6.0606606061	7.459207459	0	9	0	2	31.35198135	9.589041096	10.54216867
100	0.6553826737	0	0	0	61.03117506	1.918465228	0	6	0	3	61.03117506	45.36082474	44.40433213
101	0.8585333487	0	0	0	5.797101449	7.729468599	0	3	0	1	46.85990338	12.5	62.17948718
102	0.4687665312	0	0	0.346620451	1.64644714	1.64644714	0	2	0	3	73.3102223	11.1111111	47.77327935
103	0.6685446452	0	0	0.136378906	5.198358413	2.872777018	0	1	0	2	43.91244487	0	47.89156627
104	0.7115622373	0.214592275	0	26.39484979	1.2875552648	0	0	0	1	40.55793991	0	30.88235294	
105	0.7171005427	0	0	0	7.537668442	2.512562814	0	3	0	1	51.75879397	79.16666667	6.172839506
106	1.010436672	0	0	2.012072435	30.58350101	19.31589537	0	12	0	2	30.58350101	4.098360656	0
107	1.172502102	0	0	0	16.4556962	24.6835443	0	15	0	3	23.8924056	15.78947368	0.638977636
108	1.226568162	0	0	0	14.977797357	18.50220264	0	16	0	3	17.91483113	36.2088655	0.751879699
109	0.987527632	0	1.6633339987	36.726534691	3.659347971	0	15	0	3	36.726534691	29.41176471	0	
110	0.809888041	0	1.226993865	28.52760736	21.47239264	0	11	0	3	31.44171779	16.66666667	3.623188406	
111	0.987624222	0	1.96752593	9.72222222	29.28240741	0	10	0	3	29.05092583	16.98113208	0.701754386	
112	0.713462085	0	0	7.26259832	62.01117318	2.793296089	0	6	0	3	62.01117318	0	0

Appendix G: Stream Values of New exico Stream Samples

BsnSamplD	Shan_10	AmpHnPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
113	1.024949243	0	0.187265918	18.25842697	8.895131086	0	15	0	3	32.5842696	6.132075472	6.395348837	
114	0.631856784	0	0	52.25988701	2.189265537	0	11	0	4	52.25988701	81.28654971	2.551020408	
115	1.165576344	0	0.318979266	22.80701754	3.987240829	0	10	0	3	22.80701754	29.22077922	2.108433735	
116	1.00344555	0	7.58 -02	26.28787879	19.6969697	0	10	0	3	26.28787879	6.629834254	21.13821138	
117	1.283836348	0	0.9920633492	7.341269841	10.71429571	0	14	0	3	14.28571429	7.692307692	6.051873199	
118	0.712291311	2.380952381	0	2.380952381	2.380952381	0	4	0	2	42.85714296	0	0	
119	0.652267858	0	0	0.445434298	0.445434298	0	8	0	1	43.4298441	5.797101449	33.99503722	
120	0.787511577	0	0	15.625	3.125	0	3	0	2	29.6875	0	15	
121	0.545181612	0	0	11.40350877	0.877192982	0	4	0	1	62.28070175	19.31818182	4.188481675	
122	0.837838832	0	0	0	0.418410042	0	8	0	1	36.82008388	19.44444444	22.17391304	
123	1.08480447	0	0	9.2397130435	10.39402174	0	10	0	3	29.77807971	45.03311258	3.629032258	
124	0.91100246	0	0	0.460829493	1.382488479	0	7	0	2	29.03225586	24.59016393	2.75862069	
125	1.033031584	0	0	3.968253968	5.555555556	0	7	0	1	16.66666667	26.25	2.150537634	
126	0.971631112	0	0	17.08542714	0.251256281	0	6	0	3	27.13567839	34.46808511	2.127659574	
127	0.790278594	0	0	13.40206186	1.546391753	0	2	0	2	42.78350515	14.70588235	3.305785124	
128	0.980796058	0	0	9.659090909	22.15909091	0	7	0	3	25.56818182	11.53846154	45.91836735	
129	0.77493283	0	0	0	3.042596349	3.042596349	0	6	0	2	47.87018256	56.73758865	61.45833333
130	0.770847599	0	0	0	3.584229391	0	0	5	0	2	50.53763441	74.66666667	60
131	0.594113901	0	0	0	4.771784232	0	0	5	0	2	43.98340249	100	0
132	1.103174568	0	0	22.04081633	1.428571429	0	12	0	2	22.04081633	32.84313725	3.273809524	
133	1.134300661	0	0	13.5391924	8.313539192	0	12	0	2	19.47743488	42.70833333	4.710144928	
134	0.977189884	0	0	23.41137124	8.361204013	0	11	0	1	23.41137124	51.49253731	0	
135	1.148965824	0	0	7.0121195122	23.17073171	0	10	0	3	14.634114634	34.21052632	20.93023256	
136	1.103333454	0	0	14.379804947	0	0	12	0	2	16.99346405	54.83870968	0	
137	1.094119278	0	0	24.8502994	5.838323353	0	15	0	2	24.8502994	40.192992605	2.380952381	
138	0.903369328	0	0	10.35353535	1.01010101	0	6	0	4	46.46464646	86.57407407	3.606557377	
139	1.172434089	0	0	0	7.262569832	5.586592179	0	9	0	3	18.71508388	49.28571429	11.15384615
140	1.092324903	0	0	0	9.195402299	10.72796935	0	10	0	3	29.62962963	45.28301887	3.625954198
141	0.880740534	0	0	0	1.754385965	1.169590643	0	2	0	3	32.16374269	28.125	18.58974359
142	0.877315481	0	0	0	8.974358974	0	1	0	2	24.35897436	43.18181818	6.382978723	
143	0.503157385	0	0	0	1.52284264	0.169204738	0	3	0	2	52.96108291	46.15384615	37.56613757
144	0.474060747	0	0	0	37.2246696	0	0	1	0	1	40.74889888	98	0
145	0.849136676	0	0	0	5.194805195	0	0	2	0	2	19.91341991	32.28346457	16.27906977
146	0.549426305	0	0	0	3.194103194	0	0	3	0	2	53.31695332	1.224489796	1.591511936
147	0.767309825	0	0	0	20	0	0	4	0	2	36.66666667	29.44444444	4.390243902
148	0.799249852	0	0	0	0	0	0	2	0	1	31.57894737	11.11111111	23.07692308
149	0.587361493	0	0	0	12.64667536	5.606258149	0	2	0	2	64.01564537	35.55555556	85.24305556
150	0.918652523	0	0	0	3.153153153	1.801801802	0	9	0	1	37.38738739	91.20879121	15.88235294
151	0.921493366	0	0	0	10.01564945	4.381846635	0	10	0	2	58.63636364	1.520912548	
152	1.09677393	0	0	0	13.85630499	12.53665689	0	10	0	2	19.94134897	32.02979516	2.825552826
153	0.7772112912	0	0	0	23.5426009	0.149476831	0	7	0	2	36.77130045	37.15277778	0.108932462
154	0.896043675	0	0	0	28.37326608	35.24590164	0	12	0	3	34.67843632	28.85572139	7.293666027
155	1.185619013	0	0	4.615384615	9.349112426	8.75739645	0	12	0	2	13.60946746	57.21393035	1.025641026
156	1.202315686	0	0	3.132928188	9.314140559	13.63251482	0	14	0	3	17.10414903	61.32930514	9.473684211
157	1.147784711	0	0	1.505646173	7.528230866	19.07151819	0	8	0	4	17.44040151	50.33112583	3.448275862

Appendix G: Benthic values of New Mexico Stream Samples

BentSampleID	Shan_10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntolTax	In otTax	TolerTax	Dom01Pct	Baet	EphPct	Hyd	EPTPct	
158	0.596622506	0	0	0	0	0	2	0	0	33.333333333	45.45454545	0	0	0	
159	0.846639058	0	0	1.333333333	1.333333333	0	5	0	2	24.44444444	16.666666667	25.46296296	0	0	
160	1.070992597	0	0	0.64516129	4.838709677	0	11	0	3	19.35483871	42.372818136	0	0	0	
161	0.866045663	0	0	1.704545455	0.568181818	0	6	0	2	30.68181818	19.64285714	21.08433735	0	0	
162	0.718295219	0.740740741	0	0	2.222222222	0	2	0	1	44.44444444	8.24742268	3.174603175	0	0	
163	1.1048533206	0	2.712886209	8.364732479	8.666616428	0	7	0	4	19.96985622	4.173563544	29.9970655	0	0	
164	0.956514551	0	0.577796121	10.60668593	5.36524969	0	9	0	4	28.2294676	16.666666667	35.51401869	0	0	
165	0.887608237	0	0	3.626943005	41.70984456	0	6	0	3	41.70984456	84	9.615384615	0	0	
166	1.147429654	0	0.3753985	6.766971293	18.04511278	0	11	0	5	24.06015038	31.16883117	0.821917808	0	0	
167	1.172643892	0	0.684931507	5.251141553	10.2739726	0	6	0	3	12.55707763	91.666666667	9.745762712	0	0	
168	1.00622173	0	0	12.07243461	36.82092555	0	11	0	2	36.21730382	6.299212598	11.40350877	0	0	
169	1.184718097	0	0	3.112033195	5.601659751	0	14	0	3	18.6719917	45.13888889	10.14851485	0	0	
170	0.971304365	0	0.107296137	14.27038627	29.61373391	0	11	0	2	28.00429185	82.75862069	1.272264631	0	0	
171	0.622464329	0	0	71.25171939	0.962861073	0	15	0	4	71.25171939	22.3880597	2.747252747	0	0	
172	1.128233389	0	0	2.617801047	1.047120419	0	11	0	2	19.89528796	5.952380952	2.325581395	0	0	
173	1.007894845	0	0	0.414937759	6.639004149	0	8	0	3	28.63070539	11.27819549	4.166666667	0	0	
174	0.371639177	0	0	0	13.01369863	0.684931507	0	3	0	1	75.34246575	2.654867257	0	0	
175	0.618961317	0	0	36.03603604	1.801801802	0	1	0	2	36.03603604	0	44.44444444	0	0	
176	0.469863038	0	0	2.279202279	—	0	4	0	1	56.6951567	94.76190476	7.860262009	0	0	
177	0.606936469	0	0	8.415841584	0	0	8	0	2	54.45544554	9.6654527509	24.45054945	0	0	
178	0.865777154	0	0	3.694581281	5.172413793	0	8	0	2	27.83251232	81.88405797	0.374531835	0	0	
179	1.145492308	0	0	1.15384154	19.61538462	0	12	0	2	18.46153846	10.15625	0.5464448087	0	0	
180	0.833920795	0	0	4.684317719	3.258655804	0	10	0	2	50.50916497	93.58190566	13.20224719	0	0	
183	1.15504602	0	0	11.87904968	24.40604752	0	14	0	2	21.38228992	14.46540881	10.89494163	0	0	
184	1.196193568	0	0	4.573170732	10.67073171	0	13	0	2	14.32926829	13.41463415	20.43478261	0	0	
185	0.271677899	0	0	88.44221106	0	0	9	0	3	88.44221106	0	0	0	0	
186	0.886477808	0	0	43.8046472	20.18950437	0	10	0	1	43.804646472	56.49717514	19.94818653	0	0	
187	0.959753262	0	0	3.896103896	32.683926268	0	10	0	1	30.30303033	8.670520231	1.433848921	0	0	
188	0.82103686	0	0	0	17.00680272	0	1	0	2	35.37144966	100	52.52525253	0	0	
189	0.785188525	0	0	1.08695522	1.08695522	0	2	0	4	43.47826087	97.56697561	31.57894737	0	0	
190	0.912511527	0	0	0	1	0.5	0	8	0	1	31	35.65891473	4.487179487	0	0
191	0.981233864	0	0	12.46612466	4.06504065	0	13	0	1	24.3902439	34.28571429	3.278888525	0	0	
192	1.039268947	0	0	8.148148148	3.8888888889	0	9	0	1	16.666666667	37.56613757	0	0	0	
193	1.029534354	0	0	0	14.47028424	2.583979328	0	8	0	1	22.73901899	52.07100592	0.757575758	0	0
194	0.962454685	0	0	19.85111663	4.714640199	0	7	0	1	33.74689826	62.10045662	1.470588235	0	0	
195	1.106565556	0	0	9.098862642	7.261592301	0	8	0	3	21.87226597	47.88029925	13.82113821	0	0	
196	1.095630001	0	0	2.745512144	3.484668849	0	8	0	3	17.95142555	49.32432432	20.04176981	0	0	
197	1.079413929	0	0	3.546099291	2.482269504	0	12	0	2	24.46808511	56.52173913	2.390438247	0	0	
198	0.706006322	0	0	13.33333333	0.666666667	0	4	0	3	52.666666667	79	0	0	0	
199	0.755946713	0	0	42.52491694	4.15282392	0	11	0	1	42.52491694	87.60330579	0	0	0	
200	1.065077076	0	0	0.129533679	21.24352332	1.813471503	0	10	4	21.24352332	58.40336134	0	0	0	
201	0.985315	0	0	1.318681319	10.32967033	0	11	0	2	25.27472527	22.58064516	0	0	0	
202	0.794524605	0	0	6.796116505	3.398058252	0	5	0	2	41.74757282	20	6.077348066	0	0	
203	0.620807228	0	0	6.25	0.7575758	0	4	0	2	61.363633636	12.24489796	68.06722689	0	0	
204	0.7761540369	0	0	10.27027027	2.432432432	0	6	0	3	44.86486486	84.21052632	54.248336601	0	0	

Appendix G: Metric Values of New exico Stream Samples

BnsSamplD	Shan_10	AmpHPCt	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
205	0.593383799	0	0	3.562340967	0.763358779	0	3	0	1	66.92111959	38.46153846	76.6738484
206	0.885163358	0	0	8.560311284	2.983138781	0	6	0	4	38.26199741	63.5610766	2.533783784
207	0.956688752	0	0	10.22364217	9.744408946	0	6	0	2	29.39297125	52.32876712	0.45045045
208	0.140368791	0	0	94.22110553	0.502512563	0	1	0	1	94.22110553	100	0
209	0.925624823	0	0	24.8170326	45.04324684	0	11	0	1	27.14570888	40.90909091	10.71428571
210	0.688904232	0	0	4.775280899	1.123595506	0	1	0	1	60.95505618	72.91666667	67.38461538
211	0.934989062	0	0	14.64088398	0.552486188	0	2	0	3	28.45303867	93.10344828	17.25490196
212	0.827198159	0	0	12.61261261	0.900900901	0	2	0	2	35.13513514	88.0952381	44.82758621
213	0.667041351	2.395209581	1.19760479	1.19760479	2.395209581	0	0	0	0	52.09580838	100	6.796116505
214	0.97046203	0	0	5.37634086	15.91397849	0	6	0	1	23.65591398	83.33333333	30.11152416
215	0.679222496	3.859060403	0.1677785235	15.26845638	0.503355705	0	3	0	2	44.79865772	13.48314607	58.04347826
216	0.830318208	0	0	22.60869565	6.956521739	0	3	0	3	26.08695652	75	75.36231884
217	0.719327131	0	0	3.773584906	5.370101597	0	5	0	1	43.83164006	98.30508475	54.90909091
218	0.832208385	5.806451613	0	3.440860215	25.580645161	0	0	0	3	36.55913978	95.67901235	50.74626866
219	1.231109354	0	0.823045267	17.69547325	13.78600823	0	14	0	2	17.69547325	12.5984252	12.5
220	1.091238662	0	0.432900433	2.597402597	25.54112554	0	8	0	5	24.67532468	40	8.108108108
221	1.096821657	0	0.149233731	13.58208955	18.95522388	0	11	0	3	18.65671642	5.325443787	4.947916667
222	1.050252719	0	7.39 -02	5.686853767	8.714918759	0	9	0	4	32.05317578	51.64835165	30.76142132
223	0.995728154	0	0	11.89634865	25.32391048	0	14	0	3	25.08833922	0	25.46583851
224	1.136585792	0	0	1.208459215	2.416918429	0	14	0	2	23.56495488	0	3.754266212
225	1.088522326	0	0	4.026845638	2.013422819	0	12	0	2	23.48993289	23.52941176	0
226	1.023281921	0	0	20.9395732	6.308724832	0	13	0	2	20.93959732	18.60465116	0
227	1.234192056	0	0.14619883	7.602339181	21.34502924	0	14	0	1	20.02923977	17.17171717	5.373831776
228	1.020945129	0.102145046	0	4.290091931	7.048008172	0	8	0	4	21.96118488	1.591511936	29.986053
229	1.030371249	0.966183575	0	18.84057971	3.8647343	0	5	0	6	21.73913043	5.5147058862	5.398457584
230	1.012111987	0	0	11.28472222	3.819444444	0	12	0	1	23.61111111	0.578034682	0
231	1.17948483	0	0	4.155844156	0.25974026	0	13	0	1	15.32467532	26.27737226	13.9941691
232	1.279202535	0	0.224719101	4.269662921	6.741573034	0	19	0	2	18.42696629	28.72340426	2.27272723
233	1.250551505	0	0.145772595	2.915451895	10.64139942	0	19	0	3	17.05539359	16.36363636	5.18783542
234	0.596993757	0	0	1.769911504	5.309734513	0	1	0	1	64.60176991	73.33333333	24.1379103
235	0.632459113	0	0	12.5	0	0	1	0	1	54.16666667	92.85714286	11.76470588
236	1.0081777571	0	0	6.88172043	2.365591398	0	8	0	1	18.70967742	42.46575342	0
237	1.016293245	0	0	3.267973856	6.274509804	0	14	0	1	33.46405229	5.555555556	0.44576523
238	1.235427802	0	0	12.13872832	3.179190751	0	17	0	3	13.00578035	18.22660099	20.87912088
239	0.619211855	0	0	15.57177616	1.703163017	0	5	0	2	52.55474453	86.73469388	0
240	1.230293076	0	0	11.40776699	21.3592233	0	10	0	3	11.40776699	24.81203008	6.119047619
241	0.975460759	0	0.229357798	5.504587156	8.486238532	0	8	0	4	37.3853211	75.81395349	11.88118812
242	0.994966933	0	0	4.646840149	33.64312268	0	10	0	3	28.2527881	17.1641791	6.451612903
243	1.230377467	0	0	14.55223881	11.94029851	0	8	0	2	14.55223881	25.3164557	4.575163399
244	1.054854764	0	0	7.580824972	6.688963211	0	12	0	2	18.28316611	49.84802432	8.028169014
245	1.060462044	0	0	7.589285714	6.696428571	0	13	0	2	18.30357113	49.84802432	8.039492243
246	1.01196921	0	0	17.26027397	20.2739726	0	10	0	2	20	17.70833333	4.494382022
247	0.41234981	0	0	78.55153203	0	0	6	0	1	78.55153203	26.92307692	2.898550725
248	0.88383465	0	0	45.56962025	18.01935964	0	10	0	2	45.56962025	30.64516129	11.37566138
249	1.1839562618	0	0	28.98550725	2.173913043	0	18	0	4	28.98550725	34.39153439	9.230769231

Appendix G: Benthic Values of New exico Stream Samples

BentSampleID	Shan_10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
250	1.03121041	0	18.53932584	2.247191011	0	9	0	2	23.59550562	30.76923077	5		
252	0.857230677	0	0.696684111	30.66202091	0.348432056	0	3	0	30.66202091	17.33333333	34.09090909		
253	0.932791526	0	6.56167979	2.099737533	0	6	0	2	27.82152231	66.22516556	36.1774744		
254	0.999402493	0.137551582	0.275103164	26.5474553	8.528198074	0	13	0	3	26.5474553	71.76470588	1.069518717	
255	0.918324293	0.268817204	0	21.50537634	21.50537634	0	3	0	5	33.33333333	11.36363636	59.33014354	
256	0.567290299	0	0	33.77862595	1.335877863	0	0	0	5	33.77862595	0	30.76923077	
257	0.905375465	0	0	10	1.481481481	0	2	0	4	31.85185185	0.970873786	31.35135135	
258	0.989163923	0	0	15.63517915	8.4690553375	0	3	0	3	20.19543974	83.80952381	2.564102564	
259	0.956888533	0	0	13.72092023	5.348837209	0	9	0	2	24.65116279	23.636336364	0	
260	1.094120302	0	0	14.98371336	10.09771987	0	7	0	3	28.66449511	69.29133858	3.243243243	
261	1.17372788	0	0	22.18649518	14.46945338	0	9	0	4	22.18649518	39.6039604	0	
262	1.029496517	0	0	5.55555556	1.068376068	0	15	0	4	33.54700855	36.81318681	12.45136187	
263	1.171678941	0	0	3.225806452	4.838709677	0	10	0	2	16.12903226	42.02898551	4.72972973	
264	0.93842975	0	0	7.784431138	4.790419162	0	6	0	1	34.13173633	57.57575758	3.546099291	
265	0.910019549	0	0.295857988	26.92307692	9.171597633	0	7	0	3	26.92307692	54.21686747	0	
266	0.720483937	0	0	0.86208966	50	2.586206897	0	1	0	2	50	75	2.5
267	1.004092906	0	0	16.52173913	26.95652174	0	1	0	5	26.95652174	96.875	17.07317073	
268	1.007672707	0	4.872881356	1.271186441	14.19491525	0	1	0	5	22.03389831	35.33334586	12.82894737	
269	1.048512463	0	5.263157895	10.52631579	24.21052632	0	1	0	3	20	23.33333333	12.76595745	
270	1.133499893	2.173913043	10.43478261	8.695652174	1.739130435	0	2	0	5	20.43478261	22.44897959	14.08450704	
271	0.994168211	4.580152672	0	15.26717557	4.198473282	0	1	0	5	22.9070676336	38.70967742	2.87353218	
272	0.60867647	0	1.162790698	41.86046512	20.93023256	0	0	0	3	41.86046512	0	0	
273	0.863396099	0	0	1.538461538	27.69230169	0	1	0	2	27.69230169	87.5	13.04347826	
274	0.8889469485	0	2.6202967742	5.040322581	44.95967742	0	9	0	3	43.34677419	6.451612903	0	
275	1.0004177595	0	0	8.7686556716	5.037313433	0	10	0	5	27.98507463	76.71232877	0	
276	1.201896918	0	0.104275287	11.366600626	13.13869613	0	10	0	8	20.64650678	24.19354839	12.07815275	
277	1.164412652	0	0	9.84759617	21.3364955	0	7	0	5	21.21922626	10.70110701	9.2199858156	
278	0.812411277	0	0	1.694915254	12.99435028	0	6	0	1	33.33333333	9.722222222	0	
279	1.075216741	0	0	9.440559441	18.53146853	0	3	0	3	22.72727273	16.66666667	16.04278075	
280	1.058184897	0	0	2.314814815	34.25925926	0	4	0	4	23.61111111	21.31147541	14.9122807	
281	0.994582651	0	0	0.975609756	14.14634146	0	4	0	3	25.36585366	57.53424658	34.89932886	
282	0.708261113	0	0	4.710144928	18.11594203	0	2	0	4	47.10144928	21.21212121	0	
283	0.387246564	0	0	75.16778523	0.67114094	0	0	0	2	75.16778523	100	44.44444444	
284	0.837043825	0	1.234567901	0	0	0	5	0	2	26.54320988	48.8372093	22.87581699	
285	0.935963654	0	0.158227848	1.107594937	33.86075949	0	12	0	2	33.06962025	13.23529412	1.812688822	
286	0.648462244	0	0	1.351351351	2.702702703	0	2	0	2	56.75675676	92.85714286	24	
287	0.650521047	0	0	2.2727227273	4.545454545	0	4	0	2	55.3030303	80	25	
288	0.877674098	0	0.512820513	2.051282051	0	8	0	1	38.46153846	0	5.434782609		
289	1.057002844	0	0	8.26446281	2.479338843	0	7	0	2	23.96694215	0	0	
290	1.035151582	0	0.137551582	24.2090784	5.777166437	0	9	0	2	25.99724897	14.0625	0	
291	1.249784923	0	0	14.86486486	6.587837838	0	19	0	3	14.86486486	53.93258427	6.735751295	
292	1.258222046	0	0.551470588	14.70588235	9.007352941	0	15	0	3	15.07352941	50.53763441	10.91954023	
293	0.8633903532	0	0	32.59423503	4.87804878	0	12	0	1	32.59423503	0	0	
294	1.244036256	0	0.561797753	14.76725522	3.370786517	0	12	0	3	14.76725522	12.06225681	1.239757373	
295	1.035794078	0	0	14.00264201	2.774108322	0	4	0	4	19.94715984	1.818181818	42.17081851	

Appendix G: Stream Values of New exico Stream Samples

BnsSamplD	Shan_10	AmphPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntolTax	In_olTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
296	0.800937327	7.27 -02	0	7.88040712	4.034896401	0	10	0	6	51.94474736	2.299850575	73.99268035	
297	0.871792928	0	0	1.172579313	7.370184255	0	10	0	1	41.37353434	4.035874439	0	
298	1.087618039	0	0	13.90977444	0.37593985	0	13	0	1	19.17293233	8.139534884	23.42342342	
299	1.129212558	0	0	8.504398827	2.93255132	0	14	0	1	24.04692082	14.63414634	13.49480969	
300	1.178242915	0	0	3.116147309	1.133144476	0	15	0	1	17.28045326	38.19444444	7.590759076	
301	1.121291453	0	0	1.020408163	6.122448898	0	10	0	2	20.40816327	12.5	2.994011976	
302	0.72194802	0	0	0.99009901	3.96039604	0	4	0	2	51.48514851	91.22807018	15	
303	0.929229057	0	0	0	1.724137931	13.79310345	0	6	0	1	32.75862069	79.16666667	13.51351351
304	0.930480789	0	0	4.280155642	32.29571984	0	9	0	3	31.90661479	40	9.322033898	
305	1.054195357	0	0	0.555555556	2.222222222	0	11	0	1	36.11111111	11.42857143	7.142857143	
306	1.069436142	0	0	0	7.843137255	0	5	0	0	21.56862745	40.74074074	2.222222222	
307	1.076140709	0	0	11.04972376	0.368324125	0	12	0	4	22.6519337	41.86046512	0.967741935	
308	0.797817324	0	0	0	56.96721311	0	2	0	2	51.2295082	11.94029851	47.10144928	
309	1.083212644	0	0	3.424657534	6.164383562	0	7	0	2	25.34246575	35.80246914	2.479338843	
310	0.91177676	0.986193294	0	8.284023669	3.747534517	0	8	0	2	28.79684418	27.77777778	16.98113208	
311	1.070901317	0	0	11.5942029	2.898550725	0	8	0	3	15.94202899	45.83333333	10.90909091	
312	0.607630905	0	0	0	4.736275565	0	4	0	5	41.33476857	0.514800515	3.811149033	
313	0.626455922	0	0	2.164502165	0	0	4	0	3	41.12554113	1.052631579	3.611738149	
314	0.772946046	0	0	43.48837209	0	0	3	0	6	43.48837209	74.20718816	15.60062402	
315	0.749839506	0	0	22.81879195	0	0	3	0	3	36.77852349	84.56790123	31.99268739	
316	0.67126441	0.168208579	0	2.270815812	1.513877208	0	3	0	7	57.375912532	0	66.01489758	
317	1.042503139	0	0	4.347826087	0.483091787	0	4	0	3	26.08695632	60.43956044	25.97402597	
318	1.041846891	0	0	16.51376147	0.917431193	0	4	0	3	16.51376147	25.58139535	21.794871779	
319	0.666260369	0	0	50.69914299	0	0	4	0	5	50.69914299	64.05228758	18.06775408	
320	0.710600247	0	0	47.38760632	0	0	2	0	4	47.38760632	78.35520896	12.4260355	
321	0.361510016	0	0	4.761904762	57.14285714	0	0	0	2	57.14285714	0	0	
322	0.445135136	0	0	21.21212121	51.151515152	0	0	0	2	51.151515152	0	0	
323	0.761106233	0	0	8.888888889	4.444444444	0	1	0	3	46.66666667	100	80.76923077	
324	0.9114626953	0	0	30.5785124	9.090909091	0	1	0	6	30.5785124	62.5	60.97560976	
325	0.682545673	0	0	3.225806452	6.451612903	0	0	0	5	54.83870968	14.28571429	82.92682927	
326	0.54328117	0	0	3.448275862	5.363984674	9.578544061	0	0	4	67.04980843	15.38461538	93.08510638	
327	1.0114630463	0	0	2.071005917	1.479289941	0	8	0	4	28.99408284	23.14814815	17.1641791	
328	0.33367633482	0.917431193	0	22.01834862	0	0	0	0	3	73.39449541	0	0	
329	0.531050288	0	0	0	0.968992248	9.69 -02	0	3	0	4	60.46511628	100	64.663321244
330	0.617151317	0	0	0	0.928289626	2.32 -02	0	2	0	5	61.26711534	16.21621622	9.691110587
331	0.95644292	0	0	14.57627119	4.406779661	0	6	0	3	25.59322034	91.72932331	40.82125604	
332	1.146451622	0	0	17.38122827	21.08922364	0	5	0	3	17.38122827	49.33333333	21.6091954	
333	0.728613451	0	0	0.77821017	3.112840467	0	3	0	2	47.08171206	15.09433962	64.70588235	
334	0.7917410142	0	0	3.986928105	1.568621451	0	8	0	3	38.69281046	31.3253012	82.73934312	
335	0.791852688	0	0	48.98477157	0	5	0	0	48.98477157	97.5	42.30769231		
336	0.554212375	0	0	45	0	4	0	2	45	85.71428571	0		
337	0.690989493	0	0	33.52272727	0	0	0	1	40.34090909	83.52941176	10.43478261		
338	0.560105376	0	0	29.58412098	0	0	5	0	4	49.24385633	98.67424242	4.753521127	
339	0.791729794	0	0	13.06306306	0	0	4	0	4	41.44144144	97.18309859	15.42288557	
340	0.748159523	0	0	36.08923885	0	0	4	0	6	36.08923885	17.10526316	7.52688172	

Appendix G: Benthic values of New Mexico Stream Samples

BentSampleID	Shan_10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntolTax	In otTax	TolerTax	Dom01Pct	Baet	EphPct	Hyd	EPTPct
341	0.74175264	0	0	47.48603352	0	0	2	0	4	47.48603352	0	11.76470588		
342	0.514182938	0	0	60.61269147	0	0	3	0	2	60.61269147	30.612449	7.142857143		
343	0.772841314	0	0	36.09022556	0	0	5	0	3	36.09022556	12.08791209	13.77777778		
344	0.687348142	0	0.124009479	19.47890819	1.364764268	0	4	0	2	50	97.81553398	17.27941176		
345	1.2000755355	0	0	12.77289567	0.934579439	0	13	0	2	16.19937695	13.48314607	0		
346	1.070729573	0.816629547	0	17.81737194	8.53749072	0	11	0	1	17.81737194	83.69565217	20.4494382		
347	1.062063414	0.204498978	0	4.08997955	10.02049499	0	13	0	4	31.69734151	35.32934132	10.43256997		
348	1.175547085	0	0	16.64698937	1.298701299	0	15	0	3	16.64698937	41.41791045	10.81081081		
349	1.203217468	0	0	3.7470726	1.170960187	0	17	0	3	20.84309133	42.38095238	0.261780105		
350	1.052801897	0	0	33.28290469	0.302571861	0	14	0	2	33.28290469	25.80645161	0.930232558		
351	0.601927241	0	0	67.12598425	0	0	6	0	1	67.12598425	19.6969697	0		
352	1.053053252	0	0	6.666666667	0.533333333	0	9	0	1	18.4	13.18881319	0		
353	0.90716522	0	0	13.94422311	2.788844622	0	8	0	2	28.28685259	82.455614035	4.402515723		
354	0.716124394	0	0	4.255319149	0	0	4	0	1	42.55319149	85.29411765	7.058823529		
355	0.348852445	0	0	1.1622790698	1.1622790698	0	4	0	1	82.55813933	30	0		
356	0.708425553	0	0	5.693950178	0	0	4	0	1	39.85765125	46.96969697	0.383141762		
357	1.0287691	0	0	1.458333333	5.833333333	0	13	0	2	26.25	35.40669856	0.699300699		
358	0.803956099	0	0	4.435493871	0.806451613	0	7	0	2	34.27419355	69.02654867	2.145922747		
359	0.982281288	0	0	1.682242991	4.672897196	0	10	0	1	31.02803738	19.04761905	7.581967213		
360	0.935982153	0	0	1.851851852	3.395061728	0	8	0	1	28.08641975	41.86046512	3.020134228		
361	0.987998735	0	0	4.88888889	1.333333333	0	8	0	1	30.44444444	25.75757576	4.819277108		
362	1.063577157	0	0	27.849774093	2.849774093	0	12	0	2	27.849774093	30	0		
363	0.917174542	0	0	13.5193133	2.360515021	0	13	0	2	35.19313305	0	0.571128571		
364	0.897947464	0	0	22.58933168	0.550964187	0	11	0	2	27.27272727	54.09836066	0		
365	0.738660814	0	0	49.5890411	1.9222374429	0	10	0	2	49.5890411	37.11340206	0		
366	0.901327297	0	0	2.597402597	1.298701299	0	5	0	2	28.57142857	44.62809917	1.860465116		
367	0.891439056	0	0	25.58139535	3.720930233	0	6	0	1	30.69767442	58.40707965	6.52173913		
368	0.891681503	0	0	5.660377358	0	0	5	0	1	36.79245283	62.06896552	3.333333333		
369	0.721561109	0	5.73 -02	1.777522936	18.00458716	0	2	0	3	41.57110092	71.56959526	8.609865471		
370	0.893862694	0.492610837	0	3.9408867	2.463054187	0	3	0	3	34.48275862	25.98425197	18.29268293		
371	0.922443128	0	0	5.454545455	5.454545455	0	6	0	1	35.81818182	19.59910913	6.066945607		
372	0.751119884	2.184466019	0	45.06412492	0.566343042	0	3	0	5	45.06412492	75.2362949	2.872331418		
373	0.9629468827	0	0	9.202453988	4.601226994	0	5	0	3	30.67484663	25.943339623	7.894136842		
374	0.688450967	11.16504854	0.315533981	22.54853369	-7.28 -02	0	3	0	4	32.74271845	65.95744681	94.4016795		
375	0.804463606	0	0	1.013171226	50.75987842	0	9	0	2	50.75987842	47.65625	6.326034063		
376	0.723254472	0	0	44.81132075	2.358490566	0	4	0	1	44.81132075	12.96296296	1.020408163		
377	0.944052461	0	0	27.10280374	0.934579439	0	5	0	2	27.10280374	16.16161616	5.405405405		
378	0.947603962	0	0	35.24904215	9.961685824	0	5	0	1	35.24904215	24.13791303	7.142857143		
380	0.700151635	0	0	19.0180491	0.613496933	0	3	0	3	47.2392638	71.17111717	3.25203252		
381	0.792570501	0.330033003	0.165016502	4.290429043	3.135313531	0	2	0	5	40.4290429	95	63.75		
383	0.931257083	0	0	27.43902439	6.0975606976	0	2	0	4	27.43902439	83.01886792	8.988764045		
384	0.948550909	0	0	27.25225225	2.927927928	0	2	0	2	27.25225225	69.35483871	29.73977695		
385	0.716982666	0	0	11.82795699	0.7168495878	0	2	0	2	49.10394265	22.3880597	0.4608229493		
386	0.6339420493	0	0	58.73015873	0	0	4	0	1	58.73015873	23.52941176	4.545454545		
387	0.809205405	0	0	18.07228916	3.614457831	0	3	0	1	34.93975904	12.12121212	44.61538462		

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BentSampleID	Shan_10	AmphPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntolTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
388	0.281927155	0	0	12.03007519	0	0	1	0	1	81.20300752	94.73684211	2.564102564
389	0.6118469811	0	0	35.45454545	0	0	2	0	2	35.45454545	0	0
390	0.925883539	4.6875	8.4375	11.5625	0.3125	0	0	0	7	33.4375	100	33.73493976
391	0.776658894	0	0	36.17886179	1.219512195	0	1	0	3	36.17886179	54.7826087	10.07751938
392	0.543304415	0	0	3.125	19.791666667	0	0	2	2	66.666666667	100	0
393	0.570467606	0	0	4.942339374	6.26029654	0	3	0	3	59.63756179	95.3271028	0
394	0.6665219332	0	0	1.125	2.875	0	11	0	3	58.25	25.390625	0
396	0.229819123	0	0	0.668449198	3.609625668	0	2	0	3	88.23529412	100	0
397	0.768993563	0	0	49.02953586	9.367088608	0	6	0	2	49.02953586	62.04379562	14.54138702
398	1.001644473	0	0	8.208092486	26.24277457	0	8	0	2	24.85549133	58.42105263	24.39926063
399	0.521061452	0	0	4.555808656	0	0	3	0	1	56.2642369	91.99255121	30.57553957
400	0.911556972	0	0	21.90635452	10.86956522	0	5	0	1	22.40802676	72.43243243	29.89690722
401	0.842227219	0.692041522	0	7.266435986	4.152249135	0	5	0	2	43.25259516	14.45086705	6.072874494
402	0.848704707	0.168350168	0	23.73737374	28.61952862	0	4	0	3	23.90572391	19.26229508	33.89021448
403	0.839169756	0.643776824	0	17.8111588	0.965665236	0	3	0	3	26.28755365	37.6744186	35.87115666
404	0.824363538	0	0.16025641	10.576922308	9.935897436	0	3	0	2	26.76282051	43.31210191	26.02459016
405	0.726951435	0	0	11.33144476	17.8470255	0	3	0	3	48.15864023	2.43902439	10.61224449
406	0.900947466	0	0	2.197802198	17.58241758	0	10	0	2	32.23443223	69.64285714	3.686635945
407	0.979583146	0	0	1.496259352	27.18204489	0	7	0	1	24.43890244	17.88617886	2.27227273
408	0.8666927543	0.188323917	0	1.506591337	5.461393597	0	7	0	3	47.08097928	26.86567164	15.78947368
409	0.952279722	0	0	0.578034682	16.76300578	0	7	0	2	23.41040462	23.72881356	0.502512563
410	1.181613817	0	0	4.61675	6.770833333	0	10	0	2	18.75	57.14285714	16.7719355
411	1.028183621	0	0	10.2739726	5.136988301	0	10	0	2	19.52054795	31.91489362	0.826446281
412	0.509169094	0.161030596	61.19162641	1.771333554	0	1	0	5	61.19162641	4.285714286	0	
413	0.8498668849	0	0	30.91603053	4.580152672	0	5	0	3	30.91603053	15.73033708	23.52941176
414	0.9985810186	0.251256281	11.05527638	3.266331658	31.65829146	0	8	0	4	31.40703518	23.07692308	8.421052632
415	0.7841704627	0	0	8.607198748	7.198748044	0	6	0	1	45.69640063	82.48175182	67.88154897
416	0.918123354	0	0.591715976	25.44378698	8.08678501	0	6	0	3	30.96646943	28.37837838	60.61776062
417	0.724317909	34.54545455	9.57 -02	13.77990431	18.85167464	0	1	0	5	34.54545455	100	12
418	0.832031702	0	0	28.38589981	12.80148423	0	6	0	3	28.38589981	17.7777778	35.52631579
419	0.652089222	0	0.347826087	31.65217391	48	0	5	0	5	48	3.174603175	3.03030303
420	0.811842644	0	0	1.807228916	30.92369478	0	4	0	1	30.92369478	92.38095238	39.49275362
421	0.70276169	0	0	17.79497099	0.773694391	0	5	0	3	38.39458414	100	56.15275813
422	0.794784629	0	0	0	15.17509728	0.389105058	0	2	0	3	32.29571984	76.44.14893617
423	0.74733706	0	0	5.374823197	2.404526167	0	1	0	6	47.94908062	95.23809524	1.666666667
424	0.286198539	0	0	0.907590759	88.696363964	0	7	0	5	88.366333663	50	8.536585366
425	0.763663176	0	0	7.093425606	24.39446367	0	7	0	2	38.58131488	99.51456311	3.908794788
426	1.097956222	0	0	10.63348416	1.131221719	0	12	0	1	26.47058824	16.54411765	3.551912568
427	0.94772841	0	0.481927711	20	23.61445783	0	5	0	2	23.61445783	100	45.08196721
428	1.162423726	0	0	3.178484108	23.227338386	0	6	0	1	14.66992665	38.46153846	17.88617886
429	1.151301104	0	0	6.934306569	19.89051095	0	5	0	4	13.688613139	53.95883453	15.6462585
431	0.809237159	0	0	12.5	2.205882353	0	1	0	2	33.82352941	70.76923077	34.34343434
433	1.064299459	0	0	14.159229204	4.867256637	0	5	0	3	19.46902655	63.63336364	43.65079365
434	0.843606312	0	1.125	33	8	0	4	0	4	33	70.11494253	45.65992866
435	0.952370147	0	0	4.545454545	1.298701299	0	5	0	3	33.11688312	54.83870968	37.7777778

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BentSampleID	Shan_10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
436	0.868838399	0	0	1.666666667	1.666666667	0	5	0	2	33.666666667	100	38.11320755
437	0.844151125	0	0	0	0	0	2	0	1	27.36842105	71.42857143	30.58823529
438	0.982678597	0	0	4.12979351	5.899705015	0	9	0	2	25.66371681	75	25.30120482
439	0.992842451	0	0	6.882745098	5.882352941	0	9	0	1	34.31372549	54.16666667	43.75
440	0.6666770746	0	0	1.351351351	7.567567568	0	2	0	2	55.40540541	60	24.0563291
441	0.764274245	0	0	0.970873786	3.8833495146	0	3	0	1	47.57281553	57.89473684	51.57894737
442	0.719713045	0	0	10.44386423	0	0	0	0	4	31.46214099	100	47.81746032
443	0.714799261	0	0	0	37.09677419	0	0	0	0	3	37.09677419	92.59259259
444	0.39425659	0	0	69.31911403	8.20 -02	0	0	0	0	2	69.31911403	98.4375
445	0.169393099	0	0	10.09463022	0.122361578	0	0	0	4	89.04863873	0	0
446	0.63036182	0	0	19.17808219	6.849315068	0	2	0	5	57.19178082	86.52849741	1.470588235
447	0.789993249	0	0	15.2173913	0.8695565217	0	2	0	4	38.69565217	57.92682927	3.468208092
448	0.924734493	0	0	3.65535248	7.832898172	0	3	0	3	32.11488251	13.69863014	40.72847682
450	1.103513125	0	0	2.620087336	5.240174672	0	5	0	6	23.58078663	38.13559322	28.72340426
451	1.054230161	0	0	0.589390963	8.84086444	0	3	0	5	27.11198428	17.40614334	21.02689487
452	0.9655327464	0	0	0	1.715686275	1.225490196	0	6	0	5	27.20588235	27.14932127
453	0.847292693	0	0	0	8.595387841	0.419287212	0	2	0	2	34.38155136	77.38693467
454	0.824065762	0	0	0	8.045977011	0.287356322	0	2	0	4	34.1954023	83.93782383
455	0.621217527	0	0	0	3.664921466	0.785340314	0	2	0	2	45.28795812	91.07142857
456	0.593369164	0	0	0	1.058201058	1.058201058	0	3	0	2	39.15343915	96.1038961
457	0.880669192	0	0	0	5.747126437	0	0	0	3	0	2	2.8033738318
458	1.006174965	1.825293351	0	2.477183833	2.477183833	0	0	0	0	6	24.64146623	53.76884422
459	0.372193198	67.41293532	0	0	0	0	0	0	1	67.41293532	100	0
460	0.7751476285	0.440528634	0	7.04845815	0	0	0	0	4	37.00440529	65.853565854	52.87356322
461	0.804382066	0	0	0	15.60283688	1.418439716	0	0	0	3	26.24113475	61.9047619
462	0.854945857	0	0	0	23.07692308	9.89010989	0	1	0	2	30.76923077	81.39534884
463	0.729518552	0	0	0	13.7254902	4.901960784	0	1	0	3	50	54.54545455
464	0.950930951	0	0	0	13.13131313	2.693602694	0	5	0	5	30.63973064	28.17679558
465	0.849617946	0	0	0	17.6369863	2.054794521	0	2	0	1	29.28082192	44.52054795
466	1.095921935	0	0	0	5.048409405	20.53941909	0	11	0	6	20.33195021	36
467	0.708864544	0	0	0	61.61710037	0	0	11	0	1	61.61710037	55.29411765
468	0.967175414	0	0	0	0.6430868817	0.6430868817	0	9	0	2	25.08038585	56.93430657
469	0.530566282	0	0	0	0.877192982	0	0	2	0	2	44.73684211	98
470	0.61446551	0	0	0	3.333333333	0	0	5	0	1	61.11111111	76.38888889
471	0.88047604	0	0	0	8	0	0	8	0	3	43	64.17910448
472	0.866778092	0.146627566	0	20.67448686	1.319648094	0	1	0	7	33.87096774	29.35779817	0.235849057
473	0.709997362	0	0.41450772	18.44559585	0.3103880829	0	1	0	6	48.60103627	77.38693467	4
474	0.949260389	0.110619469	0	25.77433628	0.774336283	0	2	0	5	25.77433628	64.22764228	1.70212766
475	0.769866843	0	0	34.50854701	0.747863248	0	5	0	3	34.50854701	95.39473684	1.73611111
476	0.872197276	0	0	43.8752784	3.118040089	0	3	0	5	43.8752784	24.24242424	3.804347826
477	0.7794418746	0	0.165016502	46.699666997	2.970729103	0	3	4	46.699666997	31.65467626	15.38461538	
478	0.589517321	2.777777778	0	2.777777778	0	0	1	0	0	1	100	75.86206897
479	0.830859305	0	0	1.746724891	3.493449782	0	1	0	1	30.13100437	58.87096774	8.965517241
480	0.873396501	0	0	3.053435115	3.435114504	0	0	0	3	31.29770992	81.18811881	23.48484848
481	0.74551989	0	0	1.069518717	6.951871658	0	4	0	2	47.05882353	75.86206897	18.98734177

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BentSampleID	Shan_10	AmphPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntolTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
482	0.846480923	0.526315789	0	5.263157895	9.473684211	0	1	0	2	29.47368421	38.88888889	6.86245098
483	0.899402781	0.398406375	0	7.96812749	7.96812749	0	1	0	1	28.28685259	42.85714286	34.29951691
484	0.840481479	0.3558422939	0	7.168458781	7.526688172	0	2	0	1	37.63440086	70.794646018	47.08820179
485	0.84016033	0	0	4.975124378	8.457711443	0	1	0	1	44.7761194	84.84615385	54.1686747
486	0.746223899	0	0	1.706484642	16.89419795	0	7	0	2	53.58361775	18.60465116	1.366742597
487	0.569245563	0	0	4.494382022	9.238451935	0	7	0	3	70.03745318	42.105263116	1.940298507
488	0.848282573	0	0	5.45455455	7.272727273	0	8	0	1	47.27272727	31.48148148	13.12217195
489	1.065354886	0	0	3.514376997	14.05750799	0	10	0	2	20.76677316	69.23076923	24.883262911
490	0.622486004	0	0	18.75	0	0	0	0	2	50	100	20
491	0.954678446	0	0	7.407407407	3.703703704	0	1	0	2	29.62962963	42.85714286	44.44444444
492	0.793472697	0	0	11.62790698	2.3255581395	0	2	0	2	34.88372093	88.23529412	37.5
493	0.865909177	0	0	12.05882353	16.76470588	0	6	0	1	34.11764706	95.08196721	21.14537445
494	0.884098594	0	0	4.011461318	25.50143266	0	2	0	1	25.50143266	42.85714286	23.33333333
495	0.9985280228	0	0	4.225332113	10.21126761	0	4	0	3	24.29577465	13.58024691	50.43103448
496	0.854139858	0	0	3.164556962	2.8484101266	0	5	0	3	40.18987342	69.04761905	48.31460674
497	0.7276330611	0.27173913	0	4.891304348	61.41304348	0	9	0	3	61.41304348	12.5	39.81481481
498	1.006838098	0	0	4.777070064	26.75159236	0	9	0	2	26.11464968	64.51612903	4.812834225
499	1.091631796	0	0	3.780068729	16.83848197	0	6	0	2	28.86597938	22.44897959	22.27488152
500	0.925602157	0	0	0.751879699	13.15789474	0	1	0	2	26.31578947	27.27272727	52.60663507
501	1.077263016	0	0	7.357859532	4.013377926	0	6	0	2	19.73244147	97.77777778	22.2826087
502	0.899563934	0	0	0.98221675	8.866995074	0	8	0	1	41.77931034	35.71428571	72.41377931
503	0.77784114	0	0	2.419354839	1.209677419	0	5	0	1	41.12903226	14.70588235	80.68669528
504	1.084766977	0	0	10.56603774	1.8867792453	0	7	0	3	21.886779245	0	12.70718232
505	0.905556062	0	0	1.324503311	13.57615894	0	9	0	1	33.11258278	0	48.1981982
506	0.724549884	0	0	2.949853507	1.769911504	0	2	0	3	42.77286136	5.882352941	53.125
507	0.96453926	0	0	0	18.51851852	0	6	0	1	22.59259259	2.5	56.54450262
508	1.031836083	0	0	1.689189189	1.013513514	0	8	0	2	27.02702703	4.411764706	45.51971326
509	1.102877109	0	0	0.675675676	7.094594595	0	10	0	1	32.094594595	2	40.38461538
510	0.870812671	0	0	1.291989664	13.17829457	0	7	0	2	43.15245478	2	65.3250774
511	0.957530652	0	0	2.898550725	0.579710145	0	4	0	3	40	16.12903226	65.2014652
512	0.954595364	0	0	3.169014085	3.169014085	0	7	0	1	27.11267606	0	30.62015504
513	0.732709825	0	0	5.128205128	0.366300366	0	5	0	1	43.223344322	11.11111111	80.4
514	1.063671417	0	0	1.277955272	1.916932907	0	12	0	2	30.99041534	6.666666667	3.157894737
515	0.892488698	0	0	14.5631068	6.796116505	0	6	0	2	27.18446602	0	0
516	0.964020996	0	0.235478807	33.75196232	6.200941915	0	11	0	3	33.75196232	38.4057971	0
517	1.183198343	0	1.4333691756	3.94265233	12.186317993	0	10	0	4	18.63799283	12.63157895	18.57923497
518	1.199599131	0	2.368421053	0.526315789	3.421052632	0	8	0	6	14.73684211	2.6666666667	15
519	1.005989849	0	0.355871886	2.491103203	5.338078292	0	4	0	4	20.996441728	16.92307692	53.88601036
520	0.682768212	0	2.027027027	0.675675676	5.26486486	0	6	0	2	52.36486486	84.50704225	2.727272727
521	0.978516936	0	0.3226797386	3.594771242	15.35947712	0	4	0	5	29.73856209	5.494505495	44.28571429
522	1.068075154	0	0	15.853365854	4.268292683	0	9	0	3	21.34146341	28.02547771	16.32653061
523	0.518967336	0	0	0	5.882352941	0	3	0	3	70	0	0
524	0.838176289	0	0.204081633	0	5.510204082	0	4	0	2	34.08163265	10.56603774	36.80555556
525	1.28251255	0	0.3227838852	1.31147541	4.918032787	0	7	0	6	13.44262295	6.542056075	10.54852321
526	1.163245868	0	0	1.846965699	17.15039578	0	6	0	5	17.15039578	17.91044776	21.81069959

