

## **Section 2**

### **Dissolved Oxygen and Chlorophyll**

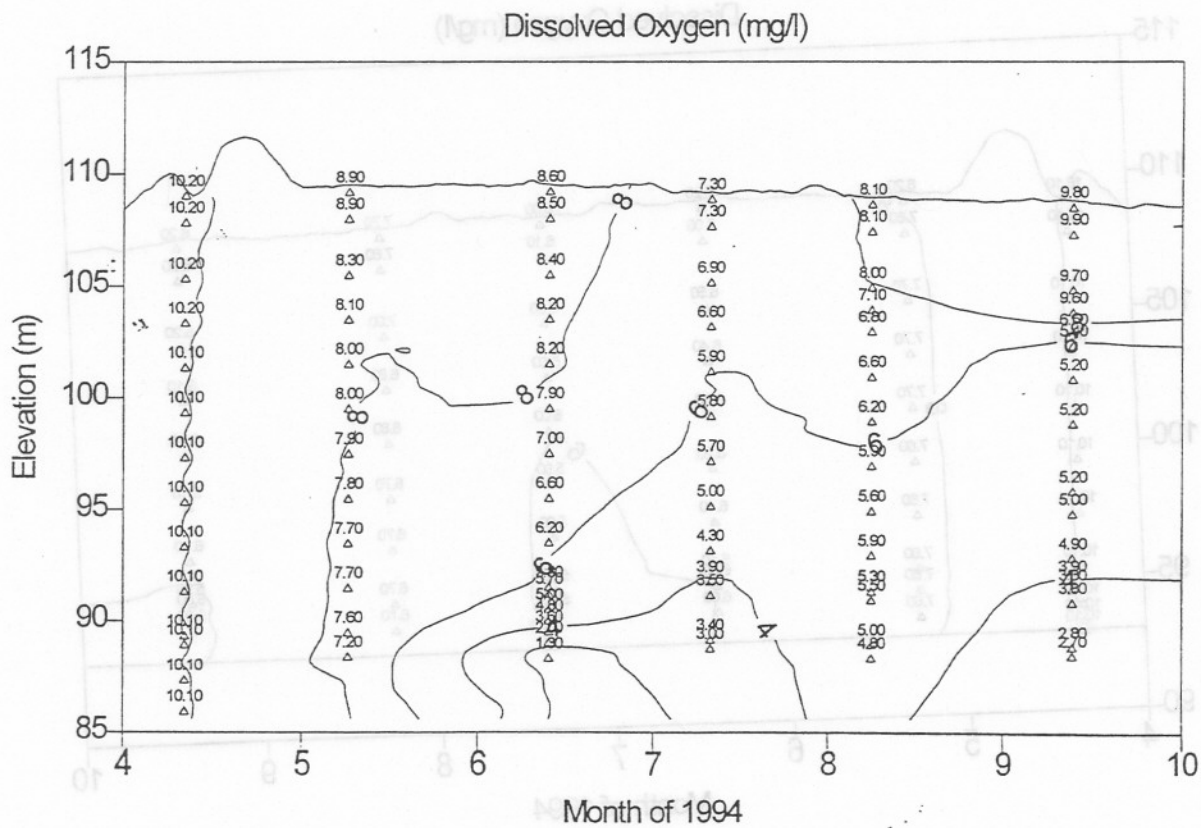
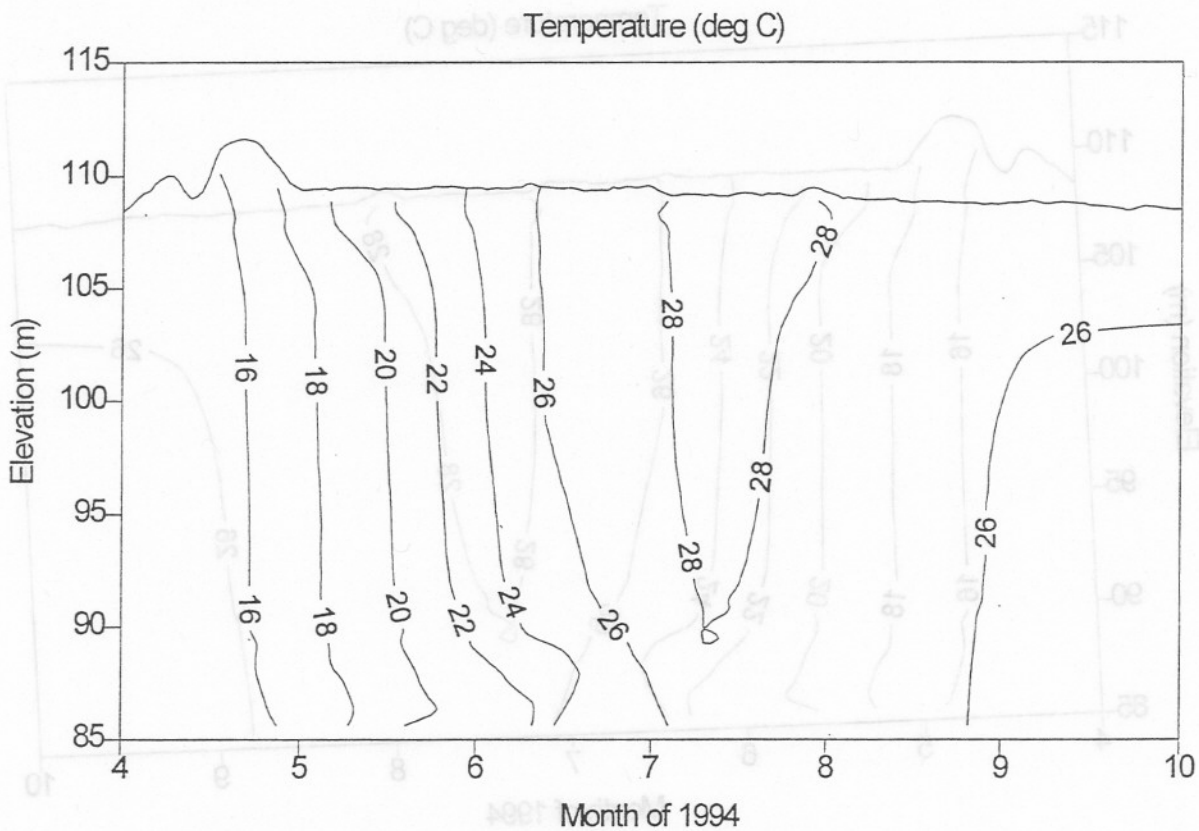
#### **Appendix A.**

#### **Temperature and Dissolved Oxygen Isopleths for Each Sample Location Throughout the 1994 Monitoring Period**

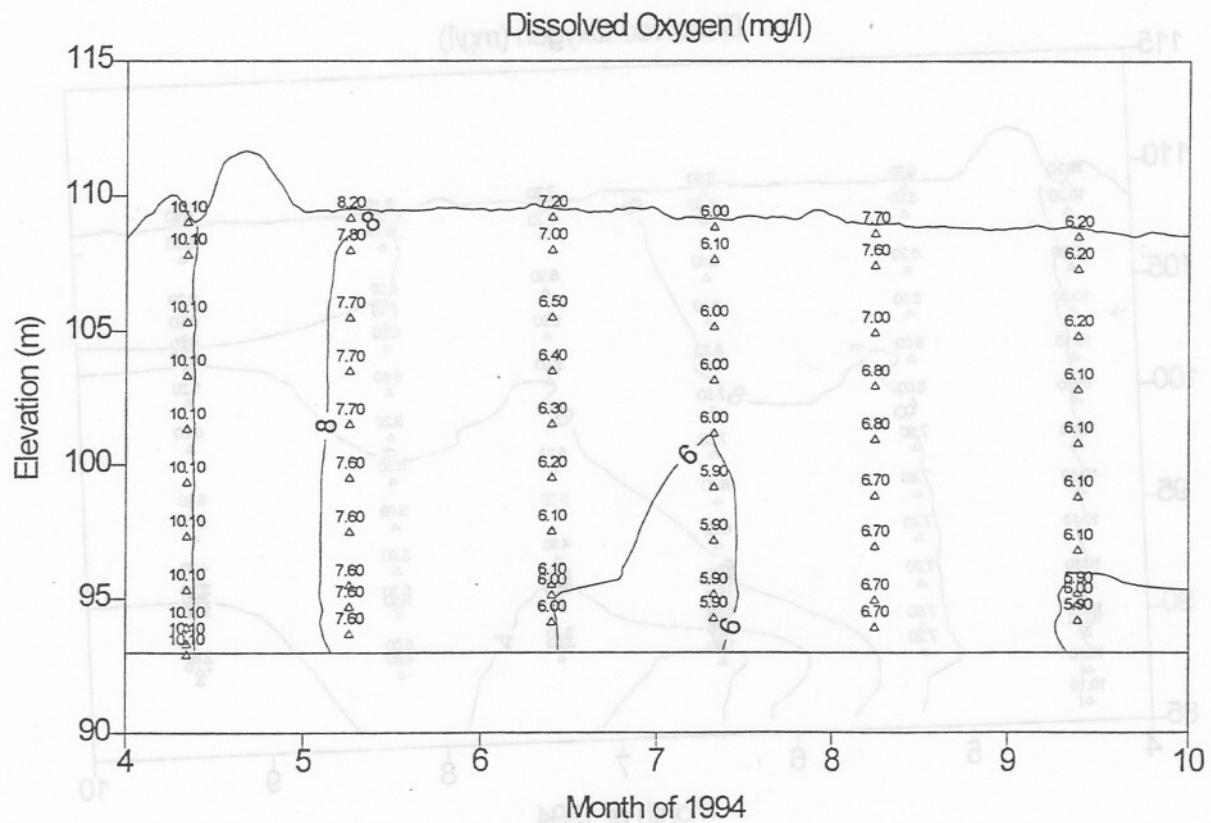
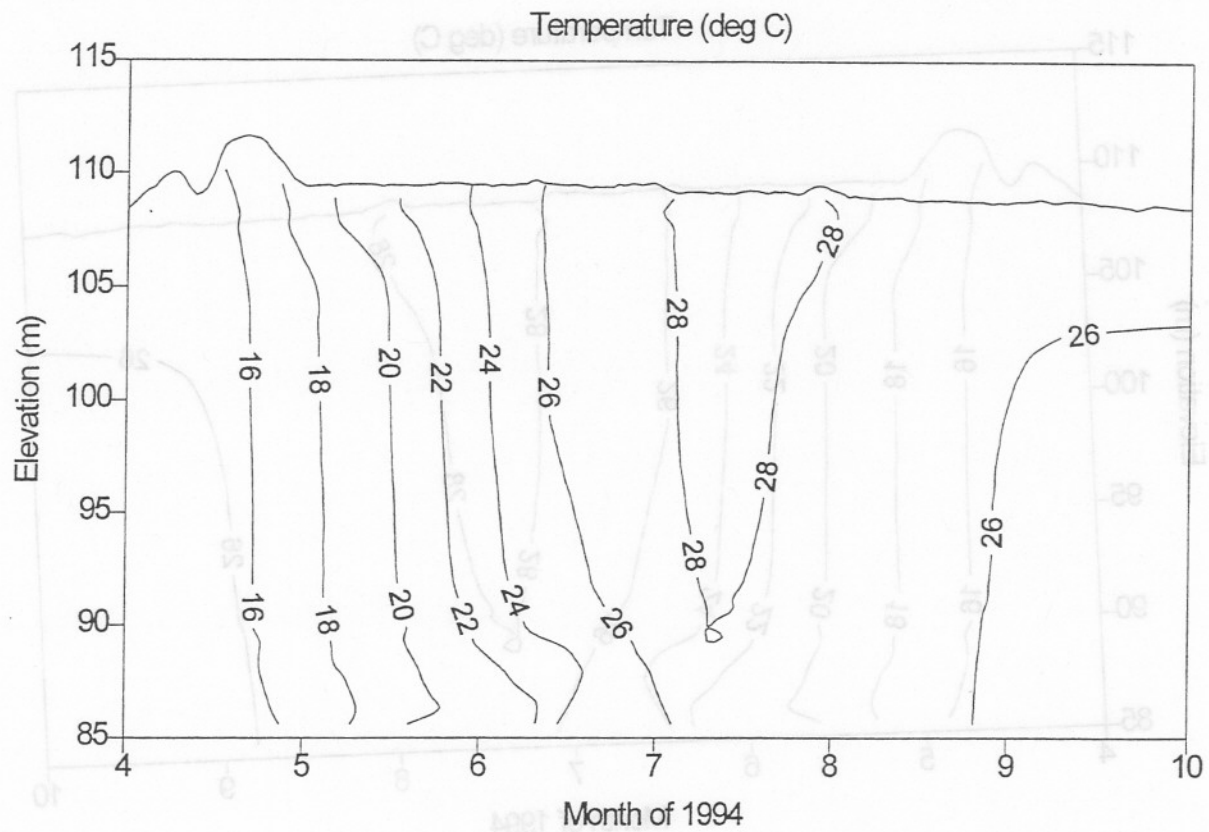




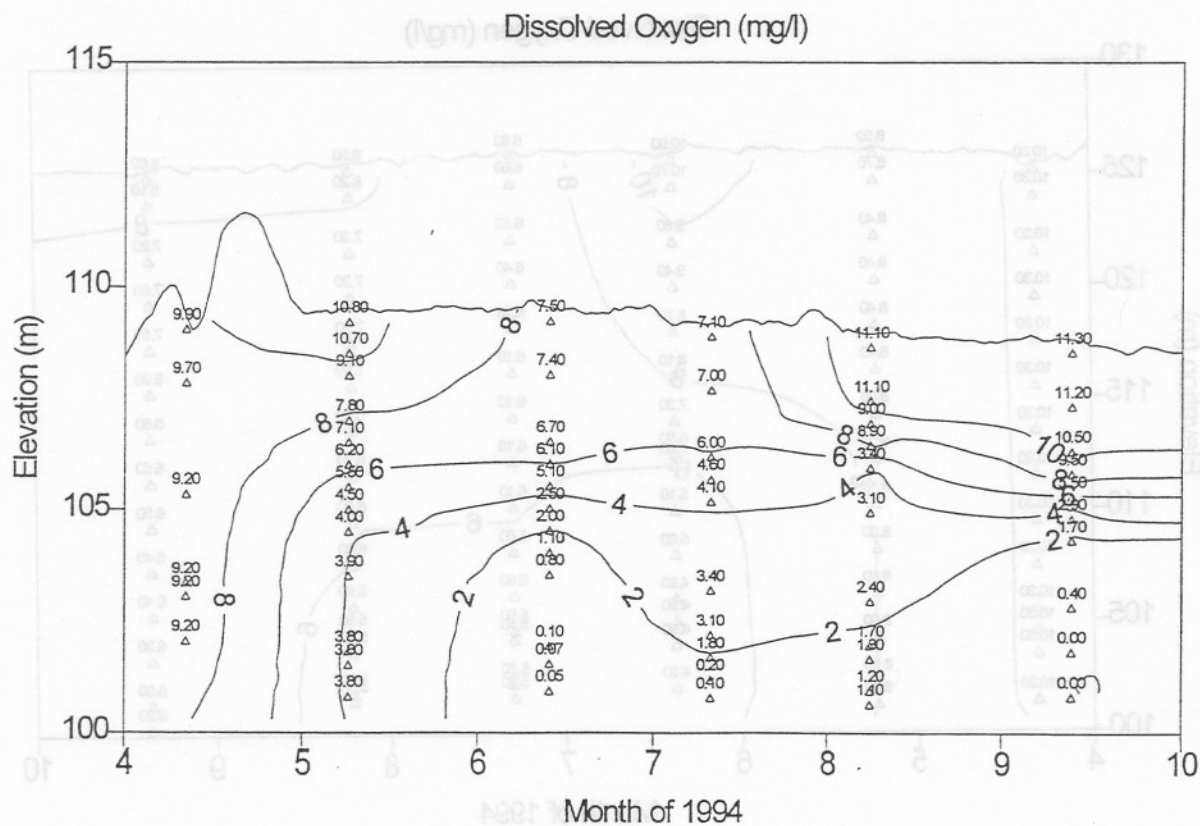
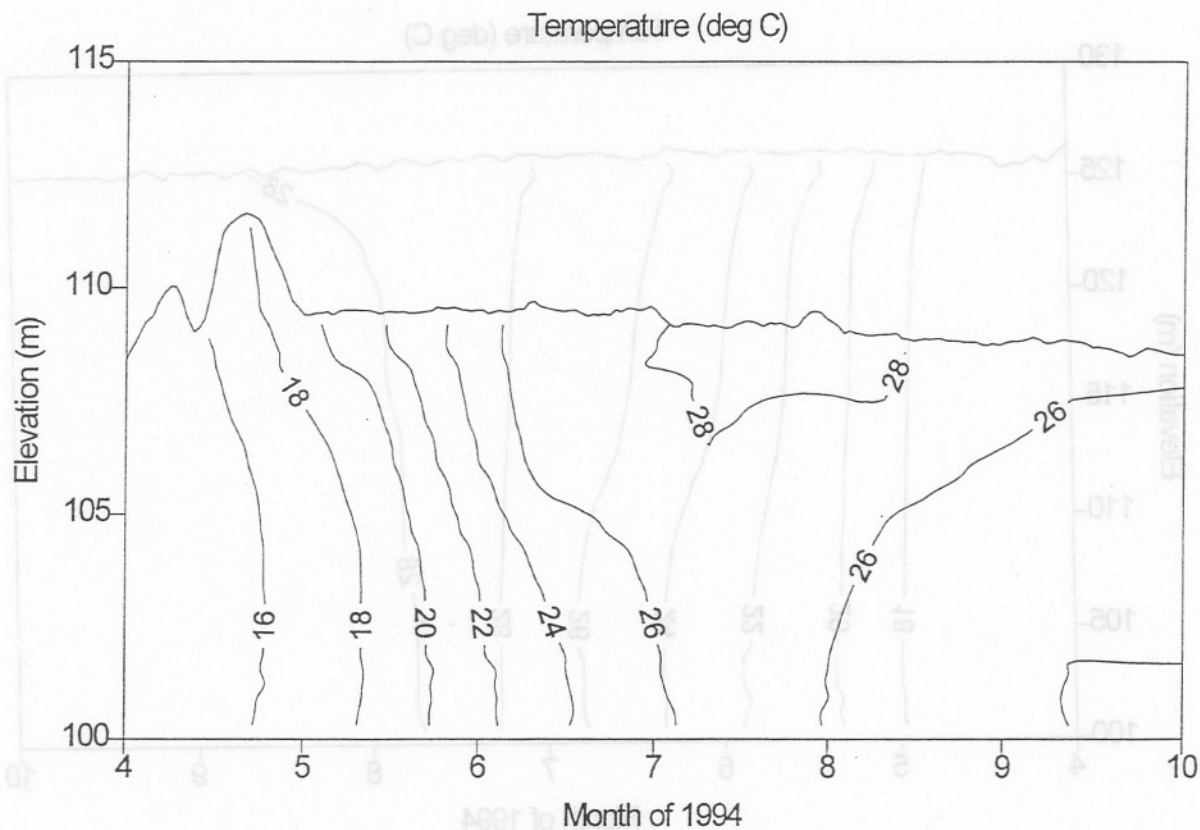
# 0.28 Kentucky Reservoir - TRM 23.0



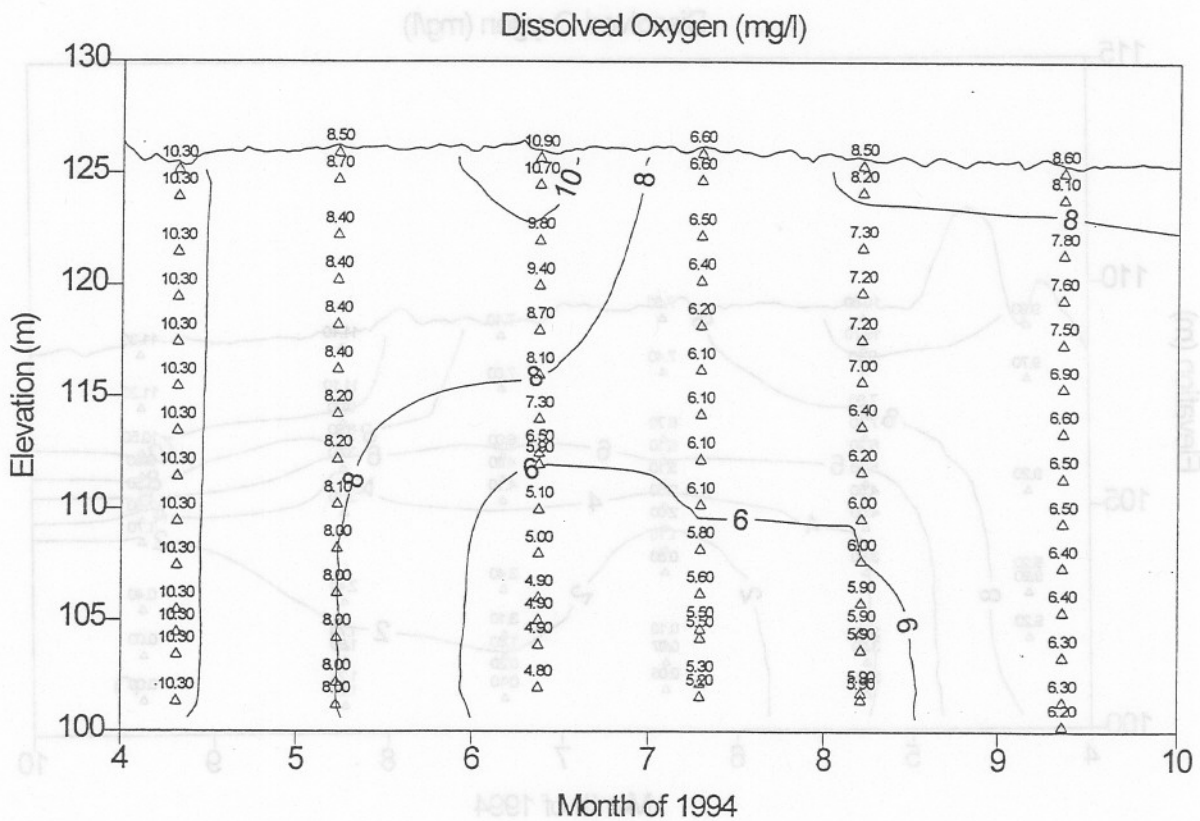
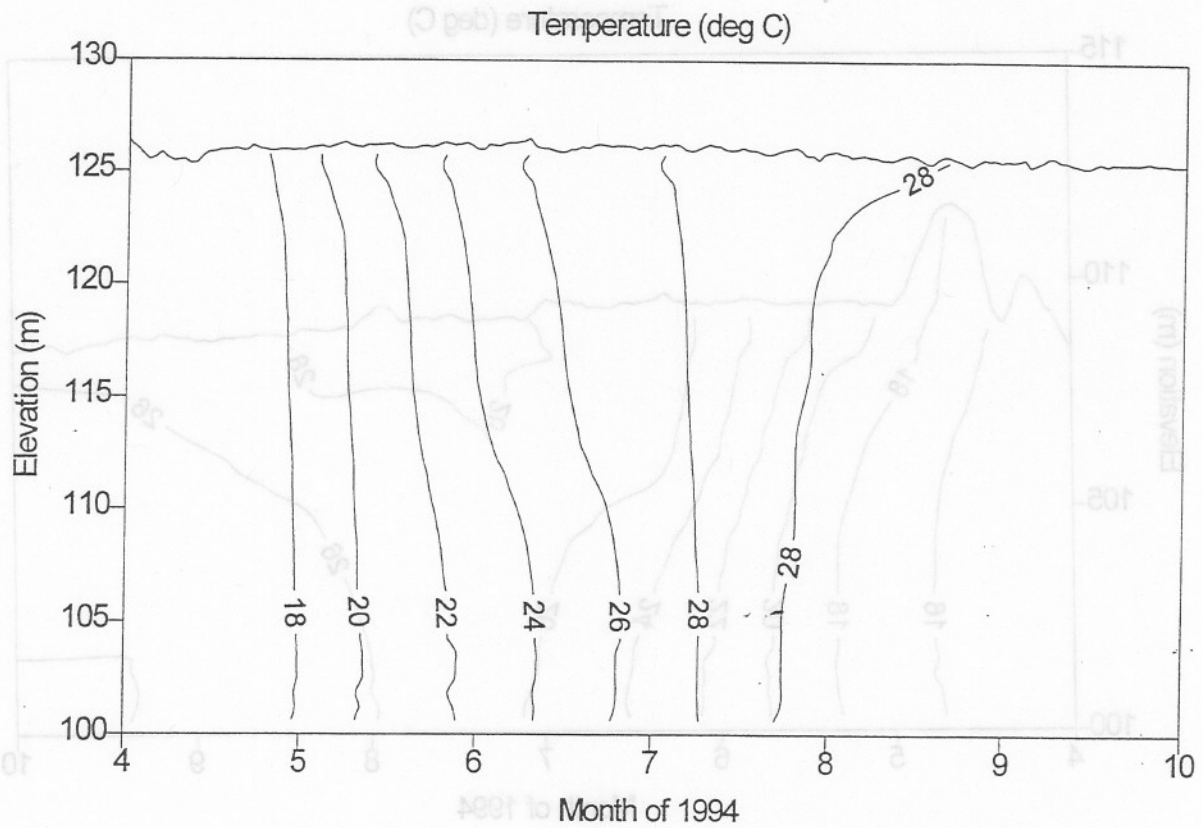
# Kentucky Reservoir - TRM 85.0