Appendix G: Stream Values of New exico Stream Samples

BsnSamplD	Shan_10	AmpHPCt	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
527	1.192599961	0	0.3331125828	8.940397351	11.9205298	0	10	0	2	20.52980132	22.4137931	28.18181818
528	1.207406665	0	0.630914826	0.315457413	9.779179811	0	8	0	3	12.93375394	10.52631579	13.61702128
529	0.659503139	0	0	6.441717791	1.226993865	0	2	0	2	43.55828221	17.30769231	64.38356164
530	0.170408111	0	0	0	0	0	0	0	1	91.11111111	100	0
531	0.975378174	0	0	1.18634362	30.86053412	0	9	0	1	24.62980812	19.86754967	0
532	0.965854639	0	0	3.249097473	35.7400722	0	8	0	3	31.76895307	62.85714286	0
533	0.737666455	0	0	24.41471572	4.682274247	0	10	0	2	50.8361204	84.91620112	0
534	0.692689576	0	0	51.47679325	0.421940928	0	4	0	1	51.47679325	19.14893617	5.357142857
535	1.036411642	0	0	23.4741784	1.877934272	0	12	0	2	23.4741784	43.43434343	0
536	1.0033184645	0	0	24.11764706	1.764705882	0	2	0	4	24.11764706	20.77922078	5.882352941
537	0.701839681	0	0	13.25301205	1.807228916	0	3	0	3	57.8313253	95.04950495	9.128630705
538	0.720159854	2.016129032	0	50.40322581	0	0	1	0	5	50.40322581	46.15384615	0
539	0.528013501	0	0	72.0647733	0.809716599	0	2	0	4	72.0647733	41.17647059	0
540	0.831843651	0	0	6.976744186	4.651162791	0	1	0	3	39.53488372	30.76923077	10.95890411
541	0.876057891	0	0	23.35526316	5.592105263	0	4	0	2	35.85526316	72.72727273	64.24581006
542	1.170484294	0	0	9.230769231	12.30769231	0	11	0	3	19.61538462	77.5862069	0
543	1.0237196001	0	0	4.815834023	3.9666005666	0	10	0	4	36.82719547	77.31958763	0
544	0.708385803	0	4.153334633	15.01597444	0.958466454	0	3	0	2	43.13099042	16.66666667	0
545	0.974644332	0	4.938211605	8.230452675	12.34567901	0	4	0	3	25.92592593	34.375	4.86111111
546	0.853473338	0	0	5.882352941	6.535947712	0	6	0	2	51.30718954	23.1884058	1.937984496
547	1.0004535084	0	0.324675325	11.68831169	18.50649351	0	11	0	1	31.81818182	50	51.79487179
548	0.529338418	0	0	5.098920359	1.19760479	0	2	0	3	45.86826347	94.42060086	15.65336299
549	0.731708245	0	0	19.51612903	2.096774194	0	8	0	3	42.74719358	31.043257	6.382918723
550	0.730606122	0	0	23.5099046	0.146735143	0	7	0	3	30.74101247	46.29834254	1.4538333333
551	0.6655913972	0	0	7.193732194	1.851851852	0	7	0	2	41.66666667	91.692718997	41.85094185
552	0.7762987784	0	0	6.184448463	6.473779385	0	9	0	2	35.66003617	85.44194107	41.84559159
553	1.141234211	0	0	7.23847298	17.9474467	0	12	0	3	17.9474467	31.96721311	7.816091954
554	0.66661763529	0	0	8.916586769	1.62991371	0	7	0	2	51.39022052	3.634751773	0.842911877
555	0.948415995	0	0	30.90663058	2.110960758	0	11	0	4	30.90663058	9.753593429	0.727513228
556	1.105709152	0	0	11.13871636	1.242236025	0	10	0	2	14.16149088	30.16270338	0
558	0.90732523	0	0	30.94890511	0.583941606	0	7	0	4	30.94890511	44.90161002	2.02020202
559	0.755541993	0	0	8.700209644	1.100628931	0	9	0	5	41.8763102/2	10.76458753	1.637197119
560	0.80820042	6.03 -02	0	35.83710407	0.4826546	0	9	0	3	35.83710407	8.429752066	1.951219512
561	1.12476377	0	0.168137873	17.57040773	3.026481715	0	15	0	4	17.57040773	21.85863874	5.889646621
562	0.159843407	0	0	1.97044335	0	0	4	0	2	93.59605911	100	0
563	0.479466189	0	0	1.689189189	4.391891892	0	3	0	5	77.36486486	100	0.81300813
564	0.867584523	0	0	20.33898305	16.94915254	0	1	0	8	38.98305085	80.70175439	0
565	0.825519324	0	0	39.26380368	8.588957055	0	1	0	6	39.26380368	73.40425532	2.06185567
566	0.178111254	0	0	14.28571429	0	0	0	0	0	85.71428571	100	0
567	0.85553598	0	0	27.2722727	0	0	0	0	3	27.2722727	50	33.33333333
568	1.044670689	0	0	1.408450704	18.30985915	0	7	0	2	19.24882629	18.33333333	0
569	1.098021495	0	0	12.71676301	0	0	7	0	0	19.65317919	56.33802817	8.391608392
570	1.043740142	0	0.348432056	5.574912892	8.710801394	0	6	0	3	38.67595819	40.74074074	10.40223982
571	0.829866487	0	0	2.64906623	9.602649007	0	6	0	3	50	54.54545455	60.15936255
572	1.037771833	0	0	4.522613065	9.045226131	0	5	0	3	28.64321698	77.41935484	36.41975309

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BnsSamplD	Shan_10	AmphPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
573	1.151575993	0.434782609	4.7826608696	13.91304348	23.47826087	0	5	0	5	18.69565217	43.47826087	4.225352113
574	0.56919777	0	0	0	0	0	9	0	2	67.03703704	5.084745763	69.61538462
575	1.003985926	0	1.6	18.8	2	0	4	0	3	24	74.41860465	23.93162393
576	0.756038093	0	0	40.97744361	0	0	1	0	3	40.97744361	22.10526316	12.23021583
577	0.40181375	0	0	9.271523179	0	0	4	0	4	76.1589404	97.81234043	0.819672131
578	0.432776783	0	0	0	0	0	3	0	0	72.98850575	90.71428571	14.36781609
579	0.584256233	0	0	8.298755187	0	0	4	0	1	62.24066359	87.71929825	16.89497717
580	0.9524338797	0	0	8.552631579	1.315789474	0	2	0	5	27.63157895	85.71428571	41.17647059
581	0.5666676405	0	0	25.64102564	0	0	1	0	2	52.13675214	1.612903226	19.23076923
582	1.025626657	0	0	12.61829653	0.94637224	0	11	0	5	31.54574132	18.44660194	40.0736508
583	0.845269294	0	0	5.572755418	1.857585139	0	6	0	4	31.57894737	6.875	35.54006969
584	0.955926832	0	0	4.672897196	4.672897196	0	5	0	1	38.31775701	50	47.12643678
585	1.154065542	0	0	21.61290323	0.64516129	0	7	0	6	21.61290323	47.95918367	32.38636364
586	1.107743686	0	0	16.40625	0.390625	0	8	0	4	21.09375	40.42553191	31.25
587	0.646069143	0	0	7.446808511	0.531914894	0	6	0	2	64.36170213	1.408450704	1.886792453
588	0.973770352	0	0	0	0	0	5	0	2	24.41314534	27.5	27.08333333
589	0.541010784	0	0	2.43902439	67.07317073	0	5	0	2	67.07317073	28.57142857	0
590	1.020348215	0	0	8.333333333	17.85714286	0	5	0	4	16.66666667	64	0
591	0.554608932	0	0	42.85714286	0	0	2	0	1	42.85714286	0	0
592	0.488162512	0	0	68.75	12.5	0	2	0	2	68.75	0	0
593	1.121339923	0	0	10.08064516	15.72589645	0	9	0	1	16.53225586	59.84251969	0
594	1.121339923	0	0	10.08064516	15.72589645	0	9	0	1	16.53225586	59.84251969	0
595	0.8893919353	0	0	37.5	9.482758621	0	8	0	1	37.5	79.71014493	4.587155963
596	0.804832858	0	0	14.51612903	37.09677419	0	4	0	1	36.69354839	10.34482759	5.93220339
597	0.8861568538	0	0	24.62121212	35.60606061	0	6	0	1	35.60606061	30.23255814	18.36734694
598	1.059347097	0	0	9.42408377	20.41884817	0	8	0	2	28.27225131	41.66666667	1.639344262
599	1.060036435	0	0	3.2	22.4	0	2	0	4	29.6	70	18.75
600	1.172018761	0	0	10	11.25	0	4	0	7	17.08333333	43.29896907	12.117391304
601	0.661410982	0	0	11.111111	0	0	3	0	1	33.33333333	75	0
602	0.907846749	0	0	2.857142857	6.122444898	0	4	0	1	50.20408163	14.89261702	64.61538462
603	0.8665524743	0	0	6.632653061	13.7755102	0	0	0	4	33.16326531	100	0
604	0.536225434	0	0	6	0.4	0	3	0	1	44.4	0.909090909	0
605	0.88894889677	0	0	7.883817427	3.319502075	0	3	0	1	41.90871369	3.937007874	19.54022989
606	0.902309058	0	0	12	8	0	0	0	3	28	0	6.25
607	1.082333294	0	0	14.28571429	18.04511278	0	9	0	1	14.28571429	8.695652174	0
608	0.769842142	0	0	49.23664122	7.633587786	0	4	0	6	49.23664122	4.225352113	0
609	1.047776376	0	0	15.7181208	23.48993289	0	4	0	4	22.14765101	7.042253521	49.01960784
610	0.896393433	0	0	7.142857143	4.201680672	0	6	0	5	45.37815726	10.17964072	0
611	1.006788571	0	0	3.225806452	20.73732719	0	6	0	1	20.2764977	37.5	0
612	0.90450851	0	0	2.702702703	10.81081081	0	4	0	4	28.82882883	3.75939496	1.290322581
613	0.8867719428	0	0	7.594936709	14.34599156	0	4	0	2	44.30379747	6.779661017	5.839416058
614	1.09497456	0	0	12.28813559	35.16949153	0	7	0	3	22.88135593	87.5	0
615	1.02364647	0	0	20.2764977	32.71889401	0	8	0	2	25.34562212	65.30612245	24.7311828
616	0.940198918	0	0	6.666666667	53.82716049	0	9	0	2	39.25925926	8.510638298	16.666666667
617	0.8888315152	0	0	24.01315789	5.592105263	0	3	0	3	29.93421053	96.61016949	47.52475248

Appendix G: Benthic values of New Mexico Stream Samples

BentSampleID	Shan_10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
618	0.765553442	0	0	51.81765775	4.812834225	0	1	0	2	51.87165775	73.17073171	29.28571429
619	1.110511634	0	0	19.41747573	22.33009709	0	9	0	5	19.41747573	54	0
620	0.845201366	0	0	15.95505618	11.68539326	0	6	0	3	35.730333708	36.53846154	25.86206897
621	0.976923935	0	0	17.4796748	23.98373984	0	6	0	3	23.57723577	15.90909091	9.433962264
622	0.688275424	0	0	0.735294118	8.0988235294	0	2	0	5	55.88235294	100	18.18181818
623	0.858403243	0	0	4.081632653	22.95918367	0	1	0	4	32.65306122	58.333333333	0
624	0.745318739	0	0	20.62780269	2.242152466	0	5	0	1	51.56950673	7.913669065	2.027027027
625	0.96298676	0	0	17.43589744	5.641025641	0	1	0	1	29.74358974	25.23364486	7.37704918
626	0.898911484	0	0	15.18518519	15.92592593	0	1	0	3	44.81481481	33.333333333	3.333333333
627	1.0556338084	0	0.507614213	14.72081218	30.96446701	0	3	0	5	18.78172589	15.38461538	0
628	0.932594233	0	0	0	46.2585034	0	4	0	3	27.89115646	6.896551724	8.108108108
629	0.77815125	0	0	0	16.66666667	0	1	0	0	16.66666667	33.333333333	0
630	1.011777399	0	0	7.5	23.75	0	3	0	3	18.75	11.53846154	29.72972973
631	0.953121749	0	4.347826087	4.347826087	4.347826087	4	4	0	1	21.73913043	0	7.142957143
632	1.141588817	0	0	0	13.68421053	0	5	0	1	17.89473684	20.80924855	4.838709677
633	1.132200387	0	0	0.462962963	12.96296296	0	6	0	3	18.98148148	9.734513274	20.26143791
634	1.009620086	0	0	25.80645161	3.225806452	0	3	0	3	25.80645161	66.66666667	8.333333333
635	1.112626547	0	0	7.954545455	17.04545455	0	3	0	1	19.31818182	77.41935484	9.523809524
636	1.042971721	0	0	4.458598726	26.75159236	0	4	0	1	22.929933631	41.50943396	18.42105263
637	1.016276676	0	0	3.80952381	23.80952381	0	8	0	2	23.80952381	3.333333333	29.9270073
638	0.794262354	0	0	0	0.903861956	7.55957272	0	3	0	53.41002455	71.0382137	3.567888999
639	0.992197318	0	0	6.46153462	13.84615385	0	3	0	3	32	60.11560694	13.24200913
640	0.993523398	0	0.420168067	1.260504202	5.042016807	0	13	1	1	34.87394938	79.80769231	4.326923077
641	0.562177965	0	1.257861635	19.81132075	0.314465409	0	5	0	5	64.77987421	0	2.272727273
642	1.064357104	0	0	6.614785992	4.280155642	0	8	0	2	36.18677043	26.47058824	55.68862275
643	0.96659222	0	0	3.416149068	9.316770186	0	10	0	5	44.72049389	13.6363364	63.59649123
644	1.100192801	0	0	7.051282051	18.58974359	0	12	0	1	20.08547009	13.58024691	30.24691358
645	1.187139823	0	0	0.108901099	13.73626374	0	10	0	3	15.38461538	10.44776119	13.74570447
646	1.099921087	0	0	0.408163265	24.89795918	0	9	0	2	19.18367347	7.692307692	9.523809524
647	1.013898646	0.452488688	0.452488688	4.524883878	23.07692308	0	2	0	3	24.88687783	85.71428571	0
648	1.132228664	0	0.420168067	3.361344538	29.83193277	0	7	0	2	21.42857143	85.36585366	12.96296296
649	0.8866594929	0	0	4.745762712	37.28813559	0	4	0	4	36.27118644	93.50649351	24.63768116
650	0.975484335	0	0	17.31448763	0.706713781	0	9	0	4	34.982333216	4.545454545	59.88023952
651	0.892424568	0	0	0	44.05594406	0.34965035	0	5	0	44.05594406	7.142857143	16.82242991
652	0.816174935	0	0	19.90950226	0.226244344	0	6	0	6	45.70135747	4.87804878	66.4495114
653	1.058826341	0	0	0.452488688	25.33936652	0	11	0	1	24.88687783	31.81818182	3.773584906
654	0.511311347	2.754237288	1.906779661	0.423728814	9.957627119	0	4	0	4	73.14618644	0	0
655	0.859492858	0	0	3.741496599	12.24489796	0	7	0	5	51.36054422	18.51851852	70.18348624
656	1.05453725	0	1.895734597	1.65876773	2.725118483	0	7	0	5	29.73933649	1.904761905	41.0130719
657	0.80392569	0	0.557413601	15.1906355	44.48160535	0	5	0	2	44.48160535	12.5	52.56916996
658	0.821812244	13.91437309	44.1890245	1.834862385	6.422018349	0	1	0	5	44.18960245	100	0
659	0.877434035	0	0	6.666666667	15.92592593	0	8	0	2	44.07407407	24.13793103	17.32673267
660	0.926646665	0	0	4.9833388104	23.25581395	0	7	0	2	33.55481728	2.222222222	49.50980392
661	1.079309613	0	0	0.62118012	10.86956522	0	7	0	1	19.25465839	47.14285714	14.54545455
662	0.827846036	1.967213115	0	3.60655737705	0.655737705	0	2	0	4	33.44262295	19.51219512	81.14035088

Appendix G: Benthic values of New exico Stream Samples

BentSampleID	Shan_10	AmpH_Pct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oITax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
663	1.039497656	0	1.893929394	12.87878788	26.89392939	0	7	0	4	26.51515152	90	32	
664	1.16975669	0	4.761904762	5.158730159	0	14	0	2	26.19047619	44.89795918	0.925925926		
665	1.024904123	0	0.757575758	17.8030303	6.818181818	0	5	0	3	18.18181818	96.20253165	34.04553319	
666	1.011547059	0	0	3.243243243	34.59459459	0	14	0	4	27.56756757	0	3.333333333	
667	1.093691796	0	0	4.850746269	10.44776119	0	11	0	2	23.13432836	11.11111111	29.95169082	
668	0.8820602878	0	0	34.74576271	11.86440678	0	5	0	3	34.74576271	0	19.56521739	
669	0.936768276	0	0	5.263157895	38.59649123	0	5	0	2	31.57894737	0	20.68965517	
670	0.992612256	0	0	37.25490196	23.03921569	0	10	0	3	37.25490196	29.72972973	7.575757576	
671	0.910950684	0	0	34.5	36	0	11	0	2	34.5	0	9.523809524	
672	0.959145344	0	0	18.62745098	36.2745098	0	4	0	1	34.31372549	66.66666667	8.108108108	
673	0.845030785	0	0	23.41772152	40.82278481	0	7	0	3	40.50632911	43.47826087	3.96039604	
674	1.024154313	0	0	19.55307263	27.93296089	0	7	0	1	26.815644246	73.33333333	4.109589041	
675	0.93472808	0	0	8.021390374	2.673796791	0	6	0	2	23.52941176	66.66666667	48.35164835	
676	1.087794014	0	0	0.348432056	8.710801394	0	11	0	1	26.48083624	5.673758865	1.724137931	
677	0.92084967	0	0	0.865800866	12.98701299	0	8	0	3	38.52813833	8.333333333	1.630434783	
678	0.492604736	0	0	0	3.563474388	0.6668151448	0	3	0	3	74.16481069	80.70175439	81.90709046
679	0.952989346	0	0	0	2.904564315	1.659751037	0	9	0	1	33.19502075	67.14285714	9.905660377
680	0.654451454	0	0	0	3.873239437	56.69014085	0	4	0	3	56.69014085	100	60.2739726
681	0.956537658	0	0	0	3.90070922	13.4751773	0	10	0	3	26.95035461	94.05940594	20.9039548
682	1.117792787	0	0	0	3.765690377	20.50209205	0	11	0	1	19.66527197	44.444444444	26.31578947
683	0.705444274	0	0	0	4.395604396	0.732600733	0	4	0	3	38.0952381	100	44.03669725
684	0.918911359	0	0	0	5.762711864	7.118644068	0	3	0	1	31.52542373	100	45.81280788
685	0.9996183	0	0	0	9.486166008	6.719361589	0	3	0	3	30.03952589	96.2962963	49.35064935
686	0.888845305	0	0	1.687763713	46.41350211	0	6	0	2	43.45991561	12.72727273	16.98113208	
687	0.958721773	0	0	0	28.95752896	0	8	0	1	28.57142857	20.51282051	18.58974359	
688	0.970022561	0	0	0.333333333	10.66666667	4	0	6	0	1	28.66666667	97.14285714	40.95238095
689	1.133441331	0	0	0	5.726872247	11.89427313	0	11	0	1	15.85903084	42.70833333	22.04301075
690	0.842882557	0	0	0	6.85463871	2.419354839	0	5	0	2	28.62903226	51.82481752	29.62962963
691	0.865085769	0	0	0	11.18210863	2.236421725	0	6	0	3	30.03194888	48.95833333	21.31782946
692	0.677807918	0	0	16.66666667	0	0	2	0	1	33.33333333	0	25	
693	0.6895322	0	0	1.587301587	0	9.523809524	0	3	0	2	36.50793651	0	0
694	0.877194506	0	0	0	18.18181818	9.090909091	0	4	0	2	18.18181818	0	0
695	0.923140777	0	0	0	28.81177708	5.993690852	0	14	0	1	30.59936909	12.78195489	0
696	1.0238245	0	0	0	10.041841	7.531380753	0	11	0	1	32.63598326	31.0348276	3.550295858
697	1.05011973	0	0.336700337	0.336700337	12.12121212	24.91582492	0	6	0	2	23.90572391	64.38356164	9.523809524
698	0.985884125	0	0	0.699684111	2.787456446	8.362369338	0	6	0	6	29.96515679	53.37423313	1.123595506
699	1.098014453	0	0	0.48	6.72	20.96	0	12	0	5	23.04	68.96551724	39.22077922
700	0.950159995	0	0	0.35971223	2.517985612	15.4676259	0	6	0	5	32.37410072	61.74496644	1.685393258
701	0.895752267	0	0	0	26.72413793	0.431034483	0	6	0	2	26.72413793	4.054054054	38.41059603
702	0.95970511	0	0	0	24.24212424	0.606060606	0	9	0	3	26.66666667	7.547169811	41.22807018
703	1.053644163	0	0	0	17.68707483	0.680272109	0	7	0	4	21.08843537	9.615384615	27.833505155
704	0.68786423	0	0	0	3.8647343	1.9323236715	0	3	0	3	58.45410628	97.67441186	0
705	0.519037777	0	0	0	4	1.818181818	0	3	0	3	69.09090909	100	1.015228426
706	0.697688178	0	0	0	3.58974359	63.07692308	0	5	0	2	57.43589744	96.15384615	16.66666667
707	0.890283659	0	0	0	42.85714286	1.930501931	0	9	0	3	42.85714286	7.058823529	0

Appendix G: Metric Values of New exico Stream Samples

BsnSamplD	Shan_10	AmpHPCt	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In_oTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct	
708	1.108772636	0	24.76190476	2.857142857	0	9	0	5	24.76190476	4.716981132	1.704845455		
709	0.927360213	0	0.411522634	12.34567901	4.526748971	0	6	0	3	28.80658436	0.694444444	8.571428571	
710	1.136307519	0	0.309597523	21.67182663	14.70588235	0	10	0	3	21.67182663	13.5483871	14.15662651	
713	0.763377647	0	0	1.0752668817	4.301075269	0	12	0	4	57.70609319	2.857142857	3.930131004	
716	1.102854978	0	0	17.61323636	0	0	8	0	1	21.59090999	8.888888889	20	
717	0.548819207	0	0	69.6996997	4.545454545	0	9	0	1	69.6996997	0	0	
718	0.766385577	0	0	48.70466321	1.295336788	0	6	0	2	48.70466321	4.347826087	1.418439716	
719	1.170093558	0	0	0.389883548	16.95906433	0	11	0	4	13.64522417	27.20588235	33.50649351	
720	1.046690519	0	0	0	16.730003802	0	5	0	3	21.29277567	8.080808081	24.35223161	
723	1.032663345	0	0	23.63013699	8.561643836	0	5	0	4	23.63013699	18.75	14.12429379	
724	1.082012313	0	0	20.30651341	10.72796935	0	7	0	8	27.96934866	30.55555556	2.985074627	
725	1.195664233	0	0	4.383282365	11.111111	0	8	0	4	23.34352701	41.66666667	48.96336314	
728	1.238649983	0	0	4.895104895	33.91608392	0	7	0	6	13.98601399	42.42424242	30.59701493	
729	1.072632116	0	0	4.081632653	2.040816327	0	6	0	8	19.18367347	1.785714286	0.636942675	
730	1.253453331	0	0	7.751937984	15.11627907	0	8	0	5	16.66666667	59.72222222	17.39130435	
731	1.078678512	0	0	5.025125628	0.335008375	0	4	0	3	22.11055276	11.91489362	17.61658031	
732	0.988451739	0	0	0	10.82251082	0	5	0	3	32.46753247	6.25	5.405405405	
733	1.027826649	0	0	0	0.460829493	0	6	0	2	34.56221198	14.16666667	9.944751381	
734	0.99_8644941	0	0	0	3.603603604	0.900900901	0	5	0	4	31.53153153	2.521008403	5.298013245
735	0.801330497	0	0	0	31.02564103	6.923076923	0	1	0	3	31.02564103	95.83333333	12.96296296
736	0.902989472	6.34 -02	6.34 -02	8.745247148	3.675538657	0	10	0	2	38.59315589	27.77129522	20.07518797	
737	0.856631878	0	0	39.24528302	4.528301887	0	2	0	5	39.24528302	27.39726027	5.194805195	
738	0.6680508584	0	0	41.91033138	5.747126437	0	1	0	6	41.91033138	0	0	
739	0.904441623	0.143678161	0	21.12068966	14.111111	0	2	0	6	34.48275862	76.92307692	68.71794872	
740	0.996038505	0	0	0.806451613	11.29032258	0	7	0	1	29.03225806	24	3.448275862	
741	0.65461285	0	2.317830795	28.25667064	1.103752759	1	0	5	48.01324533	0	94.36008677		
742	0.966187285	0	0	9.174311927	8.256880734	0	1	0	4	23.85321101	43.75	19.17808219	
743	0.9697188103	0	0	9.194159005	4.5970179502	0	5	0	3	30.66522445	25.95673877	7.891246684	
744	0.997468936	0.802139037	2.941176471	14.111111	8.021390374	0	0	0	6	25.13368984	47.88732394	57.14285714	
745	0.72089564	0	27.7777778	42.7777778	7.77777778	0	1	0	5	42.7777778	0	0	
746	0.502207088	0	8.333333333	0	0	0	1	0	2	66.66666667	5.882352941	10.52631579	
747	0.767415915	0	0	6.25	3.125	0	2	0	3	43.75	16.66666667	20.83333333	
748	0	0	0	0	0	0	0	0	0	0	0	0	
749	0.727616225	0	0	0	10.52631579	0	0	0	1	33.55263158	34	23.07692308	
750	0.582218125	0	0	18.66028708	11.00478469	0	0	0	5	57.41626794	0	99.17353372	
751	1.030237873	1.015228426	0.253807107	11.6751269	0	1	0	4	23.85786802	36.48648649	33.21678322		
752	0.186117103	0	0	13.68821293	3.80 -02	0	1	0	2	85.93155894	0	0	
753	0.81078027	0	0	0	4.724409449	0	4	0	0	36.22047244	79.31034483	1.801801802	
754	0.673894721	0	0	3.468208092	0	2	0	1	57.80346821	96.49122807	0		
755	0.702128963	0	0	9.392265193	0	0	3	0	3	44.19889503	35.483897097	12.83783784	
756	0.88383465	0	0	45.56962025	18.01935964	0	10	2	2	45.56962025	30.64516129	11.37566138	
757	1.005462435	0	0	21.50882825	13.00160514	0	3	0	3	21.50882825	23.07692308	9.836065574	
758	0.607167499	0	0	12.15753425	0.114155251	0	4	0	2	61.35844749	74.13793103	42.23918575	
759	0.72946101	3.333333333	0	48.333333333	1.666666667	0	0	0	3	48.333333333	100	0	
760	0.7773071269	0	1.595405233	1.467772814	41.0976388	0	0	0	2	40.970006388	5.135951662	52.12201592	

Appendix G: Metric Values of New exico Stream Samples

BnsSamplD	Shan_10	AmphPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntolTax	In_olTax	TolerTax	Dom01Pct	Baet_EphPct	Hyd_EPTPct
761	0.504941825	6.69 -02	0	3.277591973	2.742474916	0	1	0	4	73.04347826	0.454132607	11.36023916
762	0.898882963	1.652892562	5.509641873	20.11019284	4.132231405	0	1	0	5	34.43526711	75.75757576	13.98963731
763	0.70635602	7.65 -02	1.376146789	1.681957187	0	3	0	3	54.66360856	90.27777778	27.70330652	
764	0.406849765	0	0	24.24342105	0.361842105	0	1	0	3	54.54545455	97.61682243	
765	1.151301104	0	0	6.934306569	19.89051095	0	5	4	68.71710526	54.54545455	15.6462585	
766	1.0604227179	0	0	16.72104405	1.549755302	0	6	0	7	16.72104405	26.64756447	1.09223301
767	0.164904354	92.80742459	0.185674849	3.109048724	4.64 -02	0	1	0	2	92.80742459	100	0
768	1.141183172	0	0	13.10344828	4.482758621	0	3	0	4	13.96551724	27.43902439	32.65306122
769	1.033576599	0	0	27.44630072	17.89976134	0	10	0	3	27.44630072	55.93220339	14.83293589
770	1.069530855	0	0.549450549	16.48351648	22.52747253	0	12	0	2	22.52747253	21.05263158	10
771	0.847079821	0	0	0.154083205	0.924479923	0	8	0	1	39.44530046	13.69863014	0.649350649
772	0.659323841	0	0	2.298850575	1.149425287	0	2	0	5	59.77011494	64.7058235	71.23287671
773	0.552607473	0	0.674289065	60.97918499	0.058633832	0	2	0	2	60.97918499	38.74538745	73.04104478
774	0	0	0	0	0	0	0	0	0	0	0	0
775	0.6846451	0	0	40	0	0	1	0	2	40	65.51724138	0
776	1.097752996	0	0	3.935185185	4.629629963	0	11	0	1	23.14814815	43.66812227	0.347222222
777	0.681965612	0	0	6.57897368	2.631578947	0	0	0	2	35.52631579	100	42.55319149
778	0.908006204	1.084598698	0	3.036876356	5.8566832972	0	3	0	3	34.05639913	100	36.07038123
779	0.801132632	0	0	6.976744186	11.62790698	0	1	0	3	41.86046512	0	0
780	0.719485785	0	0	6.4453125	63.6717875	0	6	0	4	54.6875	100	5.93220339
781	0.983739047	0	0	9.172259508	18.79194631	0	6	0	2	21.25279642	87.1559633	1.913875598
782	0.814673721	0	0	3.921568627	1.960784314	0	1	0	3	31.37254902	45.16129032	25
783	0.6171892139	0	0	20.92198582	35.46099291	0	0	0	3	34.92907801	0	0
784	0.479543623	0	0	61.04651163	11.62790698	0	1	0	3	61.04651163	0	0
785	0.4466747701	0	0	0.3125	1.5625	0	2	0	2	48.75	100	45.79124579
786	0.49043708	0	0	62.94416244	0	0	0	0	4	62.94416244	0	0
787	0.458146008	0	0	0	20	0	1	0	0	40	0	0
788	0.7630048	29.67741935	0	33.5483871	1.198156682	0	4	0	3	33.5483871	42.10526316	64.1350211
789	0.238267739	0	0	89.6385839	1.82852499	0	0	0	8	89.6385839	100	0
790	0.758965773	0	48.665529774	8.624229979	0.821355236	0	3	0	6	48.66529774	100	0.925925926
791	0.978223536	0	0.182815356	25.59414991	2.559414991	0	8	0	3	25.59414991	99.09090909	29.10447761
792	1.11128067	1.063829787	0.709219858	7.446808511	21.63120567	0	4	0	6	25.17730496	54.83870968	15.86206897
793	0.91420343	0	4.854368932	6.796116505	46.11650485	0	6	0	2	41.26213592	15.15151515	16
794	1.021265789	0	0	5.27325024	4.985618408	0	5	0	4	32.40651965	25.2944269	33.89121339
795	0.776324672	1.724137931	0	20.68965517	0	0	0	0	1	25.86206897	100	14.70588235
796	1.126065285	20.40816327	4.081632653	18.36734694	11.2244898	0	2	0	6	20.40816327	50	0
797	0.9171333182	22.44897959	0	10.20408163	4.081632653	0	1	0	5	24.48979592	0	0
798	0.956347075	27.09677419	0	1.935483871	2.580645161	0	1	0	4	27.09677419	100	12.24489796
799	0.717946956	0	0	0.701754386	5.263157895	0	0	0	3	55.43859649	69.01408451	16.47058824
800	0.206690277	18.30065359	0	0	0	0	0	1	81.69934641	0	0	
801	0.887310042	0.526315789	4.210526316	2.105263158	7.894736842	0	0	0	2	27.89473684	100	53.92156863
802	0.268575683	0	0	7.258064516	1.612903226	0	0	0	2	85.48387097	100	20
807	0.951778172	0	29.85347985	18.31501832	12.27106227	0	6	0	2	29.85347985	57.14285714	0
812	0.879340788	0	10.75514874	10.29748284	33.40961098	0	7	0	2	32.26544622	100	0
813	0.46697341	0	0	23.66666667	2.666666667	0	2	0	1	64.66666667	100	0

Appendix G: **etrie** values of New Mexico Stream Samples

BnsSamplD	Shan 10	AmpHPct	BivalPct	ChiroPct	ColeoPct	CorbPct	IntlTax	In olTax	TolerTax	Dom01Pct	Baet	EphPct	Hyd	EPTPct
814	0.744262142	0	10.34482759	43.96551724	3.879310345	0	2	0	6	43.96551724	100	0		
815	0.904471519	0	26.5625	24.47916667	12.67361111	0	7	0	3	26.5625	100	0		
816	0	0	0	0	0	0	0	0	0	0	0	0		
817	0.750627301	0	0	35	3.181818182	0	4	0	5	36.36363636	50	0		
818	0.266575683	0	7.258064516	1.612903226	0	0	0	2	85.48387091	100	20			

Appendix G: etric alues of New exico Stream Samples

BnsSamplID	Hyd_TriPct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	DiptTax	EphemLTax	EPPTax	ligoLTax	rihoTax
23	84.14634146	56.77083333	0.520833333	4	0.243203243	0.383017016	1	0	0	2	2	5	0	0
24	0	38.0952381	3.80952381	20	2.806408545	0.156286432	1	1	0	3	6	17	0	0
25	32.4099723	27.81007752	6.492248062	15	2.9487177949	0.174963722	1	1	0	4	4	15	0	0
26	33.33333333	44.2712775	5.066019295	10	1.5611501079	0.181589209	1	1	0	2	4	10	0	0
27	23.07922308	28.61510248	3.61510248	28	2.772036474	0.154549101	1	2	0	8	5	21	0	0
28	3.694581281	64.44223108	5.577689243	32	1.881081081	0.1322447	1	2	0	6	7	23	0	0
29	99.35483871	14.81481481	9.053497942	11	4.679012346	0.42073938	1	0	0	4	4	8	1	0
30	39.09287257	43.05555556	3.914141414	24	3.3116761364	0.138074806	1	2	0	4	3	14	1	0
31	31.34920635	10.54421769	40.98639456	16	6.253731343	0.268748044	1	1	0	4	4	12	1	0
32	0	14.00560224	15.40616246	24	4.220963173	0.41590344	1	3	0	6	6	14	0	0
33	7.600950119	66.80497925	14.38450899	22	2.179104478	0.273027513	1	2	0	6	7	17	0	0
34	0.64516129	65.76271186	13.220533898	21	2.392086331	0.278397744	1	3	0	5	7	15	1	0
35	0.326797386	26.06177606	10.81081081	20	3.626953125	0.335653421	1	3	0	3	5	15	0	0
36	92.78806965	3.22997416	15.50387597	15	5.206266319	0.282305591	1	2	0	4	3	11	1	0
37	27.98634812	30.37974684	5.274261603	22	3.701066957	0.129187072	1	1	1	7	2	15	1	0
38	45.93301435	1.003344482	2.508361204	12	4.781420765	0.250623239	1	2	1	4	2	8	2	0
39	3.6667953668	72.46376812	1.976284585	22	1.386731392	0.366862383	1	2	0	6	7	19	1	0
40	0	44.54945455	20.90909091	15	3.126750563	0.210419261	1	3	0	3	4	11	0	0
41	4.411764706	17.67241379	13.36268897	18	4.373793043	0.13621436	1	3	0	6	5	11	0	0
42	0.465116279	11.69451074	24.34367542	12	4.769417476	0.308915052	1	2	0	3	3	9	0	0
43	0	11.90476119	25.9926349	19	4.745454545	0.274945565	1	3	0	5	5	12	0	0
44	0	3.5998971722	79.69151671	10	7.080103359	0.639533039	1	2	0	5	5	7	0	0
45	11.11111111	45.1612932	22.55804516	12	3.7267575956	0.18366657539	1	1	0	4	4	8	0	0
46	44.23287356	27.61037141	19.55150666	14	4.203630561	0.136471437	1	0	4	3	13	1	0	0
47	0	20.43343653	38.6996904	24	5.09	0.181278003	1	3	0	7	4	15	0	0
48	0	18.03197468	30.37974684	22	4.820512821	0.145107494	1	4	0	5	3	15	1	0
49	16.666666667	42.07650273	14.75409836	12	2.818965517	9.94 -02	1	1	0	5	3	10	1	0
50	100	0	36.84210526	1	5.763157895	0.251778094	1	0	0	3	1	2	1	0
51	85.71428571	7.142857143	10.71428571	6	4.892857143	0.253246753	1	1	0	3	2	4	0	0
52	14.28571429	43.85964912	5.263157895	12	2.672727273	0.237468672	1	1	0	2	3	8	1	0
53	0	66.666666667	0	1	2	0.333333333	0	0	0	1	0	1	0	0
54	71.42857143	12.93103448	7.75820696	11	4.394495413	0.130884558	1	2	1	3	6	10	0	0
55	75.51020408	27.54491018	10.1794072	22	3.6	9.85 -02	1	2	0	7	7	15	1	0
56	50	16.16161616	15.82491582	19	4.733550734	0.118209118	1	1	0	6	4	14	0	0
57	20	41.7721519	5.0632291139	21	2.333908046	0.120110134	1	2	0	5	6	14	0	0
58	0	29.266829268	0	7	3.37378374	0.411968546	0	2	0	2	3	5	0	0
59	0	75.15923567	2.547770701	8	1.936305732	0.261309815	1	1	2	3	6	2	0	0
60	3.225806452	51.20772947	17.39730435	6	4.058556585	0.1477178838	0	1	1	3	2	6	2	0
61	17.64705882	69.31818182	9.65590909	8	3.028571429	0.239096909	1	0	1	6	2	6	2	0
62	0	19.89795918	22.44897959	6	4.649233731	0.215907902	1	2	0	3	2	4	1	0
63	64.70588235	4.509803922	0.3921568863	3	4.403921569	0.542570977	1	0	2	1	4	0	0	0
64	44.82758621	45.90163934	3.278688525	4	3.475409836	0.202185792	1	1	0	2	2	5	0	0
65	72	24	10	13	4.074829932	0.15033597	1	2	1	3	5	9	0	0
66	58.47457627	7.624633431	34.31085044	9	5.479166667	0.189822322	1	3	0	2	4	8	0	0
67	0	19.67213115	32.24043716	14	4.889196676	0.139711056	1	2	0	4	6	12	0	0

Appendix G: etric alues of New exico Stream Samples

BnsSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
68	0	16.38655462	42.43697479	11	5.396551724	0.223805978	1	1	0	1	6	12	0	0	0
69	77.217272727	9.120521173	20.8460554	15	4.89562896	0.143066999	1	2	0	0	5	5	12	1	0
70	80.76923077	30	4.21056316	15	3.872982177	9.32 -02	1	2	0	0	6	6	10	0	0
71	39.47368421	29.54545455	15.151515	9	3.90625	0.10624566	1	1	1	1	5	3	7	0	0
72	64.89486486	47.76119403	1.492537313	10	3.064516129	0.148804848	1	1	0	3	4	8	0	0	0
73	70.70707071	50.67264574	1.34529148	16	3.201388889	0.197652038	1	3	1	4	6	13	0	0	0
74	0	14.59227468	35.6223176	21	5.046789989	0.217793872	1	2	0	0	6	5	14	0	0
75	79.41176471	30.35714286	8.035714286	10	3.92	0.127091377	1	3	1	3	6	9	0	0	0
76	78.57142857	39.08045459	77	11.20686955	9	3.8117629179	0.182848057	1	2	1	3	4	8	0	0
77	13.84615385	22.53521127	19.11468813	22	4.284753363	0.105739274	1	3	0	0	6	6	17	0	0
78	0	43.14381271	20.40133779	16	3.491638796	0.1722958	1	1	0	4	2	9	0	0	0
79	24.35897436	53.04878049	3.353568537	29	2.43979414	0.135432983	1	1	0	6	6	20	0	0	0
80	80.55555556	23.92857143	11.07142857	29	3.593301435	0.116973886	1	1	0	6	6	22	0	0	0
81	61.44578313	13.1147541	10.38251366	19	4.43432381	0.145078965	1	1	0	8	5	13	0	0	0
82	7.317073171	3.03030303	25.56818182	17	5.198717949	0.142976252	1	3	0	5	3	12	0	0	0
83	0	31.428857143	17.85714286	14	4.044117647	0.115416238	1	1	0	5	3	8	0	0	0
84	19.6969697	11.181760757	26.33330706	13	5.298206278	0.14850733	1	2	0	5	3	10	1	0	0
85	14.48040886	47.07880435	16.9839565	21	3.25331869	9.08 -02	1	1	0	6	5	18	1	0	0
86	18.75	11.8993135	26.31578947	16	5.292517007	0.1191719242	1	2	0	6	4	15	2	0	0
87	42.94117647	23.41696535	10.63321386	23	3.820276498	9.96 -02	1	2	0	0	9	5	17	1	0
88	34	45.57438795	6.403013183	28	2.482191781	6.65 -02	1	2	0	4	7	19	1	0	0
89	14.47368421	20.2614791	33.666013072	25	4.911917831	0.182717585	1	1	1	6	6	18	1	0	0
90	2.857142857	31.29889175	6.3232687031	22	3.3375	0.191943935	1	1	2	1	5	4	17	2	0
91	11.11111111	36.17463617	3.95010395	22	3.144607843	0.136096674	1	2	0	7	4	17	2	2	0
92	1.486988848	46.95187166	11.97800963	24	3.11111111	0.127233084	1	1	1	6	5	16	1	0	0
93	11.42857143	11.2012987	42.37012987	20	5.480607083	0.306804984	1	3	2	5	4	14	1	0	0
94	0.170068027	45.83063995	19.71557854	20	3.896597732	0.2224035	1	2	2	2	7	4	15	1	0
95	7.142857143	66.66666667	13.85281385	21	2.745614035	0.180764163	1	1	1	5	4	14	1	0	0
96	68.91891892	3.823529412	34.11764706	12	5.669969697	0.181329169	1	1	0	5	4	12	1	0	0
97	97.86096257	3.024193548	24.19354839	11	5.553097345	0.216854024	1	2	0	3	5	13	0	0	0
98	0	1.971830986	55.21126761	11	6.499232616	0.310606091	1	2	0	5	4	9	1	0	0
99	13.23251418	27.85547786	6.177156177	21	3.397722773	0.14293913	1	2	0	5	5	17	0	0	0
100	93.89312977	8.513189448	62.11031175	15	6.487303507	0.400257945	1	2	1	4	5	11	0	0	0
101	87.38738739	7.2463176812	5.797101449	11	4.807291667	0.24461433	1	1	0	4	4	10	0	0	0
102	99.15966387	0.259965338	1.993067591	8	5.672473868	0.553684834	1	1	1	4	4	7	1	0	0
103	95.78313253	0.273597811	5.335157319	6	5.3350319	0.280520211	1	1	1	3	2	6	0	0	0
104	66.666666667	0	26.39484979	4	6.002173913	0.263113203	1	1	0	4	1	6	0	0	0
105	90.90909091	54.27135678	7.537668442	7	3.37628866	0.313232831	1	3	0	6	3	6	0	0	0
106	0	16.1702121	36.21730382	25	5.362204724	0.161866359	1	2	1	7	7	18	1	0	0
107	1.851851852	33.386074595	18.67088608	28	3.756818182	0.107414391	1	3	0	9	6	21	2	0	0
108	3.571428571	31.86490455	15.71218796	30	3.7718824094	8.48 -02	1	3	0	6	7	23	2	0	0
109	0	38.19028609	36.9926813	28	4.62918774	0.184416786	1	2	1	6	6	18	1	0	0
110	4.524886878	38.49693252	29.44785276	19	4.179226069	0.228247246	1	1	1	9	3	14	1	0	0
111	1.234567901	23.95833333	12.26851852	20	3.818345324	0.158351573	1	3	1	8	5	14	1	0	0
112	0	13.40782123	65.36312849	9	6.886227545	0.394764924	1	2	1	8	0	4	1	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
113	10.83143842	52.62172285	22.84644195	28	3.351380042	0.161071505	1	2	1	7	7	21	1	0	0
114	26.31578947	3.601694915	58.68644068	20	6.771631206	0.345958356	1	2	0	4	5	15	1	0	0
115	4.21686747	21.37161085	32.2169059	24	4.878453039	0.101130695	1	2	1	8	5	16	2	0	0
116	43.77104377	24.84848485	29.46969697	20	4.78890826	0.144284008	1	1	1	6	6	18	1	0	0
117	20	40.07936508	12.5	28	3.135549872	6.67 -02	1	2	1	7	7	19	1	0	0
118	0	69.04761905	4.761904762	6	2.5625	0.243902439	1	0	4	1	2	0	0	0	0
119	92.56756757	57.0155902	0.44544298	14	2.892376682	0.298938116	1	1	0	4	2	8	0	0	0
120	28.57142857	54.6875	29.6875	5	4.34375	0.18452381	1	2	0	2	0	3	0	0	0
121	72.72127273	64.9122807	11.4030877	10	2.63594912	0.423834918	1	1	0	2	2	7	0	0	0
122	73.9	304348	51.88284519	0.418410042	16	2.553399061	0.205970254	0	1	1	4	11	0	0	0
123	5.990016639	47.37318841	10.14492754	24	2.899791232	0.132194265	1	1	0	7	9	18	0	0	0
124	20	47.92626728	0.921658986	15	2.817307692	0.1662339973	1	1	0	4	6	11	1	0	0
125	25	39.68253968	3.968233968	15	2.88594912	0.1089562381	1	1	0	5	5	11	0	0	0
126	13.63336364	4.271356784	20.351758779	12	4.898630137	0.155437135	1	1	0	4	4	13	1	0	0
127	28.57142857	2.577319589	13.91752577	7	5.071428571	0.248170504	1	2	0	3	5	11	1	0	0
128	75	16.47727273	18.18181818	16	4.762295082	0.141558442	1	1	0	4	6	11	2	0	0
129	97.52066116	13.18458418	4.2595648888	15	4.483801296	0.275598212	1	1	0	5	5	10	1	0	0
130	89.24050633	6.451612903	7.52668172	11	4.95930863	0.301462056	1	0	0	7	5	10	1	0	0
131	0	49.79253112	9.543558445	8	3.444960445	0.339809008	1	0	0	5	1	5	1	0	0
132	19.64285714	27.95918367	23.26530612	23	4.165354331	0.118377266	1	1	0	5	7	20	1	0	0
133	54.166666667	18.28978622	17.57719715	24	4.425	0.107058025	1	2	0	6	7	18	1	0	0
134	0	19.06354515	23.41137124	21	4.636333636	0.148099993	1	1	0	6	6	14	0	0	0
135	77.5862069	17.98780488	9.756697561	20	3.805714286	9.04 -02	1	3	0	4	7	16	2	0	0
136	0	54.5751634	14.70588235	23	2.902958075	9.34 -02	1	0	0	6	4	13	0	0	0
137	12.04819277	20.35928144	25.2994012	29	4.58482385	0.123890151	1	3	0	5	7	22	1	0	0
138	14.47368421	18.43434343	11.1111111	13	3.970588235	0.242577675	1	1	1	6	6	13	0	0	0
139	29.89690722	32.12290503	8.37988268	18	3.04144654	8.76 -02	1	1	0	9	7	15	1	0	0
140	5.974842767	47.12643678	10.08949974	22	2.839546191	0.130000359	1	2	0	8	8	17	0	0	0
141	31.52173913	1.169590643	3.50587193	8	4.504672897	0.182593739	1	1	0	2	5	11	0	0	0
142	100	3.846153846	10.25641026	6	4.603174603	0.152847153	0	2	0	1	4	5	0	0	0
143	40.49429658	53.63790186	1.692047377	9	2.802768166	0.41586223	1	1	0	3	5	8	0	0	0
144	0	0.220264317	37.2246696	4	6.29736828	0.349787515	1	0	0	2	3	3	0	0	0
145	100	27.27272727	7.792207792	6	4.043290043	0.1509988142	1	0	0	2	4	6	1	0	0
146	85.71428571	35.87223587	7.125307125	8	3.535626536	0.382493555	1	0	0	2	4	7	1	0	0
147	81.81818182	7.777777778	20.37037037	9	4.73504627	0.222387443	1	0	0	4	5	8	0	0	0
148	100	10.52631579	10.52631579	5	4.466666667	0.14619883	0	0	0	4	6	1	0	0	0
149	92.46704331	0.651890482	12.77705346	7	5.258019526	0.433553127	1	1	1	4	7	0	0	0	0
150	39.70588235	22.97297297	3.153153153	18	3.821256039	0.189556072	1	1	0	5	3	13	0	0	0
151	14.54545455	28.01251956	10.3226385	20	3.37645856	0.201647362	1	2	0	5	5	15	1	0	0
152	12.16931217	19.57478006	13.92961877	19	4.110955056	0.105263101	1	2	0	7	6	17	0	0	0
153	0.766230769	58.44544096	24.58893871	14	3.6355512169	0.222936253	1	2	0	3	5	12	0	0	0
154	13.38028169	16.83480454	28.9407314	24	4.940933607	0.214454553	1	2	1	6	5	18	0	0	0
155	2.843601896	39.17159763	14.20118343	25	3.607788595	7.90 -02	1	3	1	4	5	17	1	0	0
156	37.696333508	27.26502964	13.374928	26	3.953107961	8.16 -02	1	3	1	7	6	19	1	0	0
157	8	38.77038896	13.17440402	19	3.391014975	9.25 -02	1	4	1	6	4	13	2	0	0

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
158	0	33.33333333	0	5	2	0.252873563	0	0	0	0	0	4	5	0	0	0
159	44.35483871	35.55555556	1.777777778	11	1.16091954	0.182936508	1	1	0	0	3	3	10	1	0	0
160	0	51.61290323	1.612903226	22	1.737991266	0.111243345	1	2	0	0	6	5	15	1	0	0
161	81.39534884	17.04545455	2.272727273	11	1.694444444	0.183896104	1	1	0	0	4	3	9	0	0	0
162	66.666666667	46.666666667	0.740740741	6	0.342353582	0.266777225	0	1	0	0	1	3	7	0	0	0
163	74.22969188	32.479276556	11.07761869	16	3.653846154	0.108581063	1	2	2	0	6	5	16	1	0	0
164	47.63231198	16.67354519	12.34007429	20	4.502319417	0.171756392	1	1	1	1	6	7	18	1	0	0
165	13.33333333	20.20725389	24.35233161	12	4.791666667	0.214305901	1	1	0	0	6	3	9	2	0	0
166	2	45.30075188	10.33834586	21	2.693533315	0.106410093	1	3	1	1	5	7	17	2	0	0
167	15.75342466	21.91780822	25.11415525	17	4.504388827	7.94 -02	1	1	1	1	5	2	12	2	0	0
168	39.37393939	31.18712274	14.08450704	21	3.230769231	0.174214643	1	4	0	0	7	6	18	1	0	0
169	36.282318584	51.0373444	8.506224066	26	2.42586452	8.52 -02	1	3	0	0	3	7	19	1	0	0
170	2.314814815	27.89699571	14.48497854	22	3.779850746	0.156792963	1	5	1	1	7	5	17	1	0	0
171	21.73913043	16.36863824	71.9394773	29	6.606725146	0.513525906	1	2	0	0	6	6	22	1	0	0
172	11.42857143	73.29842932	5.759162304	21	1.601226994	0.103775145	1	1	0	0	3	5	17	1	0	0
173	19.14893617	57.26141079	1.244483278	14	1.172839506	0.140248963	1	1	0	0	5	4	14	2	0	0
174	0	83.56164384	13.01369863	7	2.013733103	0.588001889	1	1	1	1	2	4	0	0	0	0
175	93.33333333	29.72972973	36.93633694	3	4.944444444	0.277477477	1	1	0	0	2	1	3	0	0	0
176	100	3.418803419	2.27922279	8	4.686669687	0.428848189	1	0	0	0	2	4	6	0	0	0
177	97.8021978	61.88118812	8.910891089	17	2.678217822	0.357344667	1	0	0	0	2	5	10	1	0	0
178	0.869565217	34.48275862	9.852216749	17	3.713541667	0.189673417	1	3	0	0	4	6	11	1	0	0
179	3.448215862	60	5	24	1.536682474	9.56 -02	1	3	0	0	5	8	16	1	0	0
180	61.03896104	13.44195519	9.368655438	20	4.2866610879	0.280867866	1	3	0	0	7	6	11	1	0	0
183	50	38.666909713	12.74298056	27	2.968309859	0.105990482	1	4	0	0	6	6	20	1	0	0
184	47	42.07317073	7.926829268	25	2.85523158	7.73 -02	1	3	0	0	3	7	19	1	0	0
185	0	5.904522613	88.69346734	18	7.442477876	0.783679403	1	0	0	0	7	3	10	1	0	0
186	39.08629442	8.746355685	43.8046472	22	5.953574745	0.231152167	1	2	1	1	4	5	16	0	0	0
187	4.494382022	19.047161905	3.896103896	22	3.37012987	0.1789447	1	2	0	0	6	5	16	0	0	0
188	92.85714286	1.360544218	0.680272109	4	4.691943128	0.206356946	0	2	0	0	3	1	6	0	0	0
189	75	3.260869565	4.347826087	8	4.5	0.262064023	1	1	0	0	5	2	10	1	0	0
190	30.43478261	50.5	1	15	2.311111111	0.177839196	1	1	0	0	5	6	12	0	0	0
191	30.3030303	54.20054201	12.46612466	23	2.34535345	0.146724402	1	2	0	0	4	6	16	0	0	0
192	0	49.07407407	8.148148148	19	2.507462687	0.103483818	1	1	0	0	3	3	13	0	0	0
193	2.469135802	33.33333333	14.47028424	17	3.332228371	0.122370835	1	2	0	0	5	5	15	0	0	0
194	9.090909091	25.06203474	19.85111663	17	3.95724957	0.173326914	1	2	0	0	4	6	15	0	0	0
195	27.61020882	19.24759405	9.798771513	19	3.94527897	0.111376183	1	2	0	0	10	7	17	2	0	0
196	32.25806452	31.57338965	4.540664699	19	3.2326690125	0.111262672	1	2	0	0	5	6	18	2	0	0
197	4.285714286	32.62411348	3.90070922	24	2.798969072	0.128214836	1	2	0	0	5	7	18	1	0	0
198	0	15.33333333	9	4.377388491	0.31552727	1	1	0	0	3	5	9	2	0	0	
199	0	30.73089701	42.52491694	20	4.81877293	0.256792389	1	1	0	0	4	4	17	0	0	0
200	0	31.99481865	32.51295337	20	4.481353538	0.117611876	1	1	0	0	8	8	16	1	0	0
201	0	45.71428571	1.538461538	22	1.959501558	0.140978845	1	2	0	0	7	5	14	0	0	0
202	11.2244898	9.70837864	7.28153398	10	4.131313131	0.243713	1	2	1	1	4	4	9	0	0	0
203	77.14285714	17.99242424	6.43933939	14	3.355	0.408134955	1	2	0	0	3	6	11	0	0	0
204	62.40601504	27.2972973	11.62162162	14	3.4438850267	0.271793745	1	2	0	0	4	4	11	1	0	0

Appendix G: etric alues of New exico Stream Samples

BentSampleID	Hyd	TriPct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
205	88.55218855	8.905852417	3.562340967	10	3.63	0.461208911	1	1	0	3	4	10	0	0	0
206	16.30434783	20.10376135	9.079118029	15	3.640826873	0.198797312	1	1	0	7	5	11	1	0	0
207	2.898550725	31.30990415	10.38386558	13	2.668789809	0.163976997	1	3	0	6	5	11	0	0	0
208	0	0.502512563	94.22110553	3	7.881748072	0.88813083	1	1	0	4	2	3	0	0	0
209	15.05791506	15.63539587	24.8170326	25	5.071123755	0.177088344	1	4	1	7	6	19	0	0	0
210	85.546875	7.58426963	4.777520899	9	3.966229135	0.387830353	1	1	0	4	6	11	0	0	0
211	24.58100559	28.729228177	15.19337017	8	4.14527027	0.149630401	1	1	2	3	4	12	1	0	0
212	86.66666667	1.801801802	13.51351351	6	5.428571429	0.195741196	1	1	0	4	4	6	1	0	0
213	6.930693069	0	26.94610778	4	5.272108844	0.337205108	1	2	2	2	1	5	1	0	0
214	62.79069767	10.96774194	5.37634086	15	4.47883239	0.142683318	1	2	0	7	5	14	0	0	0
215	95.69892473	1.342281879	16.22756779	10	6.229885057	0.290880379	1	1	2	3	3	8	0	0	0
216	85.24590164	1.304347826	25.2173913	7	6.11111111	0.185988229	1	2	0	2	2	8	1	0	0
217	96.4856623	0.725689405	3.773554906	11	4.934065934	0.270053498	1	1	4	3	11	0	0	0	0
218	98.26589595	0	5.591397849	5	5.082872928	0.209927697	1	3	1	3	3	6	1	0	0
219	30.25210084	22.42798354	21.60493827	29	4.247457627	8.27 -02	1	1	7	8	22	1	0	0	0
220	13.04347826	22.94372294	15.58441558	18	4.475	0.120383964	1	2	2	7	5	12	2	0	0
221	12.41830065	41.79104478	18.50746269	22	3.571428571	0.112143319	1	3	1	5	6	16	1	0	0
222	34.12162162	8.050221566	6.573116691	20	4.423494571	0.149674502	1	2	1	6	4	15	3	0	0
223	45.38745387	38.04475854	13.30977621	28	2.966133662	0.147233594	1	2	0	6	4	21	1	0	0
224	8.088235294	58.3081571	1.812668822	25	2.287197232	0.113192346	1	2	0	5	4	18	1	0	0
225	0	57.7112081	4.697986577	21	2	0.114275349	1	1	0	6	5	14	1	0	0
226	0	55.97315436	21.0738255	24	3.430894309	0.121970845	1	2	0	6	5	16	0	0	0
227	11.6751269	45.46783626	7.602339181	27	2.81175481	8.01 -02	1	3	1	5	6	20	0	0	0
228	71.66666667	40.96016343	14.50459653	14	2.93793262	0.132335278	1	1	1	5	4	12	1	0	0
229	19.62616822	25.120779295	33.81642512	13	4.749518304	0.134242377	1	1	1	5	4	13	3	0	0
230	0	53.64583333	11.2842222	24	2.628131021	0.128876812	1	1	0	4	5	14	0	0	0
231	30.76923077	57.66233766	4.155844156	26	1.919191919	8.40 -02	1	1	0	5	6	19	0	0	0
232	3.902439024	50.33307865	4.943830225	36	2.291784703	7.34 -02	1	2	1	8	7	23	1	0	0
233	9.508196721	50.72886297	4.373777843	35	2.188640974	7.84 -02	1	2	1	5	8	25	1	0	0
234	50	5.309734513	1.769911504	6	5.411764706	0.431890013	1	2	0	3	3	6	0	0	0
235	100	4.166666667	12.5	4	4.714285714	0.307971014	1	0	0	3	2	4	0	0	0
236	0	51.39784946	6.88172043	18	2.407103825	0.12373007	1	1	0	6	4	14	0	0	0
237	0.967741935	62.61437908	3.26793856	29	2.02827381	0.168497416	1	4	0	5	8	22	0	0	0
238	67.4556213	41.47398844	12.42774566	34	2.979855772	7.82 -02	1	1	0	7	8	25	1	0	0
239	0	5.596107056	16.30110316	11	5.619402985	0.343599786	1	1	0	4	5	8	1	0	0
240	27.65957447	28.6407767	23.54348932	21	4.116666667	0.068870621	1	3	0	4	7	15	2	0	0
241	55.38461538	16.51376147	11.23883211	18	4.19481795	0.178013287	1	1	2	6	3	10	2	0	0
242	16.51376147	38.66711004	12.455316	21	2.883116883	0.152672496	1	4	0	8	5	15	2	0	0
243	12.96296296	27.6119403	23.5074269	19	4.106062606	6.91 -02	1	2	0	7	6	15	1	0	0
244	24.46351931	41.91750279	7.91523133	23	2.530179445	0.110221074	1	2	0	5	5	17	1	0	0
245	24.46351931	41.85267857	7.924107143	25	2.531055752	0.110170591	1	2	0	5	5	18	1	0	0
246	10.38961039	33.424665753	18.08219178	19	3.486238532	0.125967184	1	2	0	8	4	11	1	0	0
247	33.33333333	14.6239543	78.5513203	12	6.754669929	0.624895592	1	0	3	4	10	0	0	0	0
248	14.2384106	18.24274013	45.64408042	21	5.827689243	0.239520925	1	2	2	5	4	16	0	0	0
249	42.85714286	33.51449275	29.71014493	33	4.357228475	0.12009127	1	2	0	7	8	26	1	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
250	25	14.60674157	24.15730337	21	4.63190184	0.127273864	1	1	0	3	6	16	1	0	0
252	60	6060606061	22.64808362	32.05574913	8	5.02	0.191575801	1	1	1	4	3	8	2	0
253	88	3333333333	19.42257218	7.87405748	16	3.973180077	0.171791684	1	2	0	4	5	12	1	0
254	2.105263158	15.54322875	27.2352132	27	5.18879668	0.153432537	1	3	2	7	6	17	1	0	0
255	75.15151515	10.21505376	40.05376344	6	6.396131	0.180259688	1	2	1	4	3	7	2	0	0
256	50	0	66.41221374	2	7.336780866	0.307125978	1	2	1	4	1	4	2	0	0
257	70.73170732	32.22222222	23.7037037	6	4.524271845	0.175877736	1	2	1	4	4	7	1	0	0
258	5.555555556	1.302931596	16.61237785	10	5.036209323	0.128121607	1	2	1	4	5	10	0	0	0
259	0	43.02325581	13.95348837	19	3.095	0.144738982	1	1	0	3	4	14	1	0	0
260	14.28571429	16.93811075	18.24104235	17	4.312757202	0.125268783	1	3	0	5	6	14	2	0	0
261	0	20.57877814	26.04501608	22	4.486956522	9.83 -02	1	2	0	5	8	17	2	0	0
262	68.08510638	29.7008547	6.837666838	28	3.923456779	0.157872582	1	2	0	10	7	17	1	0	0
263	10.9375	26.88172043	5.376344086	19	2.970588235	8.74 -02	1	1	0	5	5	17	1	0	0
264	13.888888889	15.56886228	7.784431138	14	3.597014925	0.174518433	1	2	0	3	4	13	0	0	0
265	0	31.95266272	29.8816568	13	4.124481328	0.170842625	1	1	3	6	12	1	0	0	0
266	8.333333333	2.586206897	56.03448276	5	6.571428571	0.2932553373	1	1	2	2	3	6	0	0	0
267	77.77777778	0.8696565217	20.8696522	4	5.505050505	0.1266209	1	5	0	3	2	4	1	0	0
268	22.80701754	15.6779661	7.41524237	7	3.884444444	0.121477923	1	3	2	2	3	7	2	0	0
269	35.29411765	18.94736842	13.68421053	7	4.158730159	0.103471445	1	2	2	1	3	7	0	0	0
270	45.45454545	0.8696565217	14.7826087	9	5.165	9.55 -02	1	2	3	3	5	10	1	0	0
271	26.31578947	16.79389313	20.22900763	8	4.291139241	0.140504811	1	5	1	4	4	7	0	0	0
272	0	77.9067674	0	8	0.272777018	0	2	1	1	0	1	0	1	0	0
273	20	16.92307692	9.230769231	5	4.3636363364	0.152403846	1	1	0	5	2	4	0	0	0
274	0	19.95367742	6.451612903	21	3.623076923	0.235198762	1	3	1	3	5	16	0	0	0
275	0	46.45522388	18.2838209	20	3.521384929	0.153543033	1	3	0	7	6	16	1	0	0
276	73.91304348	29.19708029	21.37643379	23	4.41025641	9.23 -02	1	3	3	9	6	18	3	0	0
277	38.23529412	20.04689332	16.52989449	18	4.41062921	9.93 -02	1	2	1	7	5	18	3	0	0
278	0	13.55932203	1.694951254	15	3.616883117	0.219119158	1	3	0	3	4	10	0	0	0
279	19.86754967	4.895104895	13.6366364	12	4.71020374	0.112378849	1	2	1	2	6	15	0	0	0
280	32.0754717	21.2962963	5.555555556	13	3.881889764	0.123428079	1	2	1	5	4	11	0	0	0
281	68.42105263	20	1.95129512	8	3.733870968	0.136824486	1	2	0	3	3	8	0	0	0
282	0	0.724637681	7.608865652	6	5.253632188	0.284212424	1	1	3	4	5	1	0	0	0
283	100	0	75.83882617	1	7.451388889	0.583801923	1	1	0	3	1	2	0	0	0
284	61.40350877	13.58024691	1.85181852	12	3.52882562	0.190399509	0	0	2	2	3	9	0	0	0
285	2.620087336	21.67721519	1.265822785	25	3.098484848	0.196368031	1	3	1	6	4	16	1	0	0
286	100	2.702702703	6	5.41268413	0.35579415	1	2	0	4	2	5	1	0	0	0
287	71.42857143	5.303030303	21.96989697	6	6.230088496	0.349178811	1	1	0	4	2	5	1	0	0
288	7.518796992	34.35897436	20.051282051	15	2.693333333	0.20666138	1	2	1	3	3	13	0	0	0
289	0	47.10743802	9.91735372	16	2.86746988	0.11322314	1	1	0	4	3	13	1	0	0
290	0	49.38101788	24.62173315	20	3.41322314	0.146085085	1	2	1	7	5	17	1	0	0
291	11.35371179	39.52702703	15.87837838	36	3.432489451	7.72 -02	1	2	0	7	8	25	1	0	0
292	20.21276596	25	22.61029412	30	4.2355199	7.71 -02	1	2	1	7	6	23	1	0	0
293	0	56.98447894	32.59423503	22	3.841667565	0.194905149	1	1	0	6	3	12	0	0	0
294	2.857142857	47.99357945	16.05136437	26	3.292682927	7.35 -02	1	3	1	8	8	19	0	0	0
295	74.0625	25.75957728	17.7014531	12	4.183226932	0.123642653	1	2	2	5	4	13	1	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd_TriPct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	DiptTax	EphemLTax	EPPTax	ligoLTax	rihoTax
296	98.10996564	19.30207197	9.814612868	21	3.901482127	0.301453356	1	2	2	7	4	17	2	0
297	0	16.08040201	1.172529313	23	3.463709677	0.22777759	1	3	0	6	6	15	0	0
298	80	54.88721805	13.9097444	24	2.575129534	0.107220882	1	1	0	5	4	18	0	0
299	46.98795181	61.5835771	8.504398827	28	2.267657993	0.1102446679	1	2	0	7	6	19	0	0
300	18.11023622	50.7082153	3.116147309	30	2.045774648	8.77 -02	1	1	0	6	6	19	0	0
301	20	67.85714286	2.040816327	20	1.427672956	0.104395604	1	1	0	6	4	15	1	0
302	57.14285714	13.86138614	1.98019802	8	3.857142857	0.300792079	1	2	0	3	3	7	1	0
303	41.666666667	22.4137931	1.724137931	13	3.292682927	0.149425287	1	1	0	4	3	8	0	0
304	11.70212766	36.57587549	5.058365759	21	1.905797101	0.190205496	1	2	0	8	4	13	1	0
305	11.42857143	31.666666667	0.555555556	21	2.586466165	0.157231533	1	1	0	5	4	18	0	0
306	10	21.56862745	0	16	2.727272727	9.18 -02	0	2	0	2	5	12	0	0
307	1.587301587	25.5985267	28.54511971	25	4.458174905	0.117360842	1	2	0	8	5	17	1	0
308	91.54929577	3.483606557	6.96723115	9	4.425421873	0.292515232	0	4	1	2	5	7	0	0
309	11.53846154	23.97260274	9.589041096	16	3.41174706	0.119603212	1	1	0	3	5	15	1	0
310	26.47058824	16.765286	9.07298304	19	4.54908196	0.171675593	1	1	0	4	5	13	1	0
311	35.29411765	39.13043478	15.94202899	16	3.08	9.08 -02	1	2	0	2	5	11	1	0
312	36.81318681	46.3401507	5.92034456	12	2.86972973	0.343146956	1	0	0	3	5	13	2	0
313	28.57142857	50.43290043	3.896103896	12	2.649890591	0.330713394	1	0	0	2	4	11	1	0
314	59.52380952	6.821705426	46.35658915	13	5.790697674	0.273230255	1	0	0	3	7	11	4	0
315	79.18552036	6.979865772	23.62416107	12	5.018877204	0.244579264	1	0	0	3	6	12	2	0
316	81.77623991	1.429772918	4.20524466	7	4.79055794	0.370993365	1	3	2	5	2	7	1	0
317	81.63265306	19.32326715	10.14492754	11	4.213541667	0.128233383	1	1	0	5	7	12	2	0
318	62.96296296	21.10091743	24.7706422	10	4.524732475	0.099728169	1	1	0	2	5	10	2	0
319	77.83783784	10.1939558	53.67613893	12	6.185934489	0.312729092	1	0	0	3	5	9	2	0
320	60	3.523693803	65.49210207	8	6.83042394	0.284035914	1	0	0	6	3	6	2	0
321	0	0	42.85714286	0	6.666666667	0.447619048	1	1	0	1	0	0	0	0
322	0	0	48.4844848	0	6.727272727	0.365530303	1	1	0	1	0	0	0	0
323	100	2.222222222	15.5555556	4	5.35894359	0.246464646	1	1	3	1	2	0	0	0
324	100	1.652892562	45.45454545	3	6.279661017	0.161294766	1	1	1	3	3	4	1	0
325	100	0	29.0325806	3	5.806451613	0.324167107	1	1	1	1	3	4	1	0
326	100	0	18.00766284	4	5.440613027	0.46766873	1	2	2	1	3	4	0	0
327	88.46153846	8.875739645	10.650588757	13	4.49661358	0.141730901	1	2	0	4	7	11	2	0
328	0	0	23.85321101	1	6.453703704	0.586628704	1	0	0	3	0	1	1	0
329	76.84729064	2.131782946	1.259689922	6	4.746583851	0.416818923	1	1	1	4	1	4	1	0
330	73.65591398	4.478997447	1.833332012	7	4.029901269	0.404576653	1	1	1	3	4	12	2	0
331	67.33067729	20.33898305	14.91525424	15	4.26420613	0.147402952	1	2	0	7	4	13	1	0
332	38.84297521	6.025692468	21.4338482	15	5.369614512	9.76 -02	1	3	0	9	6	16	1	0
333	95.27559055	3.112840467	2.723735409	10	4.678947368	0.285901021	1	2	0	4	5	9	1	0
334	94.9477849	3.571428571	4.31312549	19	4.923327896	0.234817921	1	3	1	3	6	18	1	0
335	94.82758621	11.16751269	0	10	3.979651163	0.27093243	0	1	1	3	2	9	0	0
336	0	3.571428571	45.71428571	9	6.5	0.355292909	1	0	0	3	2	5	1	0
337	66.666666667	11.93181818	33.52227227	11	5.023529412	0.282142857	1	0	0	3	3	8	0	0
338	67.5	1.134215501	30.52936057	14	5.52183472	0.3525036	1	0	1	4	4	9	1	0
339	52.99145299	8.258258258	18.31831832	12	4.94196882	0.236334078	1	0	0	5	4	9	2	0
340	87.5	8.3989890131	52.88773911	10	6.545052838	0.254631115	1	0	1	3	4	8	4	0

Appendix G: **etric values of New exico Stream Samples**

BsnSamplD	Hyd_TriPct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	DiptTax	EphemLTax	EPPTax	ligoLTax	rihoTax
341	88.888888889	15.36312849	66.20111732	6	6.372881356	0.271082735	1	0	0	3	2	5	3	0
342	80	7.221006565	61.70678337	9	6.738461538	0.434709586	1	0	0	5	4	7	1	0
343	86.111111111	41.35338346	37.3433584	12	4.233502538	0.221835997	1	0	0	2	4	10	2	0
344	71.212121212	5.583126551	19.60297767	7	5.056890013	0.308609605	1	3	1	5	2	5	1	0
345	0	67.28971963	13.08411215	27	2.150537634	8.64 -02	1	0	0	6	6	22	1	0
346	39.8249453	27.83964365	17.81737194	23	4.007497657	0.110367985	1	1	0	8	5	16	0	0
347	19.43127962	55.21472393	5.316973415	27	2.141892991	0.143920346	1	3	0	6	6	17	1	0
348	22.8956229	32.82172373	17.11924439	28	3.604137931	9.35 -02	1	2	0	7	5	22	1	0
349	0.990099001	51.52224824	4.683840749	33	2.16183714	9.07 -02	1	1	0	7	6	23	1	0
350	2.919708029	31.16490166	33.43419062	28	4.492335437	0.147150782	1	1	0	4	7	22	0	0
351	0	11.61417323	67.1258425	12	6.909090909	0.462361584	1	0	0	4	5	12	0	0
352	0	42.666666667	6.666666667	17	2.410968904	0.10916221	1	2	0	3	6	17	0	0
353	8.333333333	37.4501992	14.34262948	14	3.299435028	0.162517928	1	1	0	3	4	12	0	0
354	13.0347826	51.06382979	4.255319149	8	2.475669756	0.277739648	1	0	0	3	3	9	0	0
355	0	90.69767442	1.162790698	9	1.180722892	0.683447332	1	1	0	3	4	6	0	0
356	0.523560209	46.97508897	5.693990178	8	2.712633678	0.256761566	1	0	0	3	3	8	0	0
357	1.685393258	43.541666667	1.666666667	25	2.129213483	0.132054628	1	1	0	6	5	17	0	0
358	4.587155963	50.40322581	4.838709677	15	2.48066695	0.229267337	1	1	0	2	5	12	0	0
359	15.81196581	43.92523364	1.688222991	19	2.22406386	0.156372292	1	2	0	6	5	14	0	0
360	5.806451613	54.32098765	1.851851852	15	2.087719298	0.160818713	1	1	0	4	6	13	0	0
361	10.81081081	43.11111111	4.888888889	16	2.432960894	0.147032913	1	1	0	5	5	15	0	0
362	0	47.02072539	28.10880829	24	3.895125554	0.136734474	1	2	0	7	5	16	1	0
363	1.3988601399	66.30901288	14.16309013	23	2.709495459	0.194803637	1	2	0	7	3	17	1	0
364	0	37.74104683	23.14049587	20	3.626066957	0.171407698	1	1	0	5	6	14	1	0
365	0	32.51141553	50.50228311	21	4.9384922063	0.314103495	1	2	0	6	3	14	0	0
366	4.255319149	33.333333333	3.03030303	16	2.461983304	0.185883682	1	2	0	6	6	15	0	0
367	37.5	20.46511628	25.58139535	16	4.52224264	0.187089763	1	1	0	4	6	12	0	0
368	4.918032787	13.20754717	5.660337358	12	3.941176471	0.187960467	1	0	0	5	5	9	0	0
369	96	0.172018349	2.0066880734	8	4.438750289	0.250663203	1	1	1	3	3	8	1	0
370	81.08108108	12.31527094	11.8226601	6	4.325757576	0.179729796	1	1	0	4	4	6	1	0
371	100	57.45154545	5.454545455	10	2.705882353	0.171723339	1	2	0	5	7	8	0	0
372	57.14285714	3.236245955	46.11650485	10	6.704527098	0.285411999	1	3	1	4	6	10	1	0
373	41.17647059	35.88957055	10.4294785	10	3.6434939394	0.153298726	1	4	0	4	5	9	1	0
374	97.6121563	0.436893204	25.0484369	11	6.80683314	0.248934844	1	1	3	4	4	9	0	0
375	23.21428571	19.14893617	1.418439716	18	3.445770065	0.290177993	1	1	0	5	4	13	0	0
376	2.325581395	21.22641509	44.81132075	8	5.7	0.270365734	1	1	0	2	4	8	0	0
377	50	25.23364486	28.03738318	11	4.852040816	0.1503663373	1	2	0	3	5	8	0	0
378	20	21.07279693	35.24904215	11	5.490740741	0.167904509	1	2	0	4	5	9	0	0
380	33.333333333	7.336196319	2.24559877	7	5.158536585	0.2887798	1	1	0	1	5	7	1	0
381	95.625	0.495049505	9.240942092	7	5.562822719	0.247601124	1	2	4	4	3	6	1	0
383	22.222222222	2.43902439	29.26829268	9	5.493670886	0.167364956	1	3	1	4	8	0	0	0
384	38.6473431	7.432432432	31.7565676	10	5.912133891	0.15239054	1	2	1	2	4	10	0	0
385	0.666666667	49.46236359	14.6933405	7	2.53788606	0.293494237	1	1	1	3	8	0	0	0
386	33.333333333	12.6984127	58.73015873	10	6.048381097	0.365079365	1	0	0	2	4	8	0	0
387	100	26.5060241	18.07228916	9	3.88232941	0.195121951	1	1	0	1	6	8	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
388	100	4.511278195	12.03007519	2	6.090909091	0.673957621	1	0	0	1	2	3	0	0	0
389	0	5.454545455	65.45454545	3	5.632107023	0.266889074	1	0	0	3	1	1	0	0	0
390	94.91525424	0	25.625	3	5.743902439	0.172237461	1	1	4	6	1	4	0	0	0
391	100	0.406504065	39.4309431	4	5.743902439	0.226779492	1	1	0	3	3	6	1	0	0
392	0	15.625	3	6.19358387	0.462719298	1	4	0	5	1	1	0	0	0	0
393	0	10.21416804	11.36738056	6	5.469421488	0.398236199	1	1	0	0	5	3	5	1	0
394	0	71.75	2.375	20	2.477820025	0.372637672	1	4	0	0	5	11	1	0	0
396	0	1.604278075	9.49197861	4	4.368983957	0.782688687	1	2	0	4	1	2	1	0	0
397	21.17263844	24.55696203	49.45147679	13	5.380816714	0.277037005	1	2	0	3	5	10	1	0	0
398	40.86687307	23.8150289	8.439366358	18	3.587706147	0.137384928	1	2	0	0	5	7	14	1	0
399	98.8372093	7.858769932	4.5558808656	10	4.169703872	0.405485152	1	0	0	2	5	8	0	0	0
400	63.38797814	15.05016722	21.90655452	12	4.837837838	0.155437164	1	3	0	4	3	9	0	0	0
401	44.11764706	26.64359862	7.612456747	10	3.67886679	0.228397732	1	2	0	3	4	8	1	0	0
402	98.61111111	6.060606061	24.07407407	11	5.67752443	0.182914019	1	2	0	0	7	5	10	1	0
403	100	1.072961373	19.09817245	7	5.404411765	0.173925771	1	3	0	5	4	6	2	0	0
404	79.87421384	6.891025641	11.21794872	9	4.414860681	0.183042145	1	2	1	2	4	9	1	0	0
405	13.26530612	49.2917847	11.898017	10	2.25	0.284898699	1	2	0	2	6	10	2	0	0
406	7.692307692	58.60805861	2.564102564	20	2.134387352	0.180726137	1	3	0	2	6	15	1	0	0
407	7.547169811	10.47381546	1.496269352	19	4.286231884	0.149401496	1	2	0	0	5	6	15	0	0
408	18.38235294	54.23728814	2.448210923	20	2.587467363	0.256582454	1	3	1	5	5	16	1	0	0
409	1.234567901	23.12138728	0.867052023	19	3.709219858	0.15152886	1	2	0	4	6	16	1	0	0
410	42.62295082	16.66666667	5.208333333	20	3.675213675	8.38 -02	1	2	0	6	6	18	1	0	0
411	2.352941176	46.91780822	10.616438386	21	2.451361868	0.121851904	1	1	0	4	4	16	1	0	0
412	0	0.161030596	73.91304348	5	7.014634146	0.432169757	1	2	2	2	2	2	2	0	0
413	76.19047619	1.526717157	48.66412214	14	6.607758621	0.187256433	1	1	1	5	5	12	1	0	0
414	43.24324324	5.527638191	7.286432161	18	4.686635945	0.158993962	1	2	1	5	4	13	2	0	0
415	99.66555184	8.763693271	8.607198748	11	5.059139785	0.259432597	1	1	0	5	4	9	0	0	0
416	97.51552795	8.284023669	28.00788955	12	5.867595819	0.182402881	1	1	2	4	4	11	1	0	0
417	17.30769231	0.09569378	14.44976077	4	6.343881857	0.232871363	1	2	2	5	1	4	3	0	0
418	93.10344828	3.339517625	42.85714286	13	6.288659794	0.179893924	1	1	0	4	4	10	2	0	0
419	12.5	3.304347826	32.34782609	11	6.517665634	0.3382949198	1	1	3	6	4	12	2	0	0
420	81.95488722	5.823293173	1.80728916	8	4.285714286	0.195672024	1	1	0	4	3	9	0	0	0
421	92.54079254	3.288201161	18.665537718	10	5.212288744	0.258103475	1	3	0	3	1	7	1	0	0
422	100	16.73151751	15.95330739	7	4.492063492	0.197349222	1	1	0	4	3	6	1	0	0
423	3.50871793	0.141442716	13.71994342	7	5.60574286	0.284572326	1	1	1	4	3	7	0	0	0
424	17.07317073	4.455445545	2.062706271	15	4.000839631	0.782220002	1	3	0	4	4	11	1	0	0
425	20.33898305	5.53633218	10.29411765	15	5.045668013	0.2433660446	1	3	0	4	2	11	1	0	0
426	20.63492063	30.99547511	10.633348416	26	3.442352941	0.120427658	1	3	0	7	6	16	0	0	0
427	85.9375	9.1566626506	20.48192771	13	5.143356643	0.145428089	1	1	1	9	1	8	0	0	0
428	93.61702128	24.44987775	3.178484108	15	3.984848485	8.77 -02	1	3	0	6	6	12	0	0	0
429	32.62411348	11.49635036	9.489051095	12	4.645238095	8.52 -02	1	4	1	3	3	14	2	0	0
431	100	1.470588235	14.70588235	8	4.861538462	0.206318083	1	3	0	3	3	4	1	0	0
433	77.46478873	8.849557522	29.20353982	10	5.461538462	0.113235005	1	2	0	8	4	9	2	0	0
434	51.33668984	5.4375	33.625	11	6.588661037	0.208434178	1	3	1	6	4	10	2	0	0
435	50	14.93506494	6.493556494	13	3.414285714	0.165605636	1	2	1	4	3	10	0	0	0

Appendix G: etric alues of New exico Stream Samples

BentSampleID	Hyd	TriPct	IntnPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
436	45.4954955	17	2.333333333	13	2.975206612	0.18361204	1	1	1	3	1	9	0	0	0
437	44.82158621	13.68421053	2.105263158	5	3.194444444	0.16506159	0	0	0	2	2	6	0	0	0
438	39.87341772	34.80825959	4.424778761	18	3.17928869	0.147213349	1	2	0	5	3	18	1	0	0
439	67.30169231	27.45098039	6.862745098	19	3.16394426	0.15589206	1	2	0	5	4	12	0	0	0
440	26.02139726	57.02702703	3.78373784	8	1.832099552	0.358045985	1	2	1	3	3	10	0	0	0
441	75.38461538	16.50485437	0.970873786	9	2.8	0.264610699	1	1	0	3	3	9	0	0	0
442	82.53424658	0	12.010443886	2	5.649395509	0.222764894	1	0	0	2	2	4	2	0	0
443	17.64705882		0	42.90322581	3	6.374792703	0.246484965	1	0	0	3	3	5	2	0
444	20	0	69.40114848	4	7.275638767	0.531294999	1	1	0	5	2	5	0	0	0
445	0	0	10.43132456	1	6.20706972	0.803115053	1	4	0	4	0	0	2	0	0
446	27.27272727	6.506849315	29.10958904	8	6.20661157	0.37172245	1	2	1	2	4	8	1	0	0
447	66.66666667	22.60869565	23.47826087	8	4.273148148	0.226011012	1	1	0	2	6	8	2	0	0
448	78.84615385	5.744125326	4.960835509	11	4.220338983	0.20702637	1	3	0	3	5	11	2	0	0
450	77.14285714	12.22707424	4.8039345	13	4.069444444	0.118861564	1	3	1	5	7	11	2	0	0
451	74.13793103	29.46954813	2.750491159	12	3.422764228	0.135149978	1	4	0	3	7	12	2	0	0
452	80.21978022	7.107843137	4.90190784	18	4.890662557	0.172146036	1	2	1	4	6	14	1	0	0
453	85.41666667	7.547169811	9.853219476	10	4.837349398	0.213669115	1	1	0	5	6	10	1	0	0
454	97.91666667	2.011494253	11.20696955	9	5.181818182	0.214912717	1	1	1	6	5	8	1	0	0
455	96.64804469	0.523560209	3.926701571	9	5.142857143	0.344038147	1	1	0	6	4	8	1	0	0
456	10	14.81481481	1.587301587	8	4.306451613	0.322863897	1	1	0	3	3	6	1	0	0
457	72.72727273	13.79310345	6.896551724	10	3.754049361	0.198342689	1	0	0	4	3	10	1	0	0
458	2.89017341	0	31.55149935	5	6.090225654	0.131818043	1	2	1	4	2	6	3	0	0
459	0	0	16.66666667	0	8	0.507267644	0	0	1	0	1	1	0	0	0
460	100	0	24.222907489	1	6.180904523	0.217106546	1	0	1	2	2	3	2	0	0
461	100	0	27.65957447	2	6.05213913	0.167983189	1	2	1	2	2	3	1	0	0
462	92.85714286	2.197802198	24.1752418	5	5.349206349	0.177045177	1	2	0	1	4	6	1	0	0
463	91.0742857	1.960784314	16.66666667	5	5.722222222	0.285963891	1	1	0	1	3	6	0	0	0
464	25.45454545	40.06734007	15.15151515	15	3.291512915	0.159909991	1	2	1	3	5	11	1	0	0
465	56.06557377	19.69178082	17.6369863	8	4.182080925	0.174316831	1	2	0	3	4	8	0	0	0
466	45.97249509	17.634385477	18.46473029	27	4.205578512	0.111696267	1	2	3	8	7	21	1	0	0
467	36.8852459	9.944237918	61.61710037	22	6.38518515	0.395155183	1	0	0	6	4	18	0	0	0
468	13.95348837	58.52090032	3.8855209	20	2.476027397	0.149818484	1	1	0	4	5	13	1	0	0
469	98.07692308	5.263157895	1.754385965	5	3.983333333	0.382238783	1	0	0	4	2	6	1	0	0
470	85.71428571	23.33333333	9.333333333	9	3.405063291	0.394007491	1	0	0	3	3	7	0	0	0
471	62.5	30	13	17	3.370786517	0.215555556	1	0	0	2	4	12	2	0	0
472	1.030927835	0.146627566	29.3255132	6	5.32198457	0.196890331	1	2	2	7	3	0	0	0	0
473	19.60784314	0.103626943	23.3166218	5	5.963157895	0.299436717	1	2	3	6	2	6	1	0	0
474	3.571428571	0.884955752	29.42477876	7	5.738064516	0.145691843	1	1	1	7	3	8	1	0	0
475	3.81693893	14.20940171	41.34615385	12	5.89236733	0.244676631	1	2	0	5	5	9	1	0	0
476	36.84210526	15.81291759	51.44766147	10	5.78029892	0.235334473	1	3	1	3	5	9	1	0	0
477	35.18518519	19.6369637	54.78547855	9	5.886051081	0.261009737	1	2	4	4	4	9	1	0	0
478	95.65217391	2.777777778	0	1	5.071428571	0.392063492	0	1	1	3	1	3	0	0	0
479	61.9047619	15.72052402	1.746724891	7	4.296650718	0.195165862	1	2	0	2	4	9	0	0	0
480	100	0	20.99226641	3	5.412955466	0.167704952	1	2	2	2	2	3	1	0	0
481	75	5.347593583	1.604228075	12	4.161290323	0.27255477	1	2	0	2	3	9	1	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
482	58.333333333	28.94136842	5.789413684	6	4.098159509	0.195711501	1	3	0	3	3	7	0	0	0
483	87.65132099	19.92031873	7.96812749	6	4.07042535	0.157960159	1	2	0	2	4	8	0	0	0
484	95.45454545	9.318996416	7.168458781	6	4.576763485	0.206647585	1	2	0	3	4	6	0	0	0
485	78.94136842	14.4278607	4.975124378	8	4.349206349	0.23761194	1	3	0	3	4	8	0	0	0
486	1.729106628	6.655290102	3.41299283	19	4.001736111	0.3262390712	1	4	0	8	5	12	0	0	0
487	2.181208054	5.243445693	4.744069913	17	4.081268191	0.502587391	1	4	0	6	4	12	0	0	0
488	17.36526946	12.3636336	5.454545455	18	4.018450185	0.252395488	1	3	0	5	5	10	0	0	0
489	67.94871795	33.8658147	3.833385815	21	3.554621849	0.115732776	1	3	0	4	4	16	1	0	0
490	100	0	25	0	7.166666667	0.266666667	1	0	0	2	1	2	0	0	0
491	80	3.703703704	22.22222222	6	5.5625	0.113960114	1	1	0	3	4	7	0	0	0
492	92.30769231	6.976744186	18.6045116	6	5.785714286	0.204872647	1	1	0	2	3	6	0	0	0
493	94.11764706	4.411764706	12.05882353	13	4.676975945	0.186985945	1	2	0	5	2	9	0	0	0
494	92.10526316	23.78223496	4.011461318	11	4.579104478	0.168214603	1	4	0	4	5	10	0	0	0
495	78.52348993	19.71830986	6.690140845	13	4.254480287	0.13683387	1	3	0	3	6	12	2	0	0
496	90.20979021	30.37974684	4.4303379747	8	3.20754717	0.230098453	1	2	1	4	3	9	1	0	0
497	62.31884058	9.239130435	7.33696522	19	4.053333333	0.392711172	1	1	0	5	7	19	1	0	0
498	18.75	42.03821656	5.095541401	18	3.11184407	0.137258094	1	2	1	5	4	13	1	0	0
499	66.1971831	40.89347079	5.154639175	15	3.298319328	0.124114232	1	2	0	3	6	16	1	0	0
500	71.15384615	6.015037594	1.127819549	10	4.234899329	0.149297773	1	2	0	1	4	11	1	0	0
501	29.49640288	31.79264214	8.695652174	15	3.4	0.1066350026	1	2	0	4	3	12	1	0	0
502	94.02985075	13.79310345	0.9833331675	18	3.833333333	0.22230893	1	3	0	5	6	13	0	0	0
503	95.9191836735	5.64516129	2.41934839	15	4.551280251	0.29384766	1	2	0	2	6	12	0	0	0
504	15.86206891	35.47169811	13.58490566	19	3.270588235	0.115866209	1	2	2	4	4	14	0	0	0
505	71.333333333	35.7615894	1.3224503311	18	1.980769231	0.18133616	1	0	0	4	4	14	0	0	0
506	90.53354438	1.474926254	3.5339833009	8	4.4137373103	0.2960849	1	2	1	5	2	8	1	0	0
507	71.52317881	8.888888889	2.59252593	15	4.27582069	0.134958006	0	2	1	2	4	11	0	0	0
508	65.46391753	32.09459459	2.027027027	18	2.506666667	0.137929455	1	1	0	6	6	19	0	0	0
509	62.8742515	32.43243243	0.675675676	22	1.630769231	0.136349061	1	2	0	6	5	21	0	0	0
510	98.13953488	10.59431525	1.550387597	15	3.684563758	0.224940086	1	2	0	4	3	14	1	0	0
511	84.76190476	17.10144928	7.246376812	13	4.087431694	0.195466801	1	1	2	4	5	12	1	0	0
512	60.30534351	47.53521127	3.169014085	15	1.484076433	0.153486289	1	1	0	6	4	13	0	0	0
513	97.57281553	6.593406593	5.128205128	11	4.85	0.285822021	1	1	0	4	5	13	0	0	0
514	5.806451613	47.92233268	1.91692907	21	2.561538462	0.1409984681	1	2	0	5	5	16	1	0	0
515	0	63.10679612	15.53338058	11	2.681818182	0.166190748	1	1	0	5	1	7	1	0	0
516	0	44.81946625	35.71428571	21	4.036059807	0.173171571	1	1	1	6	5	14	1	0	0
517	50	25.80645161	11.11111111	20	4.045454545	8.63 -02	1	1	1	5	5	15	4	0	0
518	40	18.94136842	25.52631579	18	5.199203187	0.083113456	1	1	2	5	6	18	3	0	0
519	82.53968254	8.540925267	17.43772242	9	4.945454545	0.128673106	1	1	2	4	2	10	1	0	0
520	8.823529412	15.54054054	1.013513514	13	3.65	0.327663346	1	1	1	4	4	9	1	0	0
521	80.17241379	4.901960784	14.70588235	14	4.8525177986	0.157655631	1	1	2	3	5	13	2	0	0
522	67.79861017	17.37804878	17.07317073	18	4.392982456	0.116301186	1	1	0	8	5	13	0	0	0
523	0	17.64705882	71.17647059	4	6.723529412	0.503097807	1	3	0	3	0	2	1	0	0
524	97.54601227	3.8775102	1.224489796	10	4.34392439	0.202086724	0	1	1	2	4	9	2	0	0
525	69.44444444	18.03278689	11.14734098	19	3.971590909	6.42 -02	1	1	1	3	5	6	18	2	0
526	56.98924731	23.74670185	8.707124011	15	3.788461538	8.43 -02	1	1	2	5	5	11	2	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd_TriPct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	DiptTax	EphemLTax	EPPTax	ligoLTax	rihoTax
527	53.44827586	27.15231788	9.602649007	22	3.8125	8.58 -02	1	1	1	3	6	18	1	0
528	47.76119403	25.55205047	8.201892744	18	3.652980377	0.071097712	1	1	1	3	6	18	2	0
529	100	13.49693252	7.975460123	5	5.271875	0.291873525	1	2	0	2	2	4	0	0
530	0	2.222222222	-1	4.222222222	0.829292929	0	0	0	0	2	1	1	1	0
531	0	29.3768546	-1.1864362	19	3.306936693	0.143634308	1	3	0	4	5	13	0	0
532	0	32.49097473	4.332129964	18	3.426356589	0.165803338	1	3	0	4	5	12	1	0
533	0	10.03344482	24.74916388	21	4.733333333	0.321025342	1	2	0	5	6	15	0	0
534	42.85714286	21.94092827	51.47679325	8	5.472081218	0.3125928864	1	1	0	2	5	10	0	0
535	0	38.96713615	23.9436197	25	3.670103093	0.127646381	1	1	0	4	7	16	0	0
536	71.42857143	14.11764706	32.94117647	8	5.297297297	0.125797855	1	2	0	4	4	8	3	0
537	56.41025641	7.530120482	13.8555169	8	4.436241611	0.360190005	1	1	0	7	3	7	2	0
538	0	6.048387097	72.98387097	6	7.4391930435	0.300248139	1	0	1	3	3	5	1	0
539	0	2.024291498	74.89878543	8	7.417777778	0.529574405	1	1	2	3	4	6	1	0
540	72.72727273	10.46511628	9.302335581	7	4.19047619	0.209849521	1	1	1	2	4	9	1	0
541	98.29059829	3.618421053	24.01315789	10	5.560714286	0.205033003	1	3	0	6	4	11	1	0
542	0	38.46153846	11.53846154	23	3.817837765	9.39 -02	1	3	0	10	4	12	1	0
543	0	50.7082153	5.949008499	21	3.07165109	0.174253155	1	3	0	9	5	13	1	0
544	0	25.23961661	17.25229617	7	4.05483871	0.262861473	1	2	2	2	2	3	0	0
545	15.90909091	16.87242798	11.52223374	13	4.279166667	0.135870489	1	1	2	4	2	8	0	0
546	3.086419753	67.64105882	7.189552484	16	2.161403509	0.282910104	1	3	0	5	8	14	1	0
547	76.51515152	17.85714286	11.68831169	23	4.09039548	0.157007488	1	4	1	6	5	16	0	0
548	100	8.898203593	5.6886622754	6	4.360363036	0.460533383	1	1	0	3	6	1	0	0
549	40.54054054	50.80645161	20.16129032	17	2.820512821	0.265390924	1	2	0	6	3	11	0	0
550	28.57142857	32.4284662	26.6322847	13	3.8331469649	0.240909219	1	2	0	8	3	10	0	0
551	88.4083045	8.903133903	7.264937265	12	4.432116788	0.306991983	1	3	1	6	3	10	0	0
552	89.80392157	9.801084991	6.50994575	19	4.29004329	0.251333391	1	3	0	5	4	14	0	0
553	35.91549296	37.48140803	10.31234507	24	2.91160221	9.24 -02	1	1	0	5	6	18	1	0
554	6.432748538	9.1562179962	32.2620374	14	6.300940439	0.332191204	1	1	0	9	4	8	0	0
555	3.2225806452	19.37753721	37.99729364	23	5.1323737276	0.169053219	1	2	0	7	6	15	2	0
556	0	63.02277433	12.87784679	22	2.438548753	9.52 -02	1	1	0	5	7	17	0	0
558	7.04845815	22.70072993	35.18248175	16	4.905669973	0.175654176	1	2	0	9	4	11	1	0
559	4.743833017	31.65618449	17.29559748	17	3.488151659	0.26003995	1	2	1	8	5	14	1	0
560	13.46153846	24.91704374	39.24585219	16	5.150091075	0.211895991	1	1	0	9	4	9	1	0
561	13.53276353	20.84909626	18.03228689	30	4.131004367	9.92 -02	1	3	2	6	5	22	0	0
562	0	2.463054187	2.463034187	7	4.06895517	0.876066917	1	0	0	4	1	3	0	0
563	18.18181818	5.067567568	5.067567568	6	4.18903436	0.602404947	1	3	0	7	2	5	0	0
564	0	0.847457627	33.47457627	8	5.472340426	0.213919942	1	6	1	5	3	4	2	0
565	66.666666667	0.613496933	6.634049798	6	0.224502124	1	4	1	8	2	4	0	0	0
566	0	0	0	2	4	0.71428574	0	1	0	0	1	1	0	0
567	100	45.45454545	2	6.36363364	-7.27 -02	1	1	0	3	2	3	0	0	0
568	0	37.555868545	1.8777934277	20	2.715909091	0.114403402	1	2	0	4	6	12	0	0
569	22.64150943	37.57225434	0	19	2.4779338843	0.103911816	0	2	0	2	6	15	0	0
570	46	48.7804878	9.756097561	17	2.834745763	0.174240394	1	2	2	5	7	16	0	0
571	65.93886463	11.25827815	4.6357461589	15	4.491803279	0.280873908	1	2	1	6	5	15	1	0
572	64.13043478	23.61809045	6.5326633317	14	3.859872611	0.136135222	1	2	1	3	6	16	1	0