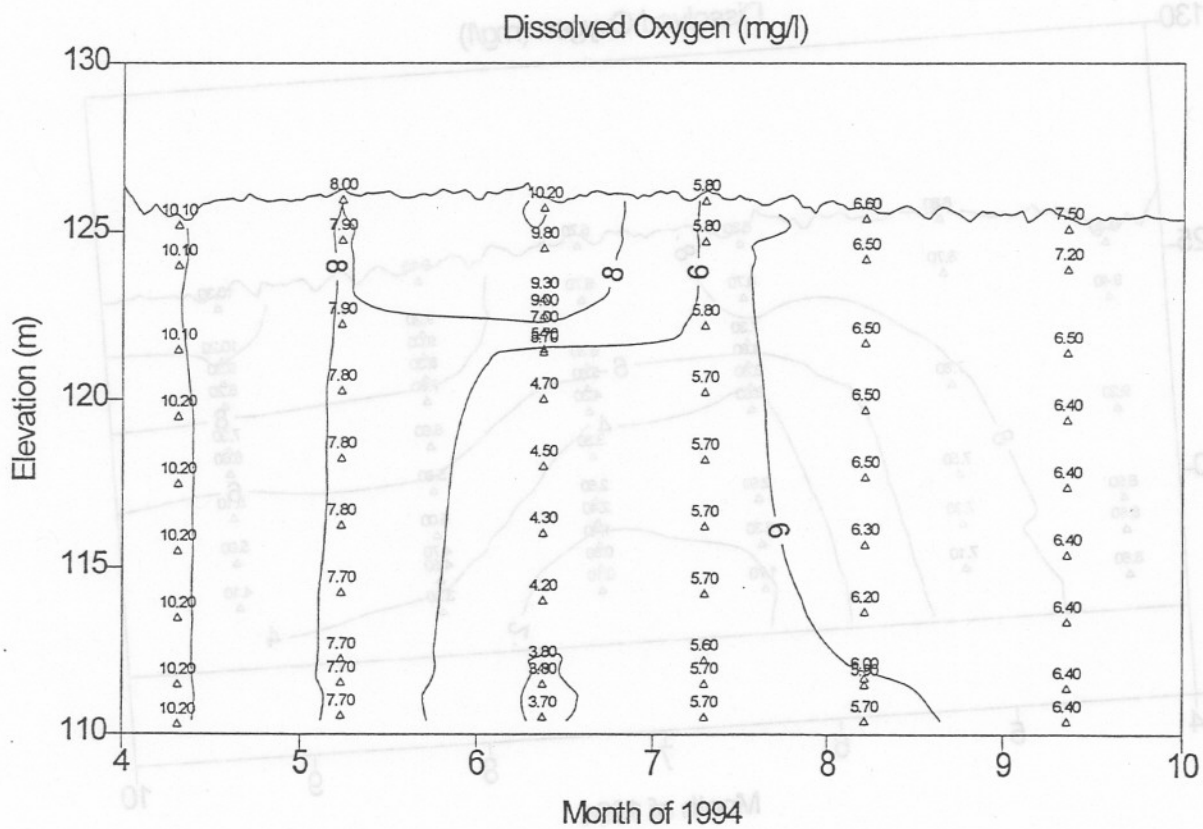
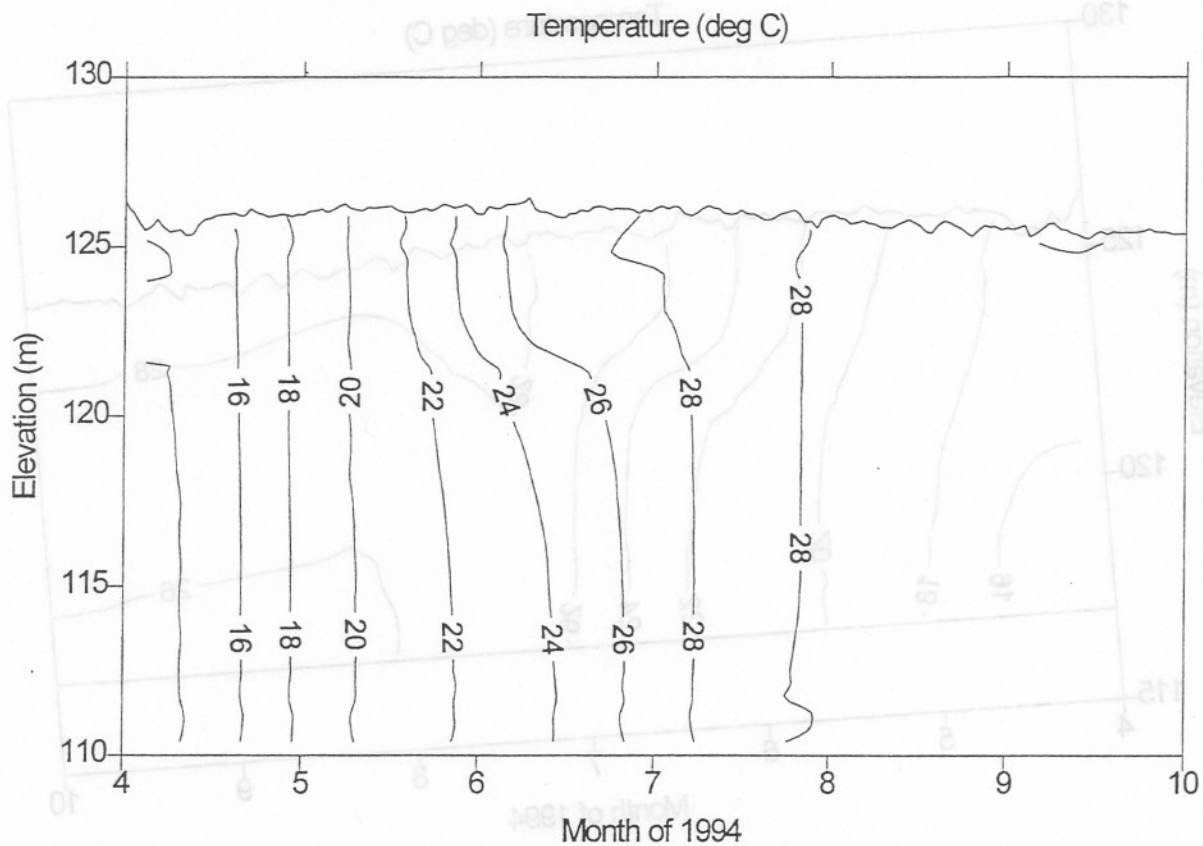
# Kentucky Reservoir - Big Sandy River Mile 7.4



# Pickwick Reservoir - TRM 207.3

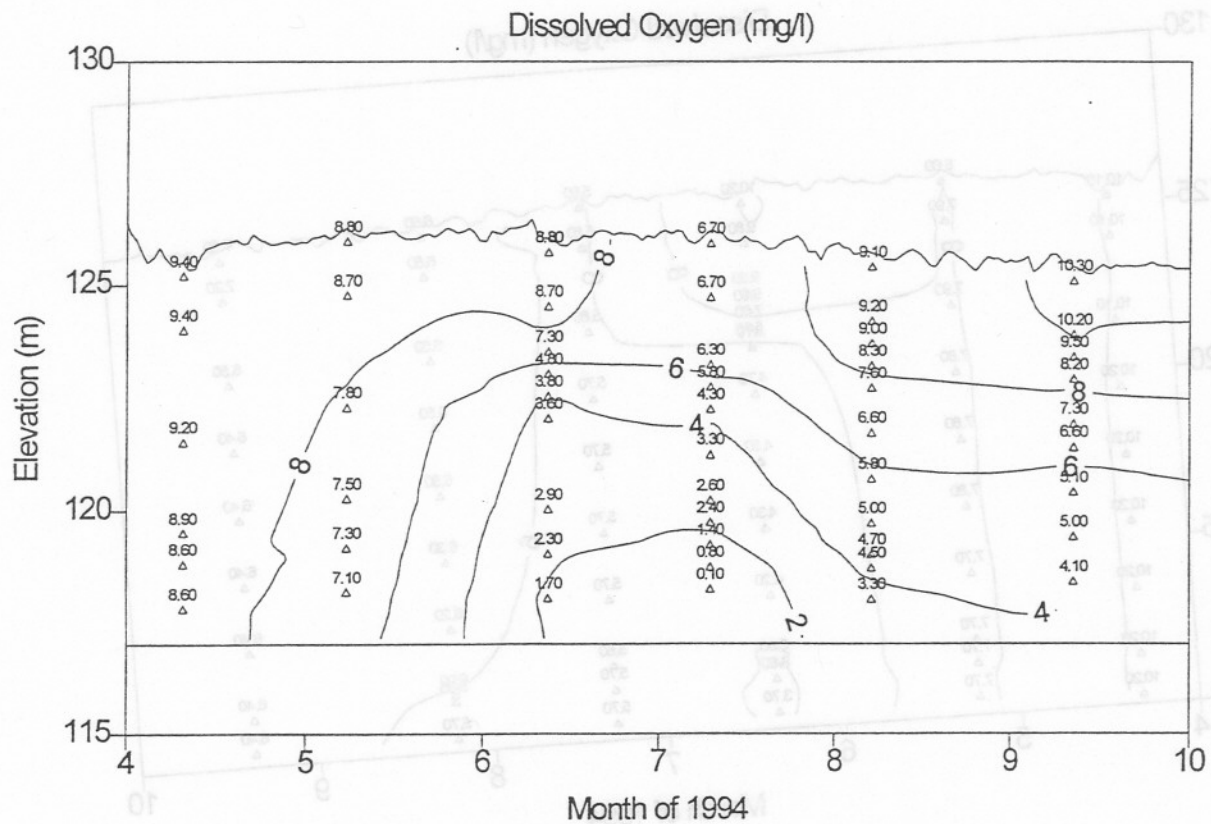
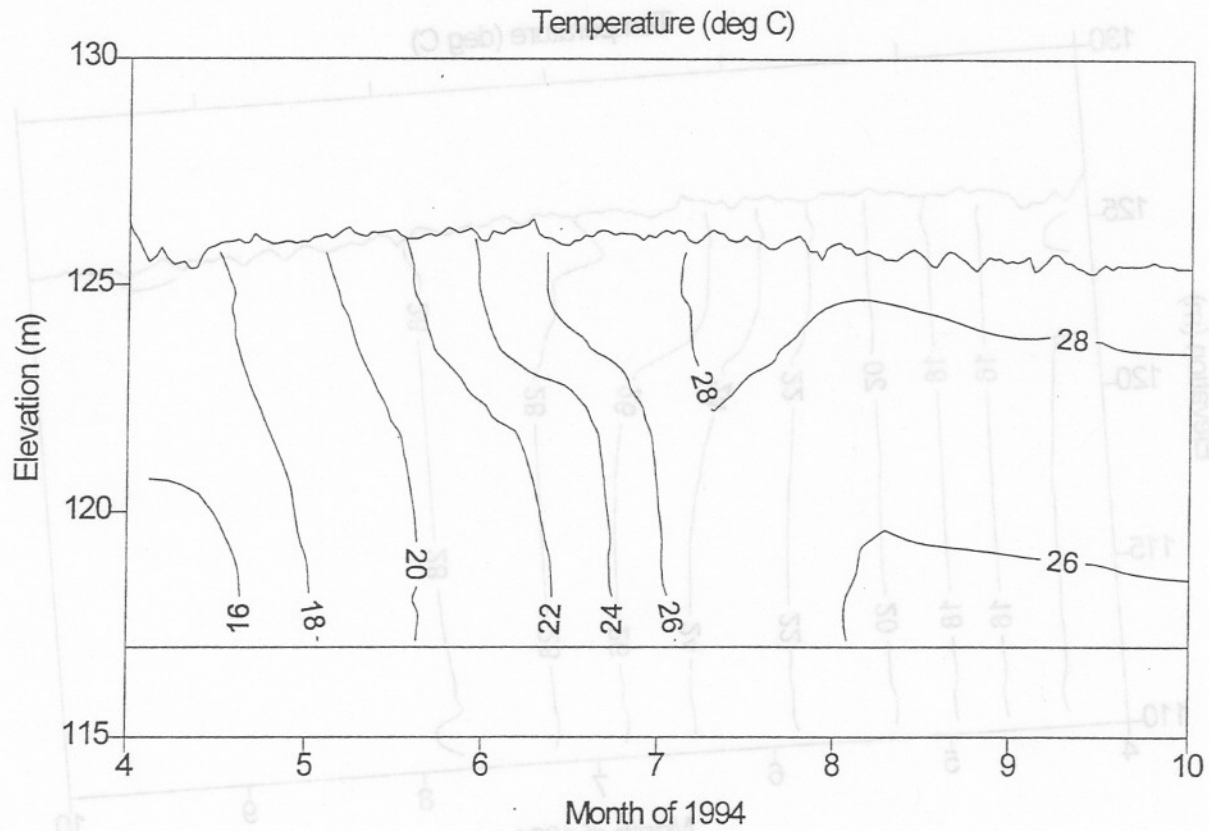


# Pickwick Reservoir - TRM 230.3

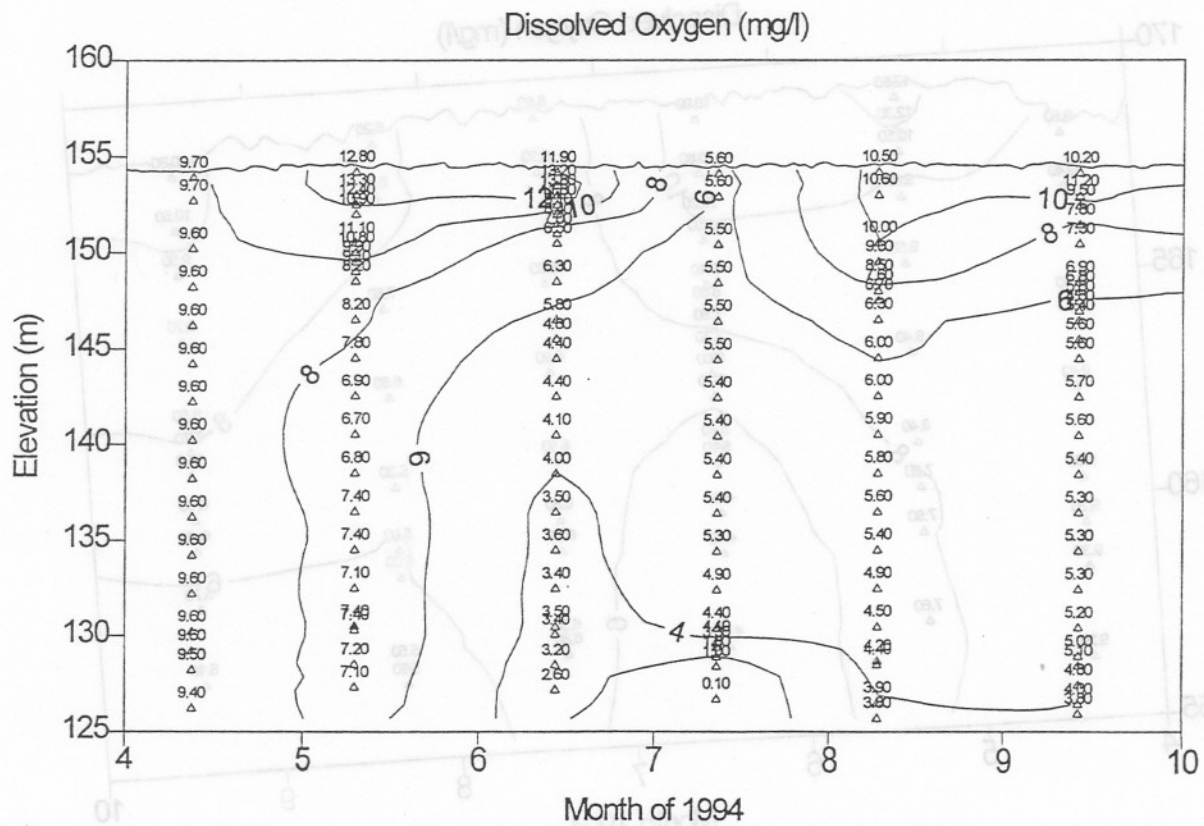
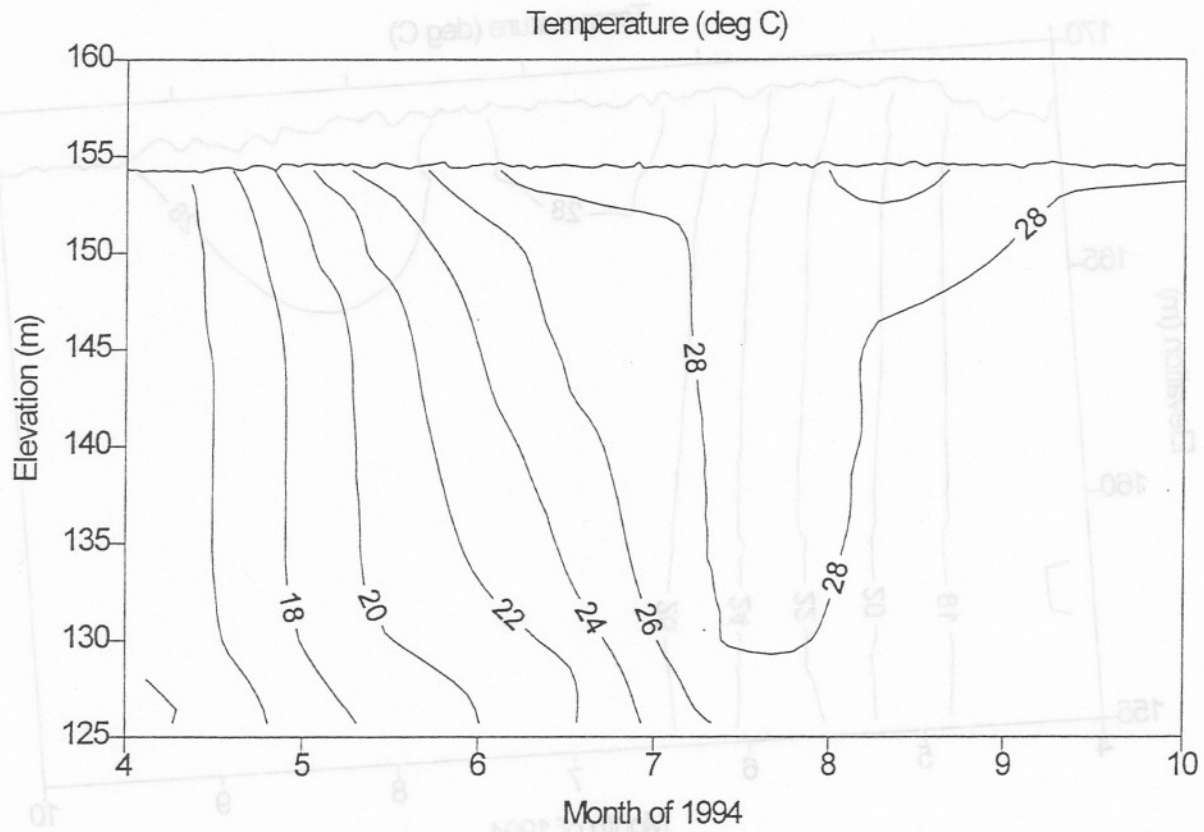




# Pickwick Reservoir - Bear Creek Mile 8.4

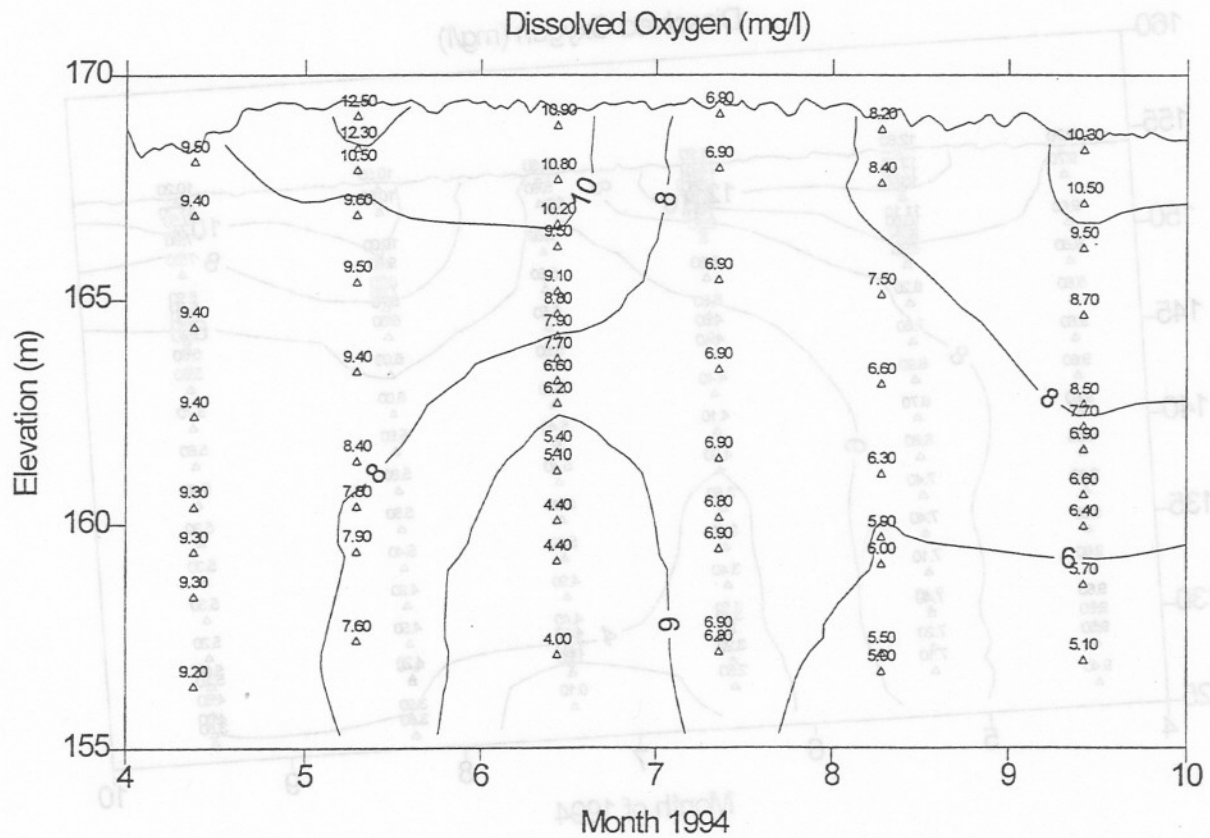
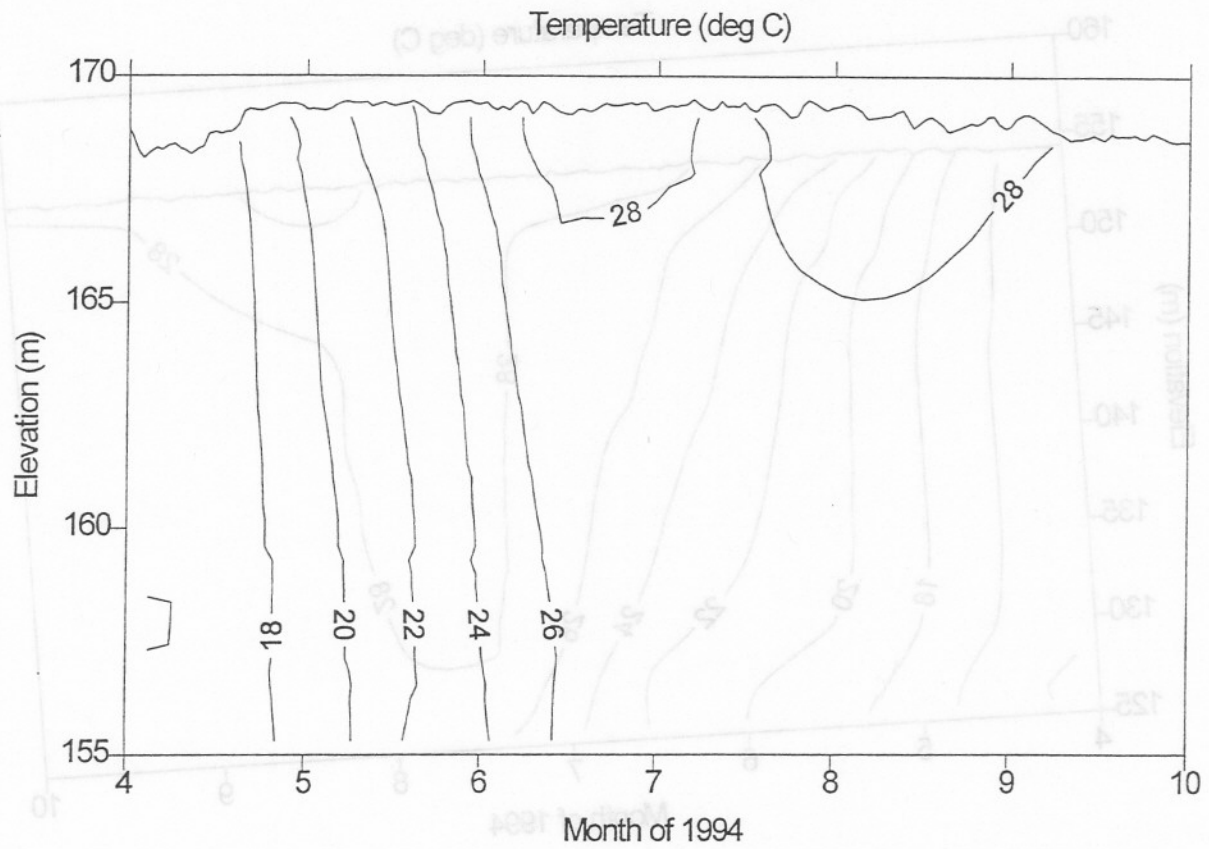


# Wilson Reservoir - TRM 260.8

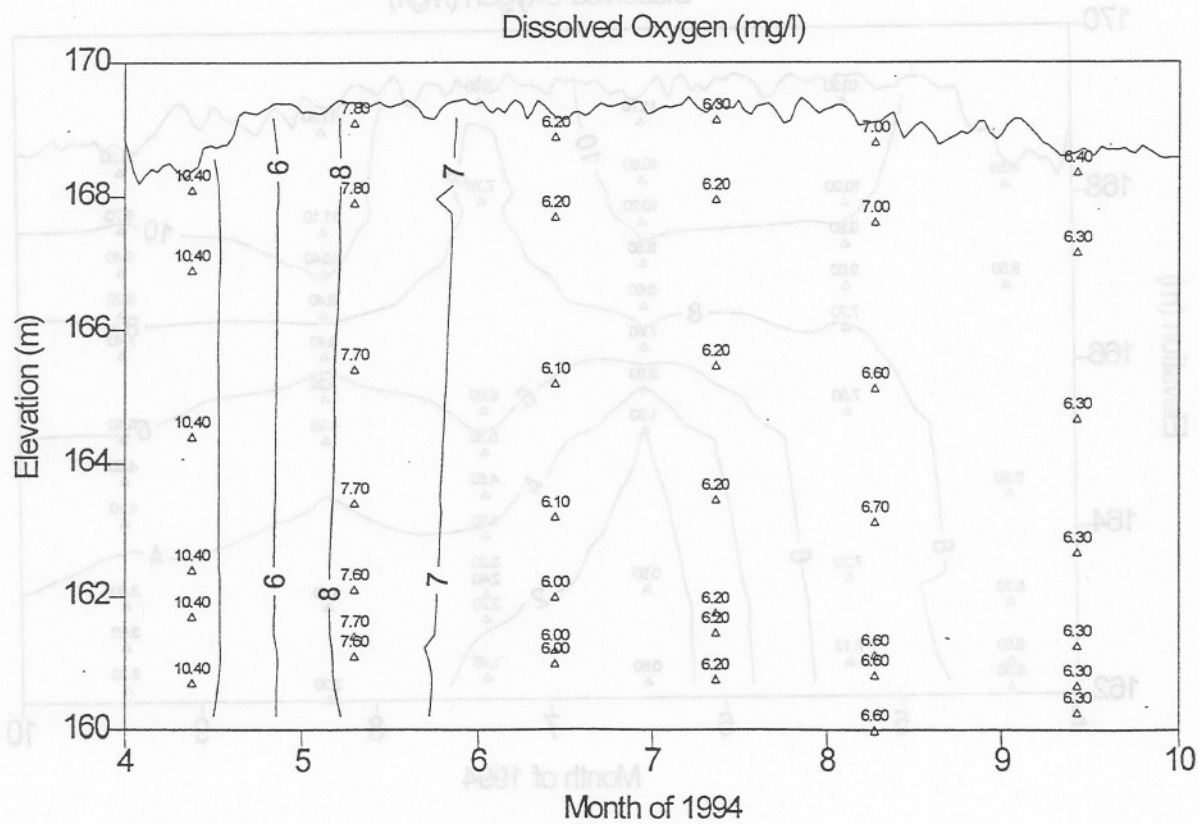
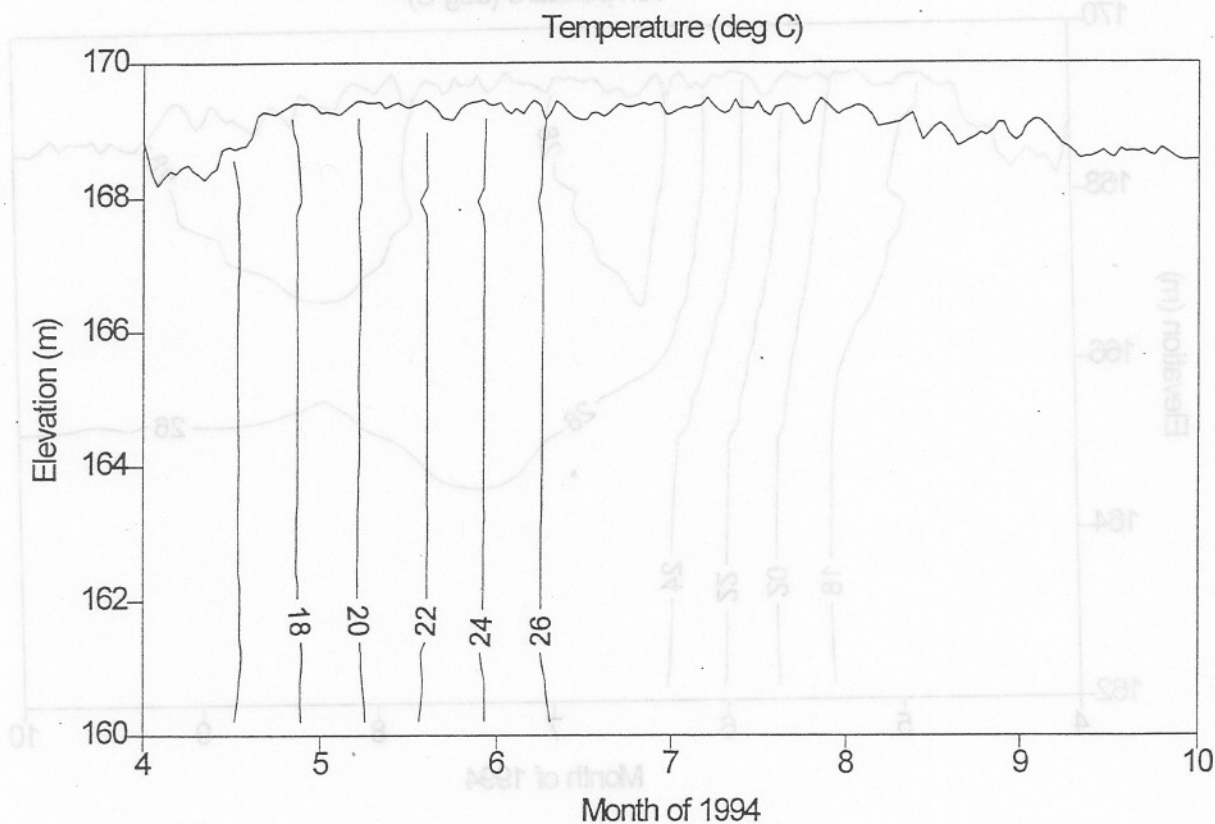