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPTTax	ligoTax	rihoTax
573	6.818181818	14.34182609	25.2173913	14	4.86407767	9.18 -02	1	4	2	5	3	9	1	0	0
574	92.34693878	27.40740741	1.111111111	18	3.832061069	0.469089908	0	0	1	0	6	12	1	0	0
575	56	9.2	21.2	11	5.423255814	0.131951807	1	2	2	5	4	9	0	0	0
576	38.63636364	0.37593985	43.60902256	8	5.995934959	0.258731735	1	0	0	5	2	7	1	0	0
577	28.57142857	12.25165563	10.26490066	8	4.14900623	0.5952178432	0	1	3	3	6	2	0	0	0
578	83.33333333	6.896551724	0	10	3.93562515	0.554049565	0	0	0	0	4	10	0	0	0
579	86.04651163	5.394190871	8.298755187	12	4.337552743	0.419121715	1	0	0	3	4	11	0	0	0
580	76.36363636	17.10526316	24.34210526	6	5	0.143429766	1	1	1	5	2	7	0	0	0
581	93.75	0.854700855	29.0592906	6	5.264957265	0.351016799	1	0	1	2	2	4	0	0	0
582	71.12676056	34.38485804	14.195836	23	3.87245902	0.1525317635	1	2	2	4	5	18	1	0	0
583	88.69565217	49.53560372	6.811145511	14	3.07641196	0.219487337	1	1	2	4	7	13	0	0	0
584	87.23404255	28.03738318	4.672897196	13	2.47826087	0.177217422	1	2	0	5	5	10	0	0	0
585	77.02102703	17.41935484	26.4516129	18	5.018388624	0.106670842	1	1	2	7	8	17	3	0	0
586	71.42857143	25.78125	17.578125	18	4.301507538	0.10692402	1	1	1	6	7	16	1	0	0
587	27.27272727	15.95744681	7.978723404	16	3.86366364	0.426840369	1	1	3	4	11	0	0	0	0
588	49.05660377	27.23004695	2.34741784	12	3.433392264	0.130702454	0	0	2	0	4	11	0	0	0
589	0	23.17073171	3.658536585	9	1.884615385	0.465522433	1	1	0	1	2	7	1	0	0
590	0	48.80952381	13.0922381	10	3.088235294	0.103843947	1	4	0	2	3	7	2	0	0
591	0	42.85714286	42.85714286	2	5.571428571	0.1190471619	1	0	1	2	0	0	0	0	0
592	0	12.5	75	3	7	0.458333333	1	2	0	2	0	0	1	0	0
593	0	23.38709677	10.08024516	20	3.5	9.31 -02	1	4	0	2	6	17	0	0	0
594	0	23.38709677	10.08024516	20	3.5	9.31 -02	1	4	0	2	6	17	0	0	0
595	55.55555556	16.81034483	37.5	16	5.197399417	0.2070415828	1	1	0	6	5	13	0	0	0
596	87.5	14.11290323	14.51612903	12	4.274193548	0.20726133	1	2	0	2	4	8	0	0	0
597	51.42857143	10.60606061	24.62121212	16	4.823734789	0.204516649	1	1	0	4	5	12	0	0	0
598	7.142857143	47.12041885	11.5182461	19	3.29281768	0.136731882	1	2	0	5	7	16	0	0	0
599	50	17.6	41.6	8	5.711894407	0.126580645	1	3	2	2	4	8	0	0	0
600	77.77777778	8.33333333	24.58333333	12	5.121212121	8.96 -02	1	3	2	3	7	12	1	0	0
601	0	55.55555556	11.1111111	5	3.11111111	0.138888889	1	0	0	2	2	2	0	0	0
602	85.13513514	10.20408163	2.857142857	14	4.616666667	0.267045835	1	3	0	3	6	14	0	0	0
603	0	53.06120449	4	6.471502591	0.186231572	1	3	1	1	1	4	0	0	0	0
604	0	2	6	11	4.212851406	0.381975904	1	1	0	4	4	9	0	0	0
605	85	6.22406639	7.883817427	9	4.495412844	0.215006916	1	3	0	6	3	7	0	0	0
606	7.692307692	0	20	4	5.083333333	0.116666667	1	1	1	2	1	5	0	0	0
607	0	41.35338346	14.28571429	19	3.56	9.52 -02	1	3	0	2	6	13	0	0	0
608	0	14.88549618	53.81679389	8	6.089147287	0.28887719	1	2	1	4	3	4	2	0	0
609	92.59259259	22.14765101	17.44964443	13	4.693661972	0.119246153	1	5	0	3	5	11	1	0	0
610	0	21.00840336	10.08403361	16	4.096069869	0.240009928	1	3	0	3	5	11	1	0	0
611	0	47.92266728	3.2245452	15	3.01463146	0.13009993	1	3	0	3	6	12	0	0	0
612	9.090909091	13.06306306	4.954954955	12	3.816091954	0.171089642	1	3	0	2	4	7	1	0	0
613	57.14285714	5.063291139	10.126582281	11	4.487562189	0.234856612	1	3	0	4	4	9	0	0	0
614	0	15.6777961	19.0677961	16	4.69262927	0.105914172	1	4	0	8	3	10	1	0	0
615	57.5	13.82488479	20.73732719	18	4.66111111	0.134835296	1	2	0	6	6	13	0	0	0
616	33.822352941	19.50617284	7.654320988	18	3.627240143	0.198203154	1	2	0	7	5	15	0	0	0
617	68.08510638	13.15789474	25.6579474	8	5.673913043	0.180258815	1	2	0	2	3	10	0	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd_TriPct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	DiptTax	EphemLTax	EPPTax	ligoLTax	rihoTax
618	70.68965517	0.534759358	52.67319679	7	6.595744681	0.298949119	1	2	0	3	3	8	0	0
619	0	9.708737864	27.18446602	23	5.045454545	0.110774331	1	4	1	4	4	13	1	0
620	311.5260504	38.87640449	16.62921348	14	3.673031026	0.198866282	1	2	2	4	4	8	1	0
621	55.55555556	10.16260163	21.13621138	15	4.713615023	0.146374647	1	5	1	4	4	9	1	0
622	20	7.352941176	24.264470588	6	6.105231158	0.3526178649	3	2	2	2	1	4	1	0
623	0	18.36734694	27.04081633	7	4.968233968	0.194191523	1	3	3	2	3	5	0	0
624	33.33333333	3.587443946	20.62780269	12	4.941747573	0.313739749	1	3	0	6	4	9	0	0
625	60	2.051282051	17.43589744	8	5.029411765	0.150885541	1	3	0	3	4	8	0	0
626	3.968253968	8.518518519	18.88888889	7	4.851711027	0.236128322	1	4	2	5	3	6	0	0
627	0	17.25888325	38.5786802	10	5.567567568	0.111312545	1	2	3	2	4	8	0	0
628	37.5	29.93197279	21.76870748	10	4.748201439	0.157767216	0	2	1	1	5	8	0	0
629	0	16.666666667	0	5	3.6	0	0	0	1	0	1	3	0	0
630	100	30	10	6	4.289473684	9.94 -02	1	2	0	2	3	5	1	0
631	33.33333333	34.7826087	4.347826087	10	4	0.102766798	1	1	1	2	4	7	0	0
632	69.23076923	23.15789474	5.614035088	15	3.932806324	8.91 -02	0	4	0	1	7	13	0	0
633	77.5	19.90740741	3.240470741	17	3.942105263	9.66 -02	1	3	0	3	7	13	1	0
634	11.1111111	9.677419355	35.48383097	4	6.125	0.101075269	1	1	1	3	2	6	0	0
635	36.36363636	10.22727273	7.954545455	9	4.691176471	8.75 -02	1	3	0	3	4	9	0	0
636	60.86956522	10.82802548	4.458538726	12	4.310304828	0.105830475	1	2	0	3	6	9	0	0
637	78.84615385	41.9047619	9.047619048	17	2.592356688	0.138209159	1	3	0	3	5	15	1	0
638	38.291787234	5.587510271	4.6450518061	13	4.071907958	0.312766833	1	5	0	3	5	11	1	0
639	63.04347826	8.30769231	8.20307692308	10	4.52525525	0.149933523	1	2	0	2	5	8	1	0
640	34.61538462	42.01680672	1.260504202	24	2.330386661	0.178420735	1	1	1	8	4	15	0	0
641	38.46153846	2.830188679	24.52830189	13	5.006309148	0.459575819	1	1	3	8	2	7	2	0
642	70.992366461	20.23346304	8.949416342	20	4.2925	0.158894698	1	2	1	7	6	13	0	0
643	83.8150289	22.67080745	5.590062112	20	3.9963329	0.223737931	1	2	2	5	4	17	1	0
644	79.67479675	40.81196581	7.051282051	23	2.947204969	0.113096872	1	4	0	6	7	16	0	0
645	59.70149254	57.69230769	3.021978022	23	1.98229504	8.54 -02	1	3	0	6	8	18	1	0
646	33.33333333	55.51020408	6.530672245	18	2.316037736	9.99 -02	1	3	0	1	7	17	1	0
647	0	7.692307692	34.3894027	8	5.51627907	0.132496915	1	4	2	5	2	4	0	0
648	21.21212121	8.403361345	6.722669076	17	4.485714286	0.100592136	1	3	2	6	4	11	0	0
649	56.666666667	6.7799661017	8.813559322	11	4.390005922	0.210146431	1	3	1	3	8	0	0	0
650	85.47008547	17.66784452	19.4342898	22	4.777675714	0.174473097	1	1	1	4	7	17	2	0
651	52.94117647	4.195804196	52.4475245	13	6.350746269	0.238252975	1	1	1	6	5	12	3	0
652	94.44444444	19.23076923	23.9819045	15	4.938574939	0.2617173536	1	1	2	4	5	15	3	0
653	26.08695652	42.53393665	0.452448688	22	1	0.1304404148	1	2	0	4	7	18	0	0
654	0	3.019067797	10.794491525	10	4.3117647059	0.545231984	1	2	2	1	6	2	0	0
655	92.72727273	11.9047619	5.782312925	15	3.953703704	0.285574981	1	2	1	5	5	13	2	0
656	49.60474308	8.767772512	12.32227488	17	4.87677251	0.150388198	1	2	3	5	3	13	3	0
657	72.2826087	7.357859532	21.73913043	15	4.965517241	0.252573061	1	1	1	6	5	13	1	0
658	0	5.6557492355	18.571865	5	5.983899821	0.238059111	1	1	2	3	1	4	2	0
659	21.60493827	58.14814815	7.777777778	16	2.055	0.229574556	1	2	0	3	6	12	0	0
660	85.59322034	17.94019934	6.312292359	17	3.527950311	0.17986711	1	3	0	4	5	13	0	0
661	64	30.1242236	0.622118012	15	1.451612903	0.108647278	1	2	0	4	5	14	0	0
662	98.93048128	0.6555737705	8.196721311	9	5.391534392	0.212726488	1	2	2	6	10	1	0	0

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd	Tripct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr	olTax	Diptax	EphemTax	EPPTax	ligoTax	rihoTax
663	41.02564103	9.848484848	16.2878779	16	4.885869565	0.125964973	1	2	2	4	4	12	1	0	0
664	4.651162791	40.07936508	5.555555556	26	2.105633803	0.105166635	1	2	0	6	6	18	1	0	0
665	87.21272727	3.787878788	14	5.6444859813	0.12371817	1	2	1	5	4	13	2	0	0	
666	37.5	52.43243243	6.48646486	24	2.653333333	0.147179788	1	2	0	10	2	11	1	0	0
667	73.809523891	41.044477612	7.838820896	21	2.658823529	0.110011739	1	2	0	5	5	14	0	0	0
668	26.47058824	32.20338983	38.13595322	10	4.737373737	0.177024482	1	1	0	5	0	7	1	0	0
669	30	29.8245614	7.01754386	9	3.075	0.145363409	1	3	0	3	0	7	0	0	0
670	16.94915254	23.52941176	43.132549	19	5.23863364	0.176073132	1	5	0	6	5	14	1	0	0
671	21.05263158	13	41	19	5.588235294	0.19160804	1	5	0	5	1	11	1	0	0
672	17.64105882	4.901960784	18.62745098	14	4.829545455	0.169285157	1	3	0	6	4	11	0	0	0
673	9.302325581	5.063291139	24.05063291	16	5	0.231946956	1	2	0	6	5	13	1	0	0
674	14.28571429	5.586592179	19.55307263	18	4.820512821	0.13746783	1	2	0	6	7	15	0	0	0
675	61.11111111	18.18181818	8.556149733	14	4.576086957	0.153470186	1	2	0	5	4	9	1	0	0
676	8	64.11149826	0.348432056	22	1.74015748	0.117955216	1	2	0	4	5	16	0	0	0
677	4.6875	14.718614772	2.16452165	20	3.362204724	0.205797101	1	3	0	6	5	16	0	0	0
678	95.71428571	2.004454343	4.231652835	9	4.9549494955	0.561316815	1	1	0	2	4	11	2	0	0
679	100	42.73858921	2.90454315	16	2.692307692	0.172268326	1	2	0	6	4	14	0	0	0
680	97.77777778	2.464788732	4.929577465	9	4.509029271	0.359801921	1	1	0	4	1	7	1	0	0
681	53.62318841	14.53900709	4.609929078	20	4.259669922	0.149769062	1	1	0	3	5	15	2	0	0
682	59.21052632	30.54393305	3.765660377	22	3.4	0.102352238	1	2	0	4	6	18	0	0	0
683	86.48648649	5.860805861	5.128205128	8	4.648648649	0.28021978	1	2	0	5	2	6	2	0	0
684	59.23566879	7.11844068	5.76271864	9	4.556521739	0.160593348	1	1	0	4	1	7	0	0	0
685	59.81251969	7.509881423	11.85770751	10	4.871559633	0.135955832	1	1	0	3	2	8	1	0	0
686	41.86046512	13.5021097	6.751054852	16	3.87431694	0.226024458	1	2	0	4	4	12	1	0	0
687	27.10280374	25.0965251	0.388610386	19	3.226831852	0.156595133	0	2	0	5	6	16	0	0	0
688	62.31884058	9	10.666666667	16	4.694214876	0.156075808	1	1	0	1	7	4	13	0	0
689	63.07692308	33.03964758	5.726872247	24	3.074014074	9.01 -02	1	1	0	2	7	20	0	0	0
690	86.48648649	26.61290323	7.661290323	11	3.87804878	0.191393496	1	1	0	5	4	9	1	0	0
691	93.22033898	17.57188498	13.41853035	14	4.2666880129	0.177582535	1	1	0	5	4	9	1	0	0
692	50	16.666666667	3	4.166666667	6.67 -02	0	0	1	0	0	3	0	0	0	0
693	0	20.63492063	66.666666667	6	5.841299841	0.2421915	0	1	1	3	0	2	1	0	0
694	0	45.45454545	36.36333636	8	4.1	5.45 -02	1	1	0	3	0	2	0	0	0
695	0	24.60567823	28.8117708	29	4.495575221	0.194439095	1	2	0	7	6	20	0	0	0
696	5.607476636	28.87029289	10.041841	23	3.557077626	0.148236701	1	1	0	4	6	16	0	0	0
697	30	11.11111111	13.8047138	15	4.606677647	0.122076622	1	3	2	6	5	10	0	0	0
698	14.28571429	14.28571429	9.407665505	16	4.289285714	0.16941595	1	3	2	6	4	11	1	0	0
699	57.1969697	27.68	8.48	26	3.98341074	0.124025641	1	3	2	6	5	18	1	0	0
700	15	7.913669065	5.035971223	14	4.256704981	0.176479755	1	2	2	6	3	9	1	0	0
701	86.56716418	37.5	27.5862069	14	4.287037037	0.180595845	1	1	0	5	5	12	1	0	0
702	88.67924528	32.12121212	26.666666667	20	4.45090392	0.164892831	1	1	1	4	6	15	1	0	0
703	64.28571429	40.13605442	25.85034014	14	4.059701493	0.116578138	1	1	0	3	6	13	3	0	0
704	0	6.280193237	5.314009662	11	4.514851485	0.369870081	1	3	0	5	4	7	1	0	0
705	50	1.090909091	7.63633636	7	4.637362637	0.499694758	1	1	0	3	2	6	1	0	0
706	32.25806452	9.230769231	5.641025641	12	4.006410256	0.354269099	1	2	0	1	2	10	1	0	0
707	0	27.02702703	44.01544402	21	5.048552996	0.225883691	1	1	0	4	5	12	1	0	0

Appendix G: Metric Values of New exico Stream Samples

BsnSamplID	Hyd_TriPct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	DiptTax	EphemLTax	EPPTax	ligoLTax	rihoTax	
708	7.142857143	27.61904762	33.333333333	24	4.649639864	0.1158596	1	1	1	3	6	16	1	
709	62.5	34.1563786	16.87242798	15	3.7	0.1786221229	1	2	2	4	5	11	0	
710	37.6	20.58823529	28.32873337	25	4.640929597	0.102983176	1	2	2	5	6	19	1	
711	25.35211268	81.72043011	1.792114695	24	2.348623853	0.35290181	1	3	1	5	7	16	1	
712	40.81632653	43.18181818	17.613363636	18	3.969829518	0.105649351	1	0	0	5	8	16	0	
713	0	4.112554113	69.6969697	17	6.912844037	0.503591853	1	4	0	5	4	12	0	
714	8.695652174	18.13471503	48.963373057	17	5.78470255	0.277787497	1	1	0	4	6	11	0	
715	52.43902439	30.99415205	2.53411306	23	3.769230769	8.67 -02	1	3	1	1	10	19	1	
716	50.53163441	41.44486692	1.901140684	15	3.492125984	0.119757351	0	4	0	1	8	14	1	
717	31.25	31.84931507	25	15	4.440433213	0.131690439	1	2	0	3	7	14	1	
718	17.39130435	9.961685824	26.05343985	17	5.133858268	0.142263484	1	5	2	2	3	13	1	
719	68.19923372	17.53312946	10.29561672	25	4.537424605	9.96 -02	1	4	0	4	11	21	1	
720	60.29411765	24.12587413	10.83916084	20	4.325301205	0.072211999	1	4	0	3	8	15	1	
721	1.020408163	27.75510204	17.95918367	17	4.237704918	0.118467715	1	3	1	4	4	10	1	
722	36.92307692	25.58139535	13.953488337	18	4.405940594	6.95 -02	1	3	0	4	4	14	1	
723	79.06976744	36.18090452	21.6080402	13	4.622320158	0.111491462	1	1	0	4	6	13	1	
724	47.05882353	23.80952381	23.80952381	11	4.780269058	0.15053642	1	0	0	4	5	11	1	
725	36.73469388	29.03225806	5.069124424	15	3.714288714	0.150921659	0	1	0	3	4	11	1	
726	57.14285714	34.68468468	18.91891892	12	4.322429907	0.153479271	1	1	0	3	6	11	1	
727	15.2173913	0.128205128	31.53846154	6	5.845170455	0.217510944	1	3	0	6	2	8	0	
728	81.65137615	51.20405577	9.188846641	20	2.982701264	0.206880755	1	2	1	6	5	17	1	
729	100	4.528301887	51.20754717	6	6.275417698	0.207632933	1	2	3	3	4	11	1	
730	0	2.436647173	51.85185185	5	6.398655478	0.274665526	1	0	2	6	1	3	2	
731	79.28994083	0.718390805	27.72988506	6	6.1100991743	0.196460762	1	4	1	4	3	9	0	
732	8.10810108	21.77419355	0.806451613	17	3.275510204	0.140965119	1	2	0	5	3	11	0	
733	98.41628959	1.214128035	40.28697572	4	6.120133482	0.322849512	1	1	2	3	2	4	2	
734	34.14634146	16.513716147	20.18348624	5	4.660377358	0.1258911947	1	2	1	2	2	6	1	
735	41.17647059	35.85722012	10.43807463	11	3.658944659	0.155372976	1	4	0	4	5	9	1	
736	98.96907216	0	30.7486631	4	6.0216680217	0.128112859	1	3	2	3	2	5	2	
737	0	0.55555556	60	3	6.99444444	0.271942893	1	3	4	1	0	1	0	
738	100	66.66666667	12.5	2	3.5	0.445662174	0	0	1	0	2	3	1	
739	83.33333333	46.875	18.75	5	3.9	0.219758065	1	1	1	3	5	0	0	
740	0	0	0	0	0	0	0	0	0	0	0	0	0	
741	100	0	10.52631579	2	5.118421053	0.205123736	1	0	0	2	2	3	0	
742	26.31578947	0	2.312138728	1	5.784688995	0.377944424	1	2	0	3	0	2	1	
743	11.16751269	7.106598985	6	4.437106918	0.121284923	1	3	2	2	4	9	0	0	
744	0	0.076045627	13.84030418	1	6.274174487	0.757118161	1	0	3	0	1	1	0	
745	15.38461538	18.8976378	0	10	2.922077922	0.211348581	0	1	0	1	2	9	0	
746	99.17355372	0	6.06934162	5	4.456521739	0.359319762	0	2	0	4	4	7	1	
747	83.33333333	46.875	18.75	5	4.572375691	16.02209945	8	4.57455635	0.271639042	1	0	2	6	1
748	0	0	0	0	45.64408042	21	5.827689243	0.239520925	1	2	5	4	16	
749	0	100	0	10.52631579	9	6.33825294	0.126465139	1	1	4	3	12	1	
750	61.02941176	1.826484018	12.2146187	12	5.804233744	0.405793558	1	1	0	5	3	12	1	
751	44.81132075	11.16751269	7.106598985	6	4.437106918	0.121284923	1	3	2	2	4	9	0	
752	0	0	0	18.8976378	0	6.274174487	0.757118161	1	0	3	0	1	1	0
753	15.38461538	18.8976378	0	10	2.922077922	0.211348581	0	1	0	1	2	9	0	
754	0	2.312138728	6.06934162	5	4.456521739	0.359319762	0	2	0	4	4	7	1	
755	95	4.972375691	16.02209945	8	4.57455635	0.271639042	1	0	1	2	6	1	0	
756	14.2384106	18.24274013	45.64408042	21	5.827689243	0.239520925	1	2	2	5	4	16	0	
757	69.76744186	2.568218299	22.7929374	9	6.33825294	0.126465139	1	1	1	4	3	12	1	
758	61.02941176	1.826484018	12.2146187	12	5.804233744	0.405793558	1	1	0	5	3	12	1	
759	0	0	65	1	7.15512414	0.272316384	1	1	1	4	1	1	0	
760	92.90780142	0	2.4888832163	5	4.496463023	0.244934436	1	3	1	3	7	0	0	

Appendix G: etric alues of New exico Stream Samples

BsnSamplID	Hyd_TriPct	IntolPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr_oLTax	Diptax	EphemLTax	EPPTax	ligoLTax	rihoLTax
761	64.1350211	0.066689632	4.81603512	8	4.326671261	0.545662695	1	2	1	3	3	8	1
762	96.42857143	6.887052342	23.14049587	5	5.246458924	0.183309742	1	1	3	3	3	5	1
763	99.04153355	3.287461774	1.834882385	12	4.299479167	0.337155378	1	2	2	4	4	11	1
764	99.14570479	0.427631579	25.855626316	7	5.768015795	0.531751269	1	2	2	4	3	8	0
765	32.62411348	11.493535036	9.489851095	12	4.645238095	8.52 -02	1	4	1	3	3	14	2
766	7.142857143	8.8091354	19.24959215	15	4.784232365	0.110295968	1	3	1	7	6	10	2
767	0	0.278422274	3.294963573	5	6.881355932	0.862625623	1	1	3	1	1	3	1
768	56.140350888	15	22.24137931	14	4.945386064	8.83 -02	1	2	2	6	4	14	0
769	32.291666667	20.28639618	28.40095465	20	4.807843137	0.135227415	1	2	0	6	5	15	1
770	45	27.47252747	17.03226703	23	3.92920354	0.111590067	1	1	1	4	4	15	1
771	2.8366879433	69.33744222	0.154083205	18	0.99255121	0.215207632	1	2	0	5	5	12	0
772	92.85714286	6.8966551724	6.8966551724	5	4.87203023	0.376904571	1	1	0	4	3	5	1
773	97.75280899	0.469070654	61.330398798	6	6.805286344	0.424495014	1	2	1	4	3	6	0
774	0	0	0	0	0	0	0	0	0	0	0	0	0
775	0	1.428571429	41.42857143	6	5.871428571	0.254244306	1	0	0	3	3	4	0
776	2.564102564	33.7962963	3.9353185185	27	2.919038851	0.113474263	1	3	0	8	6	19	0
777	100	0	19.73684211	2	5.513157895	0.232280702	1	2	0	2	1	2	0
778	36.717141791	36.87635575	6.07372711	11	3.973626374	0.197541864	1	4	0	2	1	9	0
779	0	2.322581395	10.4651628	5	4.744186047	0.222708618	1	3	1	2	2	3	0
780	15.2173913	14.453125	11.52434375	11	4.2	0.33067056	1	3	0	4	2	8	3
781	22.22222222	15.65995526	23.0420559	15	4.78030303	0.124988714	1	3	0	4	2	10	1
782	100	3.921568627	11.76470588	6	4.444444444	0.180392157	1	1	0	1	4	6	2
783	0	56.20567376	1	7.112751459	0.283687943	1	2	0	2	2	0	0	
784	0	0.290697674	63.08139535	2	7.133136095	0.436487219	1	1	0	2	1	2	0
785	96.45390071	1.875	0.9375	5	4.5125	0.418142633	1	1	0	2	1	3	1
786	0	0	95.43147208	0	7.695431472	0.440536621	1	0	0	2	0	0	2
787	0	40	0	2	3.333333333	0.2	0	1	0	0	1	0	0
788	84.44444444	2.396313364	35.76036866	11	6.819376026	0.23248933	1	2	1	4	2	8	1
789	0	0	97.64323446	1	7.913449817	0.805070316	1	1	0	6	1	1	2
790	5.555555556	6.36550308	15.8110883	6	5.730452675	0.283367556	1	2	2	6	1	5	2
791	90.691767442	19.19561243	28.33638026	14	5.205504587	0.145642901	1	1	1	10	2	6	0
792	20.1754386	4.964539007	16.31205674	10	4.833333333	0.112970394	1	4	2	4	10	1	0
793	66.66666667	4.854368932	18.44660194	12	4.872928177	0.210182335	1	2	1	4	3	12	1
794	73.30316742	9.395973154	7.861936721	18	4.831447964	0.151918558	1	4	3	4	5	13	1
795	26.31578947	0	20.6895517	2	5.290909091	0.1784634	1	0	0	3	1	0	0
796	0	4.081632653	34.69387755	6	6.289885072	9.49 -02	1	3	3	3	4	1	0
797	0	24.48979592	38.7755102	2	4.916666667	0.131802721	1	1	2	2	2	0	0
798	13.33333333	1.935483871	12.2586452	6	5.39253364	0.156514453	1	2	1	2	1	7	0
799	100	0	4.912280702	3	5.70737073	0.332320237	1	2	0	3	3	4	1
800	0	81.69944641	0	8	6.69989285	0	0	1	0	0	0	0	0
801	54.45544554	0	2.631578947	4	5.412587413	0.184071289	1	4	1	2	1	6	0
802	100	0	8.870967742	0	6.176470588	0.735378967	1	2	0	2	1	2	1
803	0	11.9047619	18.4981685	15	5.299771167	0.156581645	1	2	1	6	6	9	1
804	0	39.81693364	10.75514874	13	3.473684211	0.177261562	1	2	1	5	1	6	1
805	0	5.333333333	23.66666667	6	6.208053691	0.475830546	1	2	0	5	2	3	0

Appendix G: Values of New Mexico Stream Samples

BnsSamplID	Hyd TriPct	IntolPct	TolerPct	BeckBI	HBI	D	ChiroTax	ColeoTax	Cr olTax	Diptax	EphemTax	EPTTax	ligoTax	rihoTax
814	0	0.862068966	51.72413793	4	6.55941366	0.273249739	1	2	1	4	1	2	0	0
815	0	14.0625	28.64533333	13	5.433013478	0.170211353	1	2	1	10	1	5	0	0
816	0	0	0	0	0	0	0	0	0	0	0	0	0	0
817	0	40.454545	41.818182	7	5.163636364	0.26430054	1	3	0	5	2	4	0	0
818	100	0	8.8709267742	0	6.176410588	0.735378967	1	2	0	2	1	2	1	0

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
23	1	0	0	7	2	0.5208333333	0	98.958333333	0.5208333333	0	1	0	5	1
24	7	0	0	22	4	5.925925926	0	64.65608466	13.333333333	1.058201058	2	0	10	4
25	6	0	0	20	5	6.589147287	0	90.11627907	1.937984496	1.162790698	2	0	9	6
26	2	0	0	13	4	5.066079295	0	83.92070485	7.04845815	2.42207489	1	0	8	2
27	9	1	0	32	7	3.512396694	0.206611757	39.25619835	7.1280919174	33.67768895	3	1	18	5
28	8	0	0	32	8	10.25896414	0	72.21115538	4.8800470888	11.25498008	3	0	18	6
29	2	0	0	14	2	10.69958848	0.4111522634	78.18930041	1.646090535	9.053497942	3	1	6	3
30	3	0	0	23	8	4.419191919	1.136363636	80.177676768	0.378787879	13.888888889	4	3	12	2
31	3	0	0	19	5	41.83673469	0.170068027	53.91156463	2.721088435	1.360544218	3	1	9	4
32	4	0	0	23	4	17.64705882	1.680672269	76.47058824	1.680672269	2.521008403	4	1	12	3
33	4	0	0	26	6	14.38450899	0	74.55048409	2.4896266556	5.532053458	2	0	14	5
34	4	0	0	25	4	14.06779661	0	70.6779661	0.847457627	13.72881356	4	0	15	1
35	5	0	0	21	5	11.96911197	2.123552124	77.7992278	0.965259965	5.791505792	2	1	11	3
36	3	0	0	21	5	16.5374677	0.904392765	74.93540052	0.775193798	6.847545222	6	1	12	1
37	4	0	0	26	9	7.383966245	2.320675105	75.73839662	2.109704641	10.33755274	4	2	14	2
38	2	0	0	20	4	2.173913043	1.505016722	81.77257525	2.675585284	11.20401338	5	1	10	2
39	6	0	0	29	6	2.371541502	0	89.06455863	4.479578393	1.581027668	4	0	18	2
40	1	0	0	18	6	20.90909091	1.818181818	69.09090909	2.727272727	2.727272727	1	2	10	2
41	1	0	0	22	5	14.65517241	27.5862069	46.55172414	5.172413793	3.017241379	2	3	11	3
42	2	0	0	16	4	25.05966587	49.1646778	14.31980907	6.682577566	3.102625298	2	1	9	1
43	1	0	0	22	6	27.38095238	44.84126984	21.62698413	2.777777778	2.182539683	2	1	13	2
44	0	0	0	14	2	79.94858612	1.542416452	14.91002571	0.257069409	3.341002314	2	1	9	1
45	0	0	0	13	4	24.19354839	7.526688172	55.377634409	0	12.3655914	3	1	7	0
46	4	0	0	19	6	21.16327961	0.770847933	55.29081919	0.770847933	22.00420463	3	1	13	1
47	1	0	0	26	10	41.48606811	2.167182663	40.55727554	0.619195046	6.191950464	4	3	14	1
48	1	0	0	27	11	34.49367089	2.848101266	49.6835443	0.31645596	4.113924051	4	3	15	1
49	3	0	0	17	4	15.30054645	0	66.666666667	9.289617486	4.918032787	3	0	9	3
50	0	0	0	6	1	39.47368421	0	18.42105263	0	42.10526316	3	0	2	0
51	0	0	0	8	2	14.28571429	3.571428571	41.07142857	0	41.07142857	2	1	4	0
52	2	0	0	12	3	8.771929825	0	42.10526316	0	49.1280702	3	0	7	0
53	1	0	0	2	0	33.33333333	0	66.666666667	0	1	0	1	0	
54	1	0	0	21	3	6.034482759	2.5886206897	43.96551724	12.93103448	31.03448276	2	2	10	2
55	3	0	0	25	5	11.9760479	0.598802395	51.79640719	1.796407186	20.05988024	5	1	14	2
56	2	0	0	24	8	21.885532189	1.01010101	50.16835017	5.723905724	20.2020202	4	1	13	4
57	4	0	0	21	4	10.97046414	0.8443881857	56.11814346	4.219409283	13.080168718	2	1	14	2
58	1	0	0	9	1	0	2.43902439	26.01626016	3.25203352	68.2968293	0	1	4	2
59	2	0	0	12	1	1.910828025	1.910828025	46.49681529	5.732484076	41.40127389	2	1	2	3
60	2	0	0	14	2	5.314009662	0.483091787	5.797101449	41.54589372	22.70531401	1	1	2	5
61	2	0	0	17	2	6.818181818	0	9.659090909	56.25	22.7272723	4	0	4	4
62	1	0	0	11	1	22.44891959	1.020408163	0	14.79591837	30.10204082	2	1	0	3
63	1	0	0	7	2	0.392156863	0	25.09803922	4.509803922	70	1	0	3	
64	1	0	0	8	2	3.278688525	1.639344262	24.59016393	45.90163934	24.59016393	1	1	3	2
65	1	0	0	18	3	10	4	38	12	33.33333333	2	1	8	2
66	0	0	0	18	4	34.01759531	0.879765396	48.68035191	9.6744868035	1	2	11	2	
67	2	0	0	20	4	10.10928962	0.546448087	52.73224044	15.30054645	21.31147541	2	1	13	2

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SprwIPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SprwITax	
68	2	0	0	16	4	3.7781512605	0.840336134	61.34453182	9.243697479	24.78991597	1	1	10	2	
69	1	0	0	22	6	20.84690554	0.6514465798	47.88273616	7.166123779	22.80130293	2	1	13	4	
70	1	0	0	25	3	5.263157895	3.684210526	52.10526316	13.15789474	25.26315789	3	3	12	3	
71	1	0	0	16	3	10.60606061	5.303030303	47.72721273	9.0909091	18.18181818	3	1	6	2	
72	0	0	0	17	4	1.494853713	2.23889597	81.342392358	1.492537313	13.43283582	1	1	12	1	
73	0	0	0	24	7	0.448430493	1.569506726	79.59641256	1.569506726	16.59192825	1	2	14	3	
74	2	0	0	22	7	36.05150215	24.78540773	30.364806876	6.115879328	1.609442056	3	2	12	2	
75	0	0	0	19	3	7.142857143	1.785714286	67.85714286	13.39285714	8.928571429	1	1	11	2	
76	0	0	0	19	4	5.459770115	1.1494228287	77.29885057	0.574712644	14.94252874	1	1	12	1	
77	3	0	0	27	8	20.523138883	1.006036217	51.30784708	23.1388333	3.621730382	2	2	16	4	
78	2	0	0	17	5	20.06688963	10.03344482	54.51505017	6.3545451505	1.337792642	1	3	7	2	
79	7	0	0	27	7	4.87804878	0	48.17073171	17.07317073	28.04878049	4	0	17	4	
80	7	0	0	29	9	11.78571429	1.071428571	64.28571429	0.714285714	21.78571429	3	1	20	2	
81	3	0	0	22	5	14.20765027	9.2899617486	53.55191257	2.18579235	20.76502732	5	1	12	3	
82	2	0	0	23	7	25.75737576	20.64393939	39.58333333	2.083333333	10.41666667	2	2	13	3	
83	2	0	0	18	3	20.71428571	0	40	5	31.42857143	4	0	9	2	
84	2	0	0	20	5	26.67814114	3.786574871	27.88296041	0.344234079	19.96557659	3	1	12	1	
85	7	0	0	27	6	15.96467391	11.61684783	23.91304348	16.50815217	10.9375	3	1	15	3	
86	0	0	0	27	11	26.43020595	0	50.68649886	6.750570282	5.148741419	4	0	16	4	
87	5	0	0	30	7	10.99163668	0.597371565	48.62604054	17.08482676	6.81035842	4	1	14	6	
88	5	0	0	27	7	5.838041431	3.578154426	53.8606403	17.89077213	12.61770245	2	1	14	6	
89	5	0	0	28	7	34.1503268	0	48.03921569	11.76470588	5.0692135947	3	0	16	5	
90	5	0	0	28	8	12.2184952	0.857449089	71.918541234	10.28983907	3.965702036	4	1	14	6	
91	5	0	0	28	8	8.93970894	0	60.29106029	23.90852391	6.860706861	4	0	15	8	
92	3	0	0	26	8	11.12299465	0.213903743	64.38502674	14.11764706	5.77540107	3	1	12	5	
93	5	0	0	26	5	42.69480519	0	49.67532468	4.383116883	2.435064935	3	0	12	6	
94	5	0	0	28	6	18.29347123	0.338747447	35.48804137	41.11182935	0.969618617	4	1	11	7	
95	4	0	0	23	6	14.71861472	7.792207792	58.87445887	10.38961039	6.060606061	3	2	10	5	
96	3	0	0	21	5	27.05882353	5.588235294	48.52941176	10.88235294	5.294117647	2	1	8	7	
97	4	1	0	18	4	23.99193548	0	62.09677149	2.2177471935	10.88709677	1	0	10	4	
98	3	0	0	17	2	6.056338028	0	68.02816901	2.394366197	21.12676056	4	0	9	2	
99	5	1	0	25	7	6.177156177	0.233100233	70.3962704	14.91841492	1.282051282	2	1	15	4	
100	4	0	0	19	2	61.27098321	0	28.177745803	3.956834532	6.474820144	2	0	9	5	
101	1	0	0	17	5	10.62801932	3.88647343	76.32850242	6.763285024	1.93236715	3	3	7	2	
102	1	0	0	17	2	2.079722704	8.67	-02	94.5407279	1.733102253	1.213171577	3	1	9	2
103	0	0	0	15	4	5.471956224	0.683994528	93.43365253	0.273597811	0	2	9	1		
104	0	0	0	15	5	26.60944206	2.789699571	69.95708155	0.429184549	0	2	1	10	1	
105	1	0	0	15	2	10.55276382	1.507537688	61.30655266	7.53768442	19.09547739	3	2	6	3	
106	6	0	0	29	5	38.02816901	1.006036217	30.78470825	4.225352113	5.030181087	4	1	13	6	
107	7	0	0	35	8	22.31012658	2.848101266	40.66455696	6.170886076	4.113924051	5	1	16	9	
108	9	0	0	34	7	17.76798825	0	39.94126285	14.68428781	9.691629956	4	0	17	10	
109	6	0	0	29	6	37.6580173	0.931470393	38.1237525	7.850964737	10.04657552	4	1	11	6	
110	7	0	0	26	4	31.90184049	0.920245399	39.263803368	4.601226694	0.613496333	4	1	9	8	
111	5	0	0	28	4	28.93518519	0.462962963	28.7037037	5.555555556	4.976851852	3	1	12	5	
112	2	0	0	18	2	67.59776536	5.586592179	2.793296089	1.675977654	5	2	3	3		

Appendix G: **etrie** values of New Mexico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax		
113	9	0	0	33	5	23.22097378	9.36	-02	55.61797753	3.83895311	6.741573034	3	1	18	5	
114	5	0	0	24	5	58.54519774	0	0	28.81355932	10.200564972	10.66384181	2	0	12	5	
115	1	0	0	32	10	33.1738437	0	0	34.92822967	16.10845295	8.452950558	6	0	15	6	
116	6	0	0	29	6	28.03030303	7.58	-02	37.87878788	0.9848484885	1.59090991	3	1	17	2	
117	5	0	0	32	7	13.89047619	0.198412698	0	58.13492063	12.89868254	3.76984127	4	1	17	5	
118	1	0	0	9	0	33.33333333	0	0	50	14.28571429	0	3	0	4	1	
119	2	0	0	14	4	1.559020045	1.113585746	0	94.43207127	0.222717149	2.672605791	4	1	7	1	
120	1	0	0	10	2	17.1875	25	25	31.25	0	2	2	3	2		
121	1	0	0	10	4	11.40350877	0	0	73.68421053	0	14.9122807	1	0	8	0	
122	3	0	0	15	4	2.92880293	1.673640167	0	82.84518828	0	11.71548117	2	1	9	0	
123	4	0	0	28	5	9.488224638	0	0	76.24547101	3.872282609	10.0905797	2	0	19	3	
124	1	0	0	18	4	1.843317792	0	0	82.48847926	0.460829493	13.82488479	3	0	12	1	
125	3	0	0	17	3	5.555555556	0	0	69.84126984	2.380952381	16.66666667	2	0	11	2	
126	1	0	0	22	8	20.35175879	0	0	27.63819095	27.38693467	20.60301508	4	0	13	2	
127	2	0	0	18	4	13.91752577	0.515463918	0	75.77319588	1.030929835	7.731958763	2	1	11	2	
128	2	0	0	19	3	18.75	0	0	54.54545455	2.840909091	1.704545455	4	0	11	2	
129	1	0	0	19	4	4.462474645	0.60851927	0	74.44219067	1.21703854	16.22718053	3	1	11	2	
130	1	0	0	20	4	7.885304659	0	0	69.89247312	1.433691756	20.78853047	3	0	11	4	
131	2	0	0	11	2	9.543568465	3.3319502075	0	4.564315353	45.02074689	37.55186722	2	1	3	4	
132	8	0	0	27	5	23.67346939	0.204081633	0	50	10.40816327	14.28571429	4	1	15	4	
133	7	0	0	27	4	18.28978622	0	0	46.31828979	6.888361045	23.27790974	4	0	16	3	
134	6	0	0	21	2	24.08626756	0	0	29.09698997	12.7090301	25.75250836	2	0	12	4	
135	5	0	0	25	4	9.756097561	0.304878049	0	47.25609756	7.317073171	21.95121951	3	1	13	4	
136	6	0	0	20	3	14.70588235	0	0	55.88235294	17.32026144	11.76470588	2	0	9	5	
137	8	0	0	31	7	26.19760479	0	0	46.10778443	2.99401976	19.31137725	3	0	19	4	
138	2	0	0	22	5	11.61616162	0	0	38.88888889	1.01010101	47.22222222	2	0	14	2	
139	4	0	0	27	4	8.659217877	0	0	58.10055886	8.10055886	19.55307263	3	0	17	3	
140	4	0	0	29	5	9.454583014	0	0	65.77266922	4.086845466	9.961685824	2	0	18	4	
141	0	0	0	18	6	2.339181287	0	0	64.9122807	19.88304094	11.69590643	2	0	10	1	
142	0	0	0	11	1	0	7.692307692	0	0	38.46153846	21.79487179	24.35897436	0	1	7	1
143	1	0	0	13	2	1.52284264	0	0	90.52453469	4.737732557	3.045685279	1	0	7	2	
144	0	0	0	5	0	37.2246696	0	0	41.18942731	0	21.58590308	1	0	3	0	
145	1	0	0	9	1	7.792207792	0	0	74.02597403	0.432900433	17.74891775	2	0	5	1	
146	1	0	0	10	2	7.125307125	0	0	38.57493857	53.56265336	0.737100737	2	0	5	2	
147	1	0	0	12	2	20	0	0	22.59259259	37.77777778	19.62962963	1	0	7	3	
148	1	0	0	8	1	10.52631579	0	0	52.63157895	31.57894137	5.263157895	1	0	5	1	
149	0	0	0	13	3	12.77705346	1.173402868	0	80.70404172	3.129074316	2.086049544	2	1	7	1	
150	4	0	0	19	6	4.504504505	0	0	55.85585886	0.45045045	37.38738739	3	0	13	1	
151	5	0	0	23	5	10.48513302	0	0	42.87794992	41.15805947	3	0	14	2		
152	5	0	0	27	6	14.293255	0.659824047	0	52.71266997	7.404692082	12.75659824	2	1	15	4	
153	4	0	0	18	3	24.58893871	0	0	30.41855513	36.77130043	8.146487294	2	0	11	1	
154	5	0	0	28	8	29.19293821	0	0	30.13871375	0.315258512	4.2244646061	3	0	15	3	
155	4	0	0	26	8	15.7394497	0	0	43.07692308	14.79289941	15.50295888	4	0	14	3	
156	4	0	0	33	9	14.30990686	0	0	43.09906859	11.6850127	17.52751905	5	0	17	4	
157	3	0	0	27	6	13.29987453	0	0	47.30238394	12.92346299	11.04140527	5	0	12	3	

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwPct	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax	
158	1	0	0	5	0	0	66.6666666667	0	0	33.3333333333	0	0	4	0	
159	2	0	0	15	5	1.7777777778	0	88.8888888889	2.2222222222	2	0	8	2	0	
160	5	0	0	24	5	4.516129032	0	69.67741935	3.225806452	17.41935484	6	0	11	2	
161	3	0	0	15	3	2.272727273	0	2.272727273	6.25	2	0	7	2	0	
162	2	1	0	11	2	0	87.40740741	2.962962963	5.925925926	0	0	6	1	0	
163	4	0	0	28	7	10.4747509	0	57.49811605	9.419743783	10.77618889	3	0	15	4	0
164	4	0	0	29	7	11.51465126	0.660338423	66.85926537	3.7144036332	11.2257532	4	1	14	3	0
165	2	0	0	20	4	25.129533368	0	15.28497409	3.10880829	5.440414508	5	0	8	3	0
166	7	0	0	30	3	9.962406015	0	57.70676692	7.142857143	11.09022556	4	0	16	3	0
167	2	0	0	24	8	27.39726027	0.228310502	33.78995434	7.305936073	12.55707763	6	1	10	3	0
168	7	0	0	30	5	14.88933602	0	42.25352113	2.816901408	3.822937626	5	0	19	3	0
169	6	0	0	27	6	8.091286307	0	45.02074689	25.93360996	15.56016598	2	0	15	4	0
170	6	0	0	31	6	24.24892704	0	34.65665236	7.296137339	5.686695279	3	0	18	5	0
171	7	0	0	33	9	72.21458047	0.687757909	14.85557084	7.565337001	3.576341128	4	2	16	5	0
172	7	0	0	22	5	5.759162304	0	83.2460733	6.806282723	3.141361257	2	0	12	5	0
173	7	0	0	22	3	2.074688797	0	76.34854772	8.713692946	6.22406639	5	0	12	3	0
174	1	0	0	7	1	13.01369863	0	83.56164384	0	2.054794521	1	0	3	0	0
175	0	0	0	8	2	36.03603604	0.900900901	27.92792793	3.603603604	29.72972973	1	1	3	1	0
176	1	0	0	8	1	2.279202279	0	40.17094017	0	57.54985755	1	0	5	0	0
177	2	0	0	14	3	9.900990099	0	82.67326733	0.495049505	6.683168317	4	0	6	1	0
178	2	0	0	19	3	10.98562217	0.246305419	53.20197044	2.709359606	28.07881773	3	1	9	2	0
179	5	0	0	25	3	5.769239769	0	69.23076923	4.230769231	7.307692398	3	0	15	3	0
180	2	0	0	23	3	11.40529532	0	28.51323892	2.036659878	51.12016293	5	0	9	4	0
183	8	0	0	31	6	13.3992873	0	52.699978402	6.695464363	5.831533477	4	0	20	3	0
184	5	0	0	26	7	7.926829268	6.707317073	60.36585336	11.2804878	3.658536585	2	1	15	4	0
185	2	0	0	18	5	89.44723618	0	8.291457286	2.261306533	0	5	0	9	4	0
186	4	0	0	23	7	44.4606414	0	31.19533328	0.583090379	7.288629738	2	0	16	2	0
187	4	0	0	24	7	4.761904762	0	61.25541126	0.432900433	3.246753247	3	0	17	2	0
188	1	0	0	14	4	0.680272109	1.360544218	60.20408163	0.680272109	22.10884354	1	2	8	1	0
189	1	0	0	18	7	3.260869565	1.08695522	48.91304348	2.173913043	43.47826087	3	1	10	2	0
190	2	0	0	18	4	0	69.5	5.5	23.5	1	0	11	3	0	
191	6	0	0	22	4	12.73712737	0	58.80758808	1.89701897	23.03523035	2	0	14	3	0
192	6	0	0	17	4	8.148148148	1.481481481	61.85185185	11.2962963	13.14814815	1	1	8	4	0
193	4	0	0	22	6	14.47028424	0	59.43152455	1.033591731	22.73901809	1	0	16	3	0
194	3	0	0	21	6	19.85111663	0.744416873	37.46898263	2.481389578	33.99503722	1	1	13	2	0
195	4	0	0	32	6	10.14873141	21.87226597	29.57130359	4.374453193	30.62117235	5	1	14	7	0
196	5	0	0	29	7	4.64625132	4.64625132	61.77402323	3.590285111	22.7032735	4	1	17	4	0
197	6	0	0	26	5	6.028368794	0	68.43971631	4.609929078	20.56737589	3	0	16	4	0
198	3	0	0	15	1	16	0	4.666666667	53.33333333	4	0	4	3	0	
199	7	0	0	22	6	42.52491694	0.830564784	32.89036545	1.993355482	17.60797342	1	2	12	5	0
200	5	0	0	27	3	21.50259067	0	48.1865285	8.678756477	19.68911917	3	0	13	5	0
201	6	0	0	24	3	2.197802198	0	78.46153846	0.21978022	9.89010989	4	0	14	1	0
202	2	0	0	16	3	7.766990291	0.970873786	72.33009709	5.82524718	10.19417416	3	1	5	2	0
203	2	0	0	17	3	6.25	2.4662121212	83.52272727	4.734848485	1.136363636	1	1	10	1	0
204	2	0	0	20	5	11.35135135	0	77.02702703	0.27027027	8.648648649	2	0	12	1	0

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax	
205	2	0	0	14	4	3.562340967	0	80.15267176	10.43256997	3.816793893	1	0	7	3
206	2	0	0	22	4	8.819714656	0	46.30350195	1.426718547	40.07782101	3	0	10	3
207	1	0	0	21	5	10.54313099	0	44.5686901	7.348242812	30.51118211	2	0	12	3
208	1	0	0	8	0	94.47236181	0	2.261306533	0.502521563	2.261306533	2	0	2	1
209	6	0	0	31	7	25.1497006	0.133067199	43.51297405	0.665335995	2.46174318	3	2	17	3
210	1	0	0	17	4	5.0561719775	0	75.84269663	1.966292135	9.831460674	2	0	8	2
211	2	0	0	19	6	15.19337017	0	62.98342541	1.104972316	14.91712707	3	0	8	2
212	0	0	0	13	2	14.41441441	0	43.24324324	7.207207207	34.23423423	3	0	3	3
213	0	0	0	14	4	26.34730539	2.994011976	65.26946108	0	1.19760479	2	1	7	0
214	3	0	0	23	6	6.451612903	1.075268817	49.24731183	3.440866215	23.65591398	3	1	14	2
215	2	0	0	15	3	15.43624161	0	75	0	4.026845638	2	0	8	0
216	0	0	0	15	6	24.7826087	1.739130435	63.04347826	1.304347826	2.608695652	2	1	7	2
217	1	0	0	19	7	4.063860668	0.725689405	54.86211901	1.015965167	33.67198839	3	1	8	3
218	0	0	0	16	3	4.946236559	0.430101527	51.61290323	1.505373444	33.33333333	3	1	6	1
219	6	0	0	32	8	22.42798354	0.617283951	53.49794239	4.320987654	3.909465021	3	2	15	6
220	3	0	0	28	4	16.01731602	9.956709957	30.73593074	5.194805195	4.761904762	5	2	11	3
221	6	0	0	27	4	18.80597015	0.149253731	36.86567164	20.89552239	4.626865672	3	1	15	3
222	1	0	0	31	10	8.345642541	1.477104874	71.41802068	3.618906942	3.914327917	6	3	13	3
223	6	0	0	31	11	14.48763251	1.413427562	56.65458881	1.884570082	0.11778563	4	2	19	3
224	7	0	0	26	7	4.229607251	0	64.652556798	24.7734139	4.229607251	4	0	14	5
225	6	0	0	22	3	6.711409396	0	61.74496644	26.84563758	4.697986577	5	0	10	5
226	6	0	0	25	5	21.34228188	16.151006711	40	13.15436242	2.684563758	3	1	10	6
227	5	0	0	29	9	11.403350877	0	47.222222222	14.912807	3.07175329	2	0	17	3
228	4	0	0	22	4	7.048008172	0	56.58835546	2.75791241	21.04187947	3	0	10	4
229	3	0	0	26	6	28.18035427	2.093397746	18.03542673	20.6119626	24.15458937	3	2	11	4
230	6	0	0	19	3	12.67361111	3.29861111	60.06944444	13.88883889	6.25	3	1	8	3
231	6	0	0	25	7	5.974025974	0	76.36363636	7.792207792	9.61038961	3	0	16	3
232	6	0	0	35	10	6.06741573	0	73.93258427	5.842696629	7.865168539	5	0	19	6
233	8	0	0	35	9	4.227405248	0	69.82507289	10.05830904	3.935860058	2	0	18	6
234	0	0	0	11	3	4.424778761	2.654867257	76.991116044	2.654867257	9.734513274	2	2	4	1
235	1	0	0	7	1	12.5	0	25	4.166666667	58.33333333	1	0	3	1
236	5	0	0	21	5	9.462365591	0	61.72043011	11.61290323	13.76344086	3	0	12	2
237	8	0	0	31	6	3.790849673	0.130718954	78.43137255	7.581699346	3.921568627	3	1	17	3
238	9	0	0	35	8	15.1734104	0.144508671	57.22543353	16.90751445	6.791907514	5	1	18	5
239	3	0	0	14	0	16.54501217	0	57.66423358	2.919708029	20.92457421	3	0	5	2
240	4	0	0	24	4	24.51456311	6.553398058	44.90291262	2.427184466	10.67961165	4	1	13	2
241	1	0	0	24	6	11.23853211	8.486238532	23.62385321	12.1559533	37.3853211	5	1	10	3
242	6	0	0	29	4	12.82527881	15.79925651	33.08550186	0.557620818	5.204460967	5	1	15	2
243	4	0	0	25	5	24.6268567	4.850746269	45.52238806	5.59701425	7.462686567	3	1	14	4
244	5	0	0	25	7	8.138238573	0	61.09253066	5.79710449	18.39464883	3	0	16	3
245	6	0	0	26	7	8.147321429	0	61.04910714	5.803571429	18.41517857	3	0	17	3
246	3	0	0	22	4	8.138238573	0	43.83561644	11.50684932	4.657534247	5	0	10	5
247	4	0	0	13	2	78.55153203	0	15.73816156	1.810584958	3.899721448	1	0	9	2
248	4	0	0	25	8	46.38868206	0	38.79374535	0.297846055	1.414743112	3	0	17	1
249	9	0	0	37	9	31.88405797	0.362318841	41.12318841	10.86955522	13.58695652	4	2	18	7

Appendix G: **etrie** values of New Mexico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
250	4	0	0	21	6	24.71910112	0.561797753	56.17977528	0.561797753	15.73033708	3	1	14	1
252	1	0	0	18	4	33.44947735	4.1811184669	33.44947735	2.43902439	25.78397213	5	1	7	2
253	1	0	0	22	6	10.23622047	1.837270341	58.53018373	1.049868766	26.77165354	3	2	10	3
254	3	0	0	31	8	31.77441541	48.96836314	2.200825309	8.94085282	4	1	14	5	
255	0	0	0	18	4	33.60215054	4.3010105269	47.94946237	4.56967473	1.344086622	4	2	6	1
256	0	0	0	14	3	66.28498728	0.254452926	31.17048346	0.318066158	0	4	2	4	1
257	0	0	0	17	3	22.59239259	8.148148148	60.37037037	5.555555556	0.740740741	4	2	6	1
258	0	0	0	20	5	19.21824104	7.4941856678	30.94462541	4.560266086	29.31596091	4	2	8	1
259	7	0	0	19	3	13.95348837	1.162790698	58.37209302	11.86046512	9.302325581	2	1	10	3
260	3	0	0	24	5	18.24104235	0	41.69381107	3.908794188	28.66449511	3	0	15	3
261	4	0	0	27	5	25.40192926	0	38.585209	2.250803859	16.39871383	3	0	14	3
262	5	0	0	31	5	8.119655812	0.213675214	71.15384615	2.136752137	17.30769231	5	1	15	5
263	6	0	0	24	6	5.376344086	0	61.29032258	12.90322581	15.59139785	2	0	14	6
264	3	0	0	18	6	8.982035928	1.19760479	46.10778443	4.790419162	36.52694611	2	2	8	3
265	3	0	0	19	3	27.21893491	1.775147929	39.34911243	5.917159763	13.60946746	2	2	7	3
266	0	0	0	12	3	50	0.8662068966	12.06896552	4.310344828	20.68965517	1	1	3	2
267	0	0	0	16	2	17.39130435	7.82608957	23.47826087	1.739130435	43.47826087	2	3	5	1
268	0	0	0	19	4	6.991525424	2.330508475	72.66949153	2.542372881	9.957627119	3	1	10	1
269	0	0	0	15	4	10.526315759	3.157894737	65.26315789	5.263157895	7.368421053	1	1	8	1
270	0	0	0	24	5	12.17391304	6.086956522	29.13043478	20.43478261	12.60869565	3	1	10	1
271	0	0	0	22	3	15.64885496	4.580152672	11.06870229	18.70229008	41.98473282	2	2	7	2
272	0	0	0	6	50	56.97674419	0	20.93023256	0	20.93023256	2	0	2	0
273	0	0	0	10	2	6.153846154	18.46153846	38.46153846	26.15384615	10.76923077	2	1	3	3
274	5	0	0	25	6	5.040322581	4.233870968	29.43548387	10.88709677	3.024193548	1	2	12	3
275	5	0	0	28	5	8.9552233881	0	30.2238806	33.76856572	21.82835821	2	0	15	6
276	4	0	0	39	8	15.11991658	0.104275287	38.99895725	24.50469239	8.342022941	6	1	18	6
277	4	0	0	33	9	15.00586166	2.696365768	44.54865182	6.330597189	7.033997655	6	2	13	6
278	4	0	0	16	2	1.694915254	33.89830508	41.24293185	0	11.2943503	1	2	8	0
279	0	0	0	23	9	9.440559441	17.83216783	64.33566434	2.447552448	2.097902098	1	3	16	1
280	0	0	0	25	7	3.240740741	6.481481481	78.24074074	3.240740741	6.018518519	3	4	12	3
281	0	0	0	19	5	1.951219512	0.975609756	61.46341463	3.414634146	32.19512195	2	2	12	1
282	0	0	0	12	1	5.797101449	1.811594203	61.23188406	21.73913043	7.246376812	3	1	4	1
283	0	0	0	7	1	75.16778523	0	20.13422819	0.677114094	3.355704698	1	0	3	1
284	2	0	0	15	4	0.617283951	4.320987654	61.72839506	3.703703704	26.54320988	1	1	6	2
285	4	0	0	28	8	11.07594937	1.424050633	48.73417722	2.215189873	2.689873418	4	1	14	3
286	2	0	0	12	1	5.405405405	0	74.32432432	1.351351351	17.56756757	3	0	6	1
287	1	0	0	11	2	24.24242424	1.515151515	65.15151515	0.757575758	3.787878788	3	1	3	1
288	5	0	0	19	5	2.051282051	0	92.30769231	3.076923077	0.512820513	1	0	11	4
289	6	0	0	19	4	14.04586778	4.958677686	48.76033058	4.76272727	0	4	1	9	3
290	7	0	0	28	5	25.0343879	5.22696011	47.86795048	12.1045392	2.751031637	4	2	11	5
291	7	0	0	36	10	19.59459459	0	55.91216216	8.952702103	8.783783784	4	0	21	6
292	7	0	0	36	10	23.16176471	0.367647059	49.26470588	8.088233294	9.375	3	1	19	6
293	5	0	0	19	4	33.25942335	23.28159645	33.70288248	3.1042286	1.77383592	3	1	9	3
294	4	0	0	32	7	25.3611557	0	50.96309186	11.95826645	7.46388443	4	0	18	4
295	3	0	0	25	6	15.45574637	0.528401585	67.63540291	2.113606341	5.812417437	3	2	10	4

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax	
296	6	0	0	33	7	9.051254089	0.145401672	78.371501277	3.198836787	4.61650309	4	1	15	6	
297	4	0	0	24	5	2.01050251	41.37353434	44.72361809	1.172529313	4.020100503	2	1	13	4	
298	8	0	0	24	6	14.66165414	0	66.16541353	16.16541353	3.0071518797	3	0	14	5	
299	7	0	0	28	6	10.26392962	0.293255132	49.26686217	33.13782991	4.692082111	4	1	14	5	
300	7	0	0	26	6	11.33144476	0	5.099150142	16.147190878	4	0	14	5		
301	6	0	0	23	5	4.081632653	0	61.73469388	22.44897959	5.612244898	4	0	11	6	
302	1	0	0	13	3	1.98019802	0.99009901	41.58415842	0.99009901	51.48514851	2	1	7	1	
303	1	0	0	13	4	3.448275862	0	50	0	32.75862069	2	0	9	0	
304	3	0	0	24	6	8.171206226	0	54.86381323	1.945525292	3.112840467	5	0	14	3	
305	8	0	0	24	6	2.77777778	0	88.33333333	4.444444444	2.222222222	2	0	14	6	
306	2	0	0	16	5	3.921568627	0	68.62745098	1.960784314	21.56862745	2	0	11	1	
307	6	0	0	29	6	38.12154696	0	48.61878453	6.077348066	6.813996317	5	0	16	4	
308	0	0	0	18	2	0	0.204918033	83.40163934	6.762295082	2.663934426	0	1	11	2	
309	4	0	0	20	6	10.2739726	0	61.643835562	2.0547794521	19.8630137	3	0	13	2	
310	3	0	0	21	5	13.60946746	0	78.50098619	1.380670611	5.522682446	4	0	11	3	
311	3	0	0	17	3	15.94202899	10.144922754	43.477826087	0	27.53623188	3	1	9	0	
312	2	0	0	19	6	5.220667384	0	51.66846071	41.38858988	0.430570506	4	0	9	2	
313	2	0	0	15	5	3.679653668	0	54.11255411	39.82683983	0.86580086	3	0	7	2	
314	0	0	0	20	4	46.12403101	0	24.26356589	0.930232558	28.21705426	5	0	10	1	
315	2	0	0	18	4	24.026684564	0	38.65771812	0.536912752	36.77852349	4	0	12	1	
316	0	0	0	25	5	3.616484441	0	76.87132044	18.166526469	0.588730025	4	0	13	4	
317	3	0	0	21	2	15.4589372	0	51.20772947	5.314009662	26.57004831	4	0	11	3	
318	3	0	0	15	2	27.52293579	0	54.12844037	5.504587156	10.09174312	4	0	8	1	
319	0	0	0	16	4	53.40550293	1.533603969	26.92828146	0	17.72665765	5	1	7	0	
320	0	0	0	15	3	67.193119563	1.458080194	17.98298906	0.607533414	12.7582017	5	1	5	3	
321	0	0	0	3	0	4.761904762	38.0953281	0	0	57.14285714	1	1	0	0	
322	0	0	0	3	0	21.21212121	27.27272727	0	0	51.51515152	1	1	0	0	
323	0	0	0	10	1	11.1111111	2.222222222	68.888888889	2.222222222	11.1111111	2	1	4	1	
324	0	0	0	14	1	32.23140496	3.305785124	45.45454545	4.132231405	8.26446281	2	1	6	2	
325	0	0	0	10	1	3.225806452	8.064516129	62.90322581	9.677419355	1.612903226	1	1	3	2	
326	0	0	0	11	1	5.363984674	1.149425287	77.39463692	4.214559387	0.766283525	1	1	4	2	
327	0	0	0	22	4	11.53846154	0.295857988	67.4556213	1.183431953	19.526627222	5	1	13	1	
328	0	0	0	7	1	22.93577982	0	75.2295578	0.917431193	0	2	0	3	1	
329	1	0	0	14	2	1.937984496	0	83.04263366	0	12.8875969	3	0	7	0	
330	2	0	0	20	6	1.206776514	2.32	-02	23.81062892	61.54560223	13.36737062	3	1	11	3
331	3	0	0	26	6	15.42372881	0.169491525	58.47457627	0.508474576	20.6779661	4	1	15	2	
332	5	0	0	31	5	18.0764774	0	65.58516802	4.866743917	5.098493627	5	0	19	2	
333	2	0	0	16	2	2.723735409	0	70.81712062	22.95719844	3.112840467	2	0	9	3	
334	3	0	0	27	9	4.444444444	0.130718954	86.2745098	5.3594771242	3.594771242	3	2	15	2	
335	4	0	0	15	3	6.091370558	0	78.42639594	0.5076164213	9.898477157	2	0	9	2	
336	1	0	0	10	2	45.71428571	0	43.57142857	0.714285714	8.571428571	2	0	4	1	
337	2	0	0	11	3	34.09090909	0	21.59090909	0.568181818	40.34090909	2	0	6	1	
338	0	0	0	16	5	30.52930507	0	19.37618147	9.45	-02	49.24385633	3	0	9	1
339	1	0	0	17	4	19.96996997	0	37.23723724	0.600600601	41.44144144	4	0	9	2	
340	2	0	0	17	2	54.06824147	0	42.38845144	0	1.837270341	5	0	7	0	

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
341	1	0	0	12	2	71.7877095	0	27.09497207	0	5	0	6	0	0
342	1	0	0	13	2	62.1442013	0	33.91684902	0.218818381	3.282275711	4	0	6	1
343	3	0	0	15	3	37.3433584	0	55.88972431	0	5.764411028	3	0	9	0
344	0	0	0	18	3	20.34739454	0.372208437	22.08436725	0.079404467	50.49627792	4	1	6	3
345	10	0	0	30	6	14.01889159	0.31152648	58.87850467	22.1183006	3.73817757	3	1	18	6
346	4	0	0	28	7	21.52932442	2.152932442	57.6095026	0.593912398	17.14922049	5	2	16	2
347	5	0	0	30	6	6.748466258	0	76.48261759	1.840490798	14.11042945	5	0	17	2
348	8	0	0	33	9	22.43211334	0	57.73317591	5.548996458	13.81345927	3	0	19	7
349	10	0	0	33	7	7.494145199	0	56.20608899	14.75409336	21.31147541	4	0	18	8
350	10	0	0	28	5	33.28290469	0	43.570347496	18.00302572	4.992435703	1	0	18	6
351	5	0	0	16	2	67.12598425	0	24.40944882	5.905511811	2.559055118	1	0	9	5
352	7	0	0	22	4	6.666666667	0	71.73333333	14.4	6.666666667	1	0	13	4
353	3	0	0	17	5	13.94422311	0	44.62151394	19.52191235	18.7250996	1	0	11	2
354	3	0	0	12	3	4.255319149	0	58.51063383	6.382979723	30.85106383	1	0	7	3
355	0	0	0	10	2	1.162790698	0	91.86046512	2.325581395	3.488372093	1	0	5	2
356	2	0	0	11	3	5.693950178	0	80.78291815	2.491103203	11.03202847	1	0	6	3
357	5	0	0	25	7	2.083333333	0	71.45833333	4.791666667	15.416666667	2	0	15	4
358	3	0	0	16	4	4.435483871	0	62.5	0.403225806	31.4516129	1	0	11	1
359	4	0	0	22	5	2.056074766	0	81.86915888	3.364485981	8.224299065	2	0	14	4
360	4	0	0	18	3	1.851851852	0	74.69135802	3.395067728	16.666666667	1	0	10	4
361	5	0	0	21	5	5.333333333	0	78.88888889	3.111111111	11.333333333	2	0	13	4
362	7	0	0	26	4	28.62694201	0	50.51813472	12.94536788	5.181813475	4	0	13	6
363	6	0	0	27	8	15.66523605	0.214592275	71.03004292	10.7296373	0.429184549	4	1	14	6
364	6	0	0	21	2	23.14049587	0	40.77134986	7.988980716	27.54820937	2	0	11	5
365	6	0	0	23	5	50.1369863	0	36.07305936	6.575342466	3.470319635	3	0	10	5
366	0	0	0	23	9	3.03030303	6.493506494	61.47186147	4.761904162	23.37662338	2	4	12	3
367	1	0	0	19	5	25.58139535	2.790697674	27.44186047	9.302325581	31.1627907	1	2	10	3
368	0	0	0	15	4	10.37735849	50.94339623	16.03773585	5.660377358	16.98113208	4	2	6	2
369	1	0	0	18	4	1.949541284	0.172018349	53.555054587	2.694954128	41.57110092	2	1	11	2
370	0	0	0	15	2	11.33004926	3.448275862	32.01970443	35.4679803	16.25615764	3	1	6	2
371	0	0	0	15	1	5.818181818	0	56.545454545	8.727272727	28.90909091	3	0	6	2
372	0	0	0	22	4	47.89644013	0.72815534	5.258899676	8.818770227	34.46601942	3	3	9	2
373	1	0	0	20	3	10.12269939	0	57.36196319	10.42944785	17.17791411	2	0	9	3
374	0	0	0	23	5	22.54834369	7.28 -02	61.723330097	0.266990291	1.043688932	1	1	9	2
375	2	0	0	22	7	2.127659574	6.788247214	70.61803445	3.343465046	16.00810537	3	1	11	2
376	1	0	0	13	3	44.81132075	0	25.47169811	24.05660377	3.301886792	1	0	6	4
377	0	0	0	17	3	27.57009346	0.46728972	51.86915888	10.28037383	8.411214953	2	1	7	3
378	2	0	0	17	2	35.24904215	0	27.5862069	20.30657341	5.747126437	1	0	7	5
380	0	0	0	13	2	19.63190184	0	12.88343558	17.17791411	49.69325153	2	0	6	1
381	0	0	0	23	3	4.95049505	0.330033003	71.78217822	0.495049505	13.03630363	2	1	7	2
383	0	0	0	19	4	28.04878049	6.097560976	35.365853366	1.829268293	26.82926829	2	1	12	1
384	0	0	0	19	6	27.47747748	5.18018018	47.97297297	2.252252252	9.90990991	2	4	7	1
385	0	0	0	15	5	16.4874552	1.075268817	54.48028674	18.2795989	5.734767025	2	3	4	1
386	2	0	0	10	2	58.73015873	0	28.57142857	1.587301587	6.349206349	1	0	5	1
387	1	0	0	10	1	18.07228916	0	66.26506024	3.614457831	4.819277108	1	0	5	1

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
388	0	0	0	4	12.03007519	0	6.7669171293	0	81.20300752	1	0	0	2	0
389	0	0	0	6	0	42.72727273	0	52.72727273	0	4.545454545	3	0	2	0
390	0	0	0	19	3	20	0.625	24.0625	4.0625	33.75	2	1	7	2
391	1	0	0	13	2	37.39837398	0	30.89430894	6.097560976	25.6097561	2	0	7	3
392	0	0	0	11	0	5.2083333333	0	8.3333333333	0	85.416666667	3	0	4	0
393	2	0	0	13	0	5.930807249	0	60.62602965	9.884678748	23.3937397	3	0	3	3
394	3	0	0	21	3	1.375	0.375	28.5	58.875	10.875	2	2	9	3
396	0	0	0	9	1	6.417112299	0	0.534756358	1.604278075	91.44385027	3	0	2	2
397	2	0	0	16	3	49.53586498	0	43.29113924	0	7.172995781	3	0	12	0
398	2	0	0	22	5	8.786127168	0	75.37572254	2.89017341	12.83236994	3	0	14	2
399	1	0	0	10	2	4.555808656	0.3416685649	34.0546697	0.3416685649	56.2642369	1	1	5	1
400	1	0	0	16	5	21.90635452	7.692307692	40.46822742	0.668896321	22.40802676	1	1	11	1
401	1	0	0	16	3	7.612456747	0	39.10034602	0.346020761	8.650519031	2	0	9	1
402	2	0	0	21	3	24.74747475	0	56.90235569	1.1784511778	7.912457912	3	0	11	4
403	1	0	0	17	1	21.35193133	0	44.20600858	0.214592275	17.38197425	4	0	8	2
404	2	0	0	15	3	11.69871795	0	65.22435897	0	21.79487179	3	0	9	0
405	2	0	0	17	2	11.61473088	0	86.96883853	0	0.283286119	2	0	11	0
406	4	0	0	21	5	2.93040293	0.3663003366	61.9047619	19.78021978	15.01831502	3	1	12	3
407	0	0	0	23	9	1.496259352	1.496259352	71.57107232	0.498753117	5.486284289	1	2	14	2
408	0	0	0	30	11	3.013182674	4.143126177	79.47269303	0.564977751	8.286252354	3	4	14	3
409	0	0	0	26	10	1.15669364	1.445086705	74.85549133	0.578034682	9.248554913	3	2	13	2
410	6	0	0	27	6	5.208333333	0	63.02083333	2.604166667	22.91666667	2	0	18	4
411	5	0	0	22	7	10.95890411	2.054794521	64.7260274	1.712328767	15.4109589	3	1	14	2
412	0	0	0	12	0	72.14170692	0.161030596	2.576489533	23.027352	0.966183575	4	1	2	2
413	3	0	0	20	4	49.04580153	0.7633358779	28.81679389	13.74045802	2.6711755725	4	1	8	4
414	3	0	0	25	6	7.788944724	1.005025126	38.69346734	1.256281407	8.291457286	5	2	11	2
415	2	0	0	17	3	15.1799687	0	56.02503912	2.81690408	17.68388106	4	0	7	2
416	3	0	0	21	4	31.36094675	0	47.53451677	8.284023669	5.142011834	5	0	11	1
417	0	0	0	17	3	14.06698565	0	25.55023923	4.019138756	2.200956938	3	0	4	4
418	1	0	0	18	5	44.71243043	0	17.99628942	20.03710575	4.452690167	6	0	9	1
419	3	0	0	25	5	32.52173913	0	7.47826087	10.7826087	0.347826087	5	0	10	4
420	2	0	0	14	4	2.008032129	0	36.34538153	11.24497992	19.47791165	2	0	8	2
421	0	0	0	16	6	18.08510638	0	53.77176015	0.386847195	26.88588008	2	0	10	1
422	2	0	0	13	1	15.95330739	0	50.19455253	0.778210117	22.17898833	3	0	6	1
423	0	0	0	18	4	5.799151344	1.131541726	64.78076379	2.404526167	19.51909477	2	2	6	3
424	5	0	0	23	2	1.237623762	0	96.12211221	1.320132013	1.237623762	2	0	11	5
425	4	0	0	19	5	10.38062284	0	70.24221453	1.5570923426	17.8200692	3	0	12	2
426	4	0	0	27	6	14.02714932	0.226244344	59.72850679	5.656108597	16.74208145	4	1	12	3
427	2	0	0	19	5	22.89156627	0.963855422	6.29503614	6.024096386	9.879518072	4	1	10	2
428	4	1	0	25	2	5.86791066	0.733496333	62.59168704	4.400977995	14.66992665	4	1	14	3
429	4	1	0	25	7	9.124087591	0.729927007	74.27007299	1.824817518	13.68613139	2	1	17	2
431	0	0	0	14	1	19.11764706	0	33.82352941	13.23529412	33.82352941	4	0	7	2
433	0	0	0	24	5	34.95575221	1.327433628	35.39823609	10.61945903	15.48672566	6	1	9	5
434	1	1	0	26	5	33.5	3.0625	56.1875	1.75	3.8125	4	2	11	4
435	1	0	0	18	6	7.792207792	11.03896104	68.83116883	1.298701299	11.03896104	3	3	10	1

Appendix G: **etrie** values of New Mexico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwPct	CImbrPct	ClngPct	SprwlPct	SwmmrPct	BrrwrTax	CImbrTax	ClngTax	SprwlTax
436	1	0	0	16	7	3	8	71	6	11.333333333	3	2	8	1
437	1	0	0	10	3	2.105263158	0	74.736847211	5.263157895	15.78947368	1	0	6	1
438	8	1	0	26	7	5.899705015	0.294985251	76.40117994	0.589970501	15.92920354	4	1	16	1
439	3	0	0	19	5	10.78431373	0	76.47058824	0	12.74509804	3	0	15	0
440	3	0	0	17	4	1.351513151	0.540540541	92.16216216	2.432432432	3.243243243	1	1	12	1
441	2	0	0	13	4	1.941747573	0	85.4368932	1.941747573	10.67961165	2	0	9	1
442	0	0	0	10	2	11.35770235	0	0	27.67624021	2	1	4	0	
443	0	0	0	10	2	43.38709677	9.032258065	30.161290312	1.290322581	16.12903226	4	1	2	1
444	0	0	0	12	3	70.05742412	0.410172272	22.06726825	2.296964125	5.168170632	2	3	3	3
445	0	0	0	11	0	10.7678189	3.06	-02	89.14040991	3.06	-02	4	1	4
446	0	0	0	15	4	19.52054795	6.8493715068	10.95890411	2.397260274	57.19178082	2	2	7	1
447	0	0	0	14	2	16.95652174	0	27.82608696	7.391304348	41.30434783	3	0	6	2
448	0	0	0	21	6	5.483028721	2.349869452	53.78590078	32.63707572	5.744125326	4	2	10	2
450	0	0	0	29	4	5.676855895	5.676855895	45.41484716	20.52401747	21.39737991	5	3	12	3
451	0	0	0	27	5	4.715127701	3.3399882122	73.28094303	6.483300589	11.5913556	4	3	13	2
452	0	0	0	29	8	2.450980392	3.18627451	63.48039216	14.46078431	15.19607843	4	2	12	2
453	0	0	0	20	4	11.53039832	3.5639413	43.39622642	3.144654088	38.36477987	4	1	10	2
454	0	0	0	20	3	12.64367816	0.574712644	32.47126437	6.609196402	46.83908046	4	2	7	3
455	0	0	0	17	4	5.759162304	0.261780105	52.87958115	1.047120419	40.05235602	4	1	7	3
456	0	0	0	11	3	1.587301587	0	57.14285714	39.15343915	2	0	6	2	
457	2	0	0	15	5	13.79310345	2.298850575	43.67816092	1.149425287	39.0845977	4	2	7	1
458	0	0	0	20	4	6.64928292	1.825293351	34.81095176	14.9934811	13.952045632	4	2	7	2
459	0	0	0	3	0	0	0	0	15.92039801	0	0	0	0	
460	0	0	0	9	1	21.14537445	0	57.26872247	6.167400881	11.89427313	3	0	2	1
461	0	0	0	9	1	26.24113475	0	41.84397163	11.34751773	19.14893617	2	0	3	1
462	0	0	0	13	2	24.17582418	2.1197802198	28.57142857	6.593406593	38.46153846	2	2	6	1
463	0	0	0	11	3	13.7254902	0.980392157	61.76470588	9.803921569	11.76470588	1	1	5	1
464	1	0	0	23	5	14.47811448	0.336700337	55.89225589	10.43771044	18.181818	3	1	13	2
465	0	0	0	14	4	17.6369863	0.51369863	70.20547945	0.51369863	11.13013699	1	1	8	2
466	6	1	0	38	8	6.500691563	0.20746888	65.97510373	11.13416321	2.904564315	6	2	19	4
467	5	0	0	24	9	64.59107807	0.371747212	22.86245353	2.323420074	9.758364312	3	2	11	4
468	4	0	0	19	4	4.501607717	22.82958199	18.32797428	17.04180064	35.04823151	3	2	9	2
469	2	0	0	11	2	3.50877193	0	52.63157895	0.8771192982	42.98245614	3	0	6	1
470	2	0	0	10	2	3.333333333	0	21.1111111	2.222222222	73.33333333	1	0	6	1
471	3	0	0	16	5	13	0	43	1	43	3	0	11	1
472	0	0	0	25	5	27.27272727	0	18.76832845	35.04398827	14.07624633	6	0	8	4
473	0	0	0	21	4	21.24352332	0.103626943	54.92227979	5.284974093	15.95854922	3	1	8	4
474	0	0	0	22	5	32.30088496	0	36.83628319	12.16814159	17.47787611	4	0	8	5
475	2	0	0	19	2	39.9526496	0	41.98717949	0.747863248	15.5982906	4	0	9	2
476	0	0	0	23	4	48.9977283	0	26.72605791	12.02672606	8.908685969	3	0	13	2
477	0	0	0	19	4	47.35973597	0	36.96369637	0.660066007	7.425742574	2	0	9	3
478	0	0	0	9	2	0	0	69.44444444	2.777777778	16.66666667	0	0	3	1
479	0	0	0	14	5	1.746724891	0	44.10483349	6.550218341	47.59825328	1	0	9	1
480	0	0	0	11	1	9.541984733	1.908396947	32.824427478	31.29770992	2	1	4	1	
481	2	0	0	15	4	1.604278075	1.604278075	48.66631016	0	47.05882353	2	1	9	0

Appendix G: Stream Values of New Mexico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
482	0	0	0	16	4	5.263157895	0.526315789	45.78941368	0.52631315789	47.36842105	1	1	9	1
483	0	0	0	15	4	7.96812749	0	41.43426295	8.764940239	41.43426295	1	0	9	1
484	0	0	0	14	2	7.52688172	0	50.89605735	3.94265233	37.27598566	2	0	6	2
485	0	0	0	15	4	4.975124378	0.497512438	67.66169154	4.975124318	21.89054726	1	1	8	2
486	2	0	0	25	5	3.41299283	2.218439034	88.39590444	1.023890785	4.607508532	3	2	13	3
487	2	0	0	23	6	6.491885144	1.6222971286	87.01622971	0.624219725	2.621722846	2	1	11	3
488	0	0	0	18	5	9.454505455	0.363363364	81.454505455	0.72727272727	8	2	1	11	2
489	4	0	0	24	8	4.153354633	2.875399361	56.23003195	21.72523962	14.69648562	3	2	12	3
490	0	0	0	6	1	18.75	0	25	0	50	1	0	3	0
491	1	0	0	12	2	7.407407407	0	59.25925926	7.407407407	11.11111111	1	0	6	2
492	1	0	0	11	2	13.95348837	0	37.20930233	6.976744186	34.88372093	2	0	5	2
493	4	0	0	18	3	13.82352941	0.294117647	38.52941176	4.705882553	34.11764706	3	1	8	4
494	0	0	0	19	5	4.29794269	0.573065903	80.80229226	0.573065903	13.75358166	2	2	12	1
495	1	0	0	21	5	7.042253521	0.352112676	87.323394366	0.7042235352	3.873239437	4	1	12	1
496	3	0	0	19	3	8.544303797	0	75.63291139	4.113924051	9.17721519	5	0	10	1
497	5	0	0	29	7	7.065217391	0.543478261	87.22826087	1.358695052	2.717391304	4	1	16	4
498	5	0	0	22	4	5.414012739	0	63.37579618	18.15286624	12.7388535	3	0	14	3
499	4	0	0	23	6	10.30927835	0	80.41237113	5.498281787	3.780068729	4	0	14	3
500	0	0	0	17	7	7.142857143	1.127819549	71.42857143	14.66165414	5.639097744	3	2	8	2
501	0	0	0	21	9	29.43143813	1.003344482	51.17056856	1.003344482	14.71571906	4	1	11	2
502	2	0	0	22	5	4.433497537	0	87.68472906	0.492610837	5.418719212	4	0	13	1
503	1	0	0	17	5	4.838709677	0.403225806	83.87096774	6.452162903	3.225806452	3	1	8	1
504	2	0	0	24	8	12.45283019	1.132075472	76.60377358	3.773584906	0.377358491	3	1	14	3
505	2	0	0	20	8	2.649006623	0	90.06622517	5.298013245	0.331125828	3	0	14	1
506	0	0	0	19	6	3.83480826	0	59.58702065	34.21828909	2.06489675	4	0	10	3
507	0	0	0	18	7	0	0.740740741	81.11111111	14.44444444	1.11111111	0	1	11	3
508	6	0	0	28	7	2.702702703	0	80.06756757	0.337837838	15.54054054	3	0	20	1
509	7	0	0	30	9	1.013513514	3.378378378	89.86486486	2.027027027	0.337837838	2	1	21	4
510	6	0	0	21	5	2.583979328	0.258397933	80.62015504	8.527137783	5.167958656	4	1	10	2
511	1	0	0	22	6	8.405797101	5.217391304	75.07246377	1.449275362	4.347826087	4	2	10	2
512	5	0	0	20	4	4.929577465	0.704225352	90.84507042	1.056338028	0.352112676	4	1	11	2
513	5	0	0	18	3	5.494505495	0	90.10989011	2.93040293	1.465201465	2	0	12	2
514	6	0	0	24	5	2.555910543	0	70.60702875	20.44728435	5.750798722	3	0	11	5
515	3	0	0	14	3	19.41747573	0	44.66019417	29.12621359	0	4	0	6	3
516	5	0	0	24	4	34.53689168	4.003139717	37.20565149	11.4599886	4.552590267	4	1	9	5
517	5	0	0	28	5	11.4693405	6.451612903	60.21505376	9.318996416	10.75268817	5	1	13	5
518	4	0	0	31	8	23.6842053	0.263157895	51.05263158	12.894734884	3.421052632	4	1	16	4
519	2	0	0	21	6	18.14946619	0	57.65124555	19.57295374	3.914590747	4	0	12	2
520	2	0	0	16	3	1.013513514	10.13513514	61.48648649	5.067567568	20.27027027	2	1	9	2
521	1	0	0	25	7	13.39869281	0	65.68627451	18.62745098	1.633986928	4	0	15	3
522	4	0	0	25	4	18.29268293	1.829268293	62.5	1.829268293	14.93902439	4	1	13	4
523	0	0	0	11	2	78.23529412	1.764705882	11.17647059	4.117647059	3	1	1	2	
524	1	0	0	18	4	1.632653061	0	55.51020408	34.89795918	7.755102041	3	0	9	3
525	5	1	0	31	7	10.16393443	0.3277868852	70.81967213	4.262295082	5	1	17	3	
526	1	0	0	24	5	15.03957784	0	56.46437995	8.443271768	18.99736148	6	0	12	2

Appendix G: Metric Values of New Mexico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax	
527	6	1	0	25	6	9.933374834	5.629133073	71.523171881	3.973509334	8.609271523	3	1	16	2	
528	6	1	0	25	6	8.201892744	6.624605678	71.92429022	4.100946372	8.517350158	3	1	15	3	
529	0	0	0	12	2	6.748466258	1.5333742331	87.42331288	0	3.680981895	2	1	6	0	
530	0	0	0	4	0	2.222222222	4.444444444	2.222222222	91.11111111	1	0	1	1	1	
531	5	0	0	20	3	1.78041543	0.59347181	63.79821958	12.16617211	10.47477745	3	1	7	2	
532	3	0	0	21	4	3.971119134	0.36101083	55.23465704	20.2160605	17.32851986	2	1	11	2	
533	6	0	0	22	3	24.74916388	0.334448161	15.71906355	1.337792642	54.18060201	2	1	10	3	
534	3	0	0	13	2	51.47679325	0	36.28691983	0.843881857	7.594936709	1	0	7	1	
535	5	0	0	21	4	23.4741784	5.164319249	35.21126761	3.286384977	23.94366197	1	1	10	4	
536	1	0	0	18	3	26.47058824	0	35.29411765	10	21.76470588	3	0	7	4	
537	0	0	0	18	4	16.26506024	—	0	20.78313253	4.819277108	57.8313253	3	0	9	4
538	0	0	0	13	2	50.40322581	0	5.64516129	3.225806452	32.25806452	1	0	2	2	
539	1	0	0	15	1	72.06477733	0.809716599	15.38461538	1.619433198	5.668016194	1	1	4	2	
540	2	0	0	14	3	8.139334884	0	70.93023256	1.162790698	18.60465116	2	0	9	1	
541	4	0	0	21	3	24.67105263	0.657894737	61.51315789	1.973684211	10.52631579	3	1	11	4	
542	6	0	0	26	2	21.53846154	0	20.38461538	33.46153846	22.69230769	7	0	7	6	
543	6	0	0	27	2	14.16430595	0	14.16430595	41.64305949	24.92917847	5	0	9	5	
544	0	0	0	11	1	18.84984026	0.6389771636	22.04472843	43.13090942	8.626198083	3	1	2	1	
545	1	0	0	19	5	9.465020576	0	41.97530864	26.74897119	13.58024691	3	0	9	3	
546	3	0	0	23	3	8.169934641	51.96078431	26.47058824	0.326797386	13.07189542	4	2	11	1	
547	5	0	0	27	6	12.66233766	8.441558442	70.77922078	1.298707299	5.519480519	2	1	17	2	
548	3	0	0	12	1	13.47305389	0	19.46107784	29.99401198	65.4618626347	3	0	5	1	
549	3	0	0	20	5	19.51612903	0.3222580645	58.5483871	1.6129032226	19.67741935	1	1	11	5	
550	3	0	0	21	4	23.5509946	0	40.42553191	2.201021746	30.74101247	1	0	10	7	
551	3	0	0	20	4	7.264957265	0	48.433040843	0.925925926	41.66666667	2	0	11	4	
552	4	0	0	23	6	6.799276673	0.180831826	50.48824593	6.473779385	35.66003617	2	1	14	3	
553	4	0	0	26	8	13.88200297	9.92	-02	47.94248884	8.230044621	11.6013882	3	1	14	5
554	1	0	0	19	3	9.53978907	0	61.36145733	2.15723834	1.96548418	3	0	8	5	
555	4	0	0	27	5	49.74289581	0.054127199	39.10690122	1.840324763	2.571041949	5	1	12	6	
556	7	0	0	24	3	11.55279503	0	53.04347826	23.68530021	9.779296066	2	0	15	5	
558	2	0	0	25	5	31.82481752	0.072992701	41.97080292	3.7795620438	18.54014599	3	1	11	6	
559	3	0	0	27	6	9.119496855	0.104821803	74.47589099	1.519916143	5.607966457	3	2	12	6	
560	2	0	0	22	3	36.92307692	0	55.29411765	1.719457014	3.076923077	5	0	8	5	
561	9	0	0	34	8	28.0790248	6.263135771	51.74443043	3.530895334	7.0197562	3	1	18	7	
562	1	0	0	10	1	3.448275862	0.492610837	0.985221675	0.492610837	93.59605911	3	1	2	1	
563	1	0	0	19	2	2.027020207	0.337831838	16.55405405	2.027020207	78.71621622	2	1	8	3	
564	0	0	0	21	1	22.03389831	10.59322034	8.898305085	10.16949153	42.37288136	4	2	6	3	
565	0	0	0	19	2	41.71779141	0	18.71165644	9.202453988	28.52760736	3	0	6	4	
566	0	0	0	2	0	0	14.28571429	0	85.71428571	0	0	1	0	0	
567	0	0	0	8	1	27.27272727	0	36.36363636	18.18181818	9.090909091	1	0	3	2	
568	3	0	0	19	3	17.37089202	19.24882629	48.82629108	1.877934272	8.920187793	3	1	8	2	
569	4	0	0	19	5	4.0462422775	19.07514451	47.39884393	1.734104046	26.01156069	1	1	12	1	
570	3	0	0	26	6	8.0139337282	1.045296167	71.08013937	1.045296167	14.28571429	3	1	14	1	
571	5	0	0	25	5	3.642384106	9.271523179	81.125827281	0.993377483	2.317880795	4	1	14	2	
572	4	0	0	23	6	5.527638191	5.025125628	74.3718593	0.502512563	13.06532663	3	1	14	1	

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
573	2	0	0	27	4	27.82608696	3.913043478	41.30434783	6.52173913	4.782608696	5	5	8	3
574	3	0	0	16	3	0.740740741	0	95.55555556	0	3.703703704	1	0	12	0
575	2	0	0	19	3	20.4	0	57.2	4.8	14.8	2	0	9	2
576	0	0	0	17	5	43.98496241	1.879699248	16.16541353	29.69924812	7.894736842	4	1	6	4
577	1	0	0	12	2	18.54304636	1.655629139	1.986754967	0	77.48344371	4	1	4	0
578	3	0	0	10	3	0	0	21.26436782	0.574712644	77.01149425	0	0	6	1
579	4	0	0	14	3	8.713629946	0	23.23651452	1.244813278	65.97510373	2	0	7	2
580	2	0	0	16	3	8.552631579	1.315789474	55.92105263	6.578947368	14.47368421	1	1	5	4
581	0	0	0	8	2	29.91452991	0	17.09401709	52.13675214	0.854700855	3	0	3	1
582	2	0	0	30	11	12.93375394	0.6309714826	65.615174196	1.577287066	18.29652997	2	1	19	3
583	2	0	0	22	4	5.572755418	0	55.72755418	1.238390093	35.294117165	1	0	13	1
584	3	0	0	17	2	7.476635514	0	64.48598131	2.803738318	12.14953271	3	0	8	2
585	2	0	0	32	7	24.83870968	0	48.38709677	3.548387097	21.290322288	5	0	18	4
586	3	0	0	27	6	17.96875	0.390625	56.25	2.34375	21.09375	3	1	14	3
587	1	0	0	17	6	9.0425533191	1.595744681	17.0212766	64.89361702	6.914893617	3	1	8	2
588	2	0	0	15	5	0	0	69.01408451	9.3899671362	19.24882629	0	0	9	2
589	3	0	0	10	2	3.658536585	1.219512195	9.756097561	1.219512195	17.07317073	2	1	3	1
590	2	0	0	16	2	10.71428571	0	22.61904762	20.2380924	29.76190476	3	0	6	2
591	0	0	0	4	0	57.14285714	0	28.57142857	0	0	2	0	1	0
592	0	0	0	6	0	68.75	0	18.75	6.25	0	1	0	3	1
593	7	0	0	23	4	10.0864516	0	37.09677419	6.85483871	31.85483871	1	0	14	1
594	7	0	0	23	4	10.0864516	0	37.09677419	6.85483871	31.85483871	1	0	14	1
595	5	0	0	20	3	40.51724138	0	31.46551724	4.310344828	23.7068955	3	0	12	3
596	2	0	0	12	2	15.32288065	0	61.69354839	19.35483871	3.629032258	2	0	8	1
597	3	0	0	18	4	26.51515152	0	60.60606061	7.196969997	5.681818182	3	0	11	2
598	3	0	0	24	6	9.947643979	5.235602094	44.5026178	29.31937173	8.90052356	2	1	14	3
599	0	0	0	21	4	11.2	1.6	28.8	4	13.6	2	2	9	2
600	0	0	0	28	5	13.75	3.75	38.75	5.833333333	19.16666667	3	3	13	2
601	0	0	0	5	0	55.55555556	0	0	44.44444444	3	0	0	0	0
602	0	0	0	23	8	4.081632653	0.408163265	80.408163277	9.795918367	4.489795918	2	1	13	3
603	0	0	0	15	3	6.632633061	14.795911837	33.67346939	0	9.183673469	1	5	4	0
604	0	0	0	15	5	6.8	1.2	47.2	44	0.8	2	3	4	4
605	1	0	0	18	3	9.958506224	3.3319502075	68.04979253	16.59751037	2.074688797	3	1	9	4
606	0	0	0	10	4	12	16	36	20	4	1	1	3	2
607	4	0	0	19	3	15.03759398	9.77443609	35.33834586	6.01503794	28.57142857	2	1	8	4
608	0	0	0	18	1	51.90339695	3.053435115	16.79389313	24.04580153	3.816793893	5	2	5	3
609	1	0	0	24	5	16.10738255	2.348993289	69.46308725	10.40268456	1.677852349	2	3	13	5
610	0	0	0	24	6	9.663385546	3.361344538	29.41176471	45.79837933	8.823529412	4	4	10	2
611	0	0	0	20	6	4.147465438	0	59.9078341	12.90322881	22.11981567	2	0	11	3
612	0	0	0	17	3	4.954954955	7.657657658	47.747474775	32.432442343	7.207207207	3	2	6	3
613	1	0	0	19	4	10.12658228	2.109704641	79.74683544	4.219409283	3.797468354	2	2	10	3
614	5	0	0	24	2	23.72881356	1.271186441	52.54237288	10.16949153	6.355932203	5	1	12	3
615	2	0	0	22	5	21.65889618	1.382488479	58.06451613	1.843317972	16.58986175	3	1	12	2
616	7	0	0	25	3	7.407407407	10.86419753	58.27160494	3.950617284	3.950617284	3	1	12	5
617	1	0	0	17	6	24.01315789	0	49.67105263	0.657894737	18.75	1	0	10	1

Appendix G: **etrie** values of New Mexico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	ClngPct	SprwlPct	SwmmrPct	BrrwrTax	CImbrTax	ClngTax	SprwlTax
618	0	0	0	16	5	51.87165775	1.336898396	21.39031433	6.14973262	16.04278075	1	2	7	2
619	3	0	0	27	6	22.81553398	1.45631068	50.48543689	6.796116505	16.50485137	3	2	11	4
620	0	0	0	18	4	16.40449438	0	78.65168539	0.224719101	4.269662921	2	0	12	1
621	0	0	0	22	5	19.91869919	0.406504065	65.85366954	0.406504065	12.1912195	2	1	14	1
622	0	0	0	17	3	2.2058823206	0	19.11764106	0.735294118	0.735294118	3	0	8	1
623	0	0	0	17	2	4.081632653	3.06122449	57.14285714	3.06122449	7.142857143	1	3	6	2
624	0	0	0	20	5	23.76681614	0.448430493	13.4529148	56.95067265	4.932735426	5	1	7	4
625	0	0	0	18	4	17.94871795	1.025641026	45.64102564	20.51282051	13.84615385	2	1	9	2
626	0	0	0	22	3	15.18518519	46.2962963	22.96296296	5.185185185	2.962962963	1	4	9	4
627	0	0	0	21	4	18.78172589	9.644670051	18.27411168	14.72081218	2.030456833	2	4	6	3
628	0	0	0	16	3	0.680272109	19.72789116	41.49659864	6.802721088	1.360544218	1	2	8	2
629	0	0	0	6	0	16.66666667	0	33.33333333	16.66666667	16.66666667	1	0	2	1
630	0	0	0	13	2	15	1.25	38.75	31.25	3.75	3	1	5	2
631	0	0	0	12	3	8.695632174	4.347826087	30.43478261	21.73913043	21.73913043	2	1	4	3
632	0	0	0	23	6	6.315789474	5.614035088	50.87719298	20.35087719	15.0877193	1	1	13	3
633	0	0	0	24	6	5.55555556	2.314814815	64.35185185	20.83333333	6.481481481	4	2	11	3
634	0	0	0	14	4	25.80645161	6.451612903	48.38709677	3.225806452	9.677419355	1	2	7	1
635	0	0	0	18	5	7.954545455	2.22727273	43.18181818	7.954545455	29.54545455	1	2	10	1
636	0	0	0	16	3	5.732484076	0.636942675	38.21656051	17.8343949	14.64968153	2	1	7	2
637	5	0	0	22	5	9.047619048	4.285714286	79.04761905	4.761904762	2.380952381	2	1	14	2
638	0	0	0	25	6	1.643385374	1.643385374	23.58258012	58.34018077	3	2	12	4	
639	0	0	0	18	3	7.384615385	48.61538462	6.461538462	33.84615385	3	1	10	2	
640	4	0	0	26	7	5.042016807	0.420168067	31.09243697	22.689051563	34.87394958	5	1	12	3
641	0	0	0	22	5	25.786163502	0.314465409	4.716981132	67.2959748	0.314465409	8	1	6	4
642	1	0	0	25	6	13.61867704	0.3889105058	70.42801556	5.058365759	8.171206226	4	1	12	4
643	5	0	0	28	8	5.590062112	0	81.36645963	4.03726081	8.074534161	3	0	19	2
644	4	0	0	26	5	7.478632479	2.564102564	61.53846154	18.8034188	6.837606838	3	1	13	2
645	5	0	0	28	5	3.846153846	5.494505495	57.69230769	13.46153846	18.13186813	4	1	16	3
646	6	0	0	22	4	6.530612245	11.83673469	64.897985918	6.93877551	8.163265306	2	1	12	1
647	0	0	0	20	2	5.429864253	19.90950226	14.02714932	7.692307692	27.14932127	3	4	5	2
648	1	0	0	26	6	4.201680672	2.941176471	67.64705882	2.521008403	15.54621849	3	1	12	2
649	1	0	0	20	4	6.779661017	2.711864407	61.01694915	1.355932203	24.74576271	3	3	9	1
650	4	0	0	27	6	19.08127208	0	60.42402827	10.24734982	9.540636042	3	0	17	3
651	3	0	0	25	4	51.74825175	0.34965035	20.97902098	24.47552448	2.447552448	5	1	13	4
652	3	0	0	27	7	21.94570136	0.452488688	62.217119457	0.678730332	13.80090498	4	1	16	2
653	5	0	0	24	6	6.90497376	0	52.0361991	2.262443439	18.5520362	2	0	13	3
654	0	0	0	19	5	0.794491525	0	86.65251237	7.044491525	0.211864407	5	0	6	3
655	4	0	0	24	4	5.102040816	0	89.11564626	1.700680272	2.380952381	4	0	14	2
656	1	0	0	28	9	8.767772512	4.146919431	13.6255942	2.014218099	5	2	10	4	
657	1	0	0	22	7	22.29654404	0	72.68673356	3.901895206	0.557413601	4	0	11	4
658	1	0	0	15	2	14.22018349	0	14.06727829	6.1162019877	5	0	4	2	
659	3	0	0	18	3	7.77777778	44.07407407	33.33333333	0.740740741	4.814814815	2	1	9	2
660	3	0	0	21	5	5.315614618	1.328903654	82.39202658	6.97674186	0.664451827	2	1	12	2
661	4	0	0	20	5	0.931677019	0.931677019	54.34782609	18.01242236	20.49689441	2	1	13	1
662	0	0	0	18	4	6.557377049	0.327868852	84.91803279	2.62295082	2.950819672	2	1	9	1

Appendix G: **etrie** values of New exico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwPct	CImbrPct	SprwPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SprwTax	SprmTtax	
663	2	0	0	24	6	15.15151515	0.3378781879	70.833333333	5.15151515	7.196969697	4	1	9	3	
664	7	0	0	27	5	7.936507937	2.380952381	45.63492063	7.53968254	29.76190476	4	1	12	5	
665	3	0	0	24	6	32.57575758	0.757575758	35.98484848	1.136363636	28.78787879	4	1	14	2	
666	4	0	0	25	5	10.27027027	0.540540541	78.37837838	8.648648649	0.540540541	9	1	9	4	
667	3	0	0	22	6	5.223880597	4.8505446269	10.89552239	1.865671842	13.80597015	2	1	13	2	
668	3	0	0	14	4	38.98305085	5.084745763	29.66101695	10.16949153	0	4	2	5	2	
669	4	0	0	14	3	7.01754386	14.03508772	63.15789474	1.754385965	2	1	7	1		
670	4	0	0	26	5	43.62745098	10.78431373	31.61764706	1.470588235	8.088235294	4	2	11	4	
671	4	0	0	22	6	6	42	6	41.5	1.5	3	4	2	9	3
672	2	0	0	20	5	19.60784314	0	62.74509804	1.960784314	14.70588235	2	0	11	2	
673	4	0	0	22	4	24.36708861	0	66.13924051	3.164556962	6.329113924	4	0	13	3	
674	3	0	0	23	5	27.37430168	0	50.83798883	2.793296089	18.99441341	3	0	15	2	
675	2	0	0	19	3	9.625668449	12.8342246	68.98395722	3.20855615	5.347593583	4	1	9	3	
676	5	0	0	22	6	9.407665505	5.923344948	73.17073171	6.271777003	3.135888502	3	1	11	3	
677	5	0	0	26	6	4.761904762	0.432900433	87.87878788	2.164502165	0.432900433	3	1	16	3	
678	1	0	0	17	6	4.231625835	0	83.74164811	1.78173194	10.244988886	3	0	10	2	
679	8	0	0	22	2	4.149377593	0.414937759	39.00414938	35.26970954	20.33195021	2	1	12	4	
680	4	0	0	17	2	6.690140845	0	84.85915493	0.704225352	7.042253521	5	0	8	1	
681	4	0	0	21	6	5.673758865	1.063829787	58.86524823	0.35460929	34.04255319	4	1	12	1	
682	6	0	0	24	6	3.765690377	10.87866109	66.10878661	6.2276150628	12.55230126	1	1	16	2	
683	1	0	0	16	3	8.058608059	0	52.74725275	0	38.82783883	6	0	7	0	
684	0	0	0	14	6	7.457627119	0	75.59322034	1.355932203	15.59322034	3	0	9	1	
685	0	0	0	16	6	12.25296443	0	76.28458498	0.395256917	10.27667984	3	0	10	1	
686	2	1	0	19	6	7.594936709	6.329113924	82.27848101	0.843881857	2.953586498	3	1	13	1	
687	5	1	0	24	5	8.494208494	20.463332046	65.25096525	1.158301158	3.474903475	2	1	15	1	
688	2	0	0	25	7	13.33333333	0	61.66666667	1	23	4	0	13	2	
689	6	0	0	23	7	5.726872247	6.1167400881	64.75770925	4.845814978	18.06167401	1	1	16	2	
690	2	0	0	16	3	8.064516129	0	54.43548387	7.258064516	28.62903226	3	0	8	3	
691	2	0	0	19	3	13.73801917	0	35.7827476	18.21086262	30.03194888	4	0	9	3	
692	1	0	0	5	2	0	33.33333333	16.66666667	33.33333333	0	0	2	1		
693	0	0	0	8	2	38.0952381	12.6984127	15.87301587	31.74603175	0	2	1	2	2	
694	0	0	0	8	2	36.36336336	18.18181818	18.18181818	9.090909091	3	1	2	1		
695	8	0	0	29	6	31.96635121	0.630914826	55.73080967	8.201892744	2.103049422	3	1	17	5	
696	5	0	0	21	5	20.92050209	0	58.57740586	10.87866109	4.60251046	2	0	11	3	
697	1	0	0	25	4	13.46801347	12.12121212	46.12794613	8.417508418	16.4983165	3	2	10	3	
698	1	0	0	27	6	3.83272613	11.49825784	13.93728223	25.78397213	34.14634146	2	4	9	3	
699	3	0	0	35	10	5	3.956834532	6.115107914	32.01438849	20.86330935	33.45323741	3	5	15	6
700	1	0	0	25	5	28.01724138	2.72	75.2	4.16	6.88	4	4	9	2	
701	2	0	0	21	5	26.06606060	0.606060606	61.81818182	2.42424224	9.090909091	2	1	15	3	
702	2	0	0	23	5	25.85034014	0	46.2585034	2.040816327	24.48979592	4	0	12	2	
703	2	0	0	21	5	11.5942029	2.415458937	17.39130435	3.8647343	63.76811594	4	1	3	3	
704	1	0	0	18	2	6.181818182	0.363633364	18.5454545	0.363633364	71.63636364	4	1	4	1	
705	1	0	0	15	3	6.181818182	0.363633364	18.5454545	0.363633364	71.63636364	4	1	4	1	
706	2	0	0	15	6	5.641025641	5.128205128	75.8974359	0	13.333333333	2	2	9	0	
707	2	0	0	23	5	44.78764479	4.247104247	25.86872587	8.88030888	14.67181467	5	2	7	4	