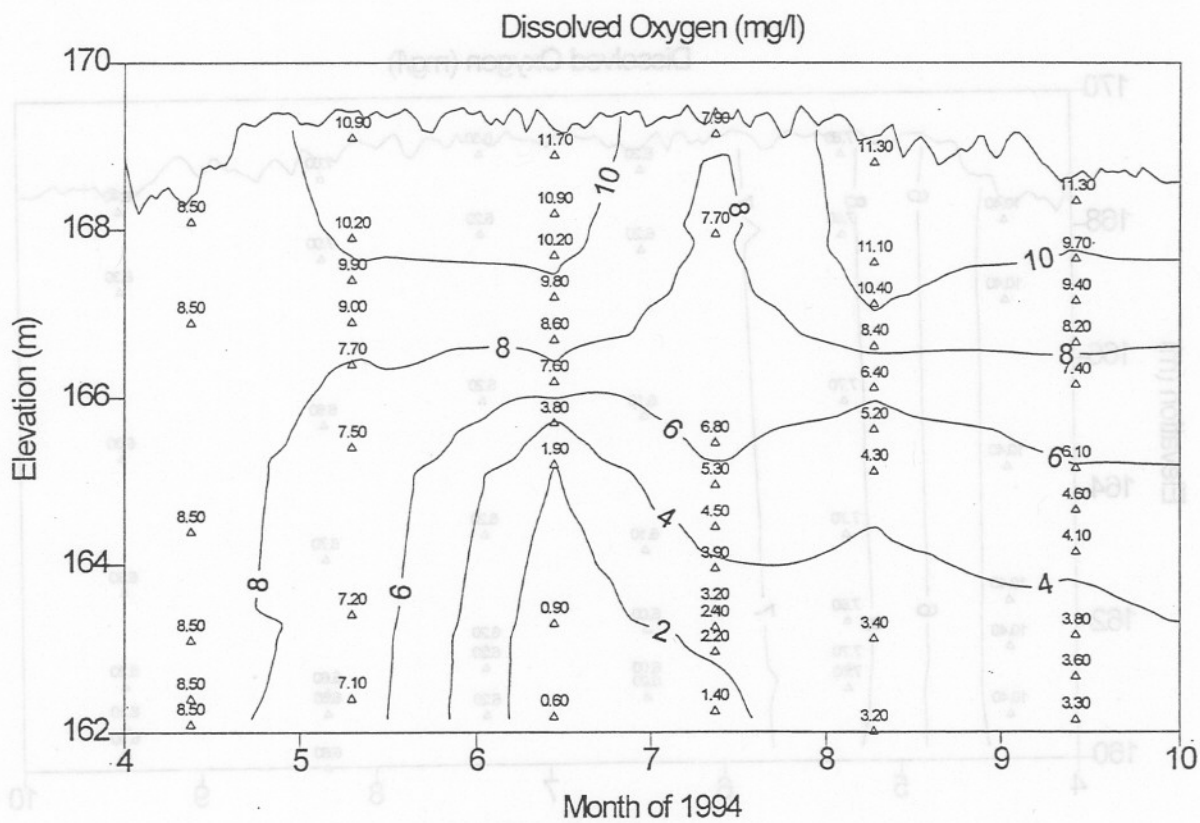
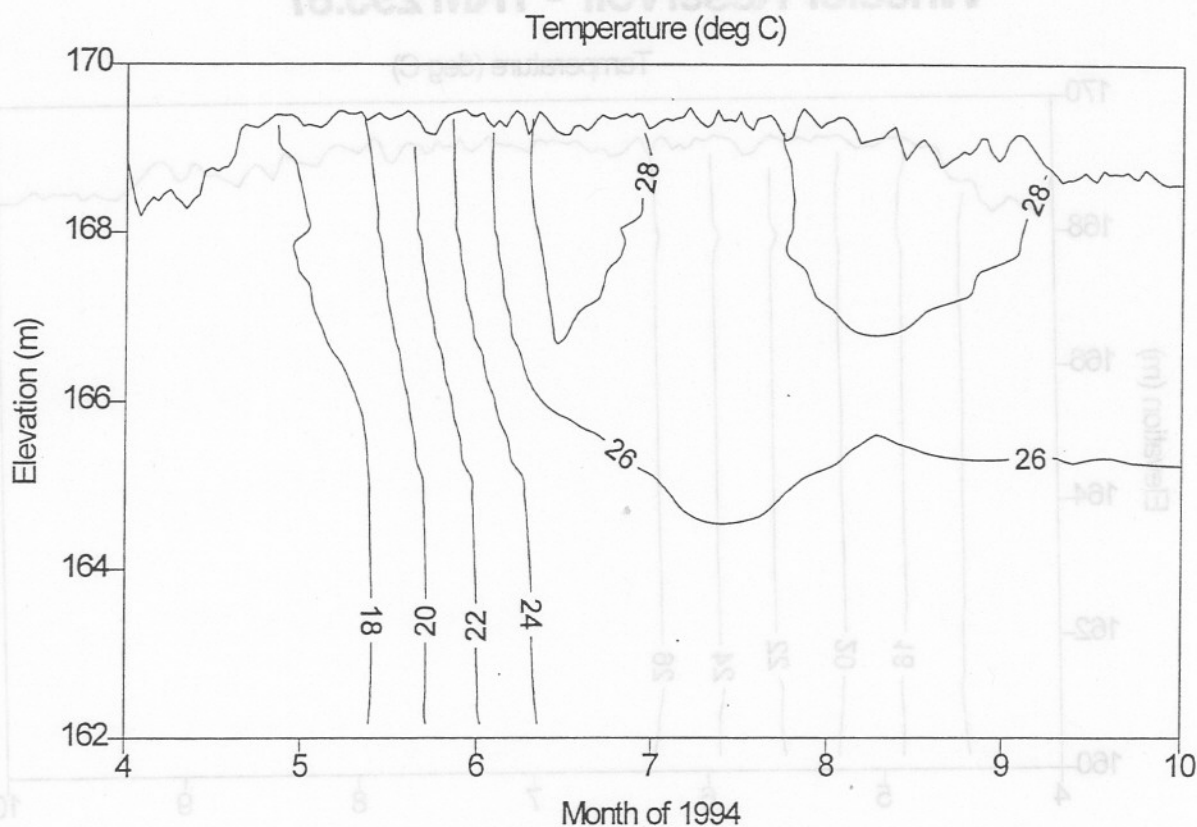
# Wheeler Reservoir - TRM 277.0



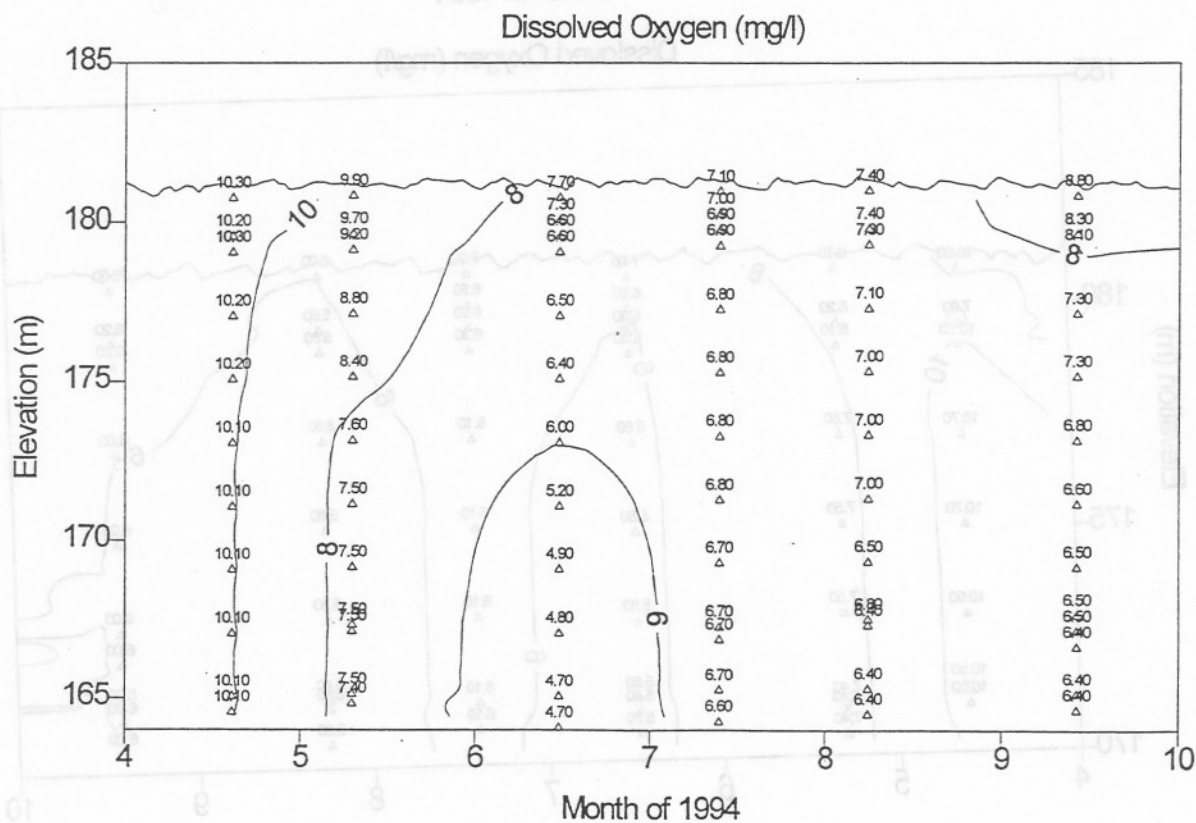
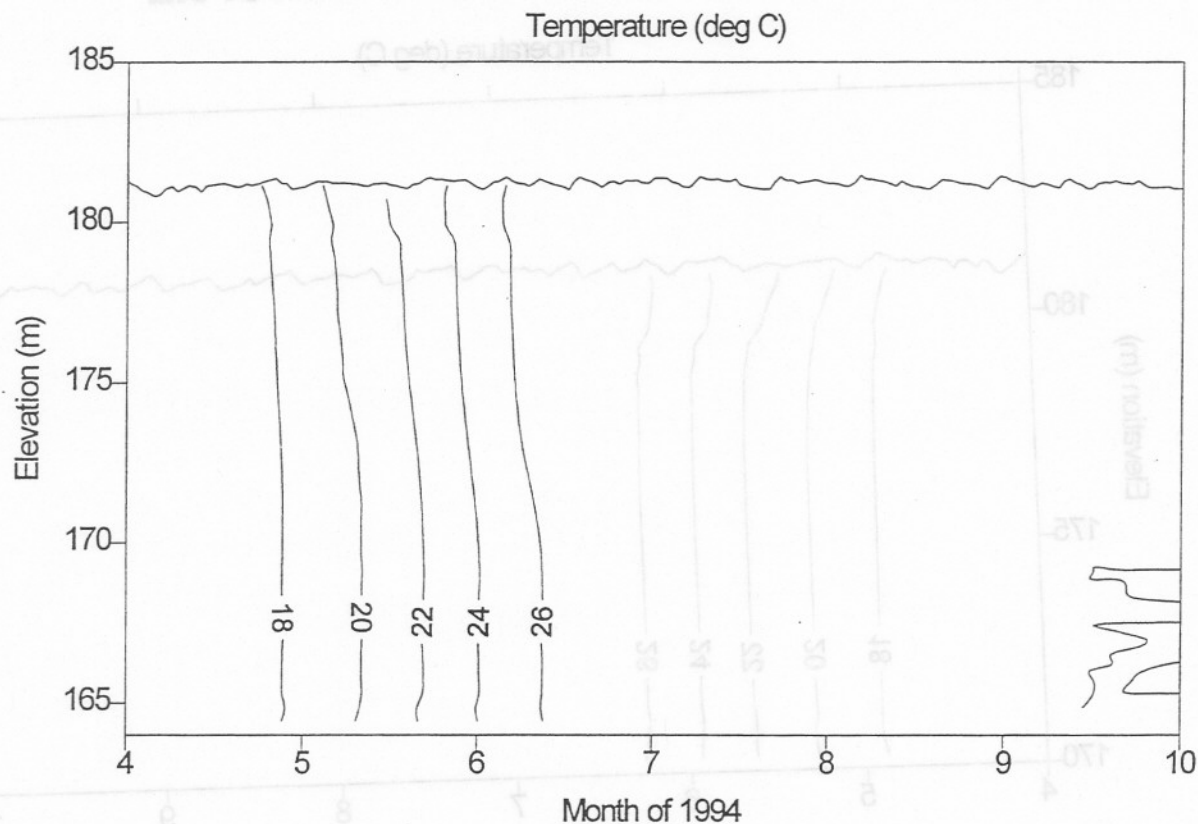
# Wheeler Reservoir - TRM 295.87



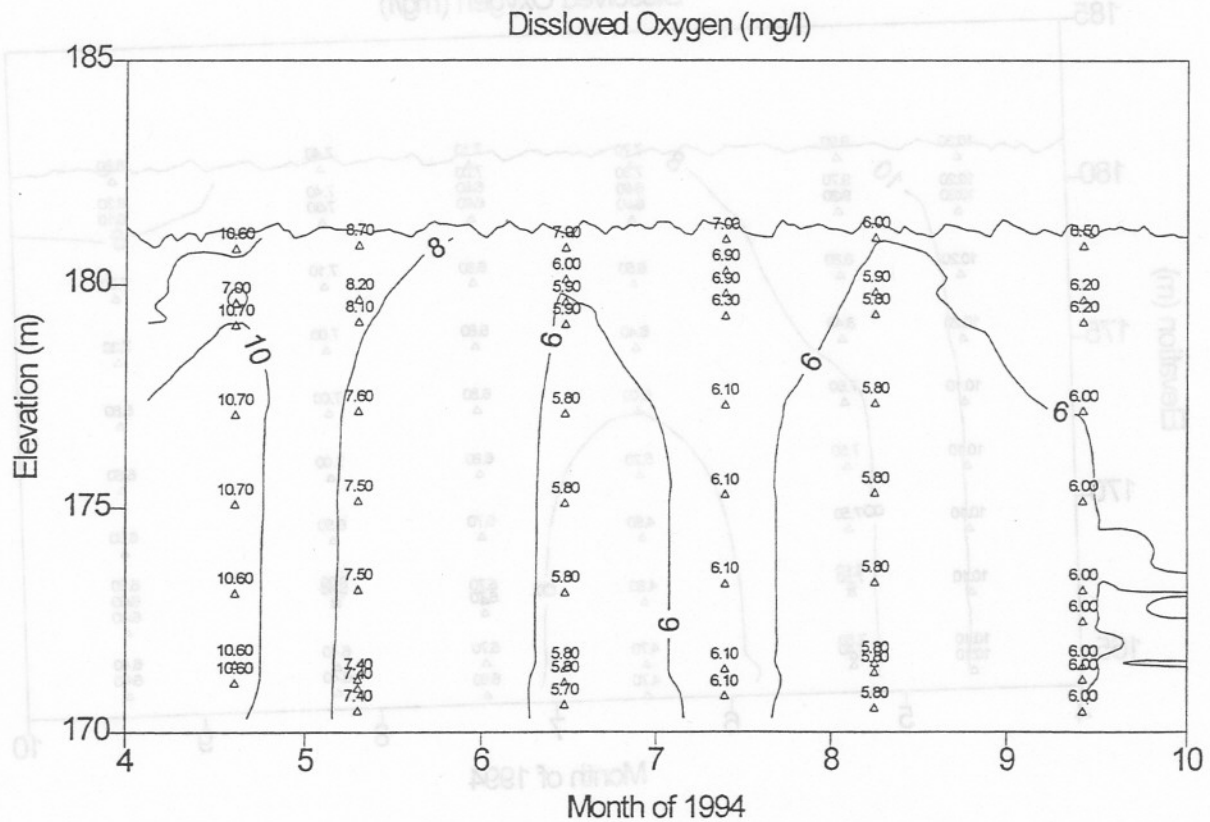
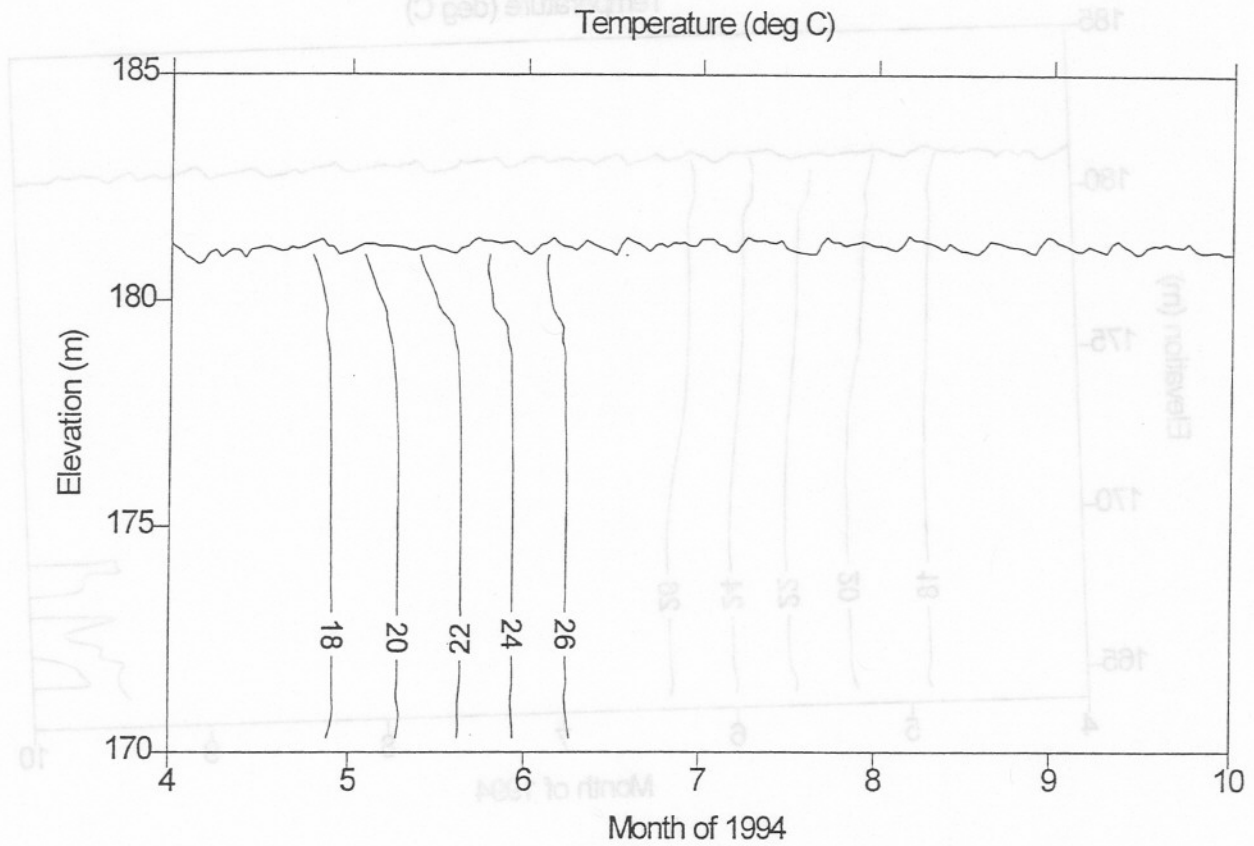
# Wheeler Reservoir - Elk River Mile 6.0



# Guntersville Reservoir - TRM 350.0

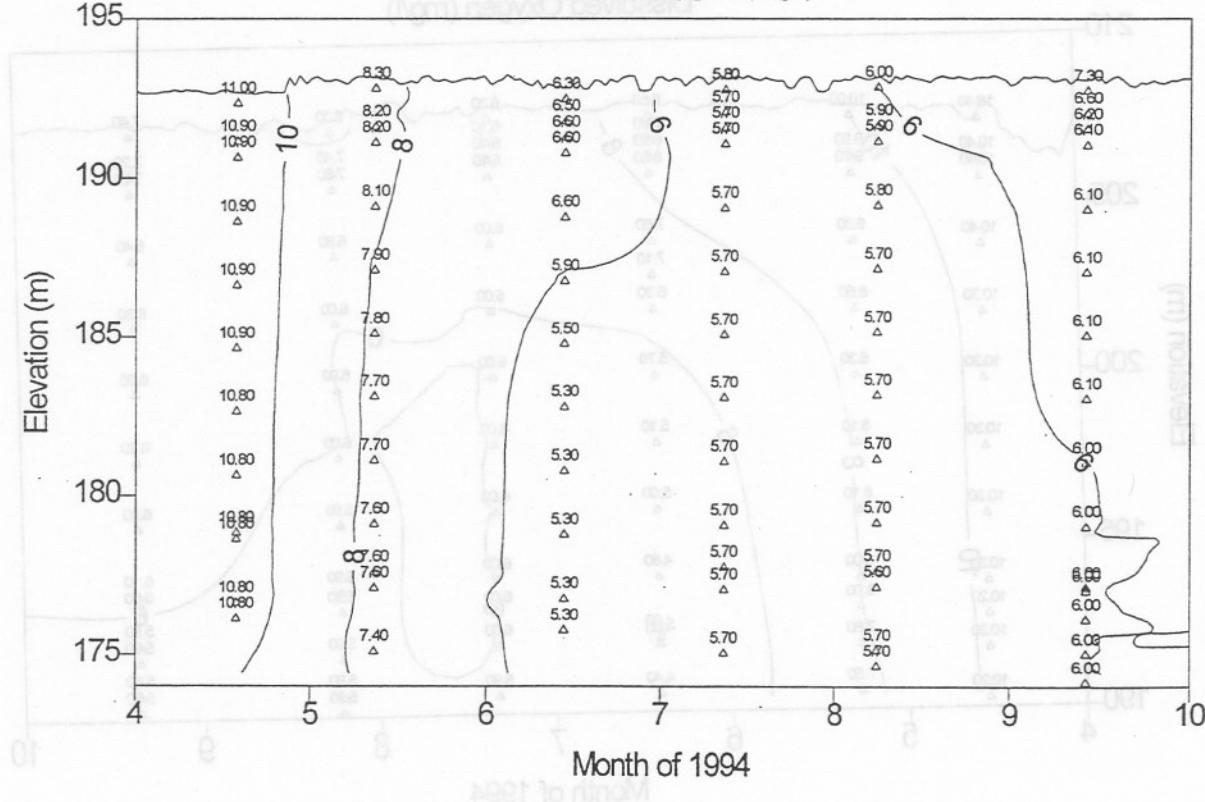
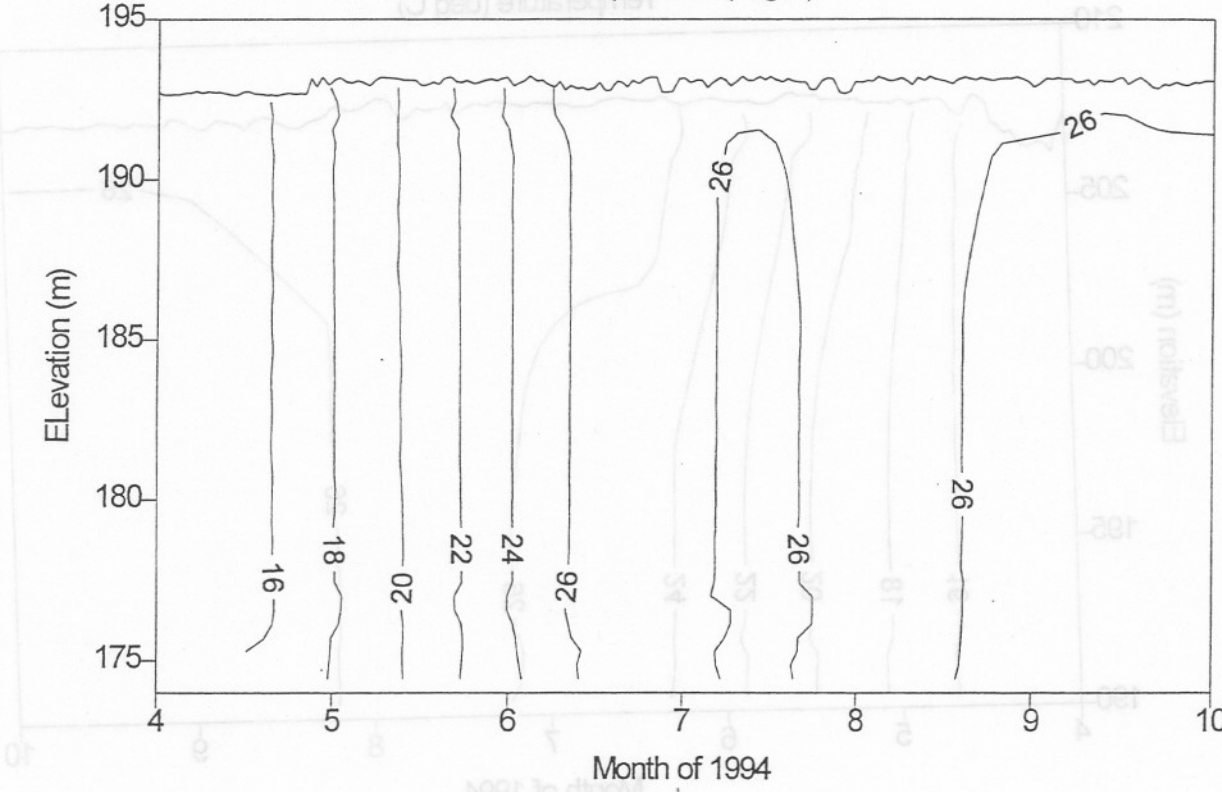