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwPct	CImbrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax	
708	4	0	0	27	6	33.0158302	1.26984127	31.74603175	17.77777778	10.79365079	4	3	9	
709	1	0	0	22	5	16.04938272	0	3.70370304	27.57201646	2	0	13	3	
710	3	0	0	31	10	28.17337461	1.238390093	55.263157589	8.204334365	6.191950464	3	1	17	
713	2	0	0	29	7	10.03584229	8.422939068	74.01433692	4.838709677	2.150537634	3	2	15	
716	2	0	0	21	6	39.20445455	6.25	40.90969091	6.25	3.977272727	2	1	11	
717	2	0	0	23	6	70.995671	1.731601732	7.359307359	14.71861472	0.216450216	3	3	8	
718	2	0	0	18	3	59.84455959	5.440414508	19.68911917	12.69430052	2.331606218	3	2	10	
719	2	0	0	30	7	0.974658869	1.559454191	77.582846	9.941520468	7.602339181	3	1	18	
720	1	0	0	24	5	0.76046274	1.140684411	72.24334601	21.29277567	3.802281369	1	2	14	
723	1	0	0	23	6	23.97260274	1.369863014	48.28767123	19.17808219	6.164383562	2	3	12	
724	2	0	0	32	8	23.37164751	10.72796935	16.09195402	28.35249042	14.17624521	3	6	13	
725	1	0	0	36	9	8.868501529	3.160040775	69.52089704	8.460754332	8.766556473	3	3	22	
728	0	0	0	31	7	7.692307692	9.79020979	49.3006993	8.741258741	10.13986014	3	4	16	
729	1	0	0	26	5	14.28571429	45.71428571	8.571428571	20.81632253	4.8977959184	5	5	6	
730	1	0	0	29	9	12.40310078	11.24031008	35.65891473	15.89147287	17.05426357	4	4	13	
731	1	0	0	24	6	10.55276382	15.41038526	57.62144054	11.39028476	4.690117253	3	3	12	
732	1	0	0	19	5	20.34632035	0	36.363363636	40.25974026	3.03030303	3	0	10	
733	2	0	0	18	5	8.294930876	0	38.70967742	44.700460983	7.8334101382	3	0	8	
734	1	0	0	21	4	16.21621622	0	39.18918919	43.24324324	1.351351351	4	0	13	
735	0	0	0	20	6	31.025564103	0.384615385	59.74358974	2.435897436	6.025641026	1	2	11	
736	6	0	0	29	6	9.37896071	1.140684411	72.05322194	1.5844283904	15.65272497	4	1	15	
737	0	0	0	15	1	41.13207547	1.132075472	14.33962264	17.73584906	13.20754717	2	1	4	
738	0	0	0	14	2	52.53411306	9.75	-02	18.51851852	26.02339181	0	6	1	
739	0	0	0	24	6	21.26436782	1.005747126	69.54022989	3.59191954	3.160916043	2	2	12	
740	0	0	0	21	8	4.032328065	0	84.67741935	0.806451613	9.677419355	4	0	14	
741	0	0	0	15	2	29.13907285	0	66.00441501	1.766004415	0	2	0	7	
742	0	0	0	14	4	17.43119266	0	66.97247706	0	13.76146789	2	0	9	
743	1	0	0	20	3	10.11357491	0	60.41103299	10.43807463	17.19848567	2	0	10	
744	0	0	0	20	3	20.85561497	0	40.64171123	10.42780749	16.31016043	2	0	9	
745	0	0	0	14	1	1.11111111	9.444444444	0	7.222222222	3	2	3	0	
746	0	0	0	6	1	4.166666667	8.333333333	75	0	4.166666667	1	1	2	
747	0	0	0	9	2	6.25	0	71.875	3.125	9.375	1	0	5	
748	0	0	0	0	0	0	0	0	0	0	0	0	0	
749	0	0	0	6	1	10.52631579	0	56.57894737	21.71052632	11.18421053	1	0	3	
750	0	0	0	11	2	19.13875598	0	64.11483254	4.306220096	11.96172249	2	0	4	
751	0	0	0	21	5	0.253807107	0.76142132	88.07106599	0.76142132	6.852791878	1	2	12	
752	0	0	0	6	1	13.95437262	3.80	-02	86.007604056	0	3	1	2	
753	4	1	0	12	3	0	6.29922598	50.39370079	7.086614173	36.22047244	0	1	9	1
754	3	1	0	14	0	6.069364162	0.289017341	28.6127176	1.156069364	63.58381503	1	1	7	2
755	1	0	0	10	3	18.2320442	0	11.04972376	44.1988503	24.30939227	4	0	3	1
756	4	0	0	25	8	46.38888206	0	38.79374535	0.297840655	1.414743112	3	0	17	1
757	3	0	0	19	6	22.15088283	0.321027287	51.20385233	6.902086677	5.778491172	2	1	11	2
758	1	0	0	20	8	12.38584475	0	77.16894977	1.198630137	5.02283105	4	0	10	3
759	0	0	0	11	0	50	0	3.333333333	1.666666667	28.333333333	2	0	2	1
760	0	0	0	17	4	1.467772814	1.723037652	91.64007658	2.425015954	1.148691768	1	1	10	2

Appendix G: **etrie** values of New Mexico Stream Samples

BsnSamplID	PlecoTax	PlecoTax	TarnyTax	TotalTax	TrichTax	BirrwTax	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
761	0	0	0	21	5	3.812/0903	0	95.183/94649	0.535/117057	0.334/448161	3	0	13	2
762	0	0	0	17	2	22.038/56749	0	18.732/78237	16.253/44353	34.710/7438	3	0	6	2
763	1	0	0	23	6	2.522/93578	0.152/905199	35.626/91131	5.275/229358	56.192/66055	3	2	9	3
764	0	0	0	19	5	24.243/42105	0.164/473684	74.144/73684	0.328/947368	0.625	1	2	10	2
765	4	1	0	25	7	9.124/087591	0.72992/7007	74.270/07299	1.824/817518	13.686/13139	2	1	17	2
766	0	0	0	29	4	19.902/12072	9.787/98222	38.336/0522	13.539/96737	16.884/17618	7	4	10	3
767	0	0	0	13	2	3.573/085847	1.252/900232	1.624/12993	0	4.64 -02	3	2	3	0
768	0	0	0	28	10	18.793/10345	0.172/413793	51.551/72414	19.827/58621	7.758/62069	2	1	16	4
769	5	0	0	25	5	28.400/95465	0	39.379/47494	6.444/3914081	7.875/894988	3	0	12	6
770	5	0	0	22	6	17.582/41758	0	52.197/8022	2.747/252/47	4.395/604396	3	0	13	3
771	3	0	0	19	4	0.462/249615	2.465/331279	86.748/84438	0.462/249615	9.553/158/06	3	1	11	1
772	0	0	0	13	2	3.448/275862	4.597/701149	73.563/21839	0	17.24/137931	2	1	5	0
773	0	0	0	17	3	61.330/98798	2.93 -02	29.228/96511	5.540/897098	3.195/543829	2	1	8	3
774	0	0	0	0	0	0	0	0	0	0	0	0	0	0
775	0	0	0	9	1	41.428/57143	2.857/142857	12.857/14286	14.285/71429	27.142/85714	2	1	2	2
776	8	0	0	30	5	5.555/55556	0	67.824/07407	2.314/814815	23.611/11111	3	0	18	5
777	0	0	0	7	1	6.578/947368	14.473/68421	43.421/05263	0	35.526/31579	1	2	3	0
778	0	0	0	22	8	3.036/876356	0.650/752219	83.731/01952	2.169/197397	1.301/518438	1	2	14	1
779	0	0	0	12	1	9.302/325581	16.279/06977	51.162/79077	5.813/953488	1.162/790698	2	2	2	2
780	2	0	0	20	4	11.523/4375	0.78125	72.656/25	13.281/25	1.171/875	4	2	7	4
781	3	0	0	18	5	23.266/21924	0	47.651/00671	4.697/986577	24.384/78747	3	0	10	3
782	1	0	0	10	1	11.764/70588	0	45.490/19608	31.372/54902	27.450/98039	3	0	3	1
783	0	0	0	8	0	20.92/198582	34.929/07801	1.418/439716	0.531/914894	41.843/97163	1	1	1	1
784	0	0	0	9	1	61.046/51163	1.162/790698	25.581/39535	0	12.209/30233	1	2	3	0
785	0	0	0	9	2	1.25	0	47.1875	1.562/5	48.7/5	3	0	3	1
786	0	0	0	6	0	77.157/36041	0	18.274/11168	1.522/84264	0	3	0	1	1
787	0	0	0	3	1	0	0	60	40	0	0	0	2	1
788	0	0	0	17	6	33.541/83871	0	29.216/58986	3.133/640553	2.211/981567	1	0	10	2
789	0	0	0	14	0	93.173/5067	0	2.275/497765	1.340/918326	2.722/47054	3	0	2	4
790	1	0	0	19	3	12.525/66735	0	13.552/3614	7.597/53534	16.632/44353	3	0	5	6
791	2	0	0	22	2	28.884/82633	0.731/261426	29.616/08775	19.926/87386	20.658/13528	3	1	7	6
792	0	0	0	25	6	7.446/808511	2.127/659574	69.858/15603	5.319/148936	7.092/198582	1	3	8	3
793	4	0	0	21	5	22.815/33398	0	68.932/03883	0.485/436893	2.427/184466	5	0	11	1
794	2	0	0	29	6	10.354/74593	1.534/036433	71.812/08054	0.862/895494	10.450/6232	3	5	12	3
795	0	0	0	8	2	24.137/93103	24.137/93103	24.137/93103	0	25.862/06897	2	1	3	0
796	0	0	0	20	1	20.408/16327	5.102/040816	19.387/7551	4.081/632653	14.285/71429	3	2	5	2
797	0	0	0	11	0	10.204/08163	0	10.204/08163	16.326/53061	28.57142857	1	0	2	3
798	0	0	0	19	6	3.870/967742	5.161/290323	58.064/51613	0.645/16129	2.580/645161	2	3	10	1
799	0	0	0	13	1	0.701/754386	1.052/631579	67.368/42105	13.333/33333	17.192/98246	1	1	5	3
800	0	0	0	2	0	0	0	0	0	0	0	0	0	0
801	0	0	0	18	5	2.105/263158	2.631/578947	88.421/05263	0	1.052/631579	1	1	10	0
802	0	0	0	7	1	8.870/967742	0	86.290/32258	0	4.032/258065	2	0	2	0
807	2	0	0	19	1	19.780/21978	4.578/754579	19.780/21978	2.197/8021978	13.553/11355	4	1	6	2
812	3	0	0	17	2	10.983/98169	7.322/654462	54.004/57666	12.585/81236	4.118/993135	3	2	6	2
813	1	0	0	11	0	25.333/33333	2.333/33333	65	5	1.666/6666667	3	1	2	1

Appendix G: Values of New Mexico Stream Samples

BnsSamplID	PlecoTax	Pterotax	TarnyTax	TotalTax	TrichTax	BrrwrPct	CImbrPct	CIngrPct	SPrwlPct	SwmmrPct	BrrwrTax	CImbrTax	CIngrTax	SPrwlTax
814	0	0	0	18	1	44.39655172	5.17243793	4.310344828	2.155172414	28.44827586	2	4	3	3
815	1	0	0	22	3	25	2.43055556	19.61805556	12.5	13.19444444	4	3	4	6
816	0	0	0	0	0	0	0	0	0	0	0	0	0	0
817	1	0	0	17	1	35.45454545	3.181818182	11.81818182	37.72727273	6.363636364	2	4	3	4
818	0	0	0	7	1	8.870967742	0	86.29032258	0	4.032258065	2	0	2	0

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	ClctPct	FiltrPct	PredPct	ScrapPct	ShredPct	ClctPct	FiltrTax	PredTax	ScrapTax	ShredTax
23	0	50.520833333	6.7708333333	0.5208333333	0	0	2	1	1	0	0
24	2	20.63492063	0	10.26455026	41.48148148	6.878306878	5	0	5	3	2
25	1	14.63178295	13.37209302	5.135658915	30.62015504	0.484496124	2	1	3	4	2
26	1	45.59471366	2.863436123	0.660792952	12.11453744	0	3	1	1	2	0
27	2	50.82644628	2.789256198	8.47107438	4.23533719	1.652892562	1	10	3	2	2
28	3	48.5059761	4.183269932	2.390438247	7.1171314741	29.88047809	9	1	7	3	4
29	1	25.92592593	63.3744856	6.995884774	0	3.703703704	8	1	2	0	3
30	2	24.87313737	26.89393939	7.323232323	27.52525253	2.27272727273	6	2	4	3	6
31	2	43.87755102	13.43537415	8.503401361	0.510204082	2.0408163277	7	1	5	2	2
32	3	22.96918768	0	8.403361345	64.14565826	3.361344538	8	0	4	3	6
33	3	21.24157953	3.181189488	1.659751037	1.24483278	50.06915629	7	1	4	2	3
34	3	39.3220339	3.050847458	2.372881356	0.169491525	49.3220339	10	1	4	1	3
35	2	25.28957529	0.193050193	14.47876448	58.3011583	0.579150579	5	1	6	5	2
36	1	24.03100775	48.19121447	1.291989664	9.3023295581	16.1498708	5	1	5	4	3
37	2	17.51054852	18.35443038	9.493670886	32.06751055	0.210970464	5	3	7	7	1
38	1	17.39130435	32.10702341	1.672240803	5.183946488	4.849498328	7	1	5	3	2
39	3	13.04347826	1.185770751	2.635046113	4.611330698	59.94729908	10	1	4	2	2
40	1	33.18181818	0	4.090909091	54.54545455	5	4	0	4	3	4
41	1	78.01724138	1.293103448	6.034482759	7.75862069	6.034482759	8	1	6	2	4
42	1	84.24821002	0.238663484	2.863961814	3.579952267	7.3985668019	5	1	4	3	2
43	1	86.70634921	0	3.968253968	5.3571142857	2.1825397683	7	0	7	5	2
44	1	91.2596401	1.799495861	0.25769409	6.16966581	0	7	1	1	3	0
45	1	86.02150538	1.075268817	1.612903226	9.677149355	0	6	1	2	2	0
46	1	67.90469516	13.59495445	2.803083392	12.82410652	1.61177295	7	2	3	3	1
47	2	60.37151703	0.309597523	17.64705882	12.3839093	2.167182663	6	1	7	7	3
48	1	56.96202532	0.316455696	19.62025316	20.88607595	0.949367089	8	1	8	6	2
49	1	28.41530055	18.57923497	15.30054645	1.092896175	0	4	1	4	1	0
50	1	84.21052632	13.15789474	2.631578947	0	0	4	1	1	0	0
51	1	80.35714286	10.71428571	7.142857143	1.785714286	0	4	1	2	1	0
52	2	77.19298246	7.01754386	7.01754386	5.263157895	0	6	2	2	1	0
53	0	0	0	66.666666667	0	0	0	0	1	0	0
54	2	71.551172414	8.620689655	4.310344828	6.896551724	2.5886206897	7	1	4	2	3
55	2	56.58682635	11.07784431	3.293413174	5.089820359	1.796407186	11	1	4	1	3
56	1	53.87205387	17.84511785	8.754208754	1.346801347	5.387205387	5	2	7	2	3
57	1	58.64978903	0	8.016877637	2.109704641	4.641350211	8	0	5	2	2
58	2	69.10569106	0	21.95121951	0.81300813	8.130081301	3	0	3	1	2
59	2	43.31210191	1.910828025	35.666878981	14.01273885	5.095541401	4	1	4	1	2
60	2	28.01932367	11.5942029	19.3236715	0	40.09661836	3	2	6	0	2
61	2	28.40909091	1.704545455	16.4727273	0.568181818	52.27272727	5	1	7	1	2
62	3	50	0	4.081632653	0	14.28571429	3	0	4	0	2
63	1	93.1372549	2.1566862745	0	0	4.705882353	3	1	0	0	3
64	1	29.50819672	21.31147541	1.639344262	1.639344262	45.90163934	3	1	1	1	2
65	2	76	15.33333333	4	1.333333333	1.333333333	8	2	3	2	1
66	2	58.65102639	20.23460411	1.173020528	13.19648094	5.571847507	8	1	4	1	2
67	2	66.12021858	0.819672131	0.273224044	5.464480874	3.551912568	8	1	1	2	4

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
68	2	50.84033613	0.840336134	0.420168067	1.260504202	5.462184874	7	1	1	1	3
69	1	60.58631922	16.61237785	3.25732899	13.02931596	3.25732899	10	1	5	2	2
70	3	60	16.31578947	12.10526316	0	7.894736842	9	2	9	0	3
71	1	55.30303033	11.36363636	5.303030303	18.18181818	6.818181818	5	1	3	2	3
72	2	61.94029851	19.40298507	1.492553713	2.23880597	7.462268567	7	2	1	2	2
73	3	68.83408072	17.04035874	1.345529148	3.587443946	6.05381165	10	3	3	4	2
74	2	65.12875536	0	3.21888412	22.96137339	7.296137339	7	0	6	3	4
75	3	58.03571429	25	3.571428571	0.892857143	1.785714286	9	2	2	1	2
76	3	49.4228736	29.59770115	5.747126437	4.885057471	4.885057471	6	2	3	3	2
77	2	40.24144869	1.810865191	5.633802817	30.38229376	11.67002012	8	1	6	6	4
78	2	21.73913043	0.668896321	13.04347826	44.48160535	20.06688963	3	2	5	2	5
79	1	48.11073171	6.097560976	5.792682927	4.573170732	28.96341463	7	3	5	3	4
80	2	57.14285714	11.07142857	4.285714286	0.357142857	1.785714286	7	3	7	1	4
81	1	49.18032787	30.6010929	8.196721311	0.546448087	3.278688525	7	2	5	1	4
82	1	71.40151515	2.272727273	3.03030303	9.46969697	2.462121212	5	1	5	4	5
83	2	61.42857143	0	16.42857143	11.42857143	7.857142857	5	0	5	3	3
84	2	61.212366609	2.237521515	5.851979346	2.925989673	4.475043029	5	2	3	1	4
85	2	32.33695652	4.279891304	6.453804348	0.135869565	27.30978261	8	1	7	1	2
86	2	38.44393593	11.8993135	4.805491991	5.034324943	6.407322654	7	3	5	4	2
87	3	22.34169654	6.09318964	8.124253286	0.597371565	14.6953405	8	1	9	1	4
88	2	25.04708098	2.824858757	13.37099812	8.851224105	18.6440678	8	1	6	3	5
89	2	64.86928105	0.98039157	5.065359477	7.679738562	14.9256827	8	3	8	2	3
90	1	66.88102894	1.39335477	11.14683816	1.178992497	12.00428725	9	2	6	2	5
91	1	47.4012474	0.623700624	8.93970894	2.910602911	24.94802495	9	2	7	2	4
92	3	33.36898396	3.743315508	6.203208556	0.641717123	34.01069519	8	2	6	2	4
93	2	83.11688312	0.324675325	3.571428571	1.298701299	7.954545455	8	1	6	3	5
94	2	45.37815126	2.133160957	7.433742728	2.068519716	39.88364577	9	1	6	4	5
95	1	26.40692641	1.298701299	57.14285714	2.164502165	11.68831169	7	1	7	2	4
96	1	46.47058824	30	3.823529412	6.764705882	3.529411765	6	1	5	2	3
97	2	45.76612903	36.89516129	0	6.25	2.016129032	7	1	0	1	3
98	1	37.18309859	0	0.704225352	4.929577465	1.267605634	6	0	2	2	2
99	2	18.06526807	18.06526807	0.34995035	2.797202797	12.004662	8	2	3	2	3
100	2	74.70023981	14.74820144	2.278177458	2.8777697842	3.597122302	7	1	3	2	3
101	1	20.28985507	53.62318841	7.729468599	0.483091787	10.62801932	6	2	4	1	2
102	1	79.11611785	17.67764298	0.953206239	1.64644714	8.67 -02	6	3	3	2	1
103	0	52.53077975	44.45964432	0.683994528	0.136798906	0.820792434	4	4	3	1	1
104	0	71.03004292	24.67811159	0.42984549	1.502145923	1.072961373	3	1	1	1	1
105	1	34.17085427	5.527638191	56.28140704	0	1.507537688	5	2	5	0	2
106	3	46.88128773	2.012072435	4.02414869	16.29778672	7.444668008	10	1	5	2	6
107	3	39.87341772	0.158227848	6.962025316	9.018987342	13.60759494	9	1	8	4	6
108	2	37.29809104	0	8.370044053	16.88693098	9.544787078	10	0	9	4	6
109	4	54.69061876	1.663339987	5.123087159	0.731869594	24.6174318	10	1	7	3	5
110	2	33.12883436	1.993865031	5.674846626	0.460122699	34.04907975	7	2	8	2	4
111	4	36.22685185	1.967592593	6.25	3.009259259	17.3611111	10	1	8	2	3
112	1	64.80446927	7.262569832	16.75977654	0.558659218	16.145251397	3	1	8	1	2

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
113	2	38.95131086	4.307116105	5.333078652	4.775288999	34.83146067	10	2	10	1	4
114	2	94.42090395	-02	1.906779661	0.494350282	2.683615819	7	1	6	1	6
115	2	58.53269537	6.533907496	12.75917065	1.594896332	7.177033493	8	4	8	4	4
116	2	40.98484848	9.166666667	6.212121212	0	9.772212273	9	2	9	0	1
117	2	37.6984127	0.992063492	9.325396825	24.00793651	5.753968254	10	1	8	4	4
118	0	7.142857143	0	69.04761905	0	0	0	3	0	4	0
119	1	55.23385301	30.51224944	10.91314031	0.890868597	1.781737194	5	1	3	1	3
120	0	17.1875	9.375	20.3125	0	53.125	2	1	5	0	2
121	1	93.42105263	3.50877193	1.754385965	0.877192982	0.438596491	5	1	1	2	1
122	1	48.9539749	21.333891213	7.949790795	9.205020921	1.673640167	3	1	5	3	1
123	3	32.33695652	29.77807971	3.872282609	19.24878841	1.5398855072	9	1	4	4	2
124	1	82.48847926	3.225896452	2.304147465	2.304147465	5.529953917	7	2	2	1	1
125	1	65.87301587	3.968253968	3.968253968	14.28571429	2.380952381	6	2	3	1	1
126	2	71.6080402	6.030150754	1.75879397	10.55276382	1.75879397	6	3	4	3	2
127	1	36.08247423	3.608247423	1.030927835	45.87628866	0	5	2	2	0	0
128	1	25.56818182	32.954545	3.409090909	7.386363636	0	8	2	3	2	0
129	1	43.61054767	48.27586207	1.21703854	0.202839757	0.60851927	8	2	2	1	2
130	2	13.62007168	51.61290323	1.792114695	2.867383513	0.7168485878	6	2	4	2	1
131	1	49.79253112	0	2.489626556	0	47.51031344	4	0	3	0	3
132	2	31.2244898	0.204081633	15.91836735	19.591183673	10.81632653	7	1	5	1	6
133	3	26.12826603	0	18.76484561	19.23990499	2.375296912	7	0	8	1	4
134	2	29.76588629	0	14.71571906	16.05351171	5.685518729	6	0	7	1	2
135	3	15.54878049	0	16.463414643	16.63414634	6.707317073	10	0	5	1	3
136	3	23.5294116	0.3226797386	30.06553948	10.45751634	23.20261438	4	1	6	2	5
137	4	39.52095808	1.19760479	9.880239521	13.322335329	1.347305389	8	2	9	2	3
138	2	21.96969697	6.313131313	3.030303033	11.61616162	0	6	2	3	4	0
139	3	23.46368715	12.5698324	5.027932961	19.55307263	0	8	2	4	3	0
140	3	32.56704981	31.9284802	4.086845466	8.684546616	1.53256705	10	2	5	2	2
141	3	31.57894737	17.54385965	4.093567251	8.771929825	0.584795322	4	2	5	2	1
142	1	52.56410256	3.846153846	10.25641026	6.41025641	7.692307692	5	1	2	1	1
143	2	7.952622673	89.00169205	0.507614213	0.338409475	0	6	2	2	1	0
144	1	99.77973568	0	0	0.20264317	0	4	0	1	0	0
145	1	63.63636364	12.12121212	7.359307359	16.88311688	0	6	1	1	0	0
146	1	66.09336609	1.474201474	30.95833096	1.474201474	0	5	1	2	2	0
147	1	81.48148148	4.074074074	5.185185185	8.518518519	0	7	2	1	1	0
148	1	52.63157895	15.78947368	5.263157895	5.263157895	0	4	1	1	0	0
149	1	25.29335072	64.01564537	0.130378096	0.130378096	3.911342894	7	1	1	1	1
150	1	59.45945946	19.87981982	3.603603604	2.702702703	7.657657658	5	2	3	2	2
151	3	71.20500782	3.442879499	3.286384977	3.5499374022	0.782472613	6	1	5	2	3
152	3	36.2170088	10.3372434	3.812316716	1.759530792	7.33 -02	7	2	8	1	1
153	3	50.61264574	0.373692078	0.523188909	10.91180867	36.77130045	6	1	3	2	1
154	3	39.3442623	2.017554477	4.224464061	11.03404792	1.071878941	6	1	7	3	4
155	3	31.12426036	11.36994675	7.455621302	11.47928994	23.66863905	7	3	5	3	4
156	4	33.361558	9.652836579	7.959356478	9.398814564	17.27349704	8	3	10	3	3
157	4	22.96110414	6.148055207	5.39523212	10.53952321	30.36386449	7	3	7	2	4

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
158	1	66.6666666667	0	0	0	0	0	3	0	0	0
159	1	2.6666666667	24.44444444	6.6666666667	4.8888888889	0	0	3	1	3	2
160	3	20	0	30.96774194	19.677741935	3.225806452	6	0	9	2	2
161	1	6.25	3.409090909	9.659090909	1.13633636	0	2	1	5	1	0
162	1	45.92592593	0	2.2222222222	1.481481481	0	3	0	1	1	0
163	3	44.83798041	24.49133384	2.562170309	0.034664657	0.5275056552	6	3	5	5	1
164	4	27.03260421	31.86132893	1.815930664	0.660338423	0.907965332	9	3	5	3	1
165	2	27.97927461	0	13.21243523	1.03626943	7.512953368	5	0	5	1	3
166	2	19.17293233	0.939849624	7.330827068	9.398496241	30.63909774	9	2	6	1	4
167	1	40.1826484	9.877351598	9.360730594	5.251141553	13.24200913	6	4	4	2	4
168	2	33.40040241	0	4.225352113	0.402414487	9.054325956	9	0	6	1	4
169	4	19.50207469	0.829875519	7.053941909	10.1659751	26.76348548	8	1	7	3	3
170	3	26.93133047	0.107296137	3.433476395	1.60944206	25.42918455	8	1	9	2	4
171	3	75.10316369	0	6.602475928	5.089408528	7.290233838	7	0	10	3	6
172	2	47.64397906	8.90052356	17.80104712	1.570680628	9.42408377	6	2	4	1	3
173	1	43.98340249	18.25726141	3.734439834	0	1.244813278	6	2	3	0	2
174	1	90.4109589	0.684931507	7.534246575	0.684931507	0	3	1	1	1	0
175	1	65.76576577	25.22525253	4.504504505	1.801801802	0	2	1	2	1	0
176	2	94.58899459	5.128205128	0.284900285	0	0	6	1	1	0	0
177	2	75.4950495	22.27722772	1.98019802	0.247524752	0	7	2	4	1	0
178	2	57.63546798	0	4.187192118	3.9408867	28.81773399	7	0	4	1	3
179	3	55.76923077	0	6.53841538	7.69230769	11.53841514	11	0	4	1	3
180	3	72.30142566	11.40529532	8.350305499	0.407331976	4.887983707	8	2	6	1	5
183	3	47.08423326	0.215582721	5.8313133477	0	8.2073343413	10	1	7	0	4
184	3	33.53458537	0	11.58536585	16.76829268	7.62195122	7	0	6	4	4
185	0	91.20603015	0	1.256281407	3.015075377	3.894477362	6	0	4	3	4
186	1	61.95335277	5.976676385	2.915451895	7.361516035	0.29154519	7	2	4	2	2
187	1	18.18181818	0.216450216	7.359307359	39.17748918	1.731601732	6	1	6	3	3
188	1	25.51020408	36.734169388	1.360544218	0	8.163265306	2	2	3	0	3
189	1	47.82608696	28.26086957	2.173913043	4.347826087	10.86955622	5	2	2	3	2
190	2	78.5	0	9.5	0	2	7	0	4	0	1
191	2	78.59078591	0	9.756097561	0	1.89701897	8	0	6	0	3
192	1	29.81481481	0	22.40740741	23.33333333	11.2962963	3	0	6	2	4
193	1	58.13953488	8.010335917	4.134366925	8.26883385	2.325581395	6	1	5	2	1
194	2	71.21588089	0	8.436724566	3.970223325	3.473945409	7	0	3	2	3
195	4	62.11723535	10.84864392	0.874890639	5.861767279	1.837270341	10	2	6	1	1
196	2	38.43717001	20.59734108	1.583949314	31.36219641	1.055966209	9	2	5	2	2
197	2	8.156028369	0	13.4751773	26.24113475	20.92198582	6	0	6	3	5
198	2	16	0	14	2.666666667	2.666666667	4	0	2	1	3
199	1	43.35548173	0.166112957	20.09966777	1.993355482	10.46511628	3	1	5	2	6
200	4	55.56994819	0.129533329	16.58031088	1.424870466	5.958549223	10	1	6	1	2
201	2	22.41758242	0	10.32967033	12.52747253	25.27472527	5	0	11	1	1
202	3	16.99029126	5.825342718	1.941747573	66.01941748	5.3398085825	4	2	3	3	1
203	1	17.99242424	16.28787879	1.325757576	2.083333333	0.189393939	6	2	2	3	1
204	2	19.72912973	23.51351351	0.810810811	4.864864865	1.621621622	5	1	3	4	3

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
205	1	13.23155216	8.142493639	1.272264631	2.544529262	0.254452926	4	2	1	2	1
206	3	35.27885863	4.150453956	2.853437095	2.715654952	3.354632588	0.129701167	6	2	6	2
207	2	36.42172524	7.028753994	0	0	0	0.638977636	6	2	4	2
208	2	96.98492462	0	0	0	0	0.753768844	3	0	0	0
209	3	29.873588616	7.252162342	2.129075183	7.318865941	0.199660798	6	1	10	4	2
210	2	11.23595506	8.707865169	0.280898876	4.494382022	0.280898876	4	2	1	3	1
211	2	33.42541436	38.39779006	0	9.392265193	0.552486188	5	3	0	4	2
212	3	34.23423423	0	4.504504505	5.405405405	0	6	0	3	1	0
213	1	33.53293413	53.29341317	0	0.598802395	0.598802395	6	2	0	1	1
214	1	45.80645161	25.59139785	1.935483871	1.935483871	1.075266817	5	2	4	2	2
215	1	25.5033557	0.67114094	0.33557047	2.516778523	0.167785235	5	2	1	2	1
216	1	41.73913043	0.434782609	0.434782609	0.8695565217	26.95652174	6	1	1	2	2
217	2	15.96516691	0.290275762	0.290275762	0.435413643	9.433962264	5	2	2	2	1
218	2	28.38709677	0	0	0.860215054	9.677419355	7	0	0	1	3
219	3	33.12757202	1.234567901	8.024691358	16.04938272	2.263374486	10	2	6	4	3
220	3	35.4978355	0.4332900433	15.151515	6.493506494	11.68831169	6	1	9	2	4
221	2	38.80597015	0.149253731	4.179104478	5.970149254	21.94029851	10	1	6	1	4
222	2	15.14032496	48.30132939	6.94239291	1.255539743	3.17577548	8	4	10	2	2
223	1	34.15783274	0.824499411	4.475833946	2.120141343	14.134271562	8	3	6	1	5
224	2	19.93957704	0	12.38670695	25.3776435	29.60725076	5	0	7	3	5
225	2	10.73825503	0	36.91275168	5.3691275168	18.120805377	5	0	7	2	5
226	3	25.36912752	0	20.9395732	1.476510067	34.76510067	5	0	7	2	8
227	4	25.73099415	4.678362573	13.888888889	10.81871345	14.766608187	8	2	6	4	3
228	2	44.94382022	0.715015322	5.617977528	5.413687436	0.919305414	6	1	5	1	1
229	2	71.98067633	1.771336554	5.475040258	2.0933397746	2.254428341	7	1	6	2	2
230	3	18.22916667	0	25.86805556	28.81944444	17.1875	6	0	5	2	4
231	2	37.92207792	0	13.24675325	4.115844156	21.818181812	7	0	6	1	4
232	3	23.14606742	5.617977528	8.539325843	20.4494382	21.57303371	11	3	8	4	4
233	5	16.32453061	5.668531195	8.60058309	15.45189504	25.80174927	8	4	8	4	4
234	1	78.76106195	5.309734513	4.424778761	0.884955752	4	1	2	1	1	1
235	2	83.3333333	4.166666667	0	0	0	4	1	0	0	0
236	2	39.56989247	0	33.5483871	4.301075269	1.2903322581	6	0	5	2	2
237	5	15.42483366	0	11.63398693	21.17647059	39.60784314	8	0	6	3	5
238	3	35.40462428	0.4333526012	9.971098266	3.757225434	15.02890173	11	1	7	3	5
239	2	90.0243309	0	4.379562044	2.433090024	0.97323601	6	0	2	1	2
240	2	51.69902913	0	3.640771699	6.553398058	10.9223301	10	0	4	1	3
241	1	60.09174312	1.834862385	15.59633028	1.146788991	10.77981651	7	2	7	2	4
242	3	37.75234201	0	3.159851301	0	16.35687732	9	0	7	0	4
243	1	45.89552239	0	11.94029851	10.074662687	5.970149254	8	0	5	2	3
244	2	43.81270903	17.50278707	4.570791527	0.5571413601	1.895206243	6	1	5	2	3
245	2	43.86160714	17.52232143	4.464285714	0.558035714	1.897321429	6	1	6	2	3
246	1	35.34246575	16.71232877	2.739726027	1.095890411	3.835616438	6	1	4	1	5
247	1	91.92200557	0	5.013922577	1.114206128	0.13927576	4	0	3	1	1
248	1	49.21816828	7.8183172	2.308265078	9.084139985	6.329113924	6	1	6	3	2
249	4	58.33333333	0	17.02898551	3.442028986	4.3477826087	9	0	10	4	7

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
250	1	55.61797753	0	3.93258427	30.333707865	1.68539258	8	0	4	2	3
252	2	60.9152560976	0.6966864111	3.484320557	0	4.529616725	8	1	3	0	2
253	2	54.85564304	0	8.923884514	2.099737533	2.6244671916	9	0	5	1	3
254	2	48.69325997	4.814305365	4.264099037	2.338376891	6.189821183	9	2	6	2	5
255	1	45.161290932	0	4.838709677	7.258064516	4.301075269	6	0	4	2	2
256	0	96.24681934	0	1.335877863	0.6336132316	0.190839695	4	0	5	1	1
257	2	68.14814815	0	4.444444444	1.851851852	1.851851852	8	0	4	1	1
258	3	55.70032573	0	3.908794788	19.86970684	1.302931596	7	0	3	2	3
259	2	28.37209302	0	23.95348837	28.13953488	12.55813953	6	0	5	2	3
260	1	56.02605863	0	8.469055375	7.1166123779	7.491856678	8	0	4	2	3
261	3	53.37620579	0	9.324758842	8.681672026	2.572347267	10	0	6	2	3
262	3	77.99145299	0	5.555555556	0.213675214	2.777777778	10	0	9	1	5
263	1	8.602150538	0	25.2688172	13.97849462	6.989247312	4	0	7	2	4
264	2	8.982035928	0	13.17355269	10.777844311	7.185628743	2	0	3	2	6
265	2	28.40236686	0.295857988	31.06508876	6.213017751	5.325443787	5	1	5	1	3
266	2	77.5862069	0.862068966	6.034482759	0	6	1	2	1	0	0
267	4	66.08695652	0	20	0	0	0	9	0	4	0
268	1	37.71186441	8.474576271	1.059322034	0.211864407	0.211864407	8	2	3	1	1
269	1	49.47368421	11.57894737	4.210526316	1.052631579	0	6	2	2	1	0
270	3	49.13043478	10.43478261	9.565217391	7.826608696	0	9	1	5	4	0
271	5	80.53435115	0	3.435114504	4.961832061	1.526717557	9	0	4	3	2
272	1	76.74118605	1.162179698	20.9323256	0	0	3	1	0	0	0
273	1	46.15384615	0	16.92307692	0	4.615384615	6	0	1	0	1
274	3	9.274193548	2.620967742	6.85483871	18.5483871	15.12096774	4	1	8	4	4
275	3	33.76865672	0	19.21641791	1.492537313	30.2238806	8	0	7	1	5
276	2	36.07924922	7.299270073	1.251303441	15.01564129	21.68929865	10	4	8	3	6
277	2	39.27315358	3.751465416	1.055099648	17.70222743	6.447831184	9	2	6	3	5
278	4	49.15254237	0.564971751	7.344632768	29.94350282	0	6	1	5	1	0
279	1	35.31468531	0.34965035	1.048951049	29.720271972	8.391608392	8	1	2	4	3
280	1	36.57407407	0	3.240470741	7.407407407	11.57407407	8	0	6	3	3
281	2	28.29268293	12.19512195	1.951219512	10.731707322	7.317073171	4	2	3	2	2
282	1	89.13043478	0	2.173913043	8.333333333	0.362318841	7	0	2	2	1
283	1	92.61744966	0	0	0	4.026845638	4	0	0	0	1
284	2	26.54320988	1.234567901	3.703703704	35.18518519	8.024691358	2	1	3	3	4
285	3	22.31012658	2.215189873	6.962025316	26.26582278	4.905063291	8	2	6	1	6
286	1	78.37837838	0	2.70202703	0	4.054054054	5	0	2	0	2
287	2	81.0606060606	0	0.757575758	0	3.787878788	5	0	1	0	2
288	1	7.692307692	0.512820513	8.205728205	41.53846154	18.97435897	3	1	5	3	2
289	0	13.2231405	0	18.181818	4.958677686	32.23140496	4	0	3	2	5
290	3	28.33562586	0.137551582	32.32462173	3.71389271	18.70701513	6	1	6	2	6
291	3	34.12162162	3.040540541	3.547297297	16.55405405	22.80405405	10	2	7	4	6
292	3	37.31617647	3.125	7.169117647	19.85294118	9.191176471	8	3	10	4	4
293	2	34.36807095	0.222172949	28.60310421	4.21286031	26.3858931	3	1	7	2	3
294	3	39.00481541	0.561797753	18.21829856	10.59390048	20.46549957	9	1	7	3	5
295	2	44.12153236	16.77675033	0.660501982	2.50990753	2.245706737	6	1	2	2	6

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
296	2	25.0090876	10.94147583	1.344965467	0.654307525	3.744093057	8	2	6	3	6
297	3	52.7638191	0	8.040201005	20.77051926	1.507537688	7	0	8	2	3
298	2	44.73684211	0	11.65413534	15.789473685	5	0	7	1	1	5
299	3	29.91202346	0	13.19648094	5.865102639	29.91202346	6	0	8	3	5
300	2	44.75920688	1.699716714	10.76487252	3.399432428	19.8300283	8	1	6	2	4
301	1	46.93877551	1.530612245	9.183673469	16.32653061	7.142857143	7	1	4	1	4
302	1	70.2970297	0.99009901	3.96039604	7.920792079	0	5	1	3	1	0
303	1	55.17241379	1.724137931	5.172413793	6.896551724	1.724137931	5	1	2	1	1
304	1	15.56420233	1.94525292	3.112840467	29.182871938	3.891050584	7	1	5	3	3
305	1	16.1111111	1.666666667	16.666666667	37.77777778	1.6666666667	6	1	5	2	3
306	1	33.33333333	3.921568627	3.921568627	17.64705882	5.882352941	4	1	1	3	2
307	2	53.95948435	0	6.813996317	24.86187845	11.23388582	9	0	8	3	4
308	2	12.90983607	2.254098361	10.24590164	53.48360656	4.918032787	4	2	3	4	2
309	1	37.67123288	0	9.589041096	28.76712329	5.479452055	5	0	4	3	2
310	2	56.01577909	9.072978304	4.733727811	28.40236686	0.197238659	8	2	4	3	1
311	2	50.72463768	5.797101449	0	10.14492754	8	1	3	0	1	1
312	1	87.78256189	8.073196986	1.076426265	1.99138859	0	6	3	4	3	0
313	1	84.84848485	10.38961039	1.948051948	1.298701299	0	5	2	3	2	0
314	2	79.2248062	11.86046512	0.465116279	6.976744186	1.472868217	9	3	2	4	2
315	1	63.89261745	29.395971315	0.134228188	5.503355705	0.939597315	7	3	1	4	2
316	1	21.69890664	70.73170732	2.270815812	2.6911337258	0.504625736	7	3	5	3	2
317	2	58.93719807	23.67149758	6.280193237	3.381642512	0.483091787	9	2	3	2	1
318	1	50.4587156	24.77064422	2.75293578	14.67889908	0	8	2	1	1	0
319	2	92.60261615	0.451059991	0.405953992	0.045105999	0.135317997	10	2	1	1	1
320	1	94.77521264	0.243013366	0.486026731	0.243013366	1.70109356	9	1	2	1	1
321	1	61.9047619	0	38.0923381	0	0	0	2	0	1	0
322	1	72.72727273	0	27.27272727	0	0	2	0	1	0	0
323	1	24.4444444	46.66666667	6.666666667	8.888888889	0	3	1	3	2	0
324	1	55.37190083	20.66115702	4.958677686	14.876603306	1.652892562	6	1	3	2	1
325	1	14.51612903	54.83870968	9.677419355	19.35483871	1.612903226	4	1	2	2	1
326	1	10.72796935	70.49808429	1.149425287	16.85823755	0.766283525	5	2	1	2	1
327	2	57.98816568	32.84023669	2.6662721893	0.887573964	1.479289941	8	5	4	1	2
328	0	96.33027523	0	1.834862385	0.917431193	0	3	0	2	1	0
329	1	14.0503876	60.46511628	2.228882171	9.69 -02	1.162790698	3	1	4	1	3
330	1	69.73775818	8.49385081	4.64 -02	3.388257136	2.32 -02	6	3	2	2	1
331	2	33.89830508	39.66101695	5.084745763	0.508474576	1.016949153	5	3	4	2	4
332	3	22.36384705	5.677867903	6.836616454	15.17960603	1.042873696	6	2	4	3	2
333	1	5.447470817	63.871322957	0.778210117	3.501945525	0.389105058	5	3	2	2	1
334	3	14.83660131	62.22222222	1.045613203	1.503267974	0.718954248	8	3	5	3	3
335	1	16.24365482	11.6751269	10.152842426	4.98477157	0.253807107	3	3	1	1	1
336	1	94.28571429	0.714285714	1.428571429	3.571428571	0	5	1	2	2	0
337	1	82.38636364	7.386363636	3.409909099	2.840909091	0.568181818	5	2	1	1	1
338	1	94.51795841	0.283533875	0.850661626	1.039697543	0.756143667	6	1	3	4	1
339	1	77.92192793	6.756756757	1.351351351	2.102102102	2.402402402	7	1	3	3	1
340	2	95.01312336	0.918635171	0.262467192	0.656167979	2.099737533	9	1	2	2	2

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
341	0	90.5027933	2.2346336872	0	0.279329609	5.8659217788	7	1	0	1	2
342	1	97.37417943	0.8752/3523	0.437636761	0.656455142	0.2188718381	6	1	2	2	1
343	2	88.97243108	8.521303258	0.501253133	0.501253133	0.2506265566	8	2	1	1	1
344	2	79.28039702	11.7866005	1.612903226	0	0.5459057072	6	2	4	0	3
345	1	34.26791277	0	16.82242991	19.9376947	15.88785047	7	0	5	4	5
346	1	38.38158872	6.3845582778	13.5150705	8.53749072	12.39792131	7	1	4	1	6
347	3	34.5603272	0.408997955	6.3339468303	10.0204499	32.31083845	8	1	9	2	3
348	2	50.7674144	1.06257379	8.618554073	16.41086187	8.7367177828	7	2	11	3	3
349	2	53.86416862	0.702576112	16.62763466	9.367681499	7.7283372377	9	1	8	3	5
350	2	45.83963691	0	13.16187595	17.397882	3.177004539	7	0	8	4	3
351	1	73.42519685	0	4.724409449	1.968503937	0	3	0	5	3	0
352	2	30.13333333	0	8	19.2	1.0666666667	4	0	4	4	2
353	1	34.26294821	28.28685259	7.569721116	0.398406375	0	4	1	5	1	0
354	1	39.36170213	42.55319149	4.255319149	0	1.0638297787	3	1	2	0	1
355	1	11.62790698	82.55813953	1.162790698	0	1.162790698	4	1	1	0	1
356	1	22.41992883	39.85765125	1.779359431	27.75800712	1.067615658	3	1	3	1	1
357	1	30.6256	0.208333333	11.66666667	26.458333333	5.208333333	5	1	7	2	4
358	1	47.58064516	34.27419355	4.4356483871	7.661290323	0	5	1	3	2	0
359	1	35.88185047	3.551401869	4.299065421	31.028037378	2.803738318	5	1	5	1	3
360	2	36.41975309	28.083641975	5.8644197531	16.97530864	0.6117283951	5	1	5	1	1
361	1	36.44444444	6	4	30.44444444	2.6666666667	5	1	4	1	2
362	2	38.73056995	0	16.83937824	4.274611399	27.8497474093	6	0	8	2	5
363	1	50.42918455	0.214592275	10.94420601	7.510729614	26.18025751	5	1	9	1	6
364	2	41.87327824	0	15.9776143	1.101928375	4.407713499	7	0	4	3	2
365	2	50.86757991	0	29.9543379	6.02739726	5.2054779452	4	0	6	2	7
366	1	9.5223809524	22.07792208	0.8658300866	35.06492506	6.493506494	7	2	2	4	4
367	2	79.53488372	0	4.186046512	4.651162791	3.255813953	7	0	3	3	3
368	1	54.71698113	0	3.773584906	4.716981132	16.98113208	6	0	3	2	2
369	1	61.41055046	19.43807339	0.229357798	18.06192661	5.73 -02	6	4	3	2	1
370	1	62.56157635	0	1.97044335	0	0.492610837	7	0	2	0	1
371	4	73.27272727	6.363636364	0.363636364	0	0.363636364	7	1	2	0	2
372	3	62.78317152	0	4.530744337	1.45631068	0.242718447	8	0	4	3	2
373	2	68.71165644	0	3.374233129	6.441717791	2.45399873	6	0	5	1	3
374	3	51.67475728	0.315533981	0.461165049	2.912621359	4.85 -02	7	1	5	3	1
375	2	35.8662614	0.40526849	2.634245187	51.16514691	3.343465046	6	1	6	2	2
376	1	52.83018868	0.471698113	0.943396226	17.45283019	22.64150943	4	1	2	1	3
377	2	56.07476636	2.803738318	6.542056075	19.1588785	7.009345794	7	1	3	2	2
378	2	46.74329502	2.6681992337	7.662835249	11.1111111	14.55938697	5	1	4	2	2
380	3	40.49079755	2.45598773	6.613476933	4.90797546	1.840490798	6	1	1	2	2
381	3	58.91089109	25.57755776	2.640264026	4.290429043	4.455445545	7	3	4	3	2
383	1	64.63414634	5.487804878	11.58536585	7.317073171	7.317073171	6	2	3	4	2
384	2	34.45945946	1.801801802	4.954954955	8.783783784	3.828828829	6	1	3	3	2
385	2	31.1827957	0	7.885304659	4.4623559	1.433691756	5	0	3	2	1
386	1	79.36507937	12.6984127	6.349206349	0	0	5	1	3	0	0
387	1	49.39759036	7.228915663	3.614457831	1.204819277	0	5	1	1	1	0

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BnsSamplID	SwmmrTax	ClctfPct	FiltrPct	PredPct	ScrapPct	ShredPct	ClctfTax	FiltrTax	PredTax	ScrapTax	ShredTax
388	1	16.54135338	0	0	0	0	2	0	0	0	0
389	1	62.72127273	0	37.27272727	0	0	3	0	3	0	0
390	2	58.75	25.9375	3.4375	5.9375	0	5	3	3	6	0
391	1	73.98373984	5.284552846	2.43902439	15.853658954	2.43902439	5	2	2	1	3
392	3	11.45833333	66.666666667	14.58333333	5.208333333	1.0416666667	4	1	3	1	1
393	3	81.54859967	0	8.23723229	0.494233937	9.390444811	4	0	6	1	1
394		5	22.25	0.375	3	13.875	59.125	8	1	4	2
396	2	94.65240642	0	3.609625668	0.401069519	1.336898396	4	0	3	1	1
397	1	60.67510549	9.620253165	8.44 -02	7.679324895	10.80168776	6	1	1	1	1
398	2	23.58381503	17.91907514	1.271676301	31.67630058	2.658959538	7	1	4	4	1
399	1	65.03416856	29.04328018	4.44191344	1.138952164	0.341685649	6	1	1	1	1
400	1	62.04013378	0	4.180602007	5.351170569	8.862876254	6	0	3	3	2
401	1	68.51211073	0	14.53287197	6.574394464	4.152249135	6	0	3	2	2
402	1	42.42424242	0	5.892255892	2.356902357	1.010101011	7	0	4	4	1
403	1	56.43776824	0	1.072961373	0.643776824	0.214592275	8	0	3	1	1
404	1	34.13461538	0.16025641	1.762820513	15.38461538	0.3202512821	4	1	1	3	2
405	1	13.59773371	0	0.8498388357	69.12181303	0.283286119	7	0	2	3	1
406	2	18.68131868	0	0.732600733	48.35164835	24.90842491	6	0	2	3	6
407	1	36.65835411	0	1.995012469	26.68329177	3.49127182	7	0	5	3	2
408	3	15.06591337	0.564971751	2.636533484	49.90563804	3.95480226	7	2	5	5	6
409	3	35.26011561	15.89595376	5.780346821	23.98843931	0.867052023	8	2	6	3	1
410	2	32.29166667	0.520833333	4.6875	15.625	7.8125	6	1	7	3	2
411	1	44.17808219	1.369863014	4.794520548	32.53424658	5.136988301	5	1	4	3	4
412	1	94.52495974	0.161030596	1.771336554	1.771336554	0.805152979	5	1	3	1	1
413	1	83.96946565	0	1.145038168	1.908396947	1.526717557	6	0	3	3	4
414	1	17.5879397	11.30653266	2.763819095	20.60301508	2.261306533	7	2	4	2	5
415	1	19.09233177	0.938967136	7.042293521	0.156494523	1.877934272	4	1	5	1	1
416	2	38.85601578	0.788956435	8.08678501	1.183431953	7.692307692	5	2	5	2	1
417	1	40.66985646	9.57 -02	9.57 -02	4.401913876	9.57 -02	7	1	1	3	1
418	1	67.90352505	0.371057154	2.968460111	0.742115028	0	8	2	4	1	0
419	1	40.86956522	1.391304348	2.782608696	3.130434783	1.217391304	4	2	5	4	2
420	1	22.48995984	25.90361446	0	1.204819277	1.004016064	3	2	0	2	2
421	1	51.93423598	40.23210832	0	0.483558994	6.67311412	7	2	0	2	3
422	1	53.307393	32.29571984	10.89494163	0.778210117	0.778210117	5	1	2	1	2
423	3	71.71145686	14.427157	8.628005658	4.243281471	0	7	1	6	2	0
424	4	5.445544554	3.052805281	0.577557756	88.36633663	0.825082508	8	2	4	1	4
425	2	66.69550173	0	2.24934948	25.43252595	2.249134948	5	0	2	3	5
426	4	36.65158371	0.226244344	9.049773756	44.3438914	5.882352941	8	1	7	4	4
427	1	33.97590361	0.48192711	8.67468795	24.57831325	1.204819277	5	1	4	3	2
428	1	27.87286064	10.75794621	8.8079599	13.69193154	19.5599022	6	1	5	2	5
429	1	34.30656934	11.49635036	1.277372263	20.80291971	8.759124088	6	2	2	3	4
431	1	61.76470588	25	2.205882353	2.205882353	4.411764705	5	1	2	2	3
433	2	53.09734513	19.46902655	5.752212389	0.884955752	7.079640018	6	1	5	2	4
434	2	39.125	1.375	0.5625	0.125	10.625	7	2	6	1	3
435	1	25.97402597	0	2.5977402597	8.4415558442	8.4415558442	4	0	2	5	2

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
436	1	19.6666666667	15	1.3333333333	3	1.3333333333	3	1	2	4	1
437	1	15.78947368	11.57894737	4.210526316	6.315789474	0	1	1	2	1	0
438	2	39.5280236	25.66371681	2.949852507	5.309734513	0.589970501	6	1	5	3	1
439	1	30.39215686	11.76470588	1.960784314	12.74509804	2.941176471	5	1	2	5	1
440	1	7.02727027	55.40540541	0	10	0	5	1	0	3	0
441	1	13.59223301	13.59223301	0.970873786	10.67961165	0	3	1	1	3	0
442	2	43.34203655	31.46214099	0.6522741514	0	0.130548303	5	1	2	0	1
443	2	94.83870968	1.935483871	0.483870968	0	0	7	1	1	0	0
444	1	96.80065628	8.20	-02	3.035274815	8.20	-02	0	6	1	0
445	1	99.54114408	0	0.458835919	0	0	0	7	0	4	0
446	1	28.76712329	0	9.246575342	3.082191781	0.342465753	5	0	2	4	1
447	2	83.91304348	0.434782609	6.956521739	2.608695652	0	6	1	2	2	0
448	3	40.9921671	3.133159269	2.872062663	10.4438423	4.177545692	7	2	1	3	3
450	4	46.72489083	4.366812227	6.113537118	2.183406114	3.493449782	8	2	7	3	3
451	3	45.97249509	14.1453831	2.554027505	1.37524558	8.447937132	6	3	6	2	4
452	4	58.21078431	0.12254902	5.024509804	2.696078431	3.188627451	9	1	8	4	2
453	3	31.44654088	0.209643606	1.677148847	0.41928712	1.048218029	7	1	2	2	3
454	3	30.74712644	0	2.586206897	3.448275862	1.149425287	7	0	4	2	2
455	2	9.162303665	0	1.047120419	4.712041885	1.5706680628	6	0	3	3	1
456	1	80.42328042	0	1.587301587	15.87301587	0.529100529	5	0	1	3	1
457	1	54.02298851	3.448275862	3.448275862	4.597701149	4.597701149	5	1	1	2	2
458	1	22.1642764	0.651890482	1.955671447	33.5071708	11.0821382	6	1	3	3	3
459	1	0	0	0	16.666666667	0	0	0	0	1	0
460	1	64.31718062	20.26431718	0	3.083700441	0	5	1	0	1	0
461	2	53.19148936	26.24113475	0	2.127659574	0	5	1	0	2	0
462	2	63.7326374	0	1.098901099	0	4.395604396	5	0	1	0	3
463	2	25.49019608	0	2.941176471	4.901960784	1.960784314	3	0	2	2	1
464	2	72.05387205	0	3.03030303	15.48821549	0.673400673	7	0	5	5	2
465	2	35.10273973	0	0.171232877	22.43150685	1.54109589	5	0	1	2	3
466	2	17.84232365	3.181189488	13.96957123	30.6362379	1.313969571	10	1	8	6	5
467	3	74.31944238	4.460966543	3.066914498	6.226765799	5.762081784	6	2	4	2	6
468	2	44.37299035	0	7.073954984	5.144694534	37.29903537	8	0	4	2	3
469	1	46.49122807	0	5.263157895	0.877192982	0	5	0	2	1	0
470	2	83.33333333	0	3.333333333	1.111111111	0	4	0	2	1	0
471	1	83	0	4	0	2	8	0	3	0	2
472	1	88.12316716	0.146627566	6.451612903	2.492668622	1.612903226	9	1	6	1	3
473	1	93.67875648	0.414507772	3.005181347	1.03626943	0.310880829	8	1	5	2	2
474	1	75.88495575	0	8.628318584	0.110619469	1.10619469	9	0	5	1	2
475	3	68.91025641	0	2.670940171	14.31623932	0.427350427	6	0	4	3	2
476	2	83.07349666	0	4.454342984	4.677060134	0.222717149	6	0	5	5	1
477	2	63.69636964	0.165016502	7.590159076	12.21122112	0.330033003	6	1	3	4	1
478	1	5.555555556	63.888888889	0	2.777777778	5.555555556	1	2	0	1	2
479	3	81.22270742	5.676858895	0.436681223	3.493449782	0.436681223	6	1	1	2	1
480	1	65.64885496	11.83206107	1.908396947	14.50381679	0.381679389	5	1	1	2	1
481	1	57.7540107	16.04278075	1.604278075	24.06417112	0	6	1	3	4	0

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
482	3	68.94136842	4.210526316	2.631578947	3.684210526	6.315789474	4	2	4	2	1
483	3	51.79282869	28.28865259	0.398406375	0.398406375	3.984063745	6	1	1	1	2
484	3	45.16129032	37.6344086	0.716845878	0	2.867383513	6	1	1	0	2
485	3	40.7960199	44.7761194	0.995024876	2.985074627	4.47761194	7	1	1	2	1
486	3	7.162235496	2.730375427	4.775815697	81.05802048	2.559726962	6	2	6	5	3
487	4	7.240948814	1.747815231	2.746566792	81.39825218	2.122334706	6	1	2	5	4
488	2	18.90909091	10.54545455	6.909090909	61.45454545	0.727272727	6	1	4	4	2
489	3	30.031948888	0.319488818	2.236421725	13.73801917	29.71246006	5	1	3	3	8
490	1	25	0	6.25	0	6.25	2	0	1	0	1
491	2	18.51851852	3.703703704	18.51851852	14.81481481	3.703703704	3	1	2	2	1
492	1	16.217906977	0	9.302325581	2.325581395	4.651162791	3	0	2	1	1
493	1	48.52941176	14.11764706	2.647058824	17.35294118	2.941176471	4	1	4	3	3
494	2	56.73352436	12.03138395	0.859598854	1.146131805	25.21489971	5	3	2	4	3
495	2	33.45010423	51.76056338	0.7042295352	10.91549296	1.408450704	7	3	1	4	3
496	2	15.50632911	0.632911392	30.06329114	0.949367089	3.164556962	5	1	4	1	3
497	2	10.59782609	1.6303434783	1.358695652	62.222826087	5.706521739	7	1	4	3	4
498	1	30.89171975	0	18.78980892	26.11464968	18.15286624	7	0	5	1	3
499	2	17.18213058	9.2783850515	35.395189	13.05841924	6.872852234	6	1	5	2	3
500	2	18.79699248	15.41353383	6.015031594	3.383438647	12.40601504	5	1	1	3	3
501	2	24.08026756	10.70234114	3.678929766	10.03344482	23.41137124	5	2	2	3	5
502	3	10.83743842	21.67487685	4.433497537	8.666995074	4.433497537	6	3	3	2	3
503	3	12.5	41.12903226	3.629032258	4.435483871	1.209677419	5	1	3	3	2
504	1	20.75471698	23.018867792	4.528301887	6.037758849	9.81132075	5	2	2	4	5
505	1	21.85430464	12.25165563	1.986754967	14.56933642	0.993377483	4	2	2	2	2
506	1	39.5280236	3.539823309	0.294985251	0.884955752	7.079646018	5	2	1	3	4
507	2	14.81481481	23.7037037	1.11111111	15.92592593	8.888888889	4	2	2	2	4
508	2	20.27027027	14.18918919	2.702702703	1.013513514	12.5	7	2	4	1	2
509	1	13.51351351	9.459459459	4.391891892	12.16216216	4.391891892	3	1	4	4	3
510	2	14.47028424	11.88630491	4.909566724	6.718346253	0.516795866	5	2	4	1	2
511	2	20.28985507	11.5942029	0	6.666666667	14.49275362	7	1	0	3	7
512	1	32.74647887	0	0.352112676	3.169014085	19.01408451	5	0	1	1	4
513	2	7.326007326	32.23443223	3.663003663	0.732600733	0	4	2	3	2	0
514	4	7.348242812	2.875399361	17.8913738	34.18530351	23.64217252	5	1	7	2	3
515	0	17.47572816	0	36.89320388	1.941747573	29.12621359	3	0	4	2	3
516	2	37.75510204	0.235478807	28.96389325	3.296703297	18.99529042	5	1	9	1	4
517	2	32.97491039	17.92114695	3.225806452	13.97849462	10.75266817	8	3	4	3	3
518	2	30	14.73684211	4.473684211	4.473684211	12.36842105	7	4	5	5	4
519	1	39.50177936	36.29893238	5.693950178	11.03202847	5.338078292	5	3	6	3	1
520	1	27.02702703	3.378378378	1.351351351	52.36484686	10.47291297	6	3	1	1	2
521	1	33.66013072	30.71898425	4.248366013	20.58823529	1.633986928	7	3	6	4	2
522	2	32.01219512	14.63414634	12.19512195	25.6097561	2.43902439	6	2	8	2	2
523	2	70.58823529	1.764705882	19.41176471	0	8.23529418	2	1	7	0	1
524	2	43.26530612	32.65306122	1.836734694	5.714285714	0.204081633	6	3	3	2	1
525	2	27.21311475	8.852459016	9.833665574	11.47540984	0.327868852	8	4	5	6	1
526	2	35.09234828	13.98416887	9.762532982	20.84432718	2.638522427	7	2	5	5	2

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BnsSamplID	SwmmrTax	ClictfPct	FiltrPct	PredPct	ScrapPct	ShredPct	ClicfTax	FiltrTax	PredTax	ScrapTax	ShredTax
527	2	20.52980132	28.47682119	3.6423384106	17.54966887	9.271523179	7	3	4	3	2
528	2	30.9148265	14.1955836	2.523659306	13.88012618	7.570977918	8	3	2	3	2
529	2	66.87116564	28.52760736	2.45398773	0.306748466	0	5	1	3	1	0
530	1	97.7777778	0	2.222222222	0	0	3	0	1	0	0
531	5	23.14540059	7.121661721	46.884273	12.75964392	6	0	6	2	2	3
532	3	21.66064982	3.610108303	7.581227437	39.71119134	20.57761733	5	1	5	3	3
533	4	77.59197324	0.334448161	9.030100334	7.357859532	1.003344482	4	1	8	2	3
534	2	75.52742616	0	3.797468354	2.953586498	0.843881857	4	0	2	1	1
535	3	68.54460094	0	12.20657277	2.816901408	7.511731089	8	0	5	3	3
536	3	54.11764706	2.941176471	10.58832529	18.82352941	0.588235294	6	1	5	2	1
537	1	71.68674699	5.722891566	8.13253012	3.614457831	0.602409639	4	1	5	2	1
538	4	69.35483871	0.403225806	22.58064516	0.403225806	0	6	1	3	1	0
539	3	83.40080972	0	4.048582996	3.6443724696	0	6	0	5	3	0
540	1	29.06976744	9.302325581	11.62790698	47.6744186	0	5	1	2	4	0
541	1	44.73684211	35.85526316	3.618421053	6.907894737	0.986842105	5	1	5	2	2
542	5	31.53846154	1.153846154	23.07692308	3.846153846	35.38461538	5	1	7	3	7
543	5	32.29461756	0.5665572238	12.18130312	7.082152975	38.8101983	7	1	10	3	3
544	1	67.73162939	25.55910543	3.833865815	2.236421725	0	5	2	2	1	0
545	1	57.20164609	21.81069959	2.880658436	15.63786008	1.234567901	6	3	3	3	3
546	5	22.87581386	0.3226179386	7.516339869	11.1111111	51.30718954	8	1	4	3	1
547	3	20.45454545	1.6223376623	8.16883117	16.8831688	10.38961039	5	3	8	2	4
548	1	72.15568862	13.17365269	0.898203593	5.089820359	8.383233533	4	1	2	2	2
549	1	83.06451699	7.258064516	1.451612903	0.161290323	2.419354839	5	2	5	1	3
550	1	84.44607483	2.86133529	4.255319149	0.220102715	7.34.-02	5	2	7	1	1
551	1	55.55555556	40.95441595	0.783475783	7.12.-02	0.213675214	5	3	4	1	2
552	1	47.95660036	36.41952984	1.229565642	5.82278481	0.470162749	5	2	5	2	3
553	1	40.15865146	5.156172533	18.44323252	7.040158651	0.991571641	6	2	7	3	3
554	1	12.27229147	6.951102589	26.22243528	0.431447747	0	5	1	8	1	0
555	1	58.8632882	3.00405954	15.29093369	1.028416779	0.51420839	9	2	6	2	3
556	1	34.24430642	0	28.94409938	19.12325052	8.902691511	6	0	7	5	2
558	2	58.90510949	12.26277372	9.927007299	0.583941606	0.291970803	6	3	6	2	3
559	1	19.39203354	25.57651992	9.958071279	5.24.-02	0.314465409	7	2	5	1	5
560	1	73.66515837	5.2488668778	3.833107089	0	6.03.-02	7	1	8	0	1
561	1	35.098781	2.4337999159	8.785203867	11.97982346	9.079445145	5	3	8	6	5
562	1	96.0591133	0.492610837	2.955665025	0	0.492610837	3	1	5	0	1
563	4	83.10810811	4.391891892	6.418918919	3.716216216	0.675675676	4	3	7	1	2
564	4	70.33898305	0.423728814	18.6440678	7.627118644	2.542372881	6	1	7	3	3
565	4	80.67484663	0.920245399	14.11042945	2.45398773	1.840490798	4	2	8	2	3
566	1	85.71428571	0	0	14.28571429	0	1	0	0	1	0
567	1	63.63636364	9.090909091	27.27272727	0	0	4	1	3	0	0
568	3	29.57746479	0	9.85915493	22.0657277	21.12676056	5	0	4	3	4
569	3	16.76300578	5.202312139	8.092485549	18.49710983	21.38728324	5	1	3	3	3
570	4	20.28905923	8.710801394	39.72125436	9.756097561	3.832752613	7	3	3	3	3
571	2	10.59602649	50	1.986734967	8.940397351	9.271523179	8	1	5	3	1
572	3	18.09045226	28.64321608	17.08542714	9.547738693	5.527638191	7	1	2	3	2

Appendix G: Stream Condition Indices of New Mexico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
573	2	28.260886957	16.52173913	5.652173913	28.69565217	10.43478261	7	4	8	2	2
574	3	22.59259259	72.22222222	1.481481481	0.37037037	0.37037037	7	2	3	1	1
575	4	58.8	20.8	1.6	2.8	5	4	2	2	2	2
576	1	80.82706767	6.390977444	2.255639098	0	3.007518797	6	1	4	0	4
577	2	87.74834437	0.662251656	9.271523179	0.662251656	1.655629139	6	1	2	2	1
578	2	78.16091954	16.66666667	0.574712644	2.87353218	0	4	2	1	1	0
579	2	76.76348548	16.18257261	0.829875519	4.149377593	0.414937759	5	2	2	1	1
580	3	26.31578947	28.94736842	23.02631579	12.5	1.315789474	4	2	6	1	1
581	1	79.48717949	12.82051282	0.854700855	3.418803419	3.418803419	4	1	1	1	1
582	3	46.37223975	33.4384858	6.30948265	7.255520505	3.154574132	9	2	6	5	5
583	4	54.17956656	33.74613003	1.547987616	3.095975232	0.619195046	8	2	2	4	1
584	2	24.29906542	5.607476636	11.21495327	0.934579439	0.934579439	6	1	2	1	1
585	3	41.93548387	20.64516129	2.580645161	4.516129032	0.64516129	12	2	4	5	1
586	3	41.796875	23.828125	7.7421875	3.90625	0.78125	7	2	5	3	2
587	2	83.5106383	1.595744681	3.191489362	1.595744681	3.723404255	6	1	1	3	4
588	2	37.558668545	26.29107981	1.877934272	7.042235321	1.877934272	4	2	1	3	2
589	2	20.73170732	0	4.87804878	3.658536585	2.43902439	4	0	1	1	2
590	3	38.0952381	0	19.04761905	1.19047619	22.61904762	6	0	2	1	4
591	0	42.85714286	0	28.57142857	14.28571429	14.28571429	1	0	1	1	1
592	0	81.25	0	12.5	6.25	0	3	0	2	1	0
593	4	28.62903226	0	11.29032258	4.032258065	15.72580645	5	0	6	2	4
594	4	28.62903226	0	11.29032258	4.032258065	15.72580645	5	0	6	2	4
595	2	65.94827586	3.448275862	9.482758621	11.63793103	5.603448276	5	2	6	2	2
596	1	41.93548387	3.225806452	9.274193548	44.35483871	1.20967749	4	2	2	2	2
597	2	43.18181818	7.954545455	7.954545455	38.25757576	1.515151515	6	2	4	2	1
598	3	23.03664921	1.047120419	6.806282723	29.84293194	34.03141361	5	1	7	4	3
599	3	8.8	4	20	40.8	20.8	3	3	4	3	4
600	4	31.66666667	24.16666667	12.5	19.166666667	8.75	7	5	6	4	3
601	2	44.44444444	11.1111111	44.44444444	0	0	2	1	2	0	0
602	3	24.48979592	55.51020408	4.897959184	4.897959184	8.163265306	6	5	2	2	5
603	3	33.67346939	0	21.42857143	34.69387755	9.693877551	4	0	7	2	1
604	2	50.8	0	2	44.4	24.4	4	0	4	1	5
605	1	17.01244813	14.10788382	10.37344398	42.73858921	6.22406639	3	1	4	2	4
606	1	52	4	12	12	16	3	1	2	2	1
607	3	47.36842105	0	17.29323308	17.29323308	12.03007519	6	0	5	3	3
608	2	77.48091603	0	9.160305344	0.381679389	11.45038168	6	0	5	1	5
609	1	39.59731544	25.16778523	2.348993289	13.42281879	14.76510067	6	2	4	4	6
610	3	78.1512605	0	8.823529412	4.201680672	5.042016807	9	0	6	2	5
611	2	63.13364055	0.460829493	2.034174745	0.460829493	28.11059908	7	1	4	1	4
612	3	39.18918919	9.009090091	4.05454054	44.77477477	9.459459459	5	1	4	2	3
613	2	16.4556962	3.375527426	1.2658322785	56.54008439	7.172995781	5	1	2	3	5
614	2	36.01694915	0	10.16949153	22.88135593	17.79661017	8	0	5	1	6
615	3	37.32718894	14.28571429	3.225806452	26.7281106	1.38248847	7	2	4	2	1
616	2	13.82716049	0	3.70373074	39.25925926	12.09876543	6	0	6	1	4
617	2	25.65789474	7.894736842	1.644736842	8.881578947	1.315789474	3	3	2	3	1

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
618	2	68.98395722	13.63636364	1.069518717	2.40647112	1.871657754	5	2	2	1	2
619	4	39.32038835	0.485536893	12.13592233	26.69902913	6.796116505	5	1	7	3	7
620	1	22.24719101	16.85593258	0.674157303	17.75288999	36.62921348	6	1	2	5	2
621	3	30.89430894	4.06504065	0.81300813	46.74796748	4.06504065	5	1	2	4	6
622	1	2.205882353	1.470588235	5.147058824	80.14705882	8.823529412	3	1	4	4	3
623	1	51.02040816	0	1.530612245	25	18.87755102	6	0	3	3	2
624	2	74.43946188	1.34529148	4.484304933	5.829596413	6.278026906	3	2	4	1	6
625	2	33.84615385	4.615384615	12.82051282	32.30769231	3.58974359	4	1	4	2	3
626	1	70.37037037	1.851851852	4.074074074	11.85185185	9.259259259	6	2	6	4	2
627	2	26.90355333	1.52284264	17.76649746	34.5177665	13.19796954	4	2	6	2	3
628	1	20.40816327	2.040816327	23.80952381	29.93197279	18.36734694	5	1	4	2	1
629	1	33.33333333	16.66666667	16.66666667	0	2	1	1	1	0	0
630	1	37.5	13.75	20	10	13.75	4	2	3	1	1
631	1	13.04347826	47.82608696	26.08956552	0	13.04347826	3	4	2	0	3
632	4	43.85964912	15.0877193	15.43859649	2.456140351	11.92982456	4	4	4	3	4
633	3	41.666666667	25	6.481481481	2.777777778	12.03703704	6	5	3	2	5
634	2	35.48387097	6.451612903	9.677419355	9.677419355	16.12903226	3	2	3	2	2
635	3	25	6.818181818	9.090909091	12.5	23.86363636	4	3	2	2	4
636	3	29.93630573	10.1910828	8.917197452	28.02547771	15.2866242	4	3	2	2	3
637	2	38.7142857	0	6.666666667	20	9.523809524	7	0	4	1	3
638	3	70.74774035	9.7781492975	3.77978636	0.328677075	1.068200493	6	4	5	1	5
639	2	60.92307692	12	1.538461538	15.38461538	15.38461538	6	3	2	1	3
640	1	7.56302521	2.521008403	11.76410588	6.722689076	24.78991597	4	3	9	2	4
641	1	91.19496855	2.830188679	2.830188679	0.943396226	1.886792453	9	2	4	2	4
642	3	22.56809339	38.52140078	5.447470817	7.782101167	3.501945525	8	2	2	3	5
643	2	17.70186335	46.27329193	4.968944099	15.52795031	0	6	2	5	7	0
644	5	23.07692308	0.641025641	7.692307692	16.02564103	21.36752137	6	2	4	1	5
645	3	37.08719209	0.549450549	8.791208791	9.340659341	-21.7032967	8	1	4	4	4
646	4	31.836734469	0	13.0672449	19.18367347	22.44897959	7	0	3	1	3
647	3	45.248866878	7.6992307692	14.47963801	28.50678733	1.3574666063	6	2	4	2	3
648	4	22.68907563	10.08403361	7.56302521	12.18487395	6.302521008	5	4	6	4	3
649	2	33.89830508	15.93220339	5.423728814	39.66101695	0.677966102	6	2	6	3	1
650	2	35.335668905	35.335668905	6.713780919	1.060070671	0.706713781	11	2	4	2	2
651	2	77.62237762	6.293706294	7.342657343	1.398601399	1.048951049	10	1	3	2	3
652	3	39.14027149	46.60633484	1.357466063	3.167420814	1.809954751	7	2	2	4	3
653	4	31.67420814	2.714932127	9.502262443	2.714932127	0.452488688	5	1	7	2	1
654	1	10.38135593	3.654661017	0.31779661	7.150423729	1.218220339	5	2	2	3	3
655	2	17.00680272	3.06122449	5.102040816	11.56462585	0	8	1	5	2	0
656	2	20.7459716	34.1232275	3.08056872	9.360189573	7.701421801	8	3	3	4	6
657	2	24.303233	18.84057971	3.232998885	46.37681159	1.003344482	7	3	2	3	3
658	1	23.54740061	44.1896245	0	11.00917431	6.727828746	6	1	0	2	3
659	2	13.7037037	2.962962963	5.55555556	7.777777778	44.07407407	5	1	4	1	1
660	2	12.2923588	2.657807309	14.6179402	21.59468439	2.325581395	6	1	4	2	2
661	2	21.42857143	2.795031056	7.453416149	5.590062112	1.242236025	4	1	3	1	2
662	3	24.91803279	34.75409836	0.327868852	1.967213115	0.327868852	7	2	1	3	1

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
663	3	23.10606061	9.463696967	1.515151515	28.78787879	6.818181818	6	2	4	2	5
664	2	26.58730159	0	11.9047619	12.3015873	5.555555556	7	0	7	3	3
665	2	49.62121212	19.69696967	2.272727273	1.893939394	7.575757576	7	3	2	4	3
666	1	6.486486486	2.162162162	47.56756757	17.83783784	7.027027027	6	2	8	2	6
667	2	36.56716418	0.746268652	10.820899552	10.07462687	5.223889597	6	1	8	1	2
668	0	38.13559322	0	27.96610169	11.86440678	5.93220339	3	0	4	1	3
669	1	5.263157895	0	19.29824561	31.57894737	14.03508772	1	0	6	1	1
670	3	48.52941176	0	6.8862745098	11.76470588	19.11764706	5	0	6	2	6
671	2	43.5	0.5	4	24	13	3	1	7	1	6
672	4	28.43137255	2.941176471	1.960784314	50.98039216	1.960784314	5	2	2	4	2
673	2	26.89873418	1.265822785	2.215189873	52.84810127	2.848101266	5	1	6	4	2
674	3	43.01675978	1.117318436	2.234636872	38.54748603	2.234636872	6	1	4	5	1
675	2	36.89839572	23.52941176	18.18181818	18.71657754	1.06951877	6	1	6	3	2
676	3	51.2195122	1.742160279	10.80139373	15.67944251	9.059233449	5	1	6	3	2
677	1	9.956709957	0.4329090433	10.38961039	32.03463203	2.164502165	6	1	6	3	4
678	2	19.15367483	76.61469933	0	1.113585746	2.004454343	7	4	0	1	3
679	2	11.61825726	1.659751037	5.394190871	1.244813278	34.02489627	5	2	6	1	2
680	1	21.83098592	15.49295775	2.112676056	56.69014085	1.408450704	5	1	4	1	2
681	3	51.77304965	20.21276596	2.836879433	15.24822695	1.418439716	8	2	3	3	2
682	3	20.08368201	17.57322176	3.3473280335	20.92050209	17.573222776	6	1	6	2	3
683	2	53.11355311	38.0952381	2.197802198	0.366300366	1.098901099	5	2	1	1	3
684	1	23.05984746	39.3220339	0.677966102	7.18644068	7.796610169	4	3	1	1	3
685	1	28.45849802	40.31620553	0	7.509881423	9.881442925	6	3	0	2	3
686	1	25.61181435	8.016877637	1.687763713	45.56962025	6.329113924	6	2	2	2	1
687	3	12.35521236	10.81081081	2.3166023317	37.45173145	20.46332046	6	1	5	2	1
688	3	34	35	2	4.333333333	5.333333333	5	4	5	2	4
689	2	26.43171806	15.85903084	5.286343612	13.655638767	10.13215859	6	1	5	3	2
690	1	62.90322581	29.43548387	2.419354839	2.016129032	2.419354839	6	2	3	2	1
691	1	73.1629393	18.53035144	2.875399361	2.236421725	2.5555910543	7	2	4	2	2
692	0	0	33.33333333	16.66666667	0	50	0	2	1	0	2
693	0	66.666666667	1.587301587	1.587301587	15.87301587	14.28571429	2	1	1	2	2
694	1	36.36363636	0	18.18181818	18.18181818	27.272727277	2	0	2	2	2
695	2	41.21976866	0	7.570977918	37.22397476	9.043112513	6	0	7	3	7
696	3	28.87029289	0	7.531380753	40.16736402	15.06276151	7	0	5	2	3
697	3	37.37373737	12.12121212	13.13131313	26.5999266	2.356902357	6	3	5	3	3
698	5	62.02090592	3.832752613	11.49825784	9.756097561	10.45296167	9	4	5	3	3
699	3	18.4	37.12	12.8	22.08	6.4	10	4	7	4	8
700	3	62.58992806	5.035971223	6.474820144	16.18705036	3.5997122302	6	4	6	3	2
701	2	57.32758621	25.86206897	7.327586207	1.72417931	0.86206896	4	3	3	2	2
702	2	53.9393934	29.09090909	4.848484848	2.424242424	6	3	3	4	3	3
703	2	59.18367347	25.85034014	4.081632653	1.360544218	0.680272109	8	3	1	1	1
704	6	81.15942029	0	10.14492754	0.966183575	5.314009662	8	0	6	1	2
705	3	87.633636364	0.727272727	10.18181818	0	0.727272727	4	1	7	0	2
706	2	6.153946154	8.205128205	0.512820513	60	5.128205128	3	2	1	3	2
707	3	61.003861	0	2.702702703	16.6023166	15.05791506	5	0	5	2	8

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
708	2	47.3015873	0.952380952	3.174603175	21.587301059	20.311746032	6	1	5	4	8
709	2	44.03292181	6.584336214	3.703703704	36.62255144	3.703703704	5	3	3	5	3
710	3	35.13931889	7.585139319	2.167182663	32.19814241	15.17027864	6	3	6	6	4
713	3	70.07168459	3.225806452	1.254480287	4.480286738	18.63799283	9	2	3	5	7
716	3	30.113636636	11.36363636	5.681818182	19.31818182	27.84096999	7	2	2	4	2
717	1	82.25108225	0	3.03030303	5.627705628	3.463320346	4	0	6	3	6
718	2	63.98963731	0.518134715	0.777202073	9.844559585	16.32124352	5	1	3	3	3
719	4	33.13840156	26.31578947	1.949317739	12.86549708	16.95906433	11	4	3	4	3
720	4	44.10646388	19.39163498	1.520912548	15.58935361	15.96958175	9	4	3	2	2
723	2	58.90410959	8.904109589	1.712328767	17.46575342	7.8767712329	11	3	3	2	1
724	3	63.60153257	2.298850575	15.3256705	4.9808472912	11.11111111	6	3	9	4	7
725	3	27.11518858	38.63404689	3.363914373	8.460754332	12.7420999	11	4	6	6	5
728	3	20.27972028	14.33566434	10.48951049	17.83216783	24.12587413	10	2	7	4	5
729	2	33.87755102	0.408163265	20.81632653	4.897959184	39.59183673	7	1	7	4	6
730	2	20.54263566	9.302325581	16.66666667	12.79069767	18.99224806	7	2	7	3	7
731	2	51.08877722	11.39028476	29.48073702	0.335008375	0.837520938	10	1	4	1	3
732	1	72.72727273	3.463203463	17.74891775	0.432900433	2.164502165	8	1	5	1	2
733	1	62.67281106	8.294930876	13.82488479	5.529953917	6.451612903	7	1	4	2	3
734	1	59.00900901	6.756756757	28.37831838	0	0.225225252	8	2	4	0	3
735	2	53.33333333	33.20512821	2.051282051	0.128205128	1.538461538	4	4	4	1	3
736	4	62.92775665	18.70595057	9.37896071	3.422053232	1.267427123	6	3	8	1	3
737	3	76.98113208	1.509433962	8.679245283	12.45283019	0.377358491	6	1	4	3	1
738	0	91.61793372	0	1.072124756	4.873294347	2.436647173	8	0	2	3	1
739	2	62.64367816	22.98850575	3.8793103426	2.729885057	1.293103448	7	3	6	3	1
740	1	12.90322581	17.74193548	1.6129032246	42.74193548	4.03225806	4	3	2	5	3
741	0	34.76821192	50.33112583	11.0372759	0.220750552	2.869757174	5	2	3	1	3
742	2	48.62285321	36.69724771	1.834862385	2.752293578	7.339449541	5	3	2	2	1
743	2	68.6857761	0	3.407247161	9.518658734	2.433747192	6	0	5	2	3
744	3	58.28877005	28.60962567	9.625668449	1.336898396	0.802139037	6	3	4	3	1
745	2	51.1111111	27.7777778	9.444444444	10	1.666666666	3	1	5	4	1
746	1	75	16.66666667	8.333333333	0	0	3	2	1	0	0
747	1	62.5	18.75	0	12.5	0	4	2	0	2	0
748	0	0	0	0	0	0	0	0	0	0	0
749	1	56.57894737	9.868421053	0	0	33.55263158	4	1	0	0	1
750	3	30.14354067	57.41626794	11.96172249	0.4784689	0	4	1	5	1	0
751	1	23.0964467	48.98477157	4.822335025	3.299492386	0.507614213	7	4	2	2	2
752	0	99.77186312	0	0.152091255	0	0	3	0	2	0	0
753	1	45.66929134	2.362204724	0.787401575	4.724409449	7.086614173	2	1	1	1	2
754	2	76.01156069	0	0.578034682	3.179190751	0	4	0	2	1	0
755	1	84.53038674	11.04972376	4.419889503	0	0	5	3	2	0	0
756	1	49.21816828	7.8183172	2.308265078	9.084139985	6.329113924	6	1	6	3	2
757	1	38.04173355	3.852327448	0.8025588218	0.642054575	0.321027287	6	2	2	1	1
758	2	79.6803653	11.47260274	0.6278383881	4.337899543	3.767123288	6	3	5	2	3
759	2	68.33333333	0	25	3.333333333	0	5	0	4	1	0
760	2	11.6145501	44.73516273	1.467772814	40.97000638	0.446713465	6	4	2	1	2

Appendix G: **etrie** values of New exico Stream Samples

BnsSamplID	SwmmrTax	Clictpct	FiltrPct	PredPct	ScrapPct	ShredPct	Clictpct	FiltrTax	PredTax	ScrapTax	ShredTax
761	1	5.752608361	88.69565217	1.3337792642	1.13377123746	0.1333779264	5	4	3	3	1
762	2	73.8292011	14.60055096	7.438016529	1.3077410468	0	6	3	3	3	0
763	3	64.14373089	20.03058104	2.064220183	1.605504587	0.229357798	7	4	4	2	2
764	2	68.77170526	1.644736842	0.921052632	0.625	8	1	3	4	2	2
765	1	34.20656934	11.49635036	1.2775372263	20.80291971	8.759124088	6	2	2	3	4
766	4	80.58727569	9.787928222	3.425774878	1.63132137	2.854812398	9	2	9	2	4
767	1	3.387470998	0.185614849	1.438515081	0.371229698	9.28 -02	4	1	2	1	1
768	1	41.37931034	22.4137931	6.034482759	8.448275862	4.655172414	5	4	3	6	3
769	2	32.21957041	0	15.99045346	6.682577566	5.966587112	5	0	7	3	5
770	1	45.05494505	0.549450549	10.43956044	3.296703297	2.747252747	7	1	6	2	3
771	2	59.78428351	17.71956857	2.003081664	0	3.235747304	6	1	3	0	3
772	4	31.03448276	60.91954023	2.298850575	0	4.597701149	7	2	2	0	1
773	2	73.7613603	23.62943418	1.436528877	0.527704485	0.469070654	5	3	4	1	2
774	0	0	0	0	0	0	0	0	0	0	0
775	1	92.85714286	0	2.857142857	1.428571429	2.857142857	5	0	2	1	1
776	2	41.666666667	0	3.009239259	23.37962963	3.472222222	6	0	5	4	7
777	1	59.21052632	26.31578947	13.15789474	1.315789474	0	4	1	1	1	0
778	1	15.40130152	29.711800434	3.6678655575	43.11670282	6.7245111931	5	4	4	4	3
779	1	13.95348837	0	17.44186047	44.18604651	24.41860465	4	0	4	2	2
780	1	21.875	0	2.34375	61.5234375	12.890625	8	0	6	2	3
781	2	57.04697987	0	9.8443400447	16.77852349	4.921700224	7	0	2	3	4
782	2	62.74509804	0	3.921568627	3.921568627	0	5	0	1	2	0
783	3	56.73758865	0	43.26241135	0	0	4	0	4	0	0
784	3	84.01162791	0	14.8265814	0	0	3	0	5	0	0
785	1	52.8125	42.5	1.5625	1.5625	4	1	2	1	1	1
786	0	77.15736041	0	22.84263959	0	0	3	0	3	0	0
787	0	0	0	0	20	40	0	0	0	1	1
788	1	49.12442396	9.22 -02	2.304147465	4.516129032	9.22 -02	4	1	4	4	1
789	2	94.22998781	0	5.77001219	0	0	6	0	8	0	0
790	2	39.01437372	48.66529774	5.544147844	1.232032854	5.338809035	6	1	6	3	2
791	4	55.39305302	14.99085923	13.52833638	2.559414991	13.16270567	5	4	7	1	3
792	3	20.56737589	34.04255319	5.673758865	18.08510638	8.865248227	9	3	3	3	3
793	2	21.84466019	6.31067912	1.941747573	55.82524272	1.941747573	4	2	3	3	2
794	2	59.53978907	0.767018217	5.273325024	13.51869607	5.656759348	10	1	5	5	5
795	1	82.75862069	8.620689655	3.448275862	0	0	4	1	1	0	0
796	3	48.97959184	4.081632653	9.183673469	8.1163265306	0	9	1	5	1	0
797	2	44.89795918	0	20.40816327	10.20408163	0	4	0	4	1	0
798	1	21.93548387	23.22580645	16.77419355	4.516129032	2.580645161	2	2	5	2	4
799	2	74.03508772	0	7.01754386	2.456140351	2.80701754	4	0	4	1	1
800	0	0	0	81.69934641	0	0	0	0	1	0	0
801	2	32.63157895	37.36842105	1.052631579	2.105263158	5	4	2	1	2	2
802	2	95.16129032	0.806451613	0.806451613	0	0	4	1	1	0	0
807	4	33.6996337	29.85347985	5.677655678	5.494505495	5.311355311	8	1	3	1	2
812	2	16.24713959	11.67048055	3.432494279	50.80091533	17.84897025	5	2	6	2	2
813	3	89	0.333333333	4.333333333	0.333333333	5.333333333	3	1	3	1	2

Appendix G: Values of New Mexico Stream Samples

BnsSamplID	SwmmrTax	ClctfPct	FiltrPct	PredPct	ScrapPct	ShredPct	ClctTax	FiltrTax	PredTax	ScrapTax	ShredTax
814	3	73.27586207	12.5	13.36206897	0.431034483	0.431034483	3	2	11	1	1
815	3	38.71527778	27.08333333	8.6680555556	14.75694444	10.76388889	4	3	10	2	3
816	0	0	0	0	0	0	0	0	0	0	0
817	2	51.36363636	0	10	1.818181818	36.81818182	5	0	9	1	2
818	2	95.16129032	0.806451613	0.806451613	0	0	4	1	1	0	0

Appendix H - Metric Standardization

Metrics which were selected for inclusion in the indices were converted to standardized scores prior to index aggregation using the formulas in Table H-1 based on the direction of the metric's response to stress. Percentile distributions of each metric's values were determined for the entire set of data ($n = 767$ benthic samples). Standardized score conversions use the 95th or 5th percentile, shown along with the mean, median, maximum, and minimum values in Table H-2. The selected standardized metric scores were then averaged to provide indices with values ranging from 0 to 100.

Table H-1. Metric standardization formulas for New Mexico.

Metric Response to Stress	Formula
Decrease with Stress	if $X > X_{95}$, score = 100 if $X \leq X_{95}$, score = $100 \times X/X_{95}$
Increase with Stress Baetis to Ephemeroptera % and Tolerant %, both with $X_{05} = 0$	if $X = 0$, score = 100 if $X > 0$, score = $100 - X$
Increase with Stress Diptera % HBI	if $X < X_{05}$, score = 100 score = $100 \times (100-X)/(100-X_{05})$ score = $100 \times (10-X)/(10-X_{05})$

X_{95} and X_{05} for each metric are listed in Table H-2.

For Example:

For Shannon DI_{log2} (X) = 2.0 which is less than the 95th percentile for Shannon DI_{log2}, one would use the second formula in the table above, giving

$$\text{Standardized score} = 100 \times 2.0/3.89 = 100 \times .51 = 51;$$

For Shannon DI_{log2} (X) = 3.0,

$$\text{Standardized score} = 100 \times 3.0/3.89 = 77;$$

For Baetis to Ephemeroptera % (X) = 65, using the fourth formula,

$$\text{Standardized score} = 100 - 65 = 35;$$

For Baetis to Ephemeroptera % (X) = 25,

$$\text{Standardized score} = 100 - 25 = 65;$$

For Diptera % (X) = 48, using the sixth formula,

$$\text{Standardized score} = 100 \times (100-49)/(100-2.58) = 52;$$

For Diptera % (X) = 18,

$$\text{Standardized score} = 100 \times (100-18)/(100-2.58) = 84;$$

For HBI (X) = 5, using the seventh formula,

$$\text{Standardized score} = 100 \times (10-5)/(10-2.14) = 64; \text{ and}$$

For HBI (X) = 3,

$$\text{Standardized score} = 100 \times (10-3)/(10-2.14) = 89.$$

Table H-2. Metric mean, median, minimum, maximum and 5 and 95 percentile values for all 767 New Mexico samples.

Metric	Expected Direction	Mean	Median	Standard Deviation	Minimum	Maximum	Percentiles	
							5	95
Shannon DI _{log2}	↓	2.90	2.99	0.71	0.5	4.3	1.60	3.89
Diptera %	↑	22.51	17.04	19.48	0.0	99.7	2.58	65.15
Ephemeroptera %	↓	29.97	26.10	19.92	0.0	93.6	1.55	66.63
Plecoptera %	↓	6.48	2.56	9.73	0.0	66.7	0.00	26.67
Evenness	↓	0.36	0.36	0.11	0.0	1.0	0.19	0.50
EPT Sensitive %	↓	41.73	41.08	22.20	0.0	94.6	5.87	78.46
Clinger %	↓	50.72	52.63	22.48	0.0	99.0	11.37	86.17
Clinger Taxa	↓	9.86	10.00	4.52	0.0	22.0	2.00	17.00
Sprawler %	↓	8.17	4.22	10.624	0.0	67.3	0.00	31.68
Swimmer %	↓	15.41	10.68	15.71	0.0	93.6	0.43	47.31
Sprawler Taxa	↓	2.55	2.00	1.66	0.0	10.0	0.00	6.00
Swimmer Taxa	↓	1.93	2.00	1.02	0.0	6.0	1.00	4.00
Diptera Taxa	↓	4.23	4.00	1.94	0.0	10.0	1.00	8.00
Ephemeroptera Taxa	↓	4.12	4.00	1.88	0.0	11.0	1.00	7.00
Plecoptera Taxa	↓	2.409	2.00	2.34	0.0	10.0	0.00	7.00
Trichoptera Taxa	↓	4.33	4.00	2.29	0.0	11.0	1.00	8.00
Total Taxa	↓	19.73	20.00	6.82	2.0	39.0	8.00	31.00
HBI	↑	4.32	4.31	1.33	0.2	8.0	2.14	6.60
Baet2EphPct	↑	42.60	36.63	32.59	0.0	100.0	0.00	100.00
Hyd2EPTPct	↑	17.64	9.47	20.86	0.0	99.2	0.00	64.20
Intolerant %	↓	21.95	17.67	18.60	0.0	90.7	0.00	57.17
Tolerant %	↑	17.68	12.26	17.10	0.0	97.6	1.18	53.76
Intolerant Taxa	↓	5.98	5.00	4.012	0.0	19.0	0.00	13.00
Scraper %	↓	11.00	5.18	14.39	0.0	88.4	0.00	43.78
Shredder %	↓	7.28	3.18	10.05	0.0	59.9	0.00	29.425
Scraper Taxa	↓						0.00	4.00
Shredder Taxa	↓	2.420	2.00	1.74	0.0	8.0	0.00	6.00

NOTES: Clinger Taxa values were inadvertently missing in the April 2006 version. It was added 07/19/19.

Appendix I: Metric Discrimination Efficiencies
August 15 - November 15

ETRIC	5%tile	n	S				HS	1	S		9		24		HS	1			
stdshan2	72.6503	36	73.47	6	66.67	19	79.17	11	68.75	51.99	3	33.33	72.935	19	79.17	74.372	11 68.75		
stddeptsn	36.3412	25	51.02	5	55.56	12		8	50.00	14.959	4	44.44	32.711	12	50.00	47.798	11 68.75		
stdclngp	52.0752																0.00		
stdsprwp	3.3741					9	37.50						20.813	17	70.83			27.27	
stdsprwt	33.3333	31	63.27	5	55.56	18	75.00	8	50.00	16.667	2	22.22	16.667	11	45.83	50	13 81.25	69.70	
stdswmrt	50							13	81.25							50	13 81.25	0.00	
stddipp2	76.1285																	0.00	
stddept	57.1429	39	79.59	8	88.89	20	83.33	11	68.75	35.714	2	22.22	57.143	20	83.33	71.429	14 87.50	84.85	
stdplect	14.2857	30	61.22	6	66.67	20	83.33	4	25.00	7.1429	4	44.44	0	17	70.83	42.857	11 68.75	78.79	
stdtrit	62.5	35	71.43	7	77.78	19	79.17	10	62.50	31.25	5	55.56	50	18	75.00	62.5	10 62.50	78.79	
stdtott	64.5161	36	73.47	6	66.67	21	87.50	9	56.25	41.936	3	33.33	58.065	17	70.83	67.742	9 56.25	81.82	
stdeven	63.1927	25	51.02	6	66.67	13	54.17	10	62.50	56.461	4	44.44	77.56	20	83.33	63.701	10 62.50	57.58	
stdscrap	9.1028	37	75.51	7	77.78	19	79.17	11	68.75	12.25	8	88.89	2.0215	9	37.50	9.8247	11 68.75	78.79	
stdshrdp	4.5874							14	58.33	8	50.00	3.0162	4	44.44	6.8541	14 58.33	4.3866	8 50.00	42.42
stdshrdt	33.3333	30	61.22	5	55.56	18	75.00	7	43.75	16.667	4	44.44	50	24		33.333	7 43.75	69.70	
stdintlt	46.1538	39	79.59	6	66.67	20	83.33	10	62.50	26.923	4	44.44	30.769	19	79.17	61.539	13 81.25	78.79	
stdH_I	67.132	27	55.10	6	66.67	13	54.17	8	50.00	61.753	3	33.33	59.148	10	41.67	73.318	10 62.50	57.58	
stdb2ep	49.5656							19	79.17									57.58	
stdtolp	75.9211																	0.00	
stdswmrp	8.2814								0.9167									0.00	
stdhyd2ep	70.7018	26	53.06	4	44.44	15	62.50	7	43.75	63.465	3	33.33	51.032	5	20.83	86.878	10 62.50	57.58	
stddipt	37.5																	0.00	
stdephemp	18.0608																	0.00	
stdshredp	4.5874	26	53.06	4	44.44	14	58.33	8	50.00	3.0162	3	33.33	6.8541	14	58.33	4.3866	8 50.00	54.55	
stdintlp	19.2376	35	71.43	3	33.33	19	79.17	9	56.25	6.5471	3	33.33	5.65	12	50.00	39.232	11 68.75	66.67	
stdplecop	2.3292	33	67.35	6	66.67	18	75.00	7	43.75	0.8007	3	33.33	0	17	70.83	15.577	10 62.50	72.73	
stdscript	50	38	77.55	8	88.89	19	79.17	11	68.75	25	6	66.67	25	11	45.83	50	11 68.75	81.82	
T_ct	57.937																	0.00	
astr_ct	0																	0.00	
g	3.149	39	79.59	6	66.67	21	87.50	11	68.75	2.125	3	33.33	2.967	21	87.50	3.414	13 81.25	81.82	
TnH_ct	37.089	24	48.98	6	66.67	10	41.67	8	50.00	25.617	6	66.67	29.234	4	16.67	47.619	9 56.25	48.48	
NonIn_ct	0																	0.00	
don_ct	0																	69.70	
ligo_ct	0																	0.00	
Trich_ct	20.019																	15.15	
mph_ct	0																	0.00	
ival_ct	0																	0.00	
Chiro_ct	3.014																	0.00	
Coleo_ct	3.231	30	61.22	7	77.78	14	58.33	9	56.25	4.887	8	88.89	4.867	14	58.33	3.179	9 56.25	63.64	
TolerTa	3	29	59.18	5	55.56	15	62.50	9	56.25	2.5	5	55.56	4	7	29.17	3	9 56.25	60.61	
om01_ct	73.7036	16	32.65					7	29.17	6	37.50	49.492	3	33.33	30.769	17	70.83	35.73	6 37.50
Hyd2Tri_ct		26	53.06	2	22.22													6.06	
eck_I	14	38	77.55	5	55.56	23	95.83	10	62.50	9	4	44.44	11	20		18	13 81.25	84.85	
	0.109					9		24		15	93.75	0.297	3	33.33	0.177	18	75.00	0.207	7 43.75
ChiroTa	1																	0.00	
ColeoTa	1							11	45.83									33.33	
TTa	12	40	81.63	7	77.78	22	91.67	11	68.75	7	4	44.44	9	18	75.00	13	12 75.00	87.88	
rrwr_ct	5.644																	0.00	
Clmbr_ct	0	24	48.98	3	33.33	11	45.83	8	50.00	0	3	33.33	0.637	15	62.50	0	8 50.00	42.42	
rrwrTa	2																	0.00	
ClngrTa	11	39	79.59	7	77.78	21	87.50	11	68.75	7.5	4	44.44	9	16	66.67	11	11 68.75	84.85	
Cllct_ct	19.721																	0.00	
Filtr_ct	0.313	39	79.59	5	55.56	5	20.83	2	12.50	0	5	55.56	11.39	12	50.00	0.434	3 18.75	30.30	
red_ct	2.691	34	69.39	6	66.67	21	87.50	5	31.25	1.146	3	33.33	1.292	15	62.50	4.224	8 50.00	81.82	
CllctTa	5					4	44.44	10	41.67	9	56.25	4.5	1	11.11	5	10	41.67	5 9 56.25	42.42
FiltrTa	1																	0.00	
redTa	3	29	59.18	2	22.22	20	83.33	7	43.75	1	2	22.22	2	17	70.83	4	8 50.00	66.67	

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Appendix J: Correlation among Metrics

Table J: Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80.

Pearson Correlation Coefficients	han _{log2}	Coleopt	iptera	phem	T	lecop	urrow	Clinger	prawler
hanon _{log2}	1								
Coleoptera	0.16	1							
iptera	-0.35	-0.13	1						
phemeroptera	0.03	-0.28	-0.34	1					
T	0.24	-0.37	-0.79	0.50	1				
lecoptera	0.21	-0.04	-0.19	-0.14	0.23	1			
urrower	-0.27	-0.10	0.0	-0.34	-0.69	-0.14	1		
Clinger	0.16	0.01	-0.41	-0.06	0.45	0.00	-0.55	1	
prawler	0.18	-0.09	-0.18	0.08	0.17	0.48	-0.10	-0.26	1
wimmer	-0.18	-0.19	-0.06	0.57	0.19	-0.18	-0.18	-0.37	-0.14
Clinger Ta a	0.71	0.28	-0.25	-0.05	0.19	0.06	-0.19	0.32	-0.03
prawler Ta a	0.46	0.10	-0.06	-0.10	0.06	0.26	0.02	0.00	0.25
wimmer Ta a	0.36	0.17	-0.13	0.00	0.08	0.09	-0.14	-0.03	0.11
Coleoptera Ta a	0.34	0.39	-0.13	-0.11	-0.05	-0.01	-0.15	0.11	-0.01
iptera Ta a	0.45	0.19	0.09	-0.18	-0.09	0.07	0.08	-0.01	-0.01
phemeroptera Ta a	0.61	0.11	-0.23	0.17	0.25	0.04	-0.15	0.17	0.06
T Ta a	0.74	0.22	-0.26	-0.05	0.25	0.21	-0.18	0.25	0.06
lecoptera Ta a	0.52	0.19	-0.16	-0.13	0.15	0.43	-0.09	0.15	0.08
Trichoptera Ta a	0.61	0.20	-0.25	-0.12	0.19	-0.02	-0.18	0.27	0.01
Total Ta a	0.75	0.30	-0.20	-0.14	0.09	0.09	-0.12	0.17	0.08
eck I	0.70	0.24	-0.21	-0.09	0.19	0.26	-0.14	0.21	0.05
H I	-0.40	-0.06	0.65	-0.26	-0.68	-0.45	0.65	-0.51	-0.14
aetis to phemeroptera	-0.25	-0.06	0.18	0.01	-0.15	-0.20	0.04	-0.27	-0.22

Appendix J: Correlation among Metrics

Table J (con't.):
 Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80.