# Guntersville Reservoir - TRM 375.2

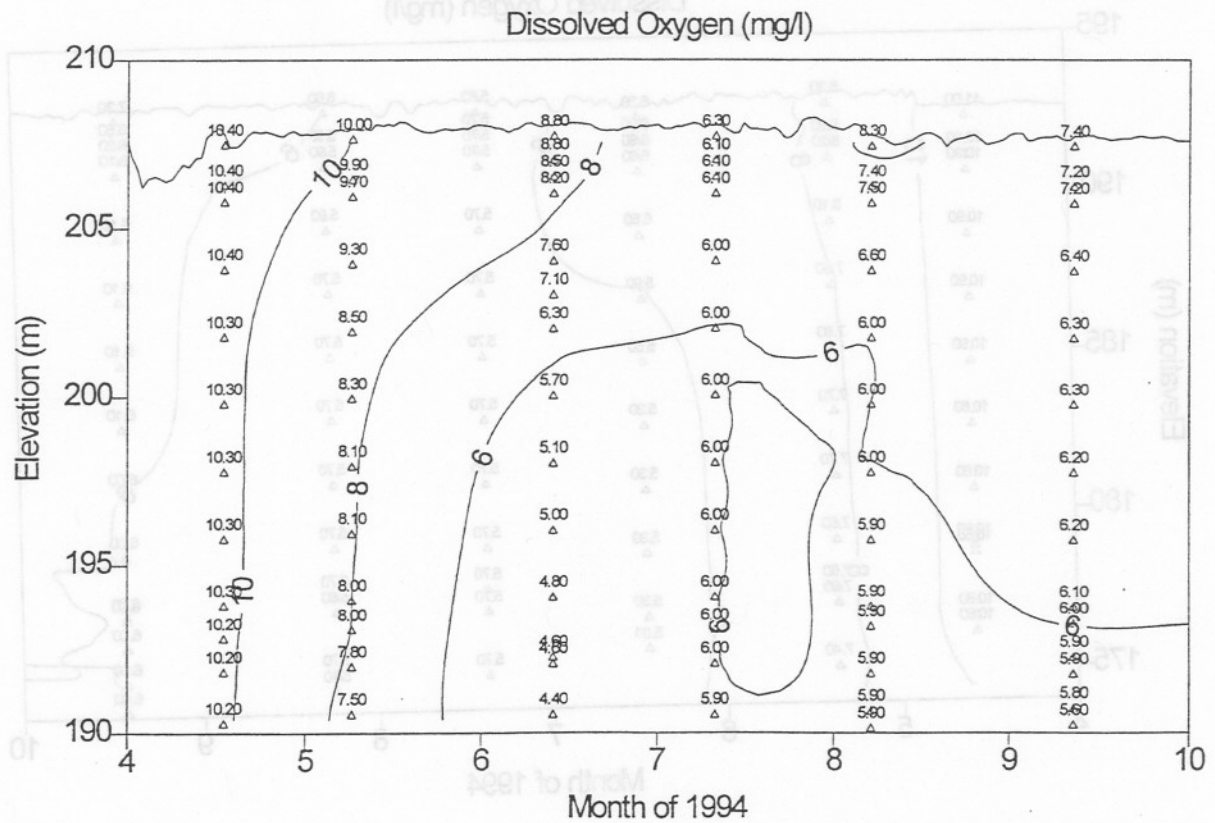
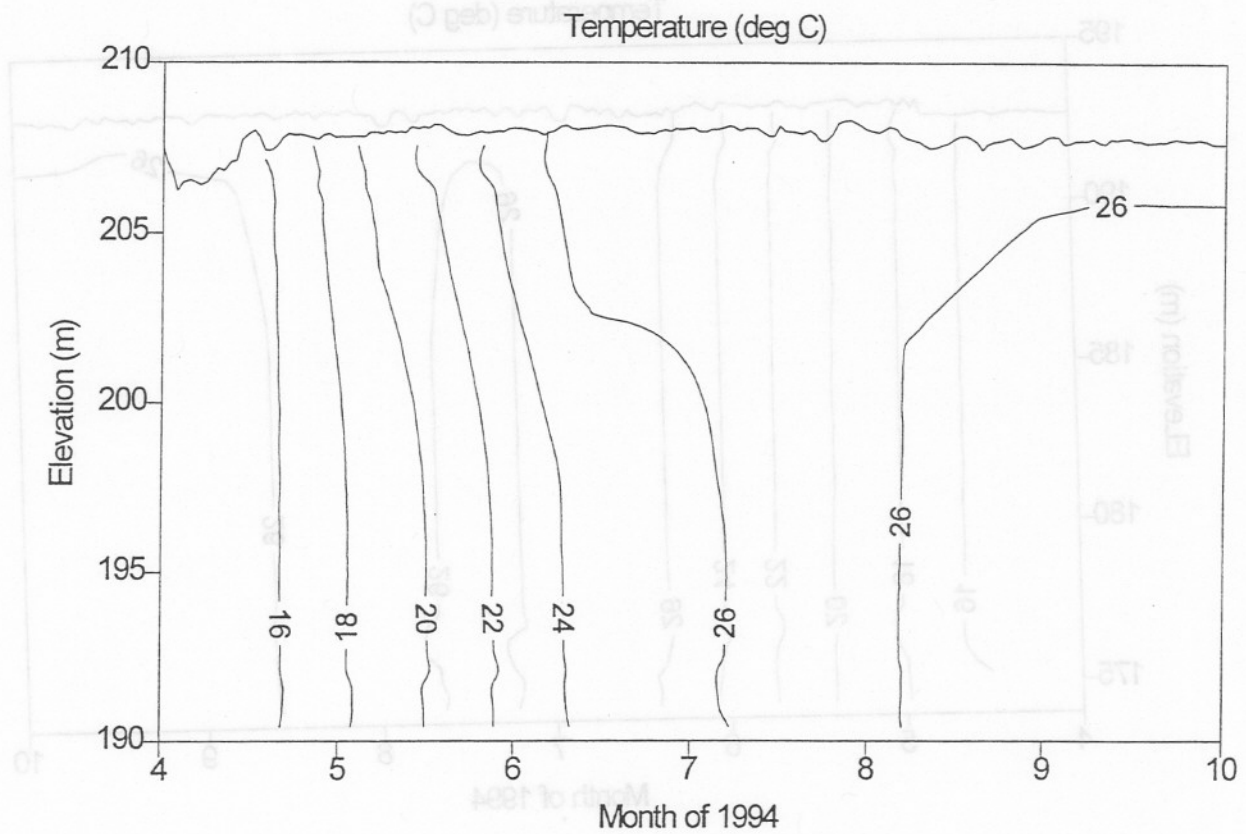




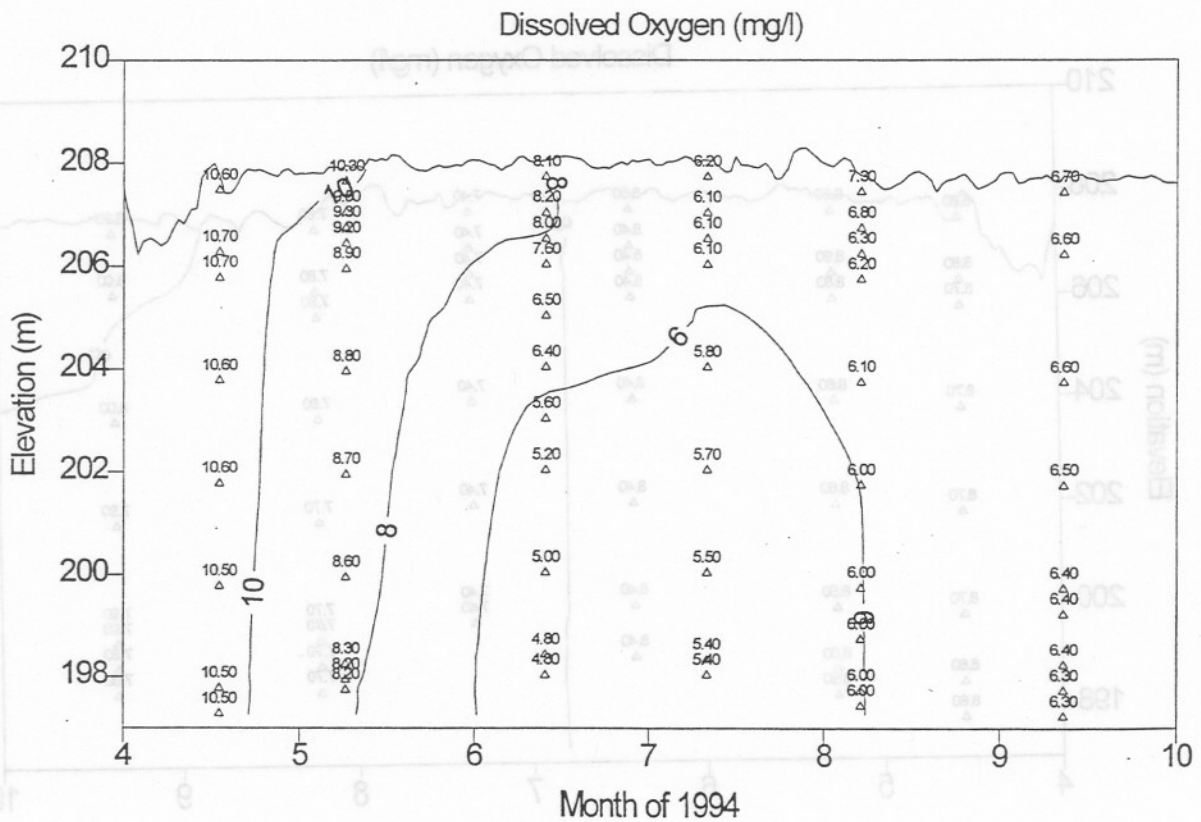
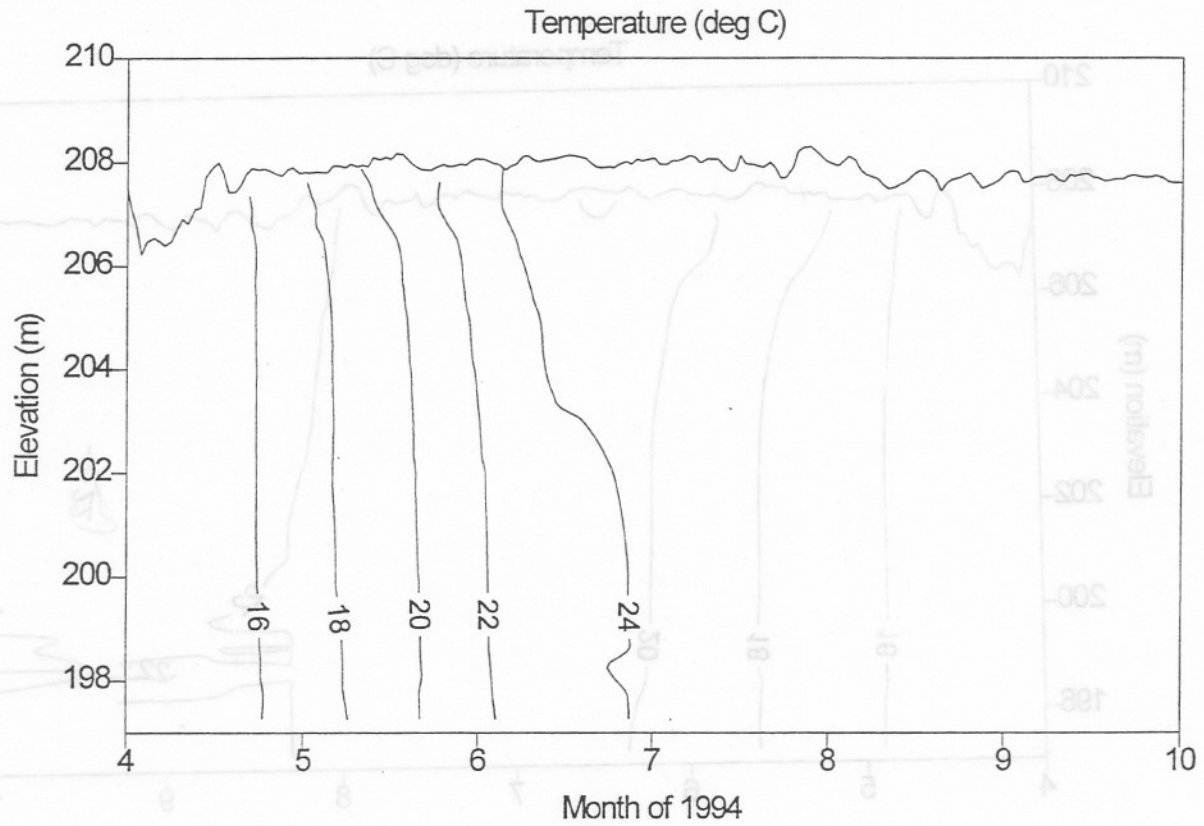
## NICK

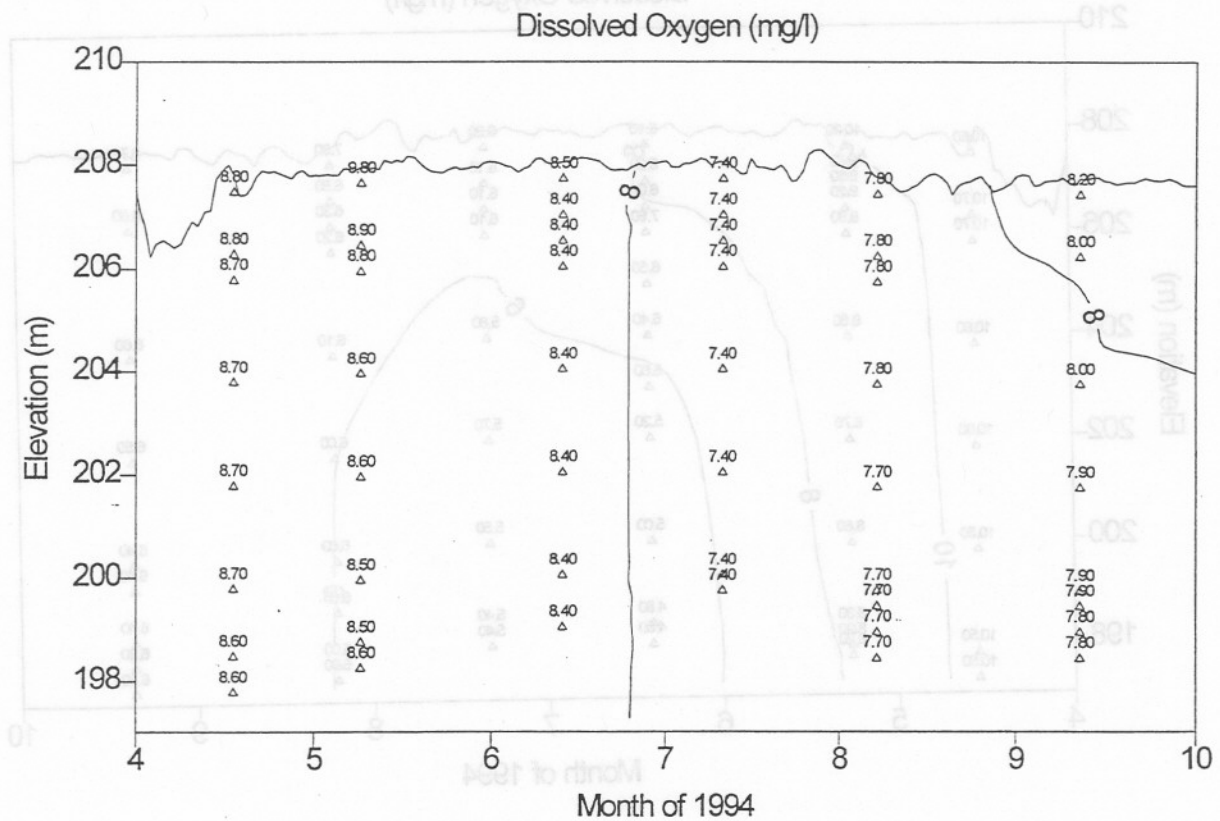


# Chickamauga Reservoir - TRM 472.3

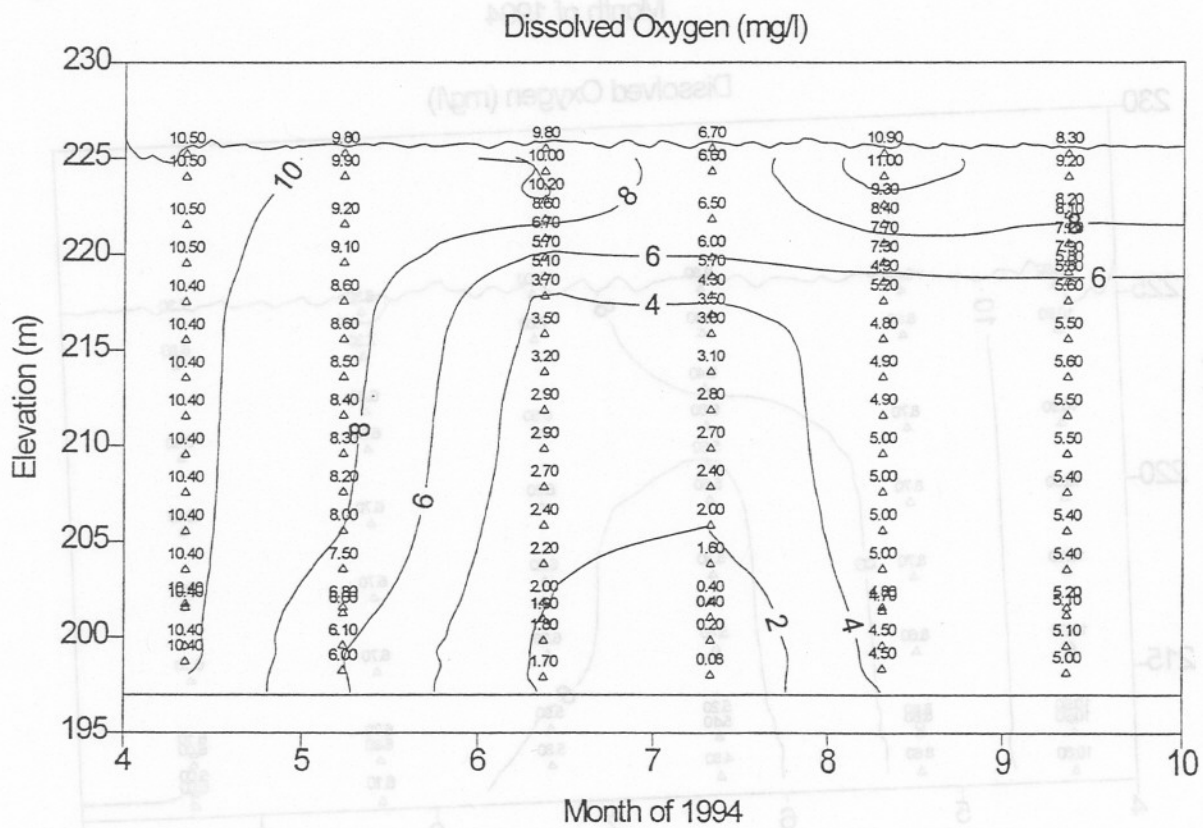
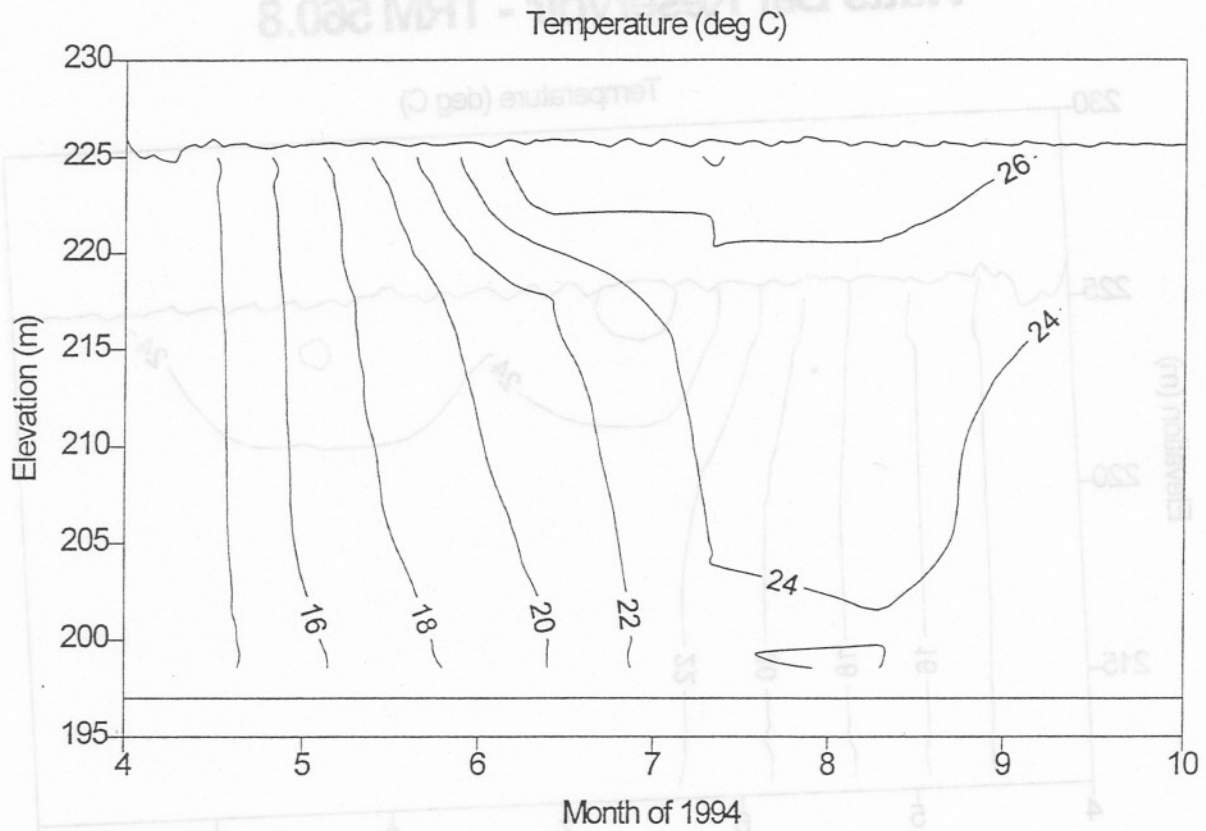


# Chickamauga Reservoir - TRM 490.5



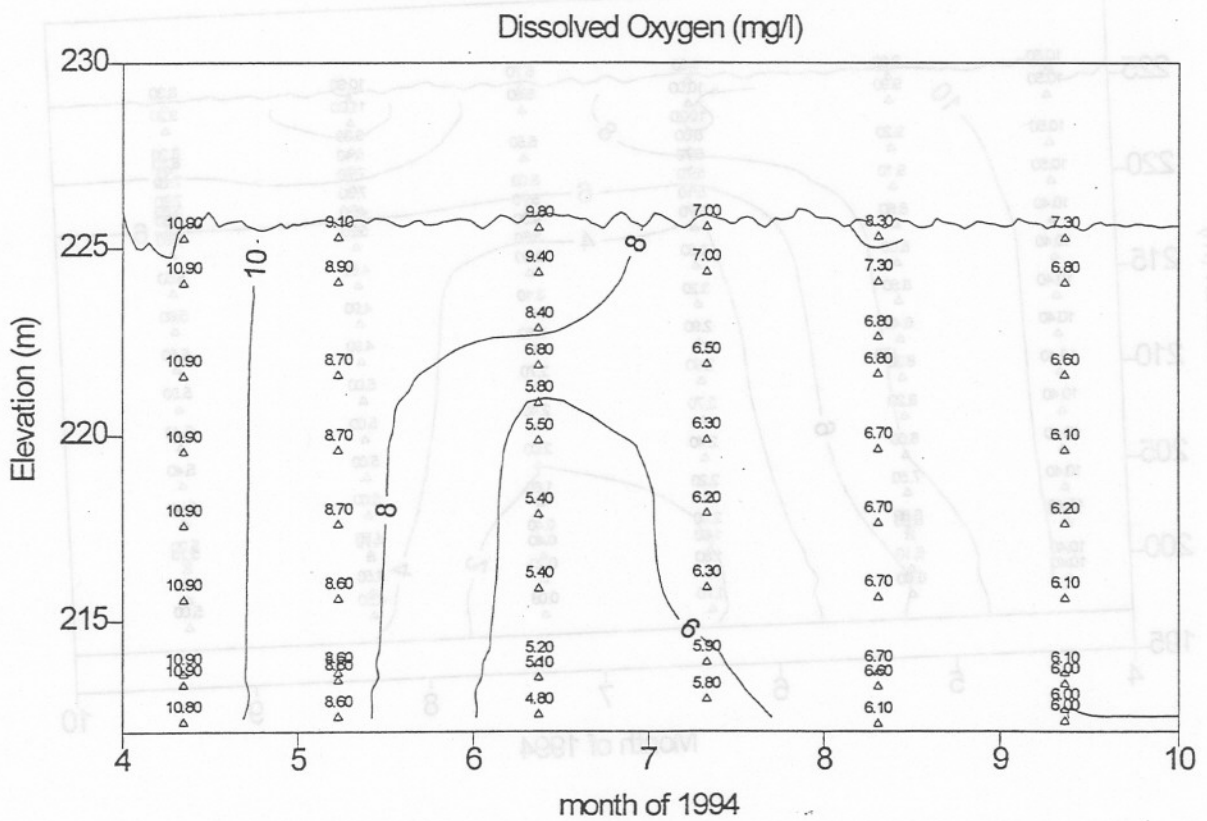
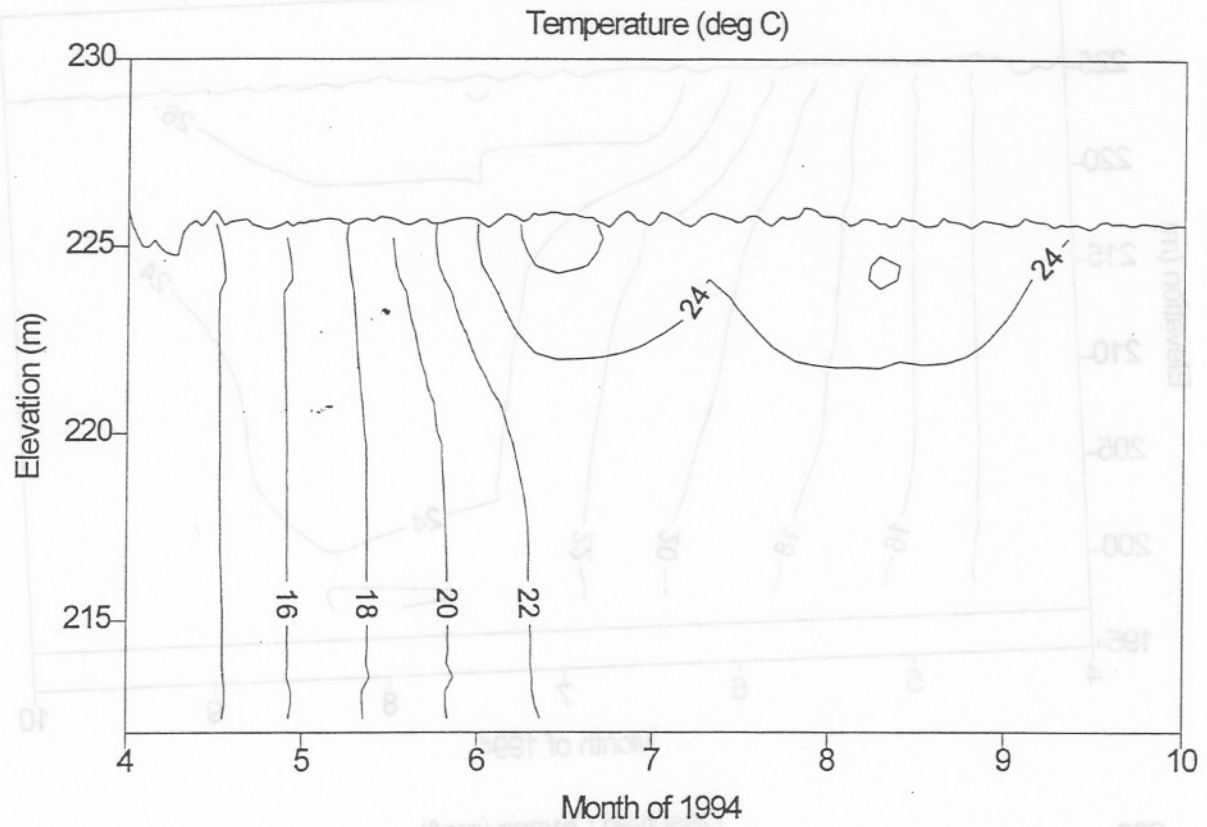