Pearson Correlation Coefficients	han	log ₂	Coleopt	iptera	phem	T	lecop	urrow	Clinger	prawler
ominant 1	-0. 0	-0.06	0.29	-0.08	-0.22	-0.19	0.24	-0.11	-0.18	
Hydropsychidae to T	-0.07	-0.07	-0.16	-0.17	0.15	-0.27	-0.15	0.32	-0.16	
Intolerant	-0.07	-0.35	0.12	0.44	0.56	-0.28	0.28	0.24		
Tolerant	-0.29	-0.12	0.76	-0.31	-0.69	-0.20	0.94	-0.56	-0.07	
Intolerant Ta a	0. 5	0.21	-0.20	-0.09	0.19	0.35	-0.13	0.17	0.09	
Tolerant Ta a	0.06	0.06	0.07	-0.07	-0.20	-0.15	0.15	-0.18	0.17	
Collector	-0.31	-0.27	0.60	0.30	-0.38	-0.33	0.51	-0.41	-0.06	
Filterer	-0.11	-0.11	-0.20	-0.14	0.19	-0.20	-0.23	0.30	-0.14	
redator	0.13	-0.07	0.02	-0.12	0.02	0.59	0.07	-0.08	0.20	
craper	0.13	0.33	-0.24	-0.15	0.09	0.04	-0.22	0.34	-0.05	
hredder	0.29	0.08	-0.16	-0.23	0.09	0.49	-0.11	-0.06	0.43	
Collector Ta a	0.49	0.19	-0.03	0.02	-0.03	-0.10	0.02	0.02	0.04	
redator Ta a	0.51	0.22	-0.01	-0.18	-0.04	0.24	0.04	-0.04	0.14	
craper Ta a	0.37	0.11	-0.17	-0.11	0.14	-0.04	-0.12	0.23	-0.01	
hredder Ta a	0.50	0.26	-0.16	-0.18	0.04	0.21	-0.08	0.06	0.15	
	-0.	-0.06	0.35	-0.07	-0.26	-0.21	0.28	-0.14	-0.18	
	0. 3	0.29	-0.30	-0.08	0.18	0.16	-0.21	0.20	0.11	
venness	0.73	0.05	-0.38	0.11	0.29	0.33	-0.31	0.11	0.21	
T NH	0.27	-0.26	-0.54	0.58	0.74	0.40	-0.48	0.17	0.25	
sensitive T	0.24	-0.20	-0.47	0.44	0.62	0.35	-0.42	0.17	0.29	

Appendix J: Correlation among Metrics

Table J (con't):

Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80.

Pearson Correlation Coefficients	wimmm	Clinger Ta a	prawl Ta a	wimmm Ta a	Coleopt Ta a	iptera Ta a	phem Ta a	T Ta a	lecop Ta a
wimmer	1								
Clinger	-0.26	1							
prawler Ta a	-0.23	0.45	1						
wimmer Ta a	0.07	0.33	0.27	1					
Coleoptera Ta a	-0.12	0.44	0.16	0.41	1				
iptera Ta a	-0.17	0.56	0.63	0.29	0.26	1			
phemeroptera Ta a	-0.12	0.71	0.40	0.53	0.28	0.35	1		
T Ta a	-0.28	0.1	0.61	0.41	0.31	0.53	0.76	1	
lecoptera Ta a	-0.25	0.65	0.62	0.26	0.12	0.47	0.46	0.81	1
Trichoptera Ta a	-0.26	0.78	0.40	0.23	0.34	0.42	0.43	0.78	0.39
Total Ta a	-0.29	0	0.65	0.49	0.48	0.71	0.69	0.0	0.64
eck I	-0.29	0.84	0.61	0.43	0.34	0.59	0.69	0.	0.79
H I	0.10	-0.36	-0.21	-0.13	-0.10	-0.09	-0.30	-0.44	-0.45
aetis to phemeroptera	0.59	-0.28	-0.21	0.00	-0.13	-0.06	-0.27	-0.32	-0.25
ominant 1	0.11	-0.52	-0.32	-0.22	-0.22	-0.31	-0.43	-0.53	-0.36
Hydropsychidae to T	-0.04	-0.03	-0.22	-0.08	-0.07	-0.14	-0.11	-0.14	-0.27
Intolerant	-0.23	0.26	0.27	0.14	0.04	0.11	0.25	0.37	0.46
Tolerant	-0.15	-0.24	-0.01	-0.15	-0.16	0.02	-0.18	-0.24	-0.15
Intolerant Ta a	-0.27	0.76	0.65	0.40	0.26	0.57	0.61	0.	0.84
Tolerant Ta a	-0.04	0.06	0.16	0.16	0.11	0.18	0.04	0.00	-0.12
Collector	0.23	-0.28	-0.20	-0.15	-0.15	-0.14	-0.15	-0.33	-0.32
Filterer	0.01	-0.01	-0.17	-0.05	-0.06	-0.12	-0.07	-0.12	-0.20
redator	-0.11	-0.07	0.18	-0.04	-0.10	0.11	-0.06	0.04	0.25

Appendix J: Correlation among Metrics

Table J (con't.):

Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.

Bold R values are greater than 0.80.

Pearson Correlation Coefficients	wimn	Clinger Ta a	prawl Ta a	wimn Ta a	Coleopt Ta a	iptera Ta a	phemn Ta a	T Ta a	lecop Ta a
craper	-0.22	0.22	0.10	0.13	0.21	0.04	0.15	0.24	0.19
hredder	-0.19	0.19	0.29	0.26	0.22	0.16	0.14	0.28	0.33
Collector Ta a	-0.13	0.58	0.36	0.46	0.39	0.46	0.68	0.55	0.28
redator Ta a	-0.25	0.56	0.63	0.37	0.33	0.67	0.37	0.62	0.59
craper Ta a	-0.19	0.54	0.18	0.20	0.30	0.22	0.36	0.50	0.19
hredder Ta a	-0.22	0.50	0.55	0.31	0.42	0.41	0.36	0.59	0.48
	0.13	-0.53	-0.31	-0.22	-0.22	-0.29	-0.45	-0.54	-0.37
	-0.24	0. 5	0.58	0.45	0.46	0.61	0.68	0.	0.61
venness	-0.04	0.31	0.14	0.11	0.10	0.05	0.29	0.34	0.25
T NH	0.20	0.19	0.20	0.11	-0.01	0.02	0.31	0.32	0.33
sensitive T	0.07	0.18	0.14	0.12	0.06	0.00	0.25	0.27	0.25

Appendix J: Correlation among Metrics

Table J (con't):

Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80.

Pearson Correlation Coefficients	Trichoptera Ta a	Total Ta a	eck I	H I	aetis to phem	omin 1	Hydrop to T	Intol	Tolerant
Trichoptera Ta a	1								
Total Ta a	0.78	1							
eck I	0.71	0.5	1						
H I	-0.27	-0.27	-0.46	1					
aetis to phemeroptera	-0.23	-0.26	-0.31	0.33	1				
ominant 1	-0.45	-0.53	-0.49	0.31	0.19	1			
Hydropsychidae to T	0.06	-0.07	-0.24	0.20	0.12	0.01	1		
Intolerant	0.15	0.22	0.44	-0.0	-0.41	-0.24	-0.36	1	
Tolerant	-0.23	-0.16	-0.21	0.72	0.05	0.25	-0.15	-0.33	1
Intolerant Ta a	0.60	0.78	0.7	-0.49	-0.30	-0.46	-0.29	0.51	-0.20
Tolerant Ta a	0.10	0.30	-0.05	0.26	0.01	-0.02	0.07	-0.19	0.22
Collector	-0.27	-0.29	-0.30	0.42	0.13	0.21	-0.18	-0.24	0.50
Filterer	0.00	-0.09	-0.18	0.00	0.13	0.08	0.50	-0.07	-0.21
redator	-0.12	0.00	0.14	-0.21	-0.20	-0.14	-0.31	0.38	0.01
crapier	0.23	0.19	0.26	-0.22	-0.14	-0.02	-0.19	0.06	-0.23
hredder	0.15	0.28	0.35	-0.28	-0.14	-0.22	-0.18	0.48	-0.11
Collector Ta a	0.42	0.68	0.55	-0.04	-0.16	-0.34	-0.05	0.05	-0.01
redator Ta a	0.46	0.73	0.69	-0.19	-0.22	-0.37	-0.28	0.25	0.00
crapier Ta a	0.63	0.51	0.47	-0.12	-0.16	-0.24	0.04	0.03	-0.15

Appendix J: Correlation among Metrics

Table J (cont'd.):

Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80

Pearson Correlation Coefficients	Trichoptera	Total Ta a	eck I	H I	aetis to phem	omin 1	Hydrop to T	Intol	Tolerant
hredder Ta a	0.53	0.64	0.64	-0.21	-0.15	-0.37	-0.13	0.24	-0.11
	-0.47	-0.54	-0.51	0.35	0.22	0.96	0.00	-0.27	0.30
	0.74	0.	0.	-0.37	-0.27	-0.61	-0.07	0.28	-0.26
venness	0.26	0.27	0.32	-0.40	-0.20	-0.71	-0.04	0.30	-0.34
T NH	0.11	0.12	0.33	-0.73	-0.21	-0.23	-0.48	0.64	-0.48
sensitive T	0.14	0.12	0.32	-0.71	-0.26	-0.20	-0.45	0.67	-0.45

Appendix J: Correlation among Metrics

Table J (con't):

Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80.

Pearson Correlation Coefficients	Intolerant Ta a	Tolerant Ta a	Collector	Filterer	redator	craper	hredd	Collector Ta a
Intolerant Ta a	1							
Tolerant Ta a	-0.08	1						
Collector	-0.31	0.10	1					
Filterer	-0.21	0.03	-0.21	1				
redator	0.21	-0.13	-0.23	-0.23	1			
craper	0.23	-0.11	-0.39	-0.17	-0.02	1		
hredder	0.40	0.02	-0.30	-0.18	0.16	0.00	1	
Collector Ta a	0.45	0.39	0.10	-0.05	-0.17	0.03	0.12	1
redator Ta a	0.71	0.21	-0.18	-0.23	0.30	0.13	0.31	0.37
craper Ta a	0.33	0.12	-0.22	-0.03	-0.12	0.39	0.04	0.23
hredder Ta a	0.61	0.11	-0.27	-0.16	0.13	0.22	0.44	0.33
viness	-0.47	0.01	0.27	0.08	-0.16	-0.05	-0.25	-0.32
T NH	0.74	0.20	-0.35	-0.09	0.06	0.22	0.30	0.60
ensitive T	0.36	-0.16	-0.31	-0.08	0.27	0.07	0.25	0.11
	0.34	-0.22	0.00	-0.10	0.20	0.26	0.28	0.08

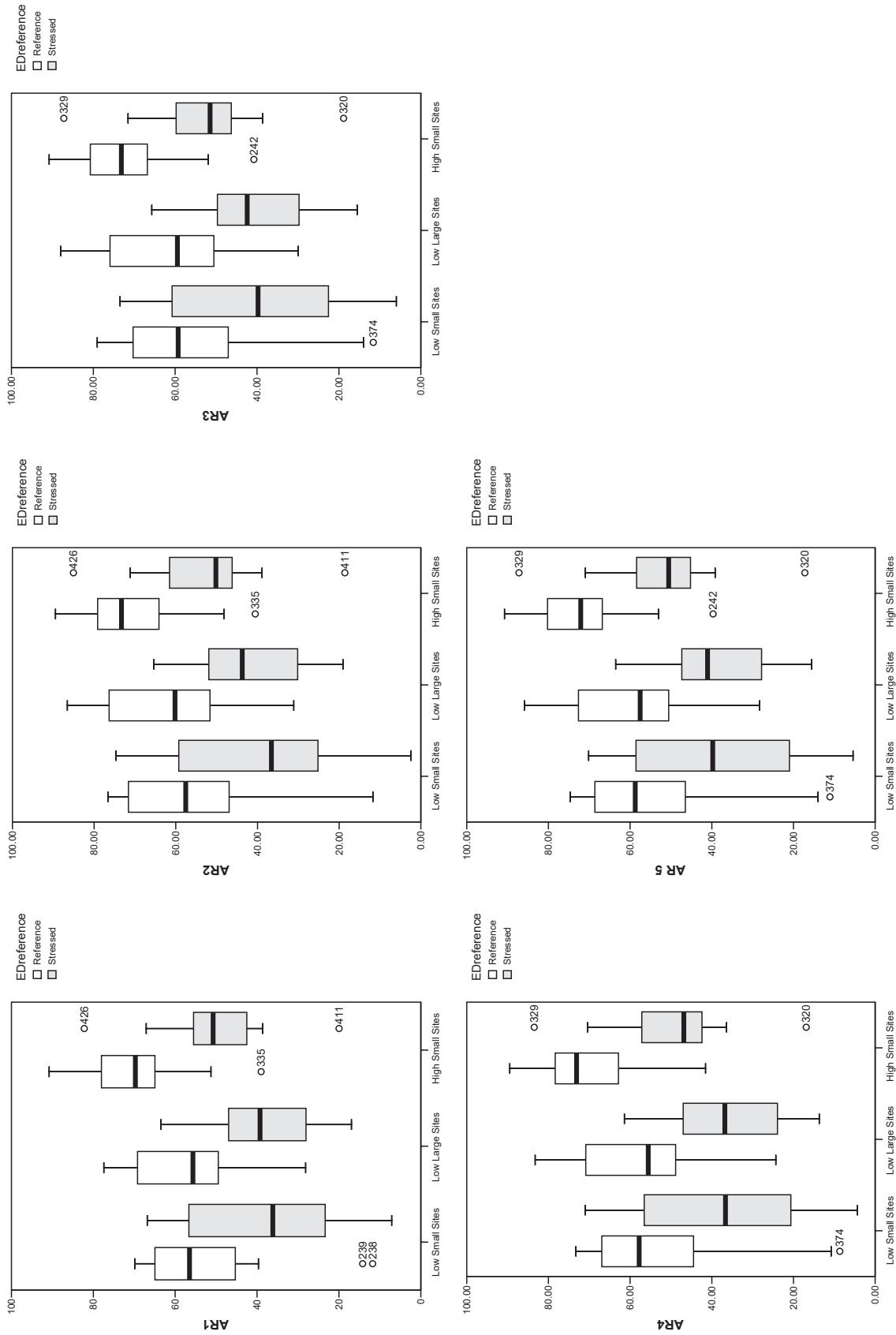
Appendix J: Correlation among Metrics

Table J (con't):

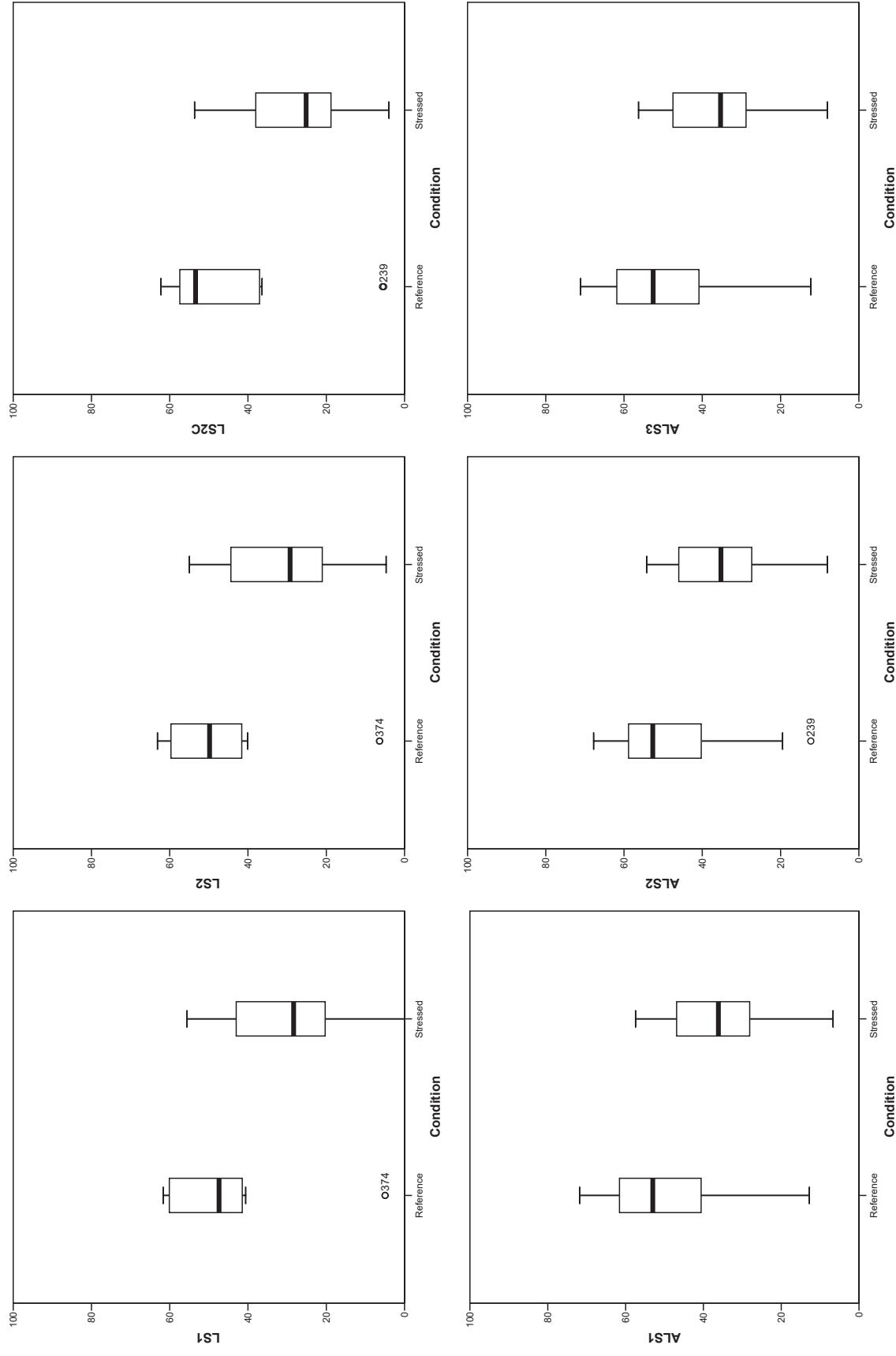
Pearson Correlation Coefficients among Candidate Metrics. Metrics for 423 samples were included in the correlations.
Bold R values are greater than 0.80.

Pearson Correlation Coefficients	rederator Ta a	crapier Ta a	creaper Ta a	hredder Ta a	ven-ness	T NH	ensit T
rederator Ta a	1						
crapier Ta a	0.22	1					
hredder Ta a	0.39	0.28	1				
	-0.37	-0.27	-0.37	1			
	0.65	0.50	0.62	-0.64	1		
venness	0.16	0.14	0.23	-0.78	0.55	1	
T NH	0.14	0.06	0.12	-0.25	0.20	0.31	1
ensitive T	0.15	0.08	0.14	-0.22	0.20	0.27	0.
							1

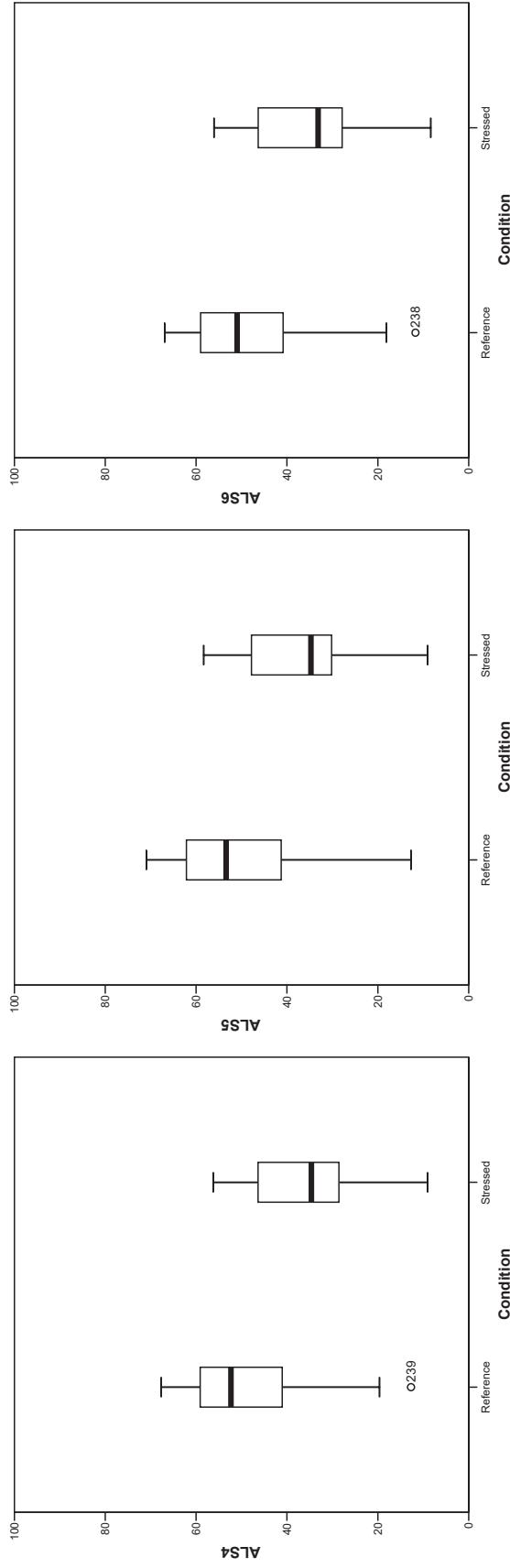
Appendix K: Comparison of Indices among Bioregions for Biomonitoring in New Mexico



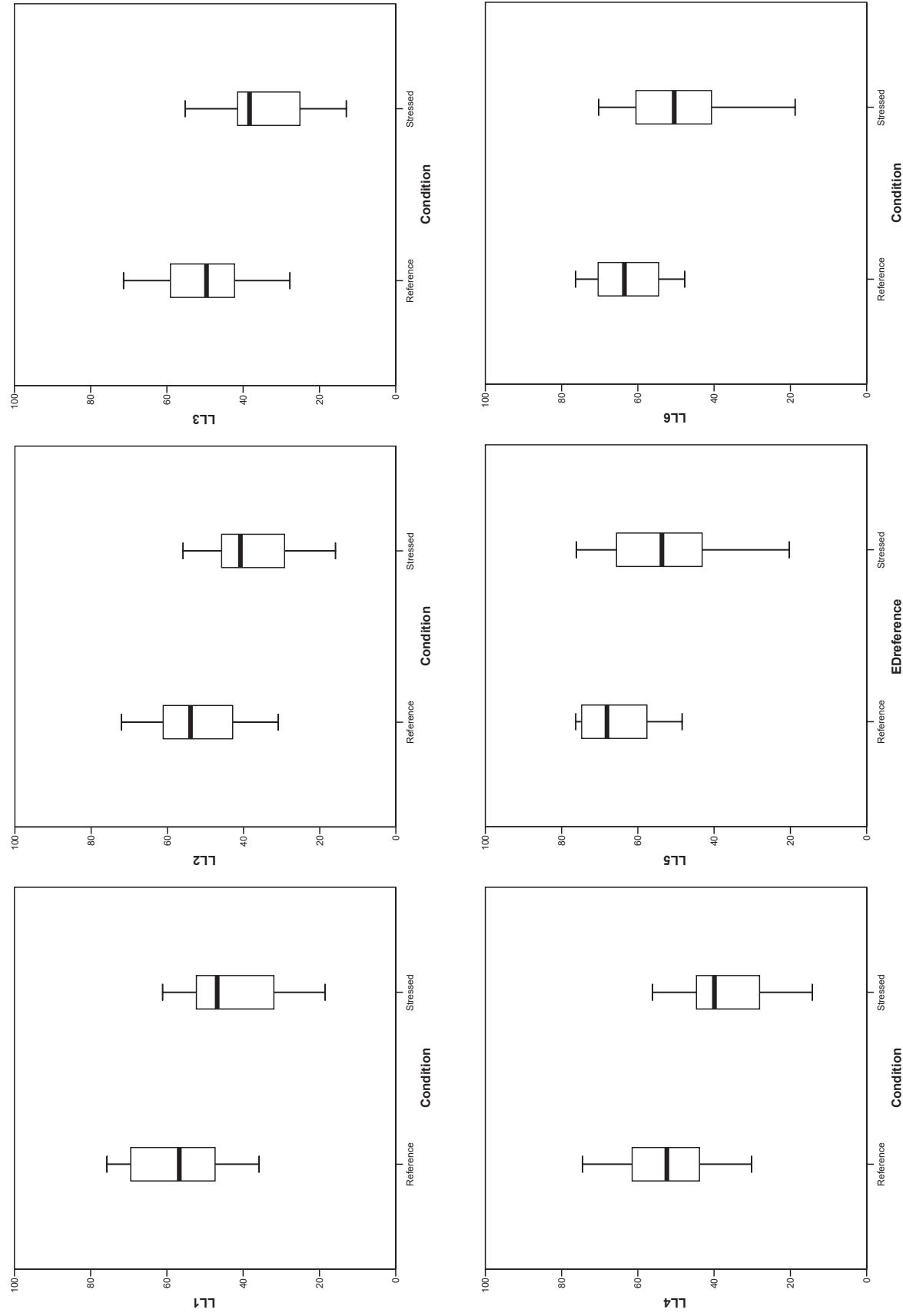
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



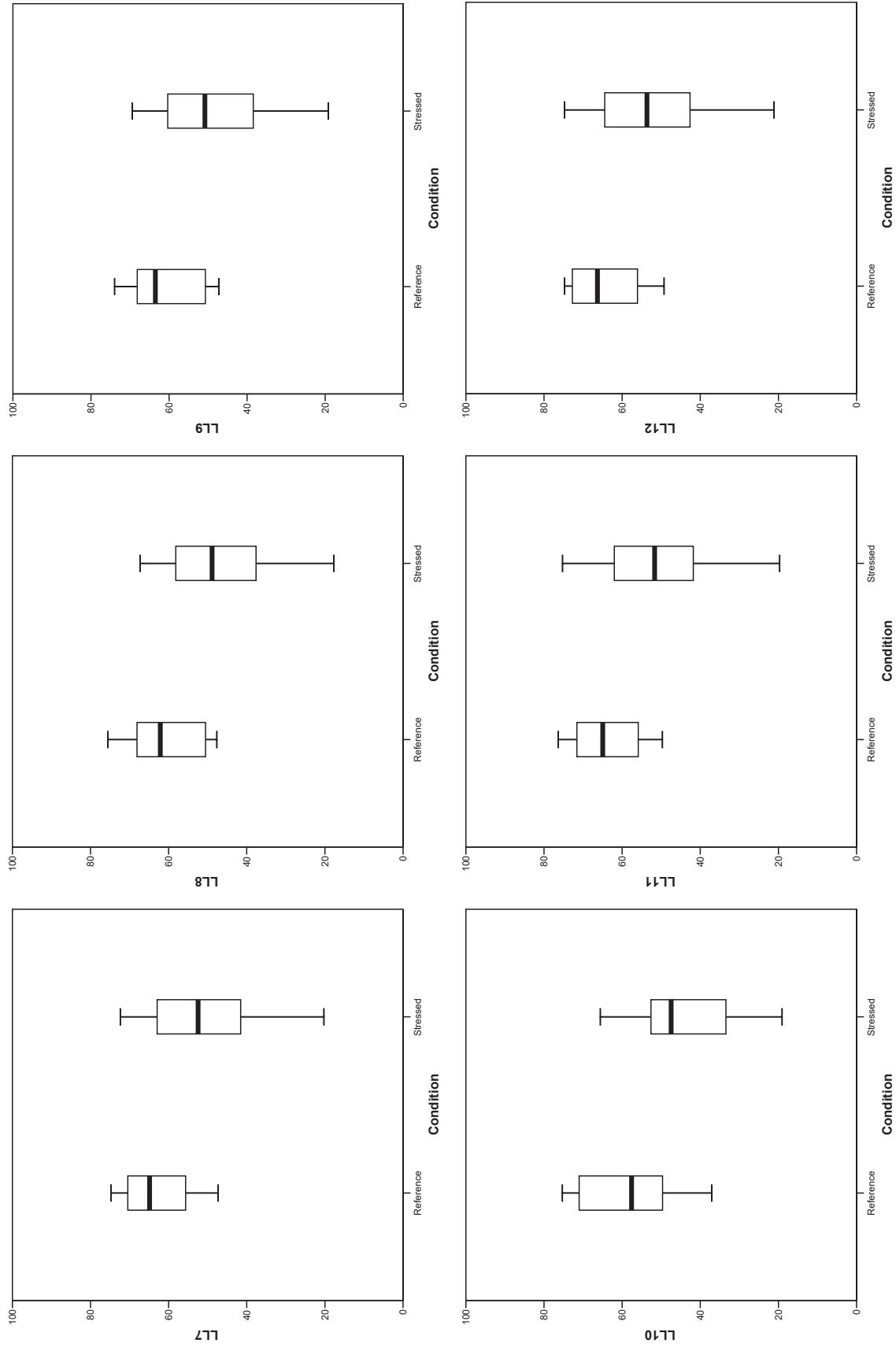
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



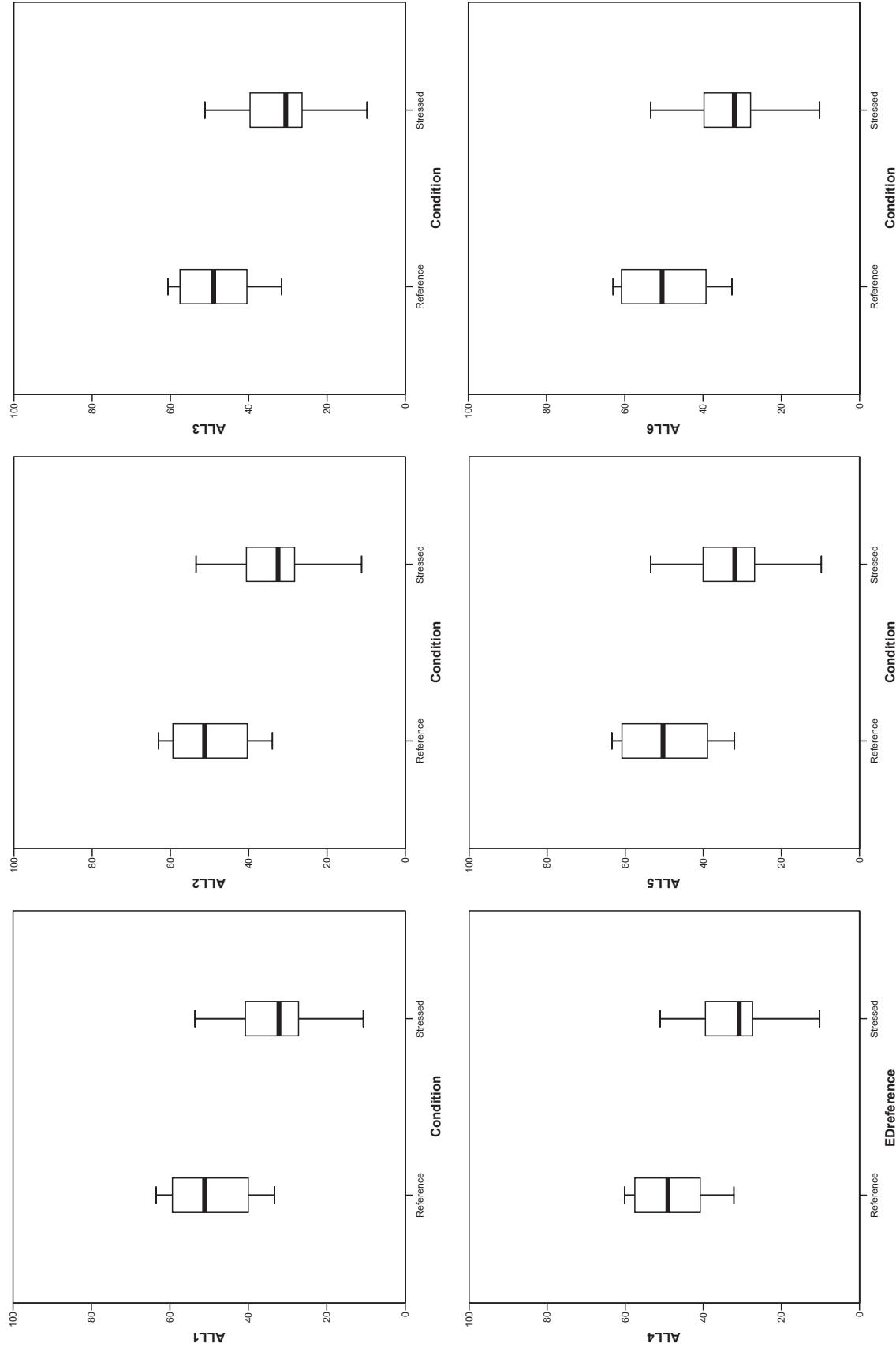
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



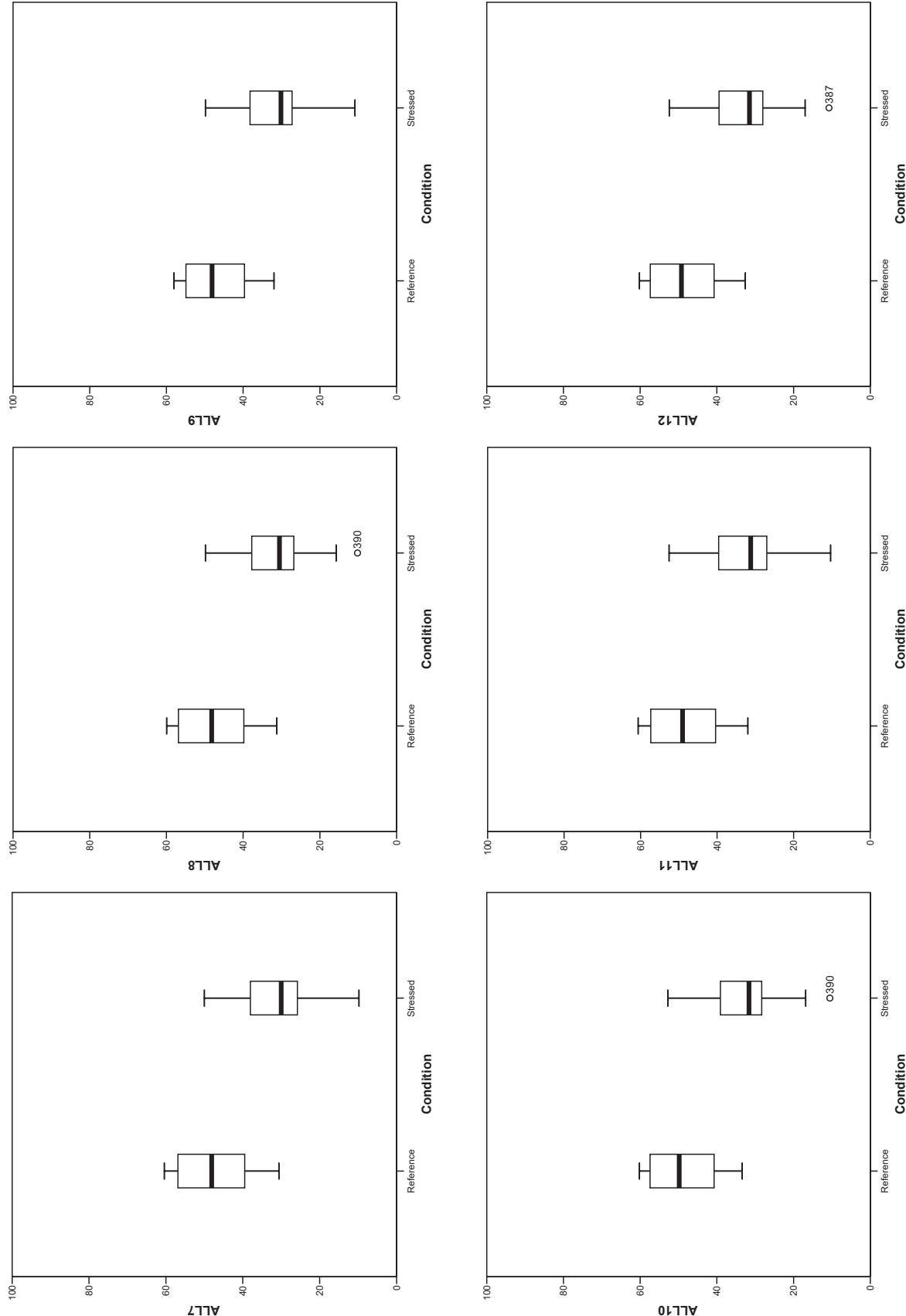
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



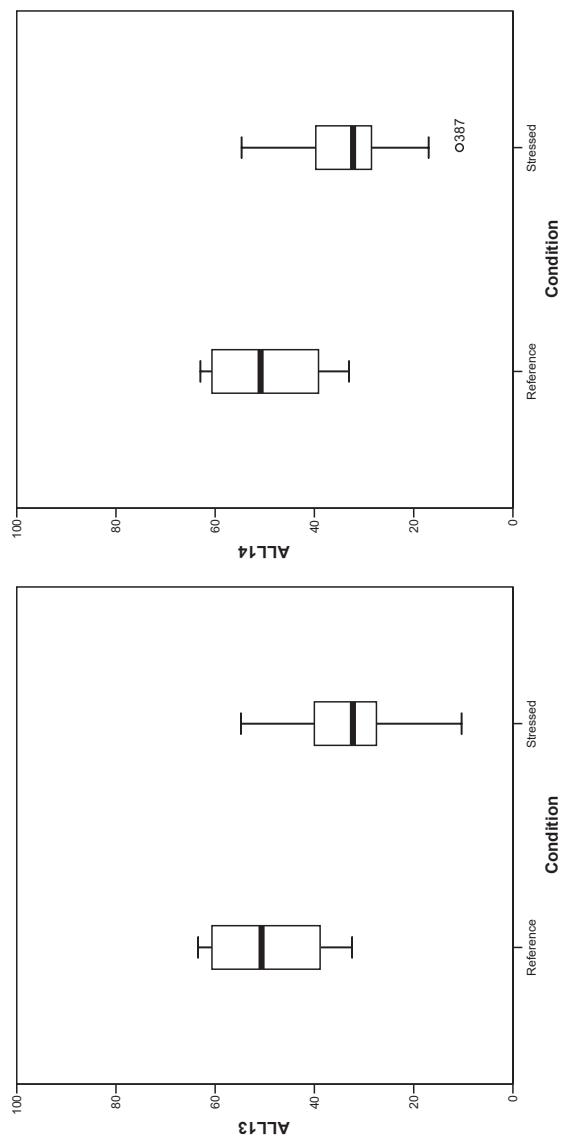
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



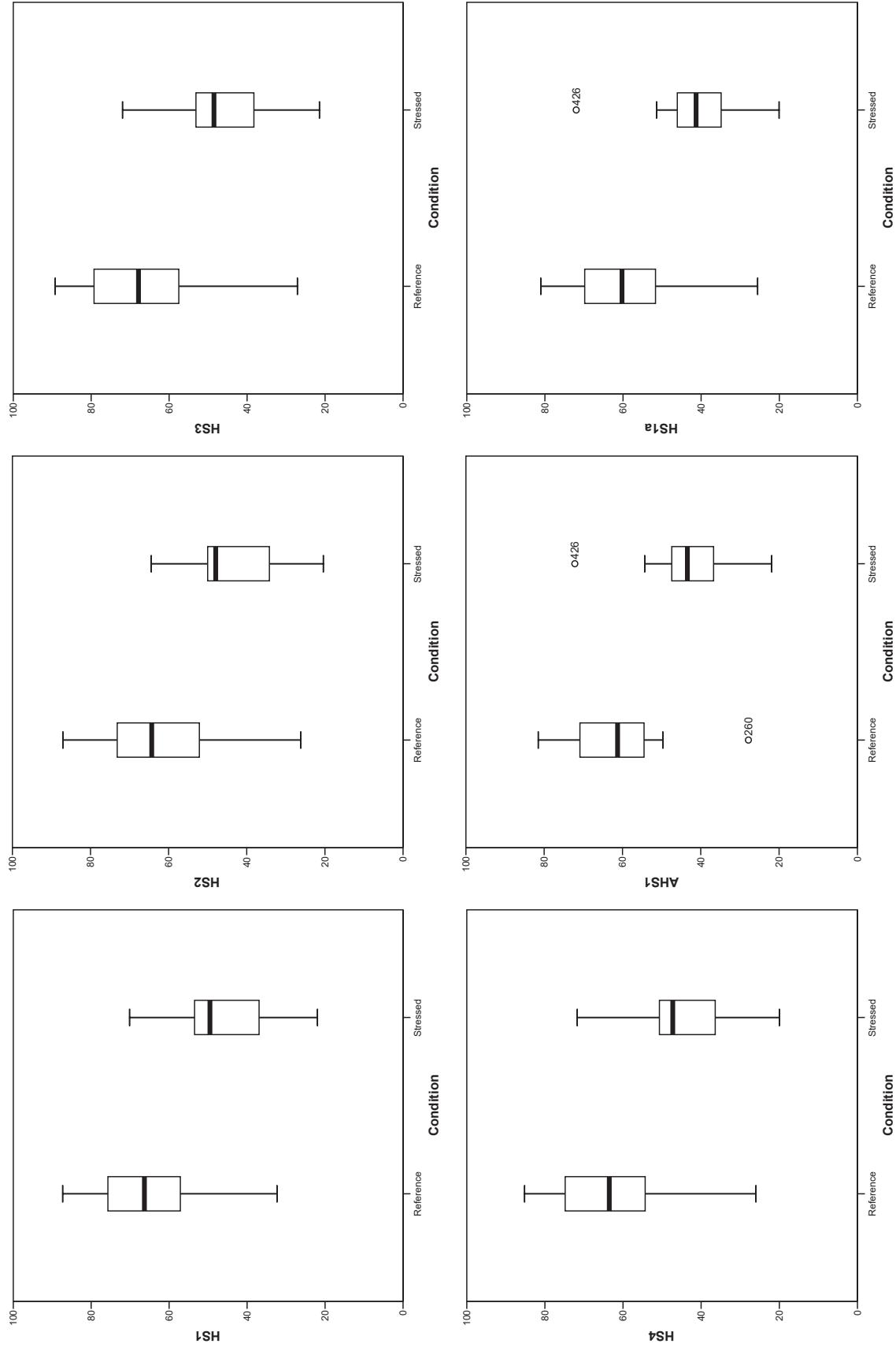
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



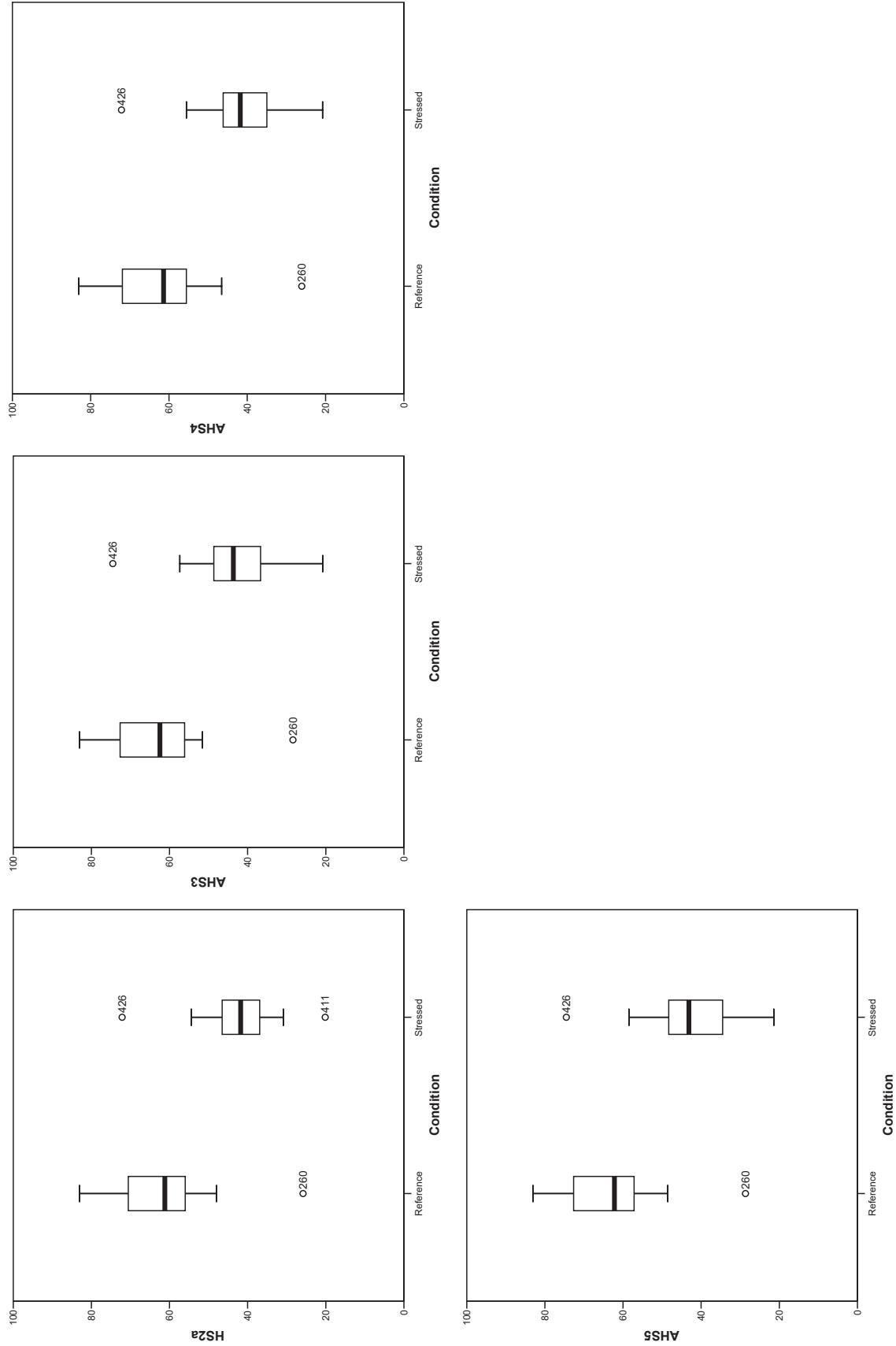
Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



Appendix K (con't.): Comparison of Indices among Bioregions for Biomonitoring in New Mexico



Appendix L: Index Composition and Discrimination Efficiency

	AR1	AR2	AR3	AR4	AR5	LS1	LS2	LSNMMSCI	LS2C	ALS1	ALS2	ALS3	ALS4	ALS5	ALS6
Taxonomic Composition															
Shannon DI (log ₂)	x	x	x	x	x					x	x	x	x	x	x
Beck BI			x												
Margalef DI				x											
Evenness													x	x	x
Coleoptera %							x	x	x	x	x	x	x	x	x
Odonata %								x	x	x	x	x	x	x	x
Placoptera %								x	x	x	x	x	x	x	x
Habit															
Clinger Taxa	x		x			x		x		x		x		x	
Sprawler Taxa							x		x						
Taxonomic Richness															
EPT Taxa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Ephemeroptera Taxa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Plecoptera Taxa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Trichoptera Taxa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Total Taxa	x														
Tolerance															
Sensitive EPT %						x									
Intolerant Taxa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Functional Feeding Group															
Scraper %	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Scraper Taxa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Low Small 25th %	45.3242	46.9389	47.0232	44.4818	46.47	41.4648	41.5887	43.5477	37.044	40.6013	40.268	40.8616	41.0359	41.2648	40.8378
Hess DE	66.67%	66.67%	66.67%	66.67%	66.67%	66.67%	66.67%	66.67%	77.78%	66.67%	55.56%	55.56%	55.56%	55.56%	55.56%
Other									70.00%						
Ben_01a										60.00%					
Ben_03p										75.00%					
Ben_03r										100.00%					

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Appendix M: Microsoft® Access® Query to Calculate Indices

To review this MS® Access® database, please contact

James Hogan, Ph.D. – Program Manager
Monitoring and Assessment Section
Surface Water Quality Bureau
New Mexico Environment Department
1190 S. St. Francis Dr., N2050
(505) 476-3671 Tel.
(505) 827-0160 Fax.
James.Hogan@state.nm.us

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Appendix N: Development of Confidence Intervals

Using the mean standard errors and critical values from the following table, one can develop confidence intervals as follows (also see Table N-2):

For a 90% confidence interval around the lower cut-off for a rating of Fair using the Low Large NMMSCI (which is also the upper cut-off for a rating of Poor), one would add 12.01 (Table N-2) to 34.43 (Table 8-1) and subtract 12.01 from 34.43:

$$\text{Upper limit of confidence interval: } 34.43 + 12.01 = 46.44$$

$$\text{Lower limit of confidence interval: } 34.43 - 12.01 = 22.42$$

A Low Large NMMSCI score between 22.42 and 46.44 would have to be judged based on other factors unless multiple replicates for the station were available (see box-and whisker plot below).

For a 95% confidence interval around the upper cut-off for Fair using the High Small NMMSCI (which is the bottom of the box and the lower cut-off for a rating of Good), one would add 2.12 (Table N-1) to 56.70 (Table 8.1, notice that this value is also the threshold for the index) and subtract 2.12 from 55.99.

$$\text{Upper limit of confidence interval: } 56.70 + 0.95 = 57.65$$

$$\text{Lower limit of confidence interval: } 56.70 - 0.95 = 55.75$$

A High Small NMMSCI score between 55.75 and 57.65 would have to be judged based on other factors unless multiple replicates for the station were available (see box-and whisker plot below).

Notice that the High Small NMMSCI confidence interval is considerably smaller than that for the Low Large NMMSCI. The number of replicate samples is key in calculating the mean standard error and determining the critical value used for developing the confidence interval.

Table N-1. Values for use in calculating confidence intervals (CI) for index condition cut-offs.

Index	Mean Standard Error	90% CI Critical Value	95% CI Critical Value	90% Confidence Interval	95 % Confidence Interval
Low Small NMMSCI	1.18	2.92	4.30	+/- 3.46	+/- 5.10
Low Large NMMSCI	4.11	2.92	4.30	+/- 12.01	+/- 17.70
High Small NMMSCI	0.48	1.80	1.97	+/- 0.87	+/- 0.95

Table N-2. Confidence Intervals for the Upper Limit of Rating Divisions.

90% CIs	Very Poor	Poor	Fair	Good
LSNMMSCI	14.52 - 11.06	25.57 - 32.49	40.09 - 47.01	52.99 - 59.91
LLNMMSCI	5.20 - 29.22	22.42 - 46.44	39.63 - 63.65	63.81 - 87.83
HSNMMSCI	18.03 - 19.77	36.33 - 38.07	55.83 - 57.57	77.48 - 79.22
95% CIs	Very Poor	Poor	Fair	Good
LSNMMSCI	9.42 - 19.62	23.93 - 34.13	38.45 - 48.65	51.35 - 61.55
LLNMMSCI	0.00 - 34.91	16.73 - 52.13	33.94 - 69.34	58.12 - 93.52
HSNMMSCI	17.95 - 19.85	36.25 - 38.15	55.75 - 57.65	77.40 - 79.30