# Watts Bar Reservoir - TRM 531.0

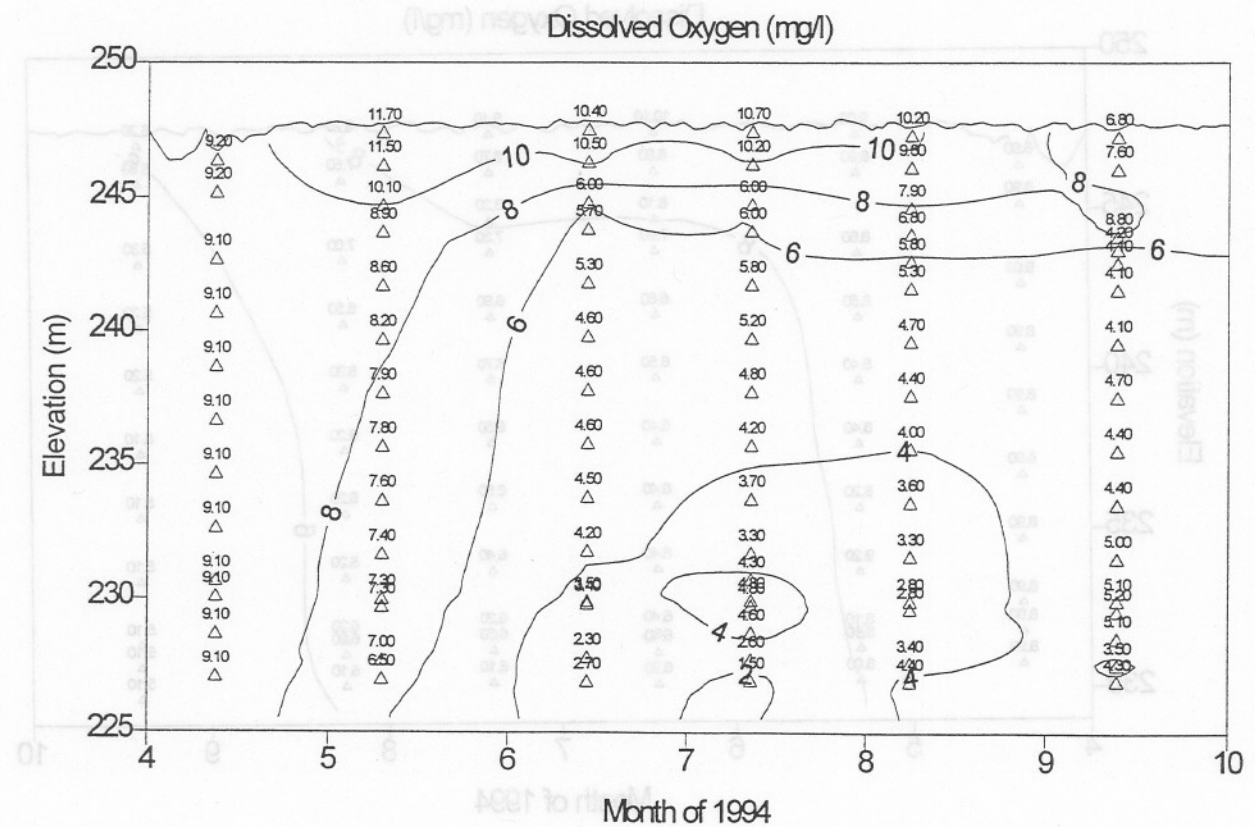
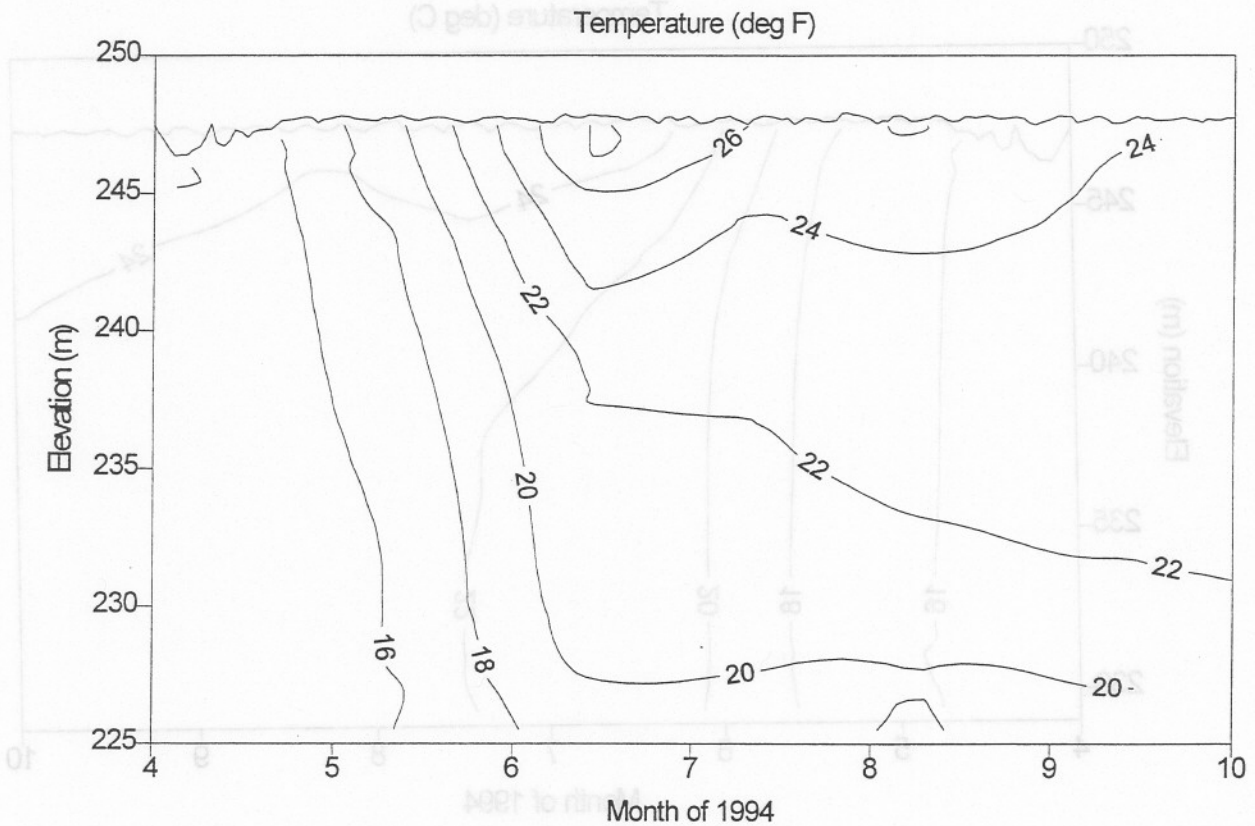




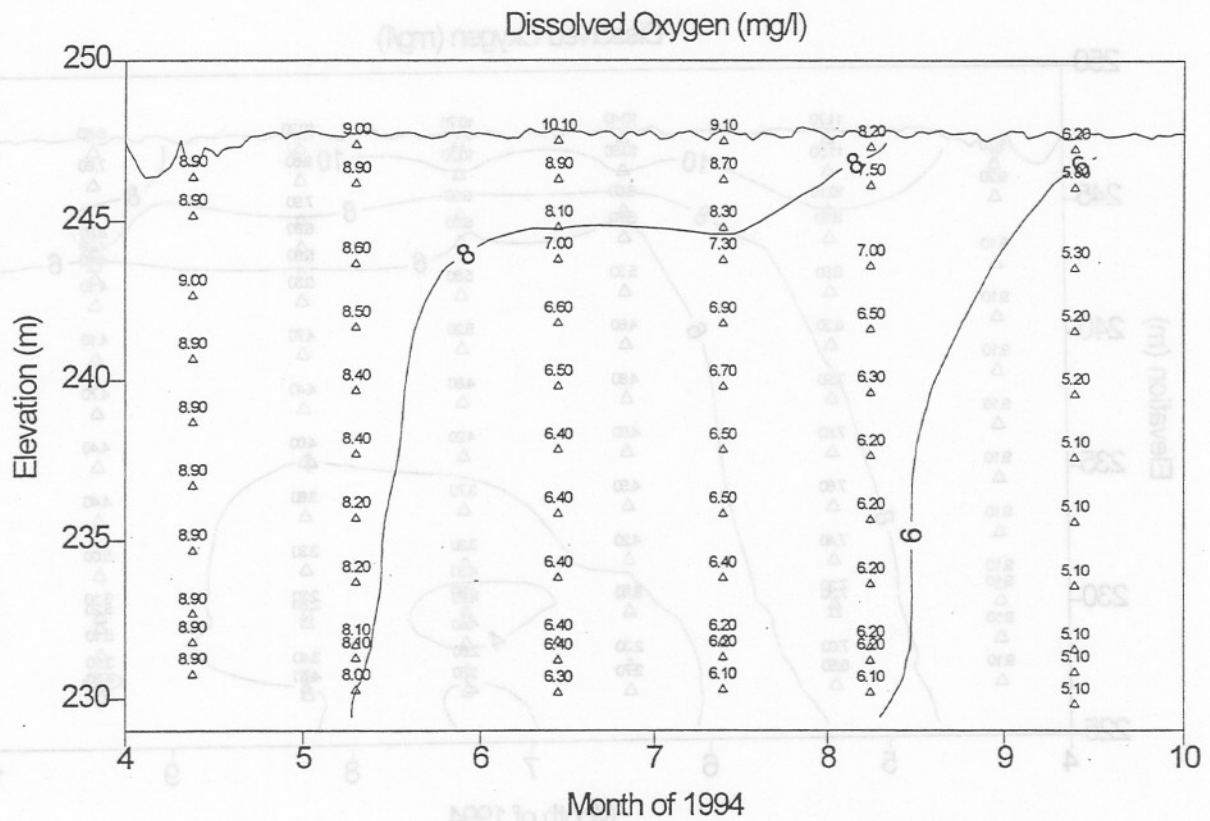
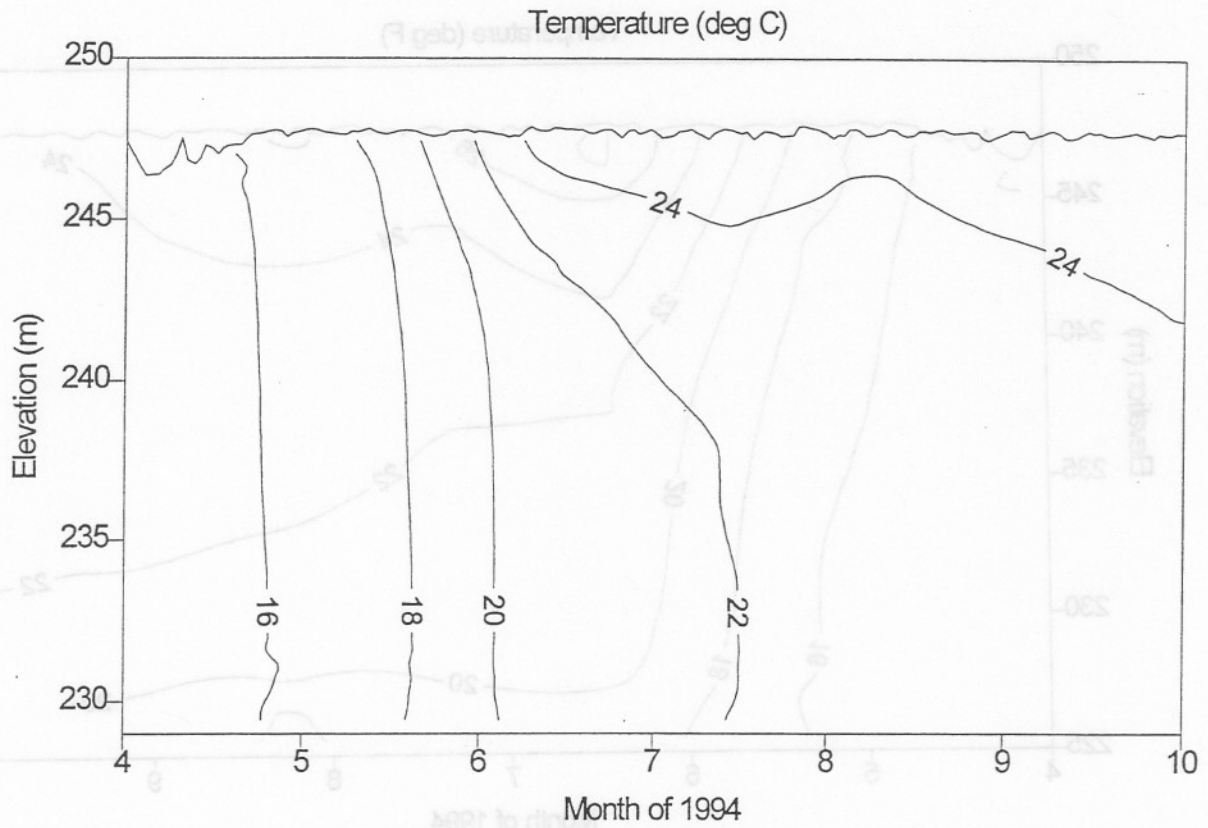
# Watts Bar Reservoir - TRM 560.8



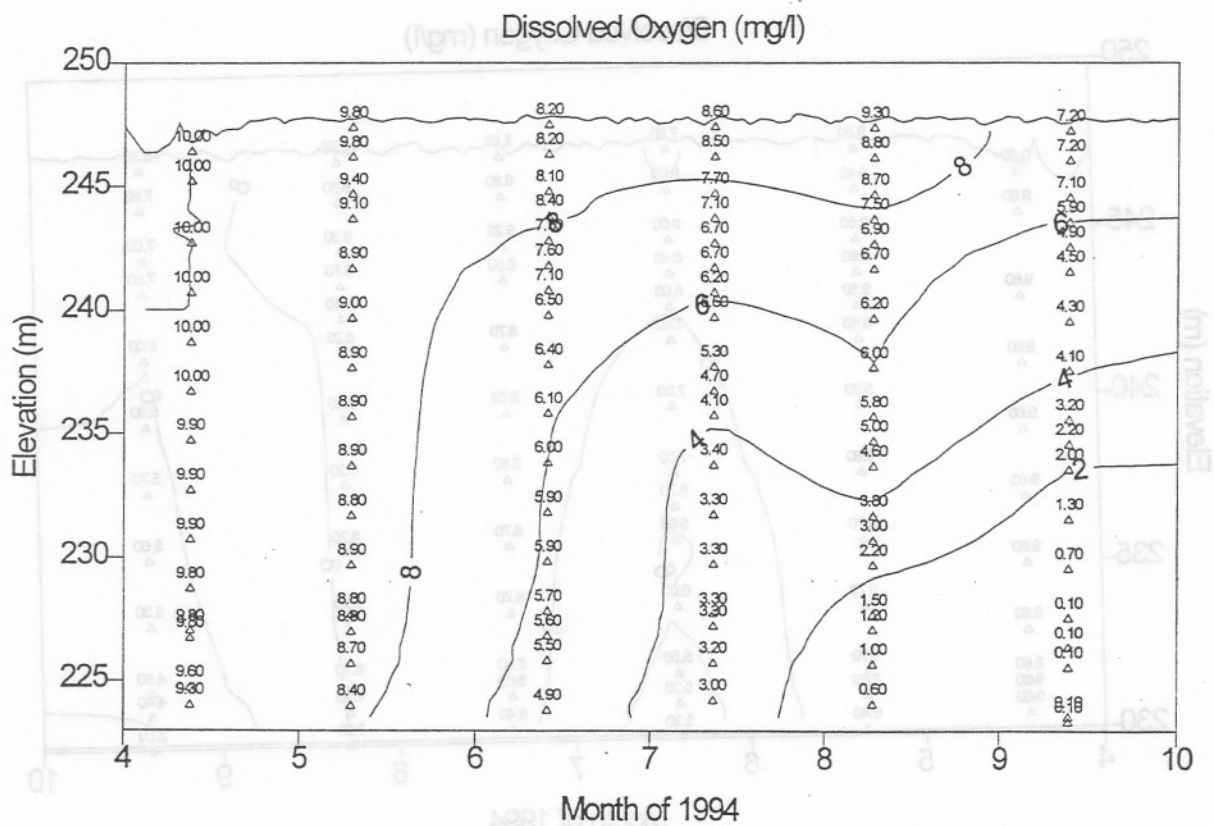
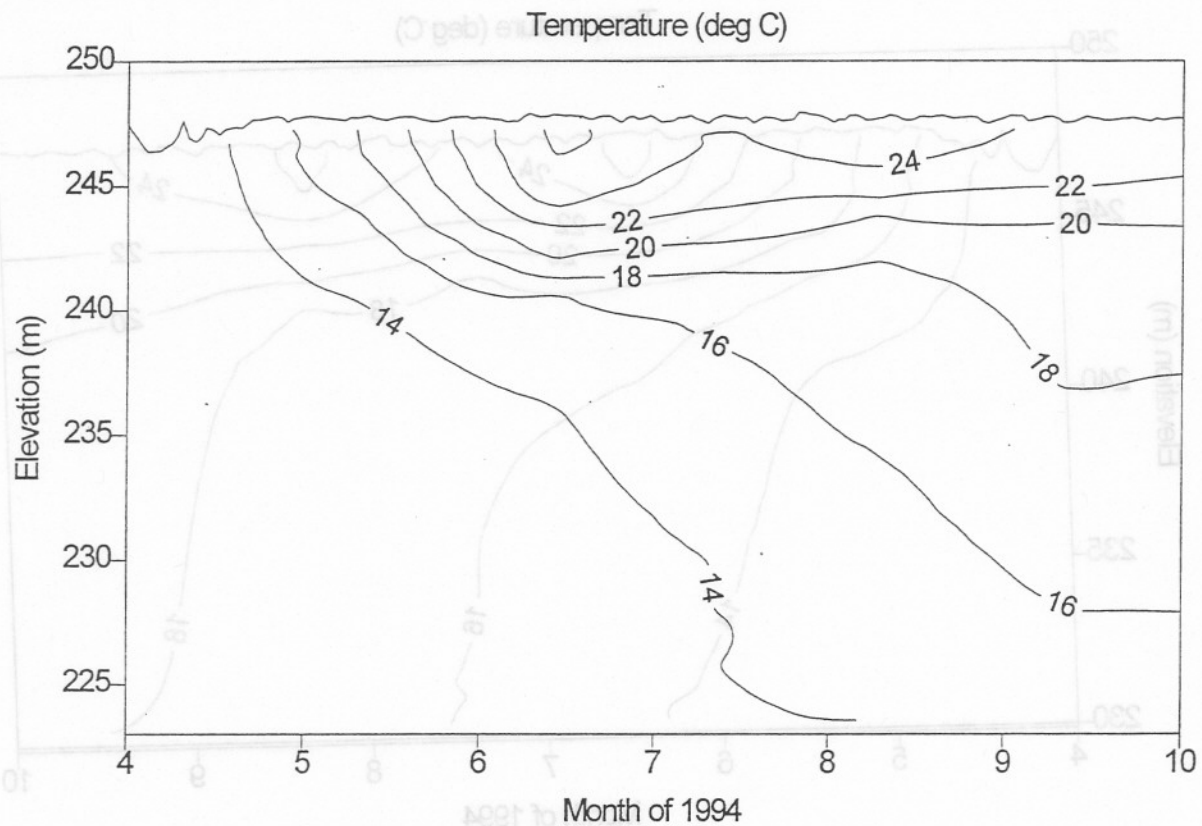
# Fort Loudoun Reservoir - TRM 605.5



# Fort Loudoun Reservoir - TRM 624.6

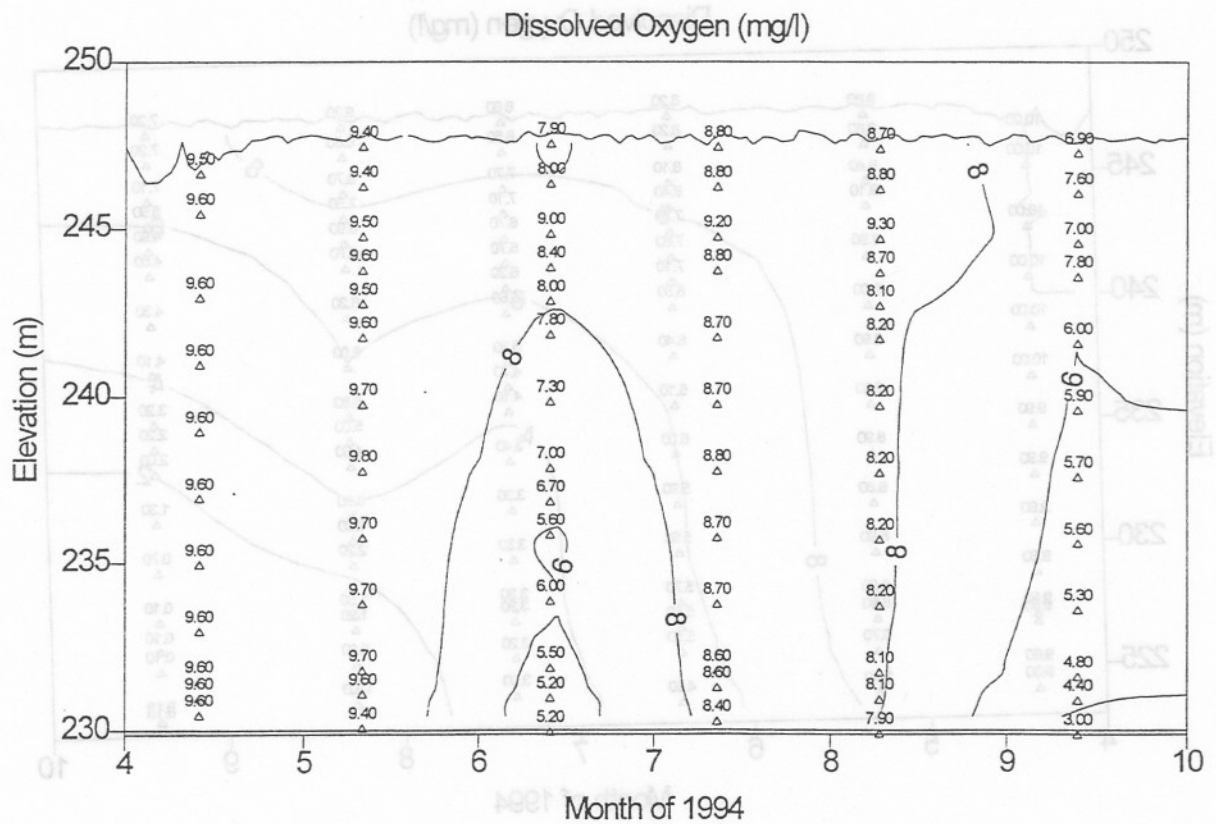
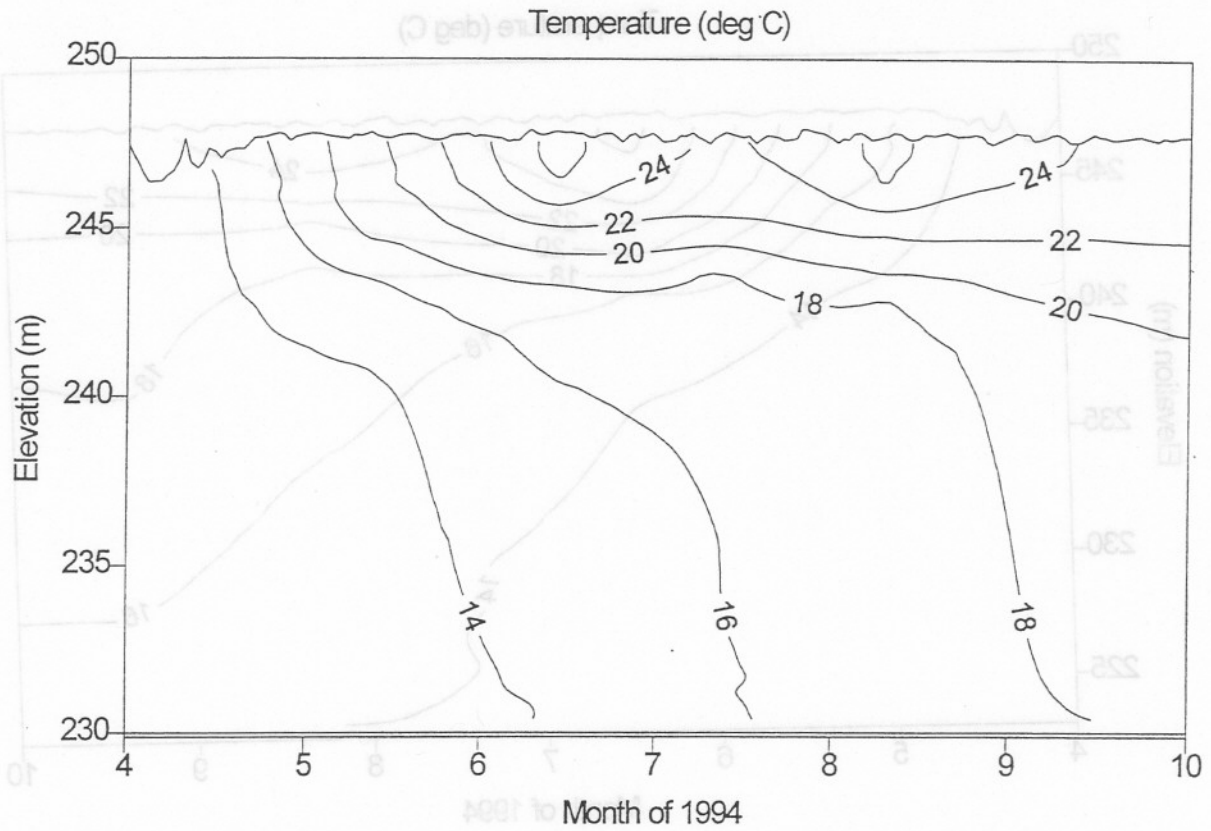


# Tellico Reservoir - LTRM 1.0



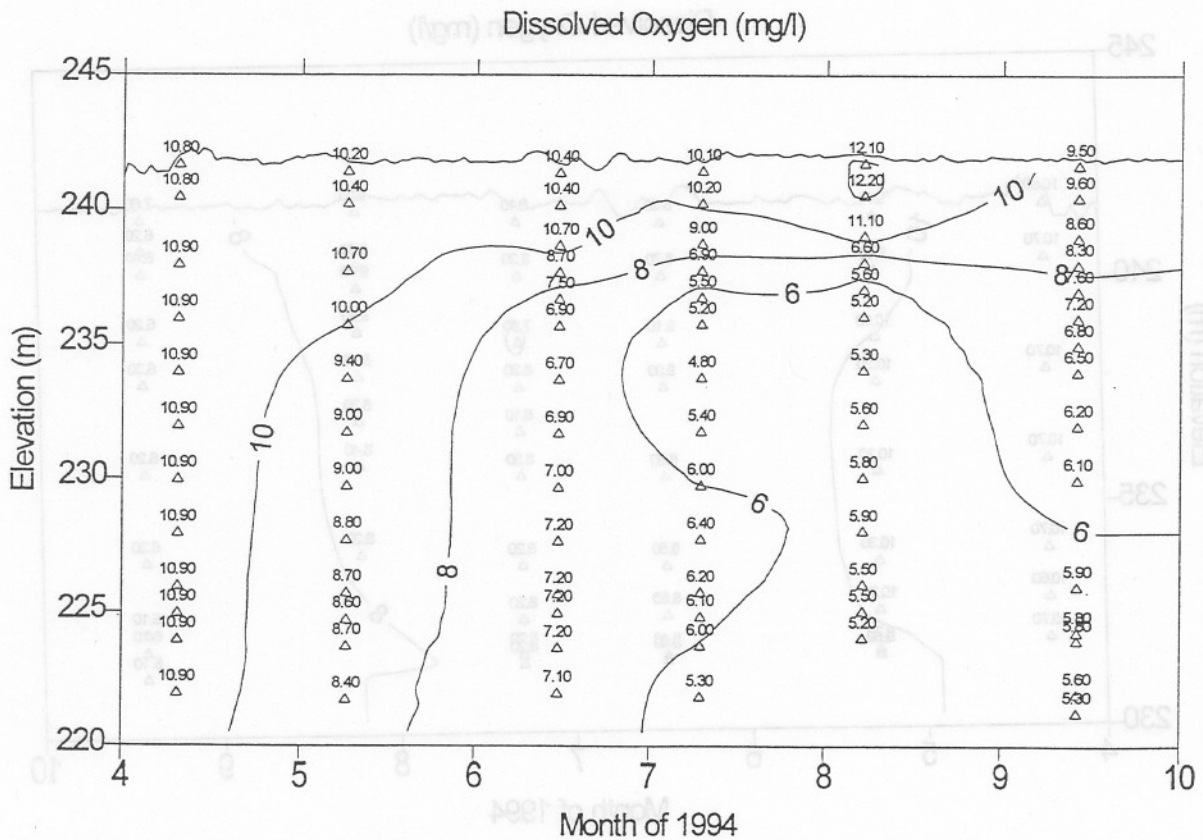
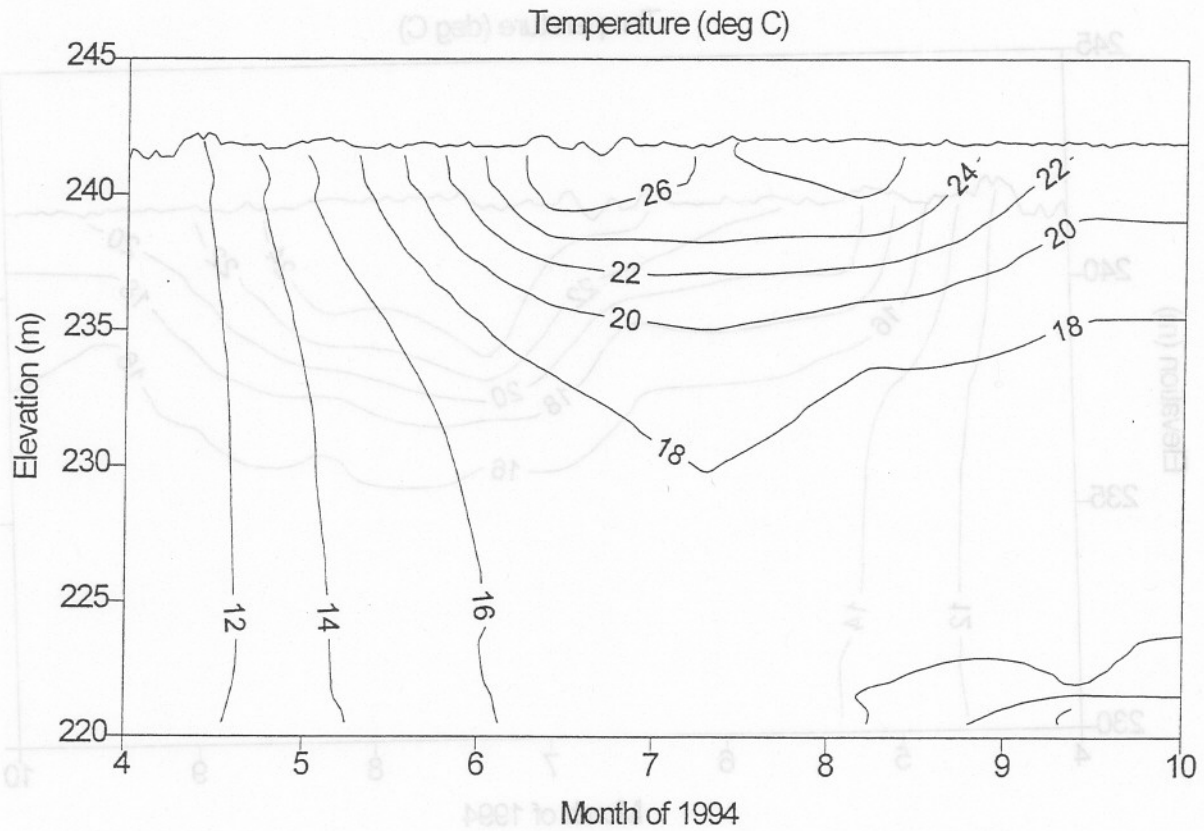


# Tellico Reservoir - LTRM 15.0

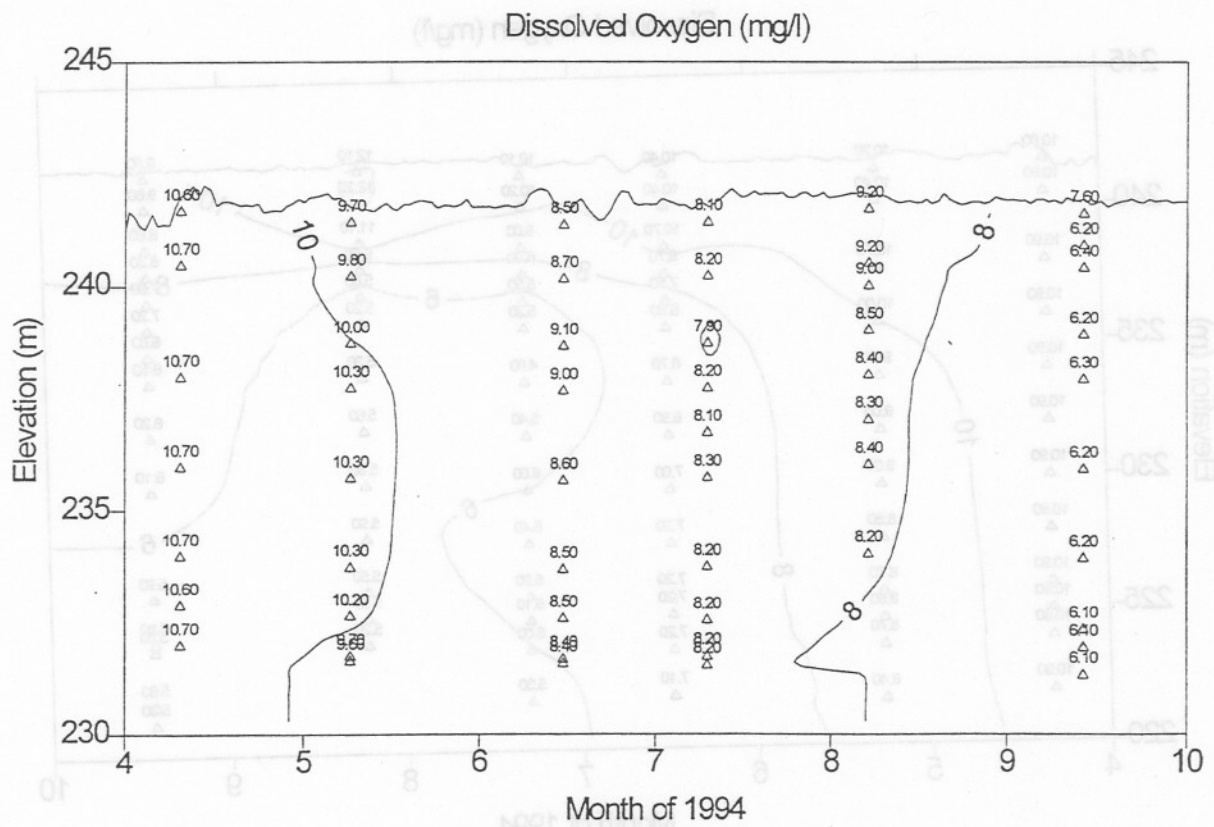
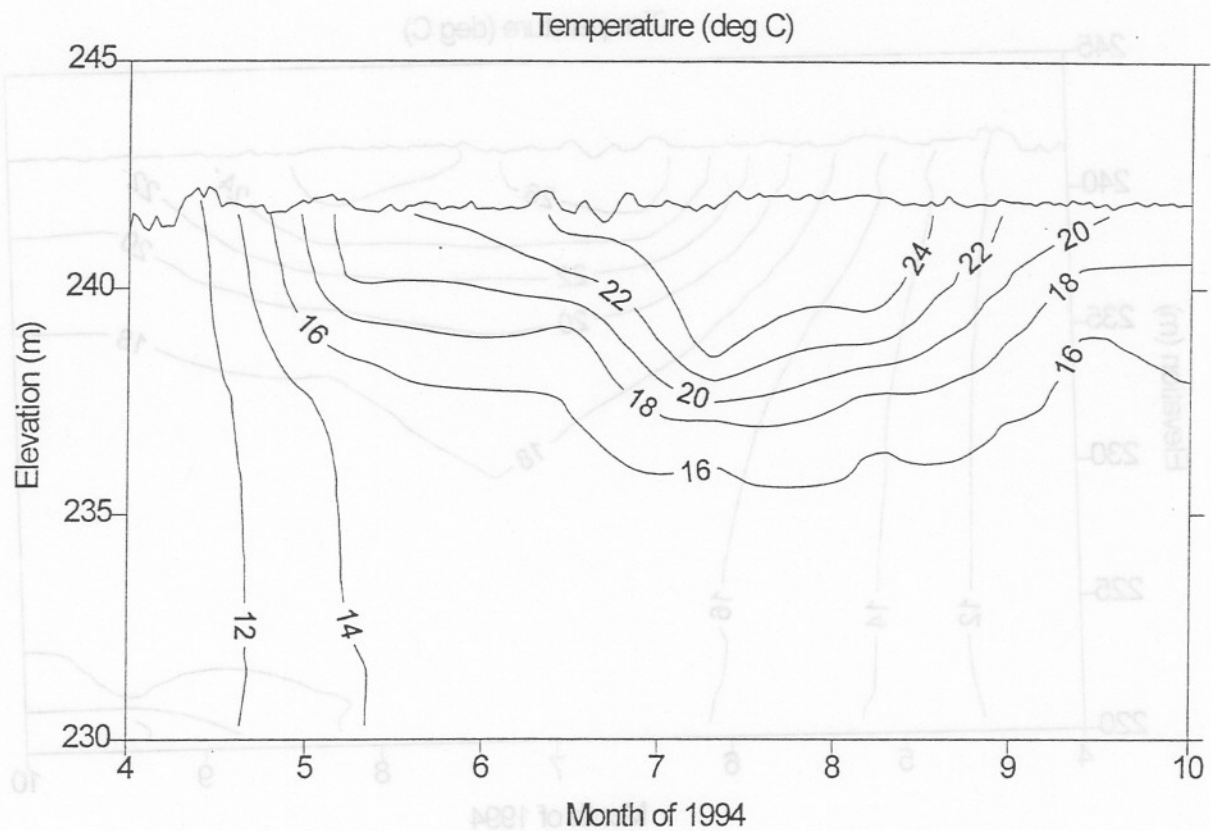




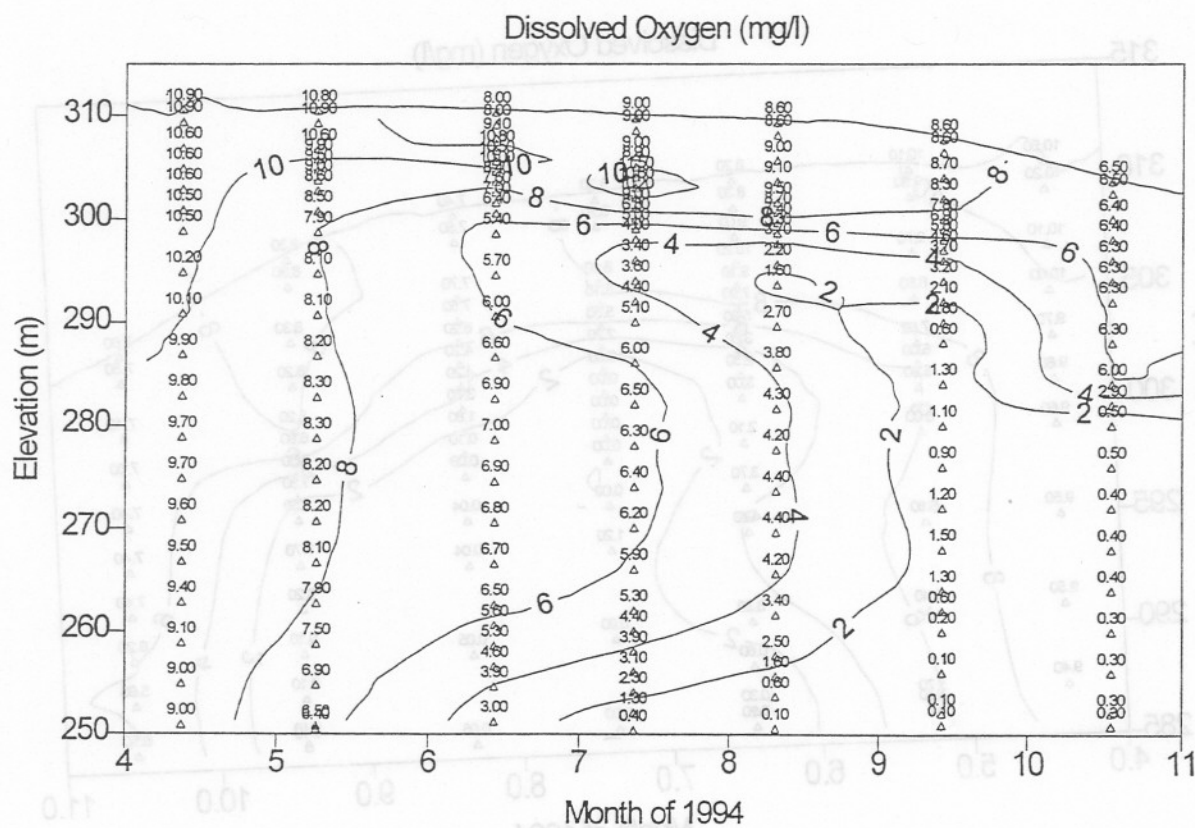
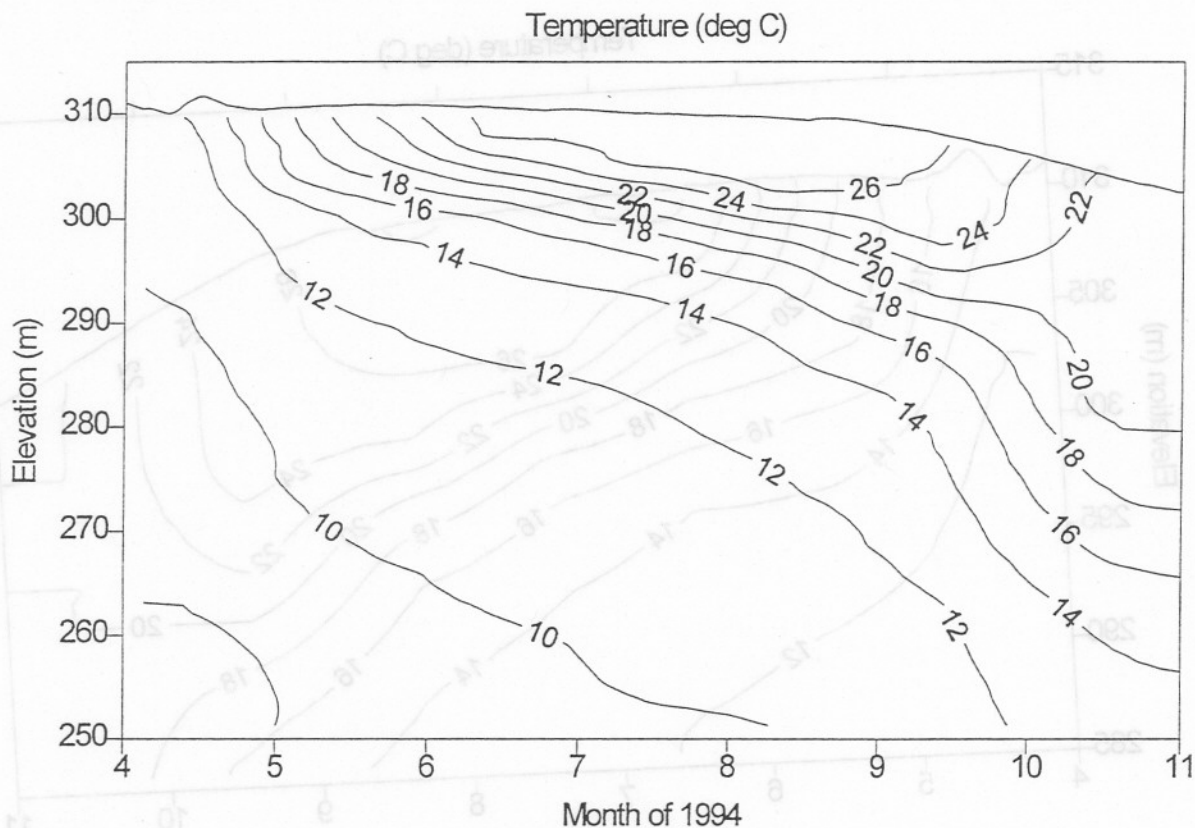
# Melton Hill Reservoir - CRM 24.0



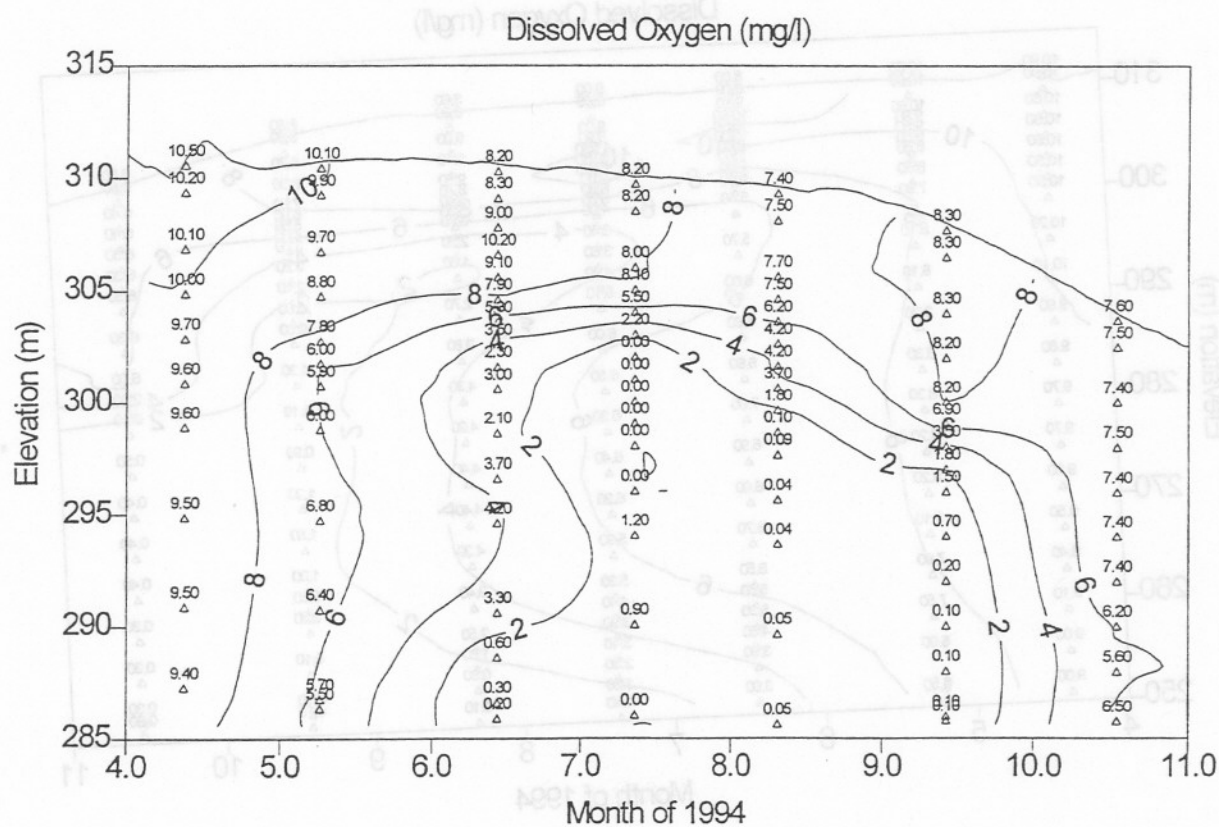
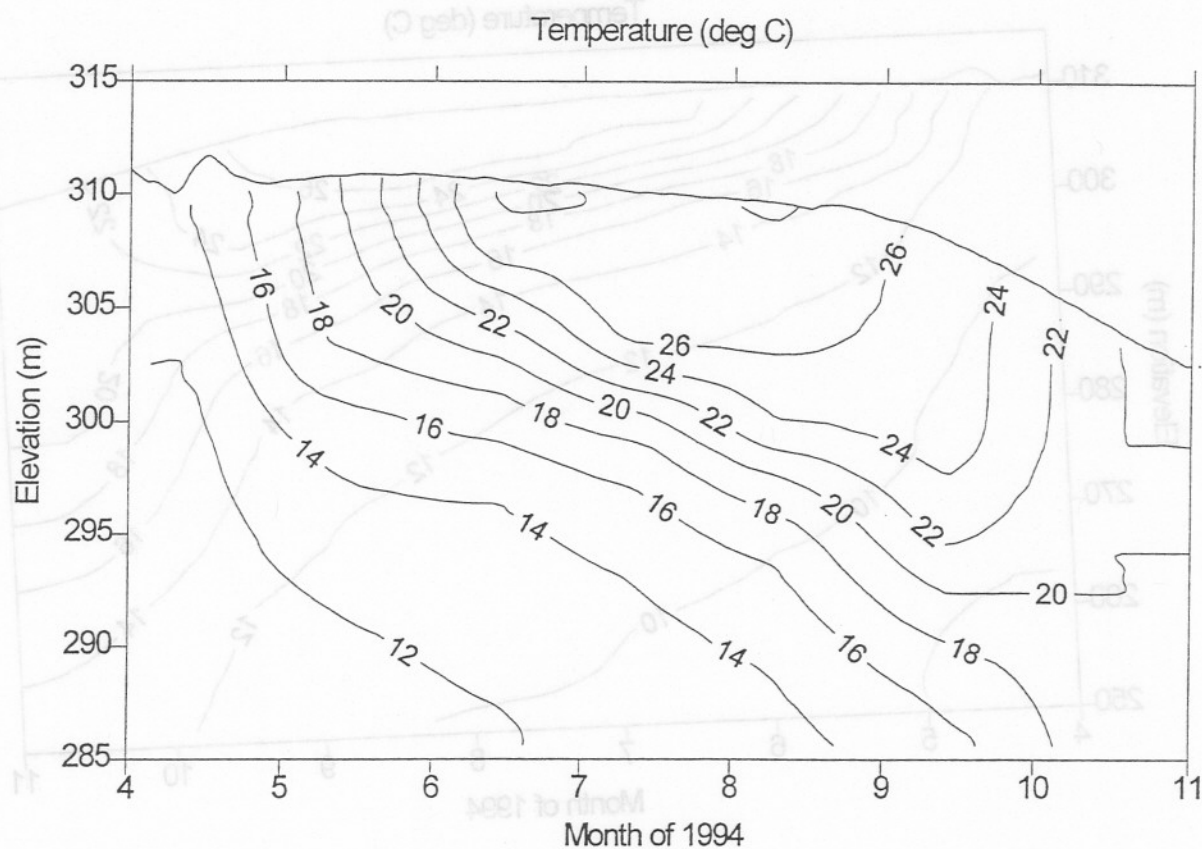
# Melton Hill Reservoir - CRM 45.0



# Norris Reservoir - CRM 80

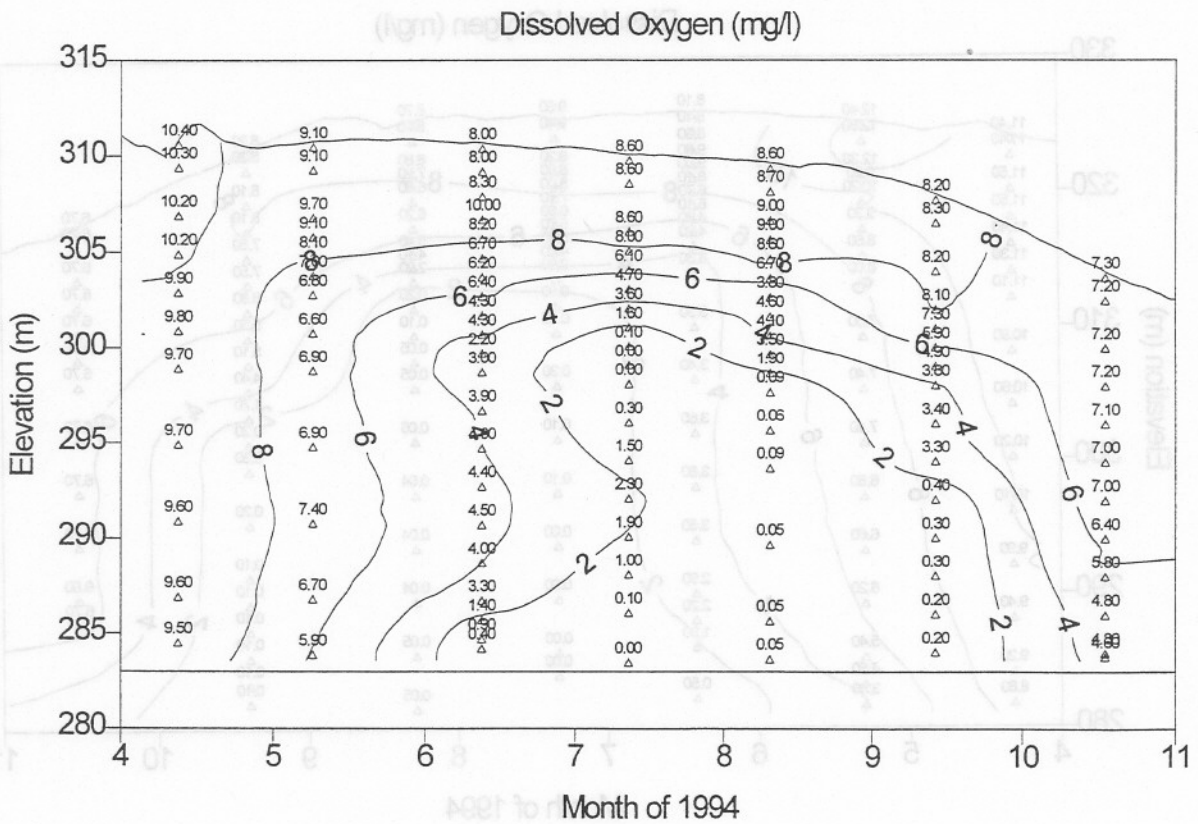
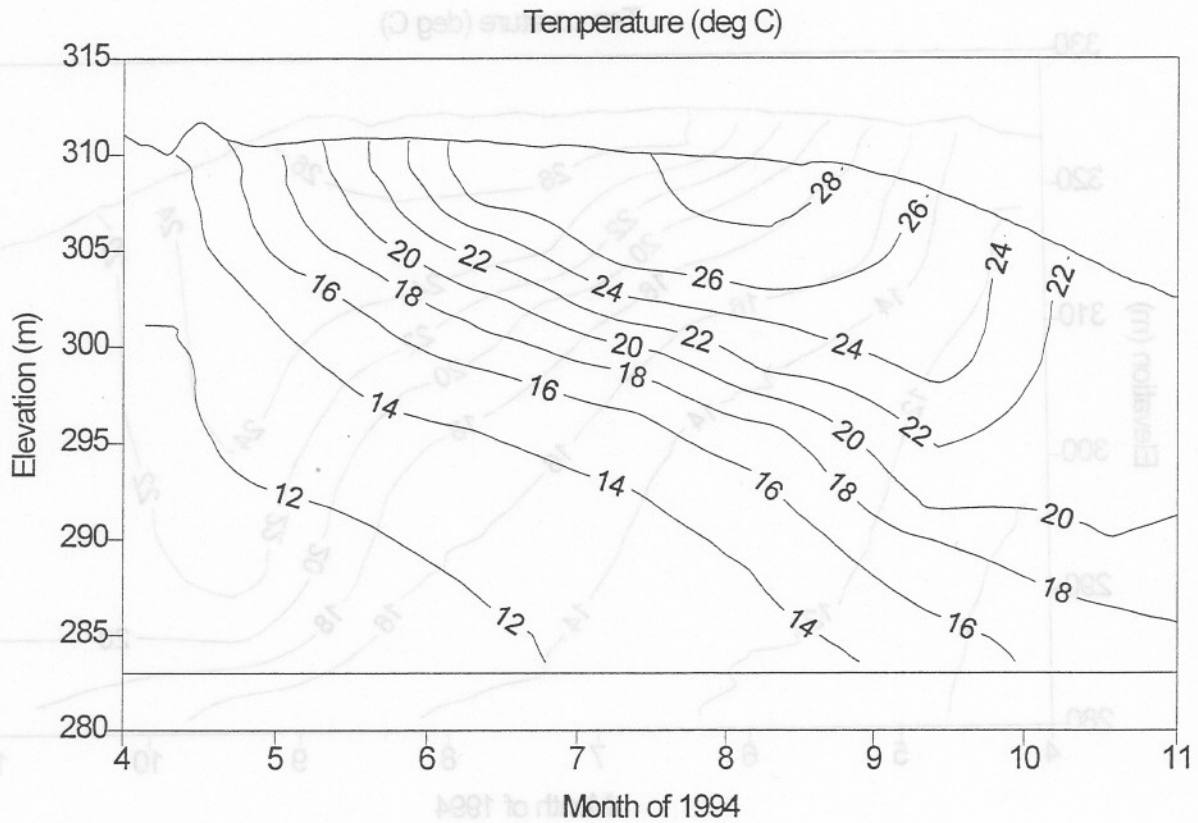


# Norris Reservoir - CRM 125



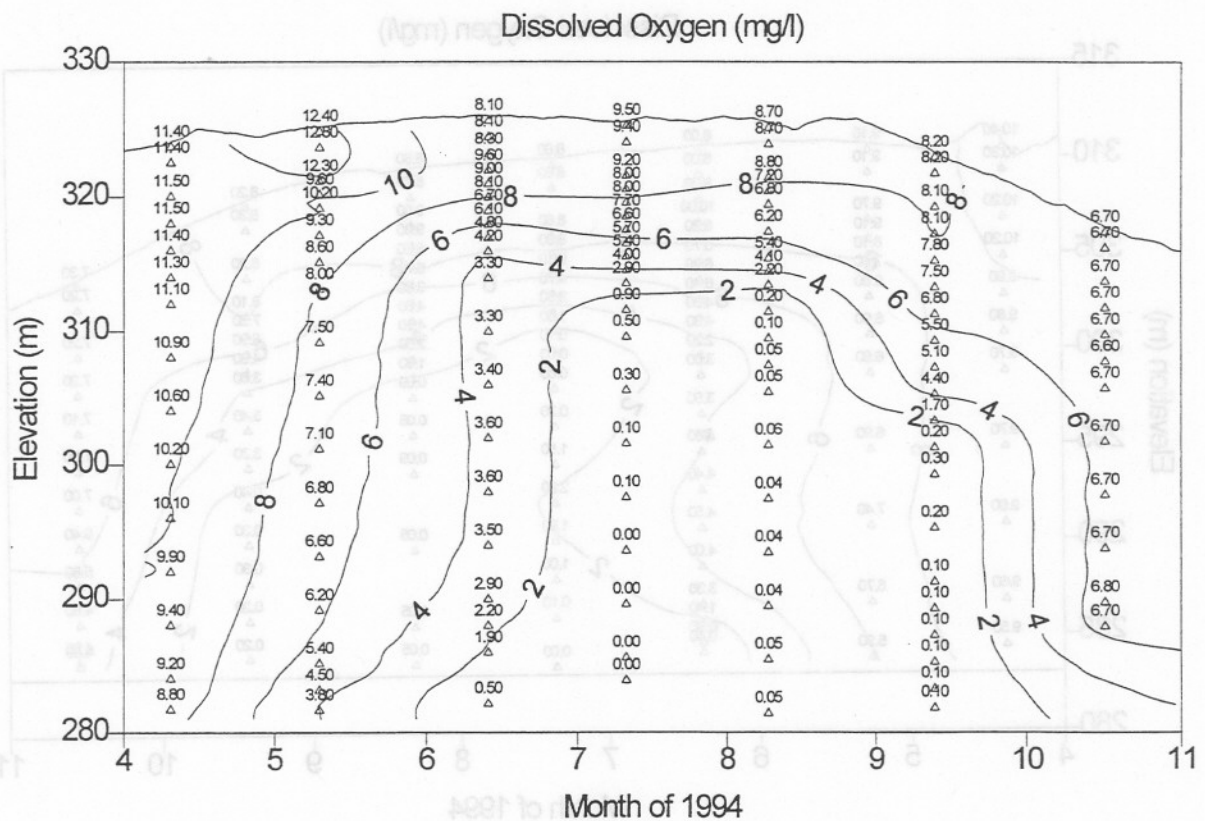
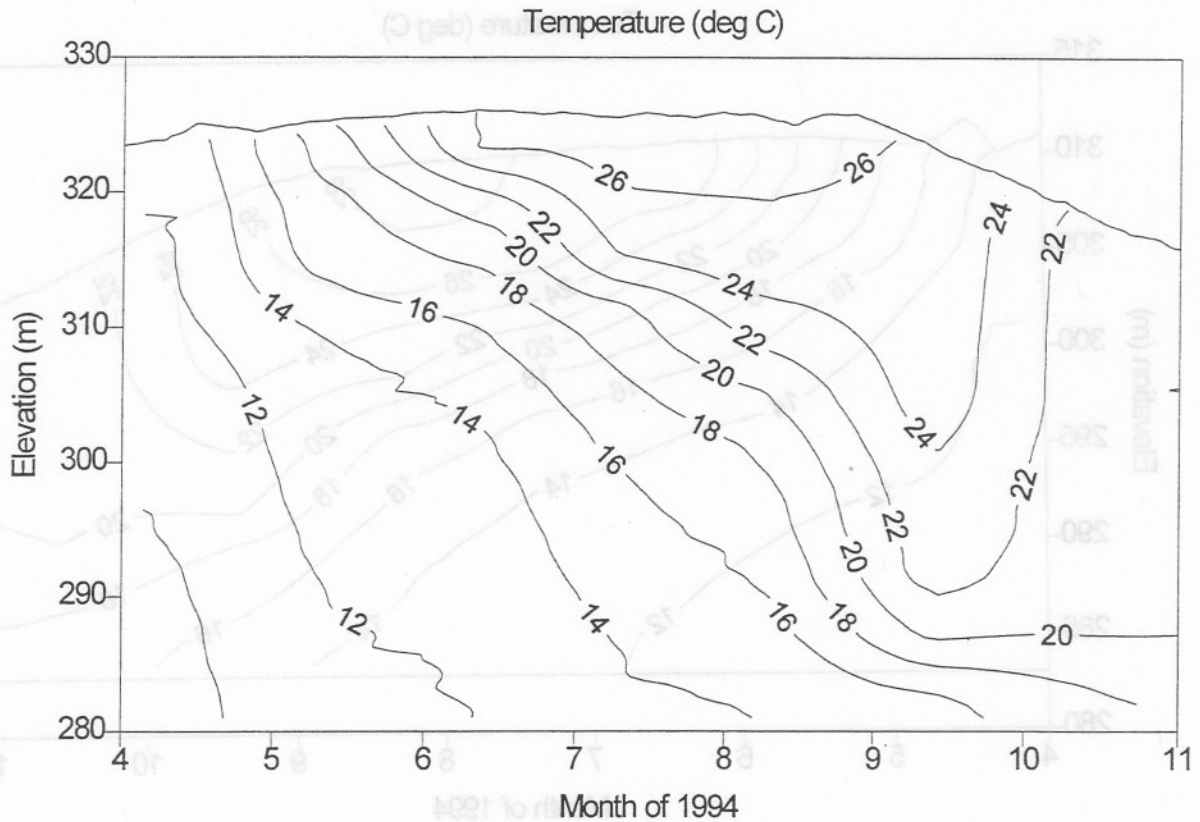


# Norris Reservoir - PRM 30

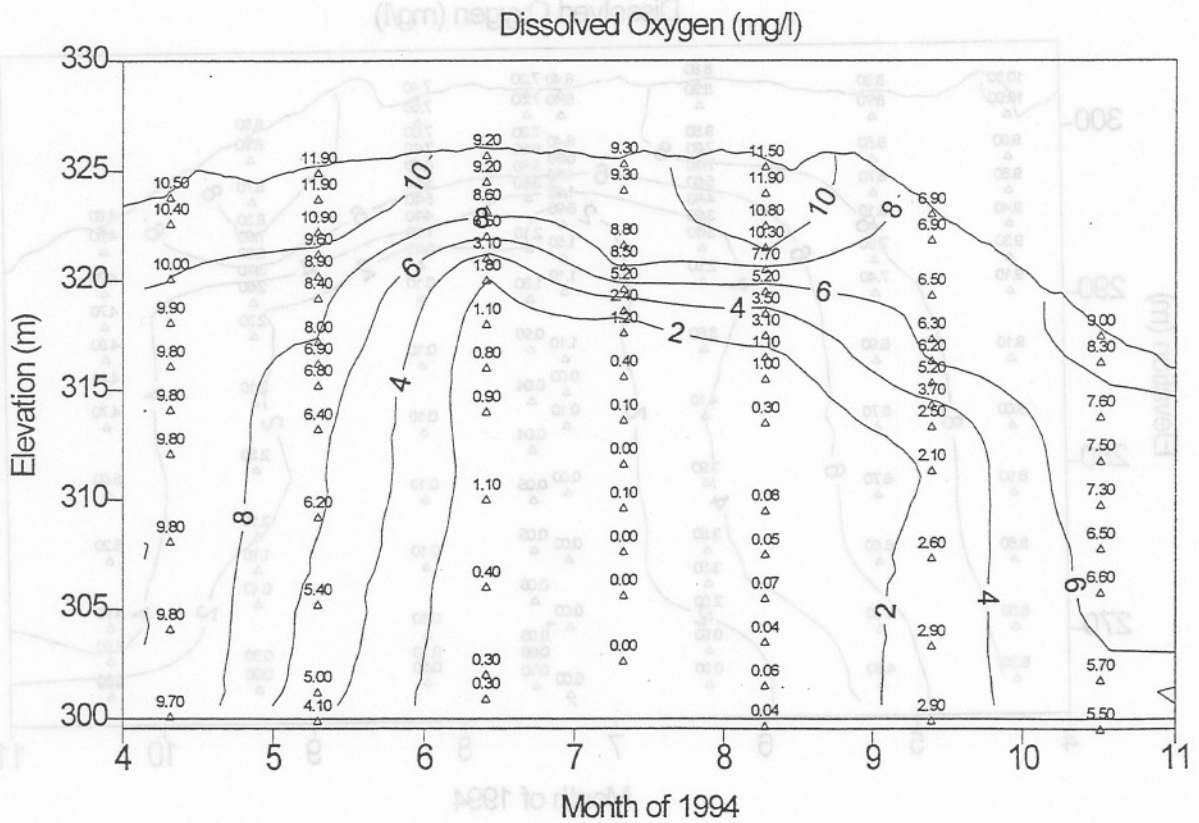
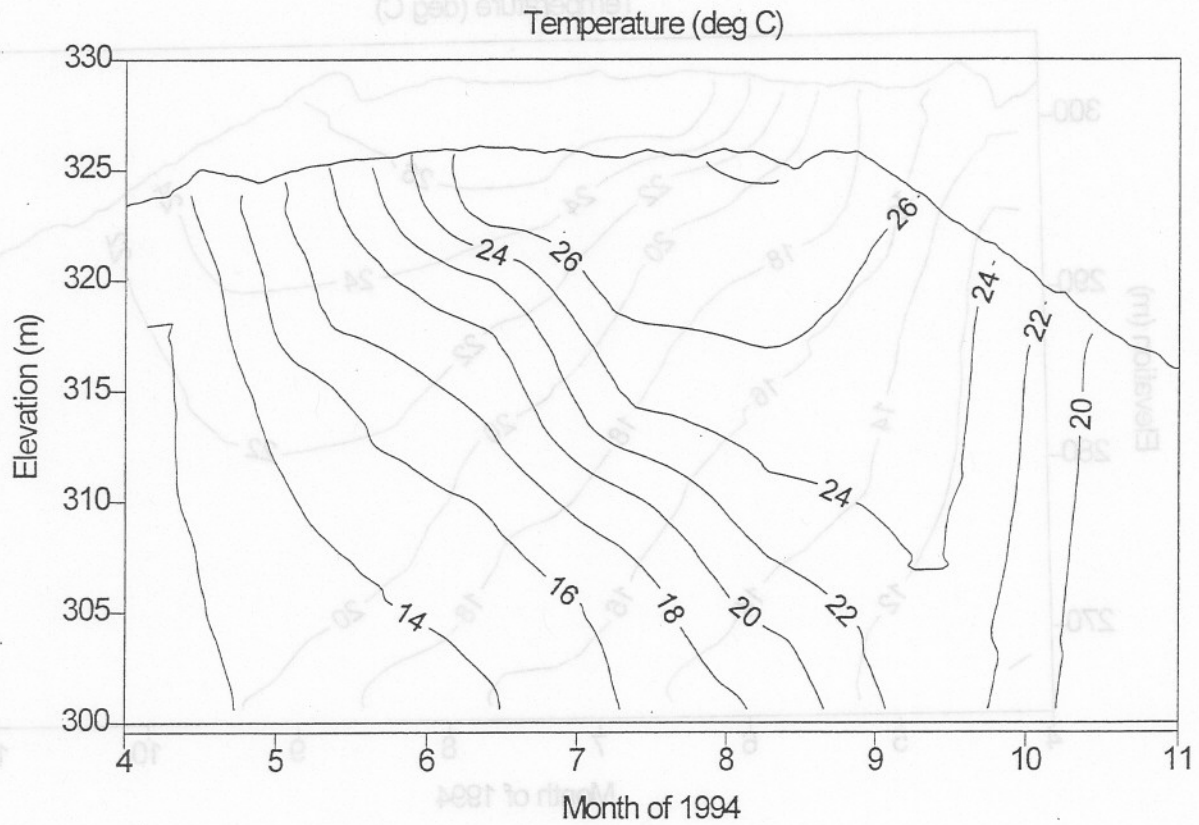




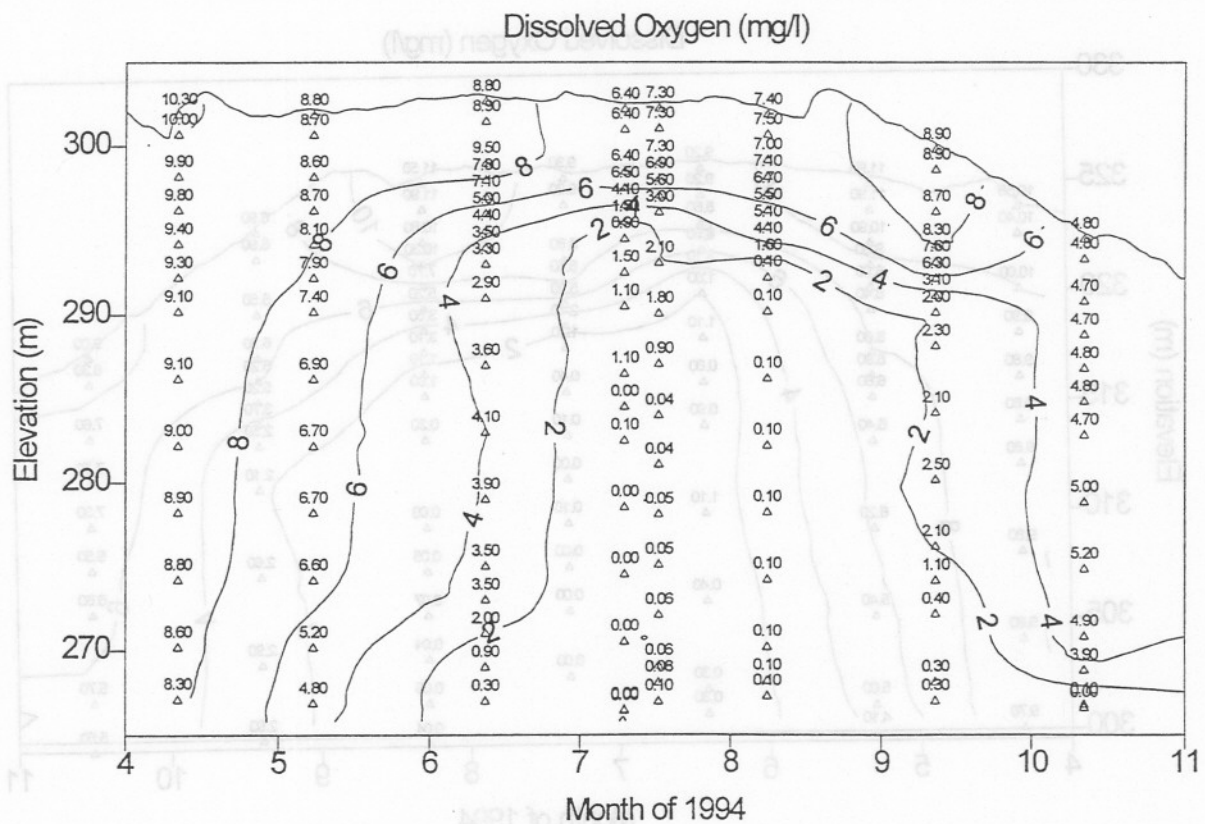
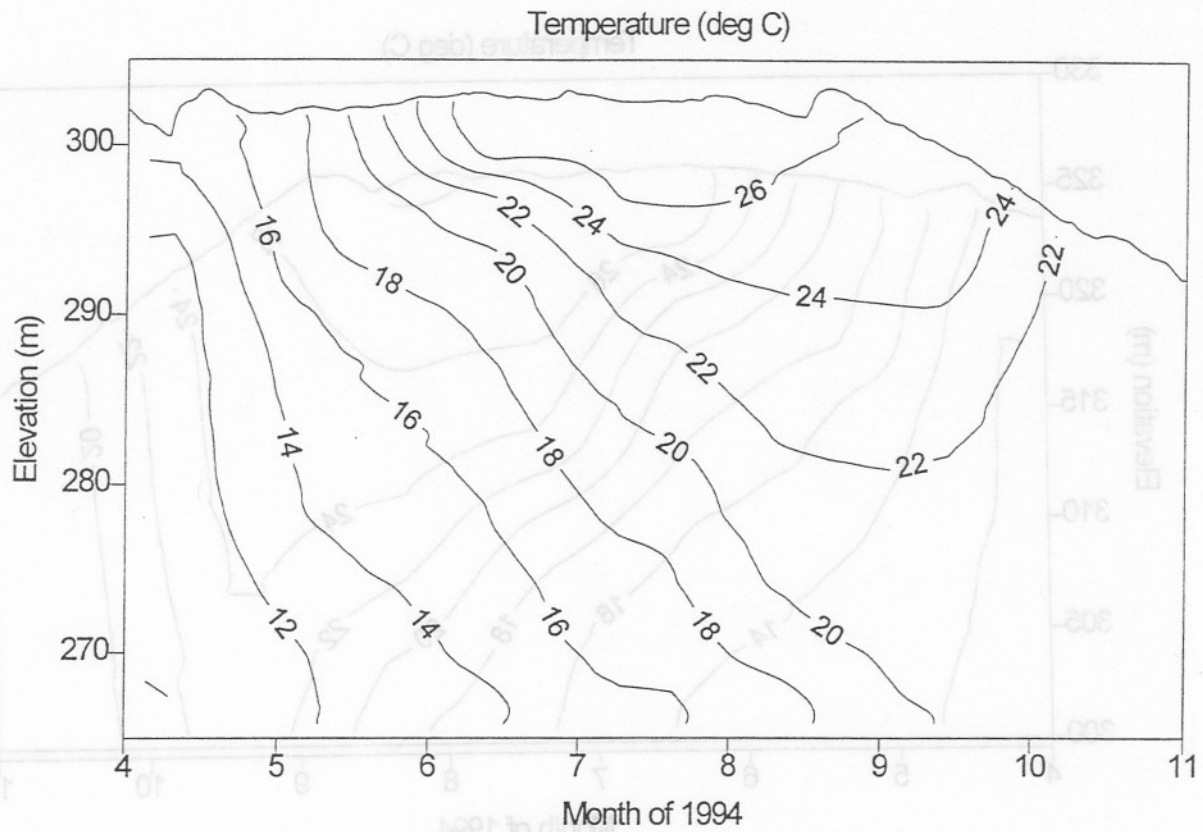
# Cherokee Reservoir - HRM 53



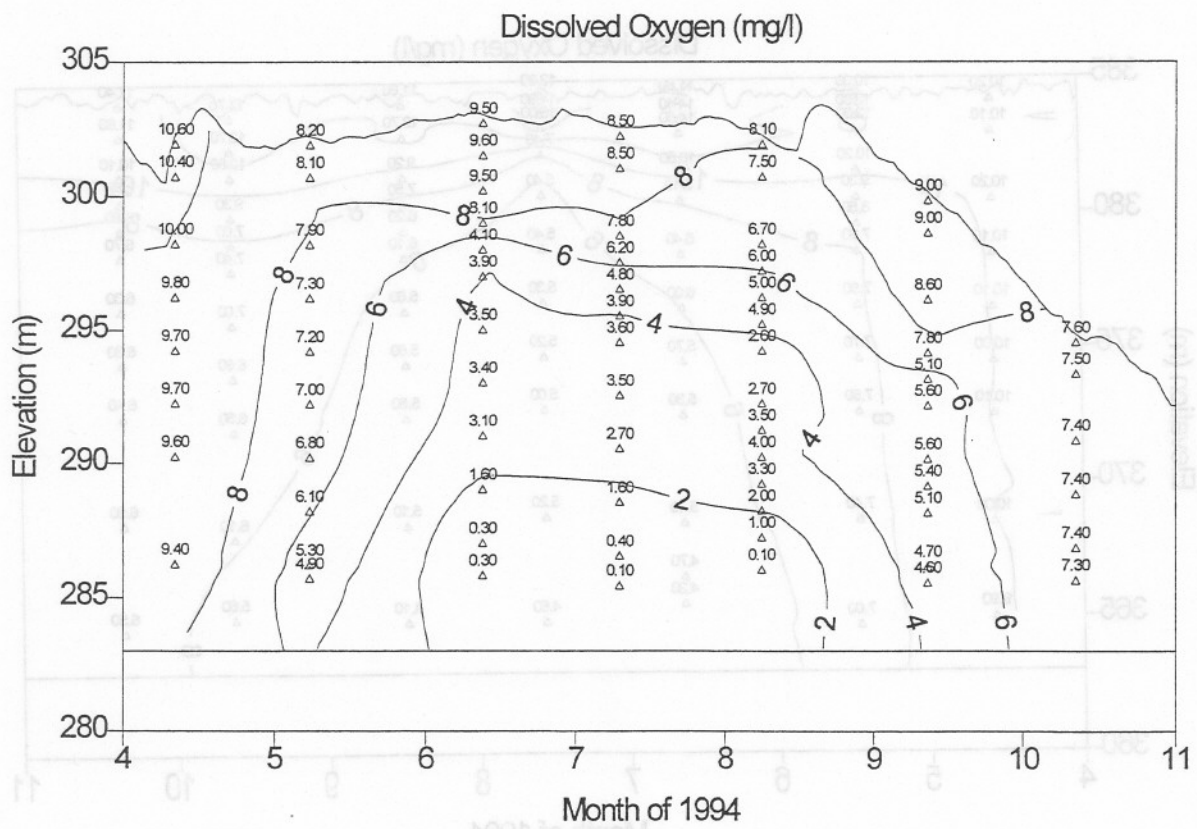
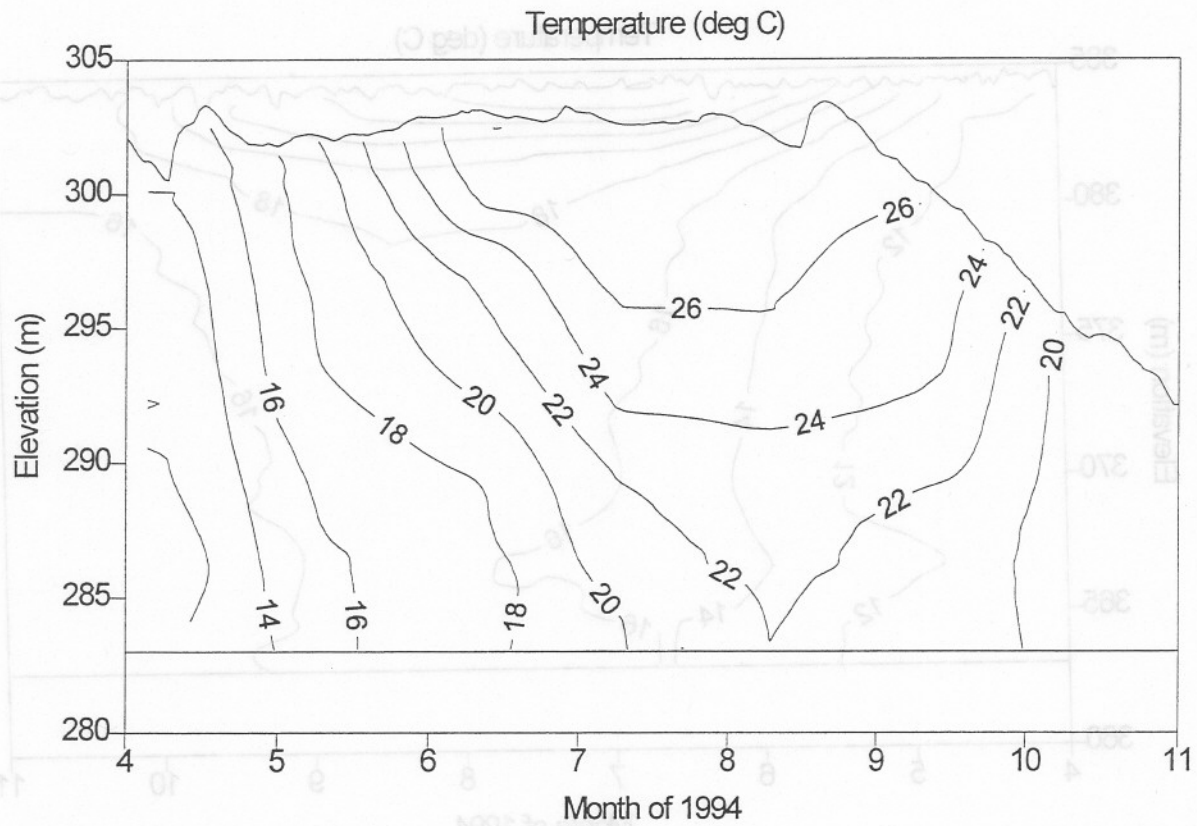
# Cherokee Reservoir - HRM 76



# Douglas Reservoir - FBRM 33

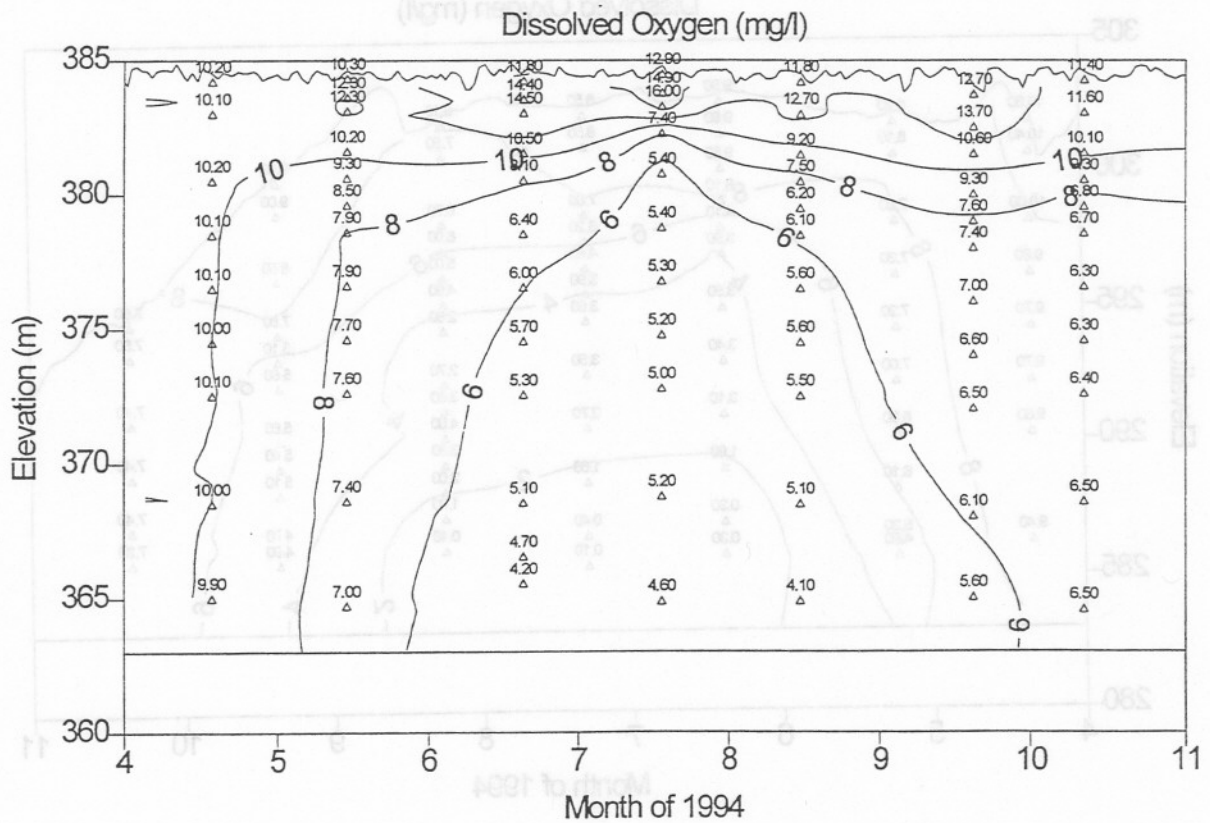
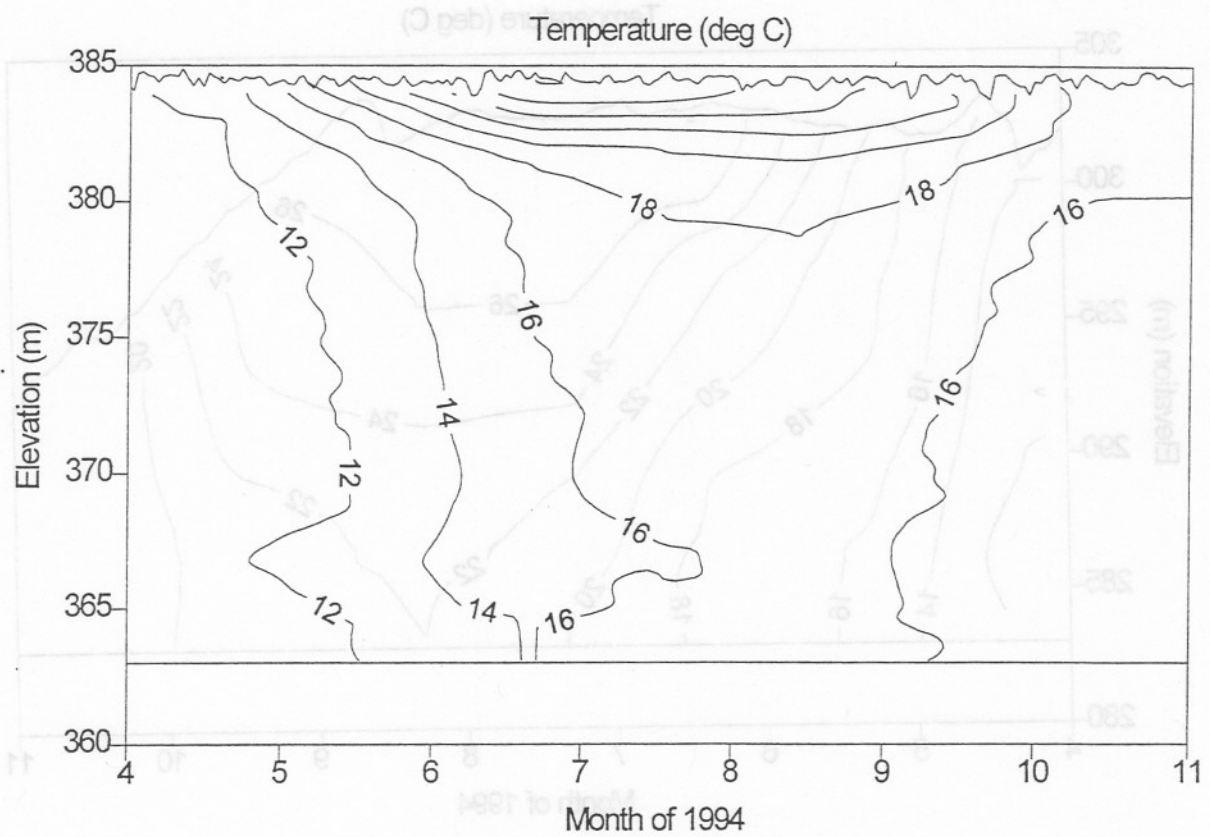


# Douglas Reservoir - FBRM 51



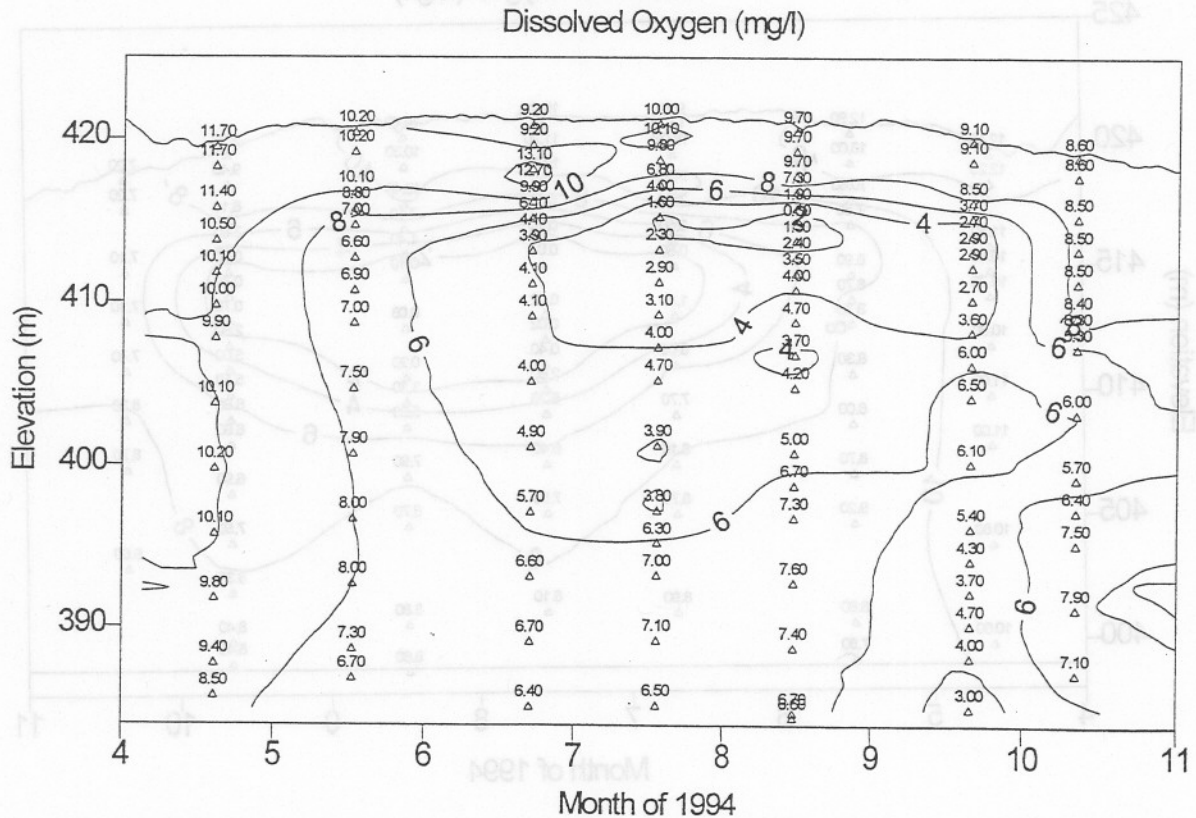
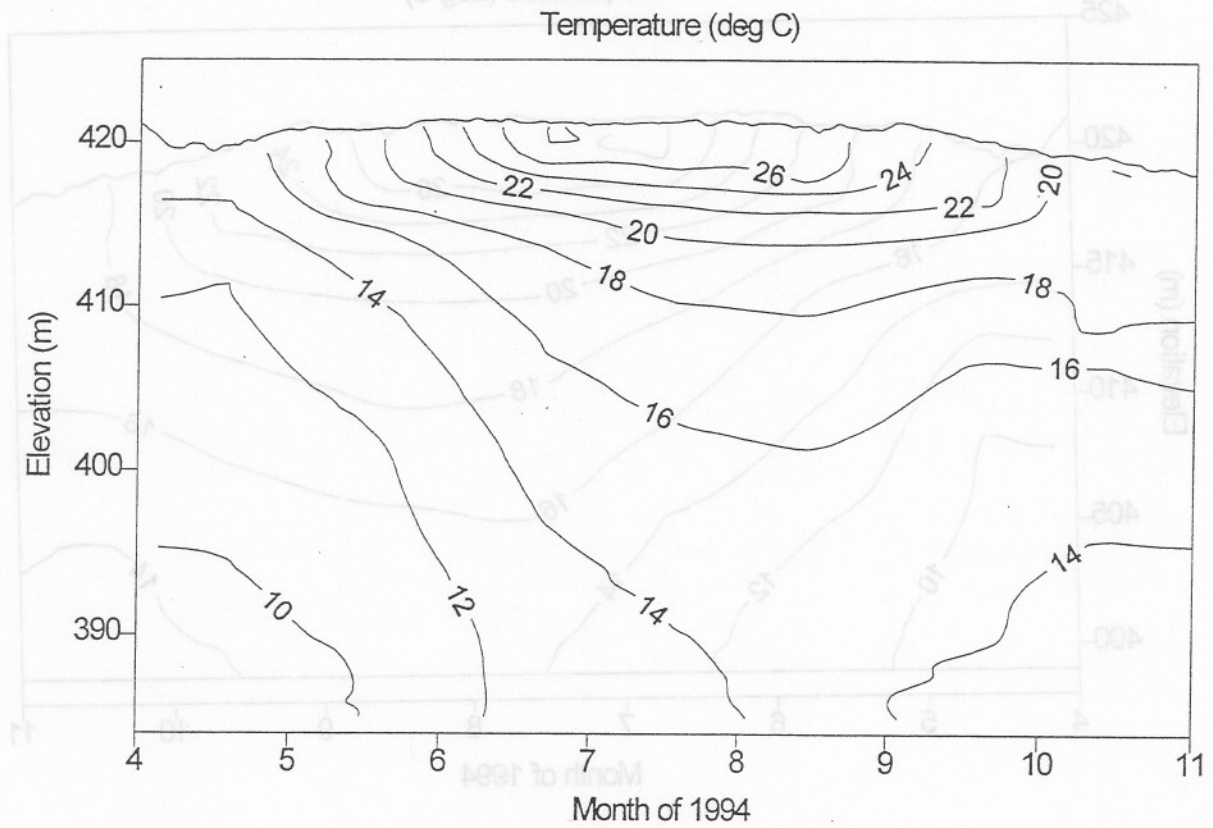


# Fort Patrick Henry Reservoir - SFHRM 8.7

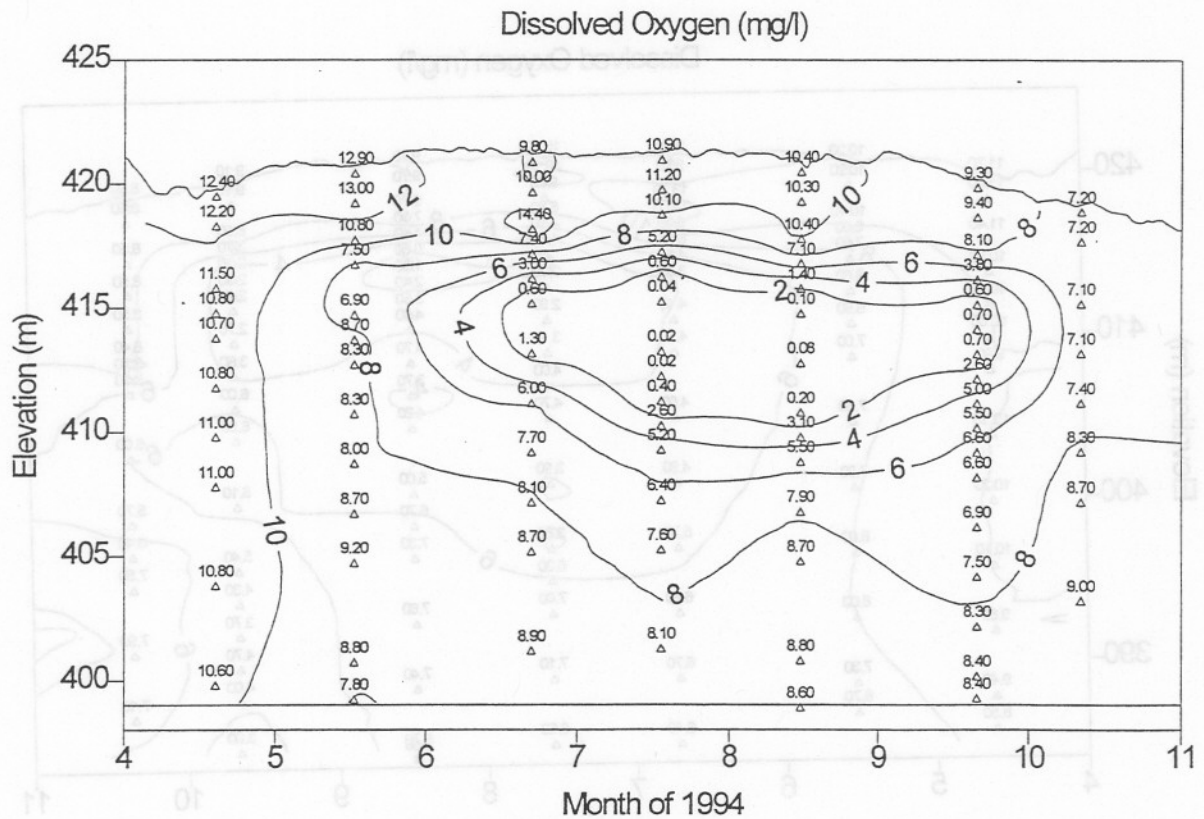
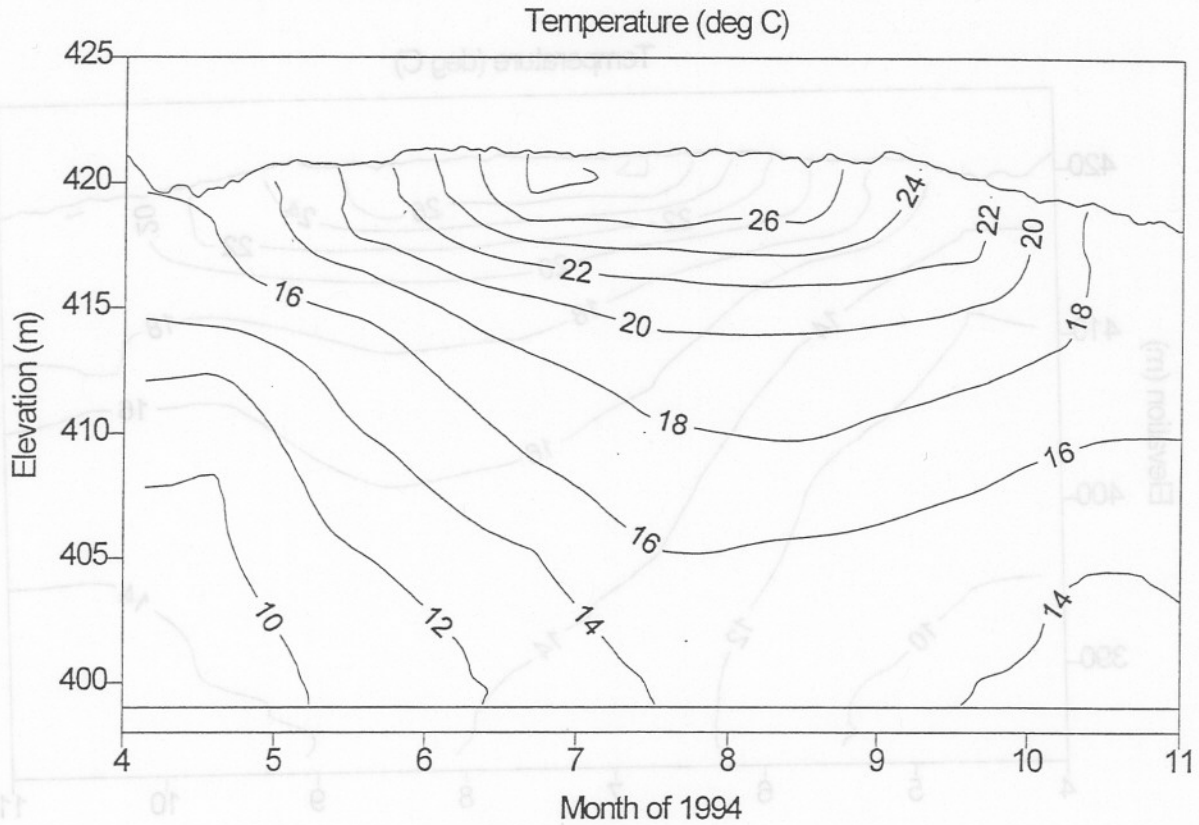




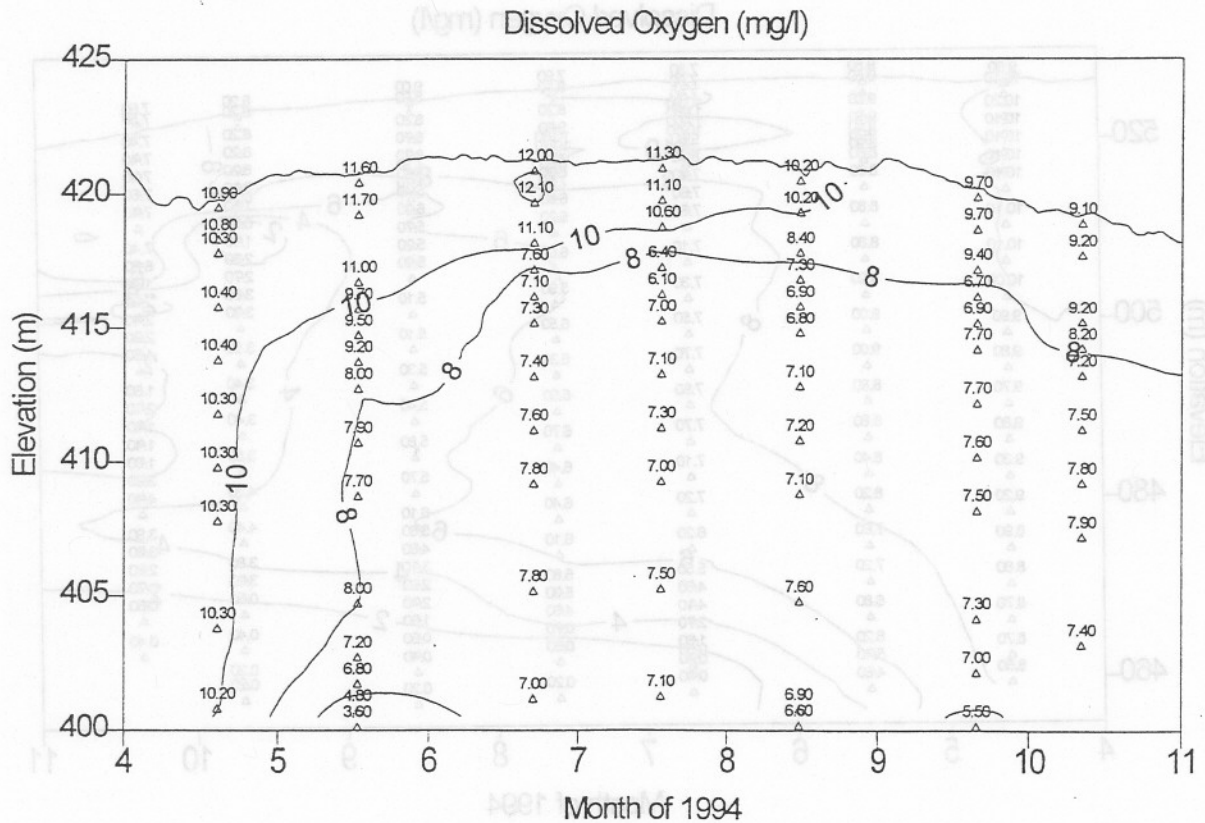
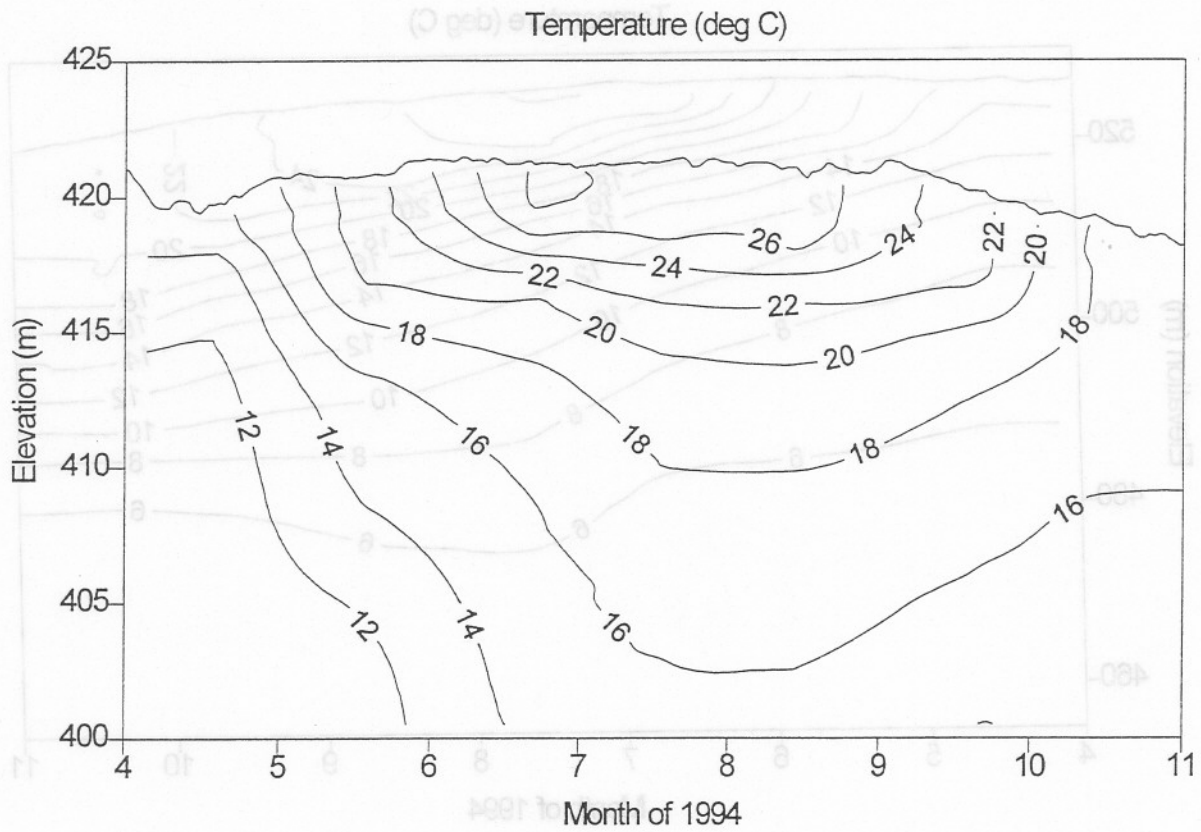
# Boone Reservoir - SFHRM 19



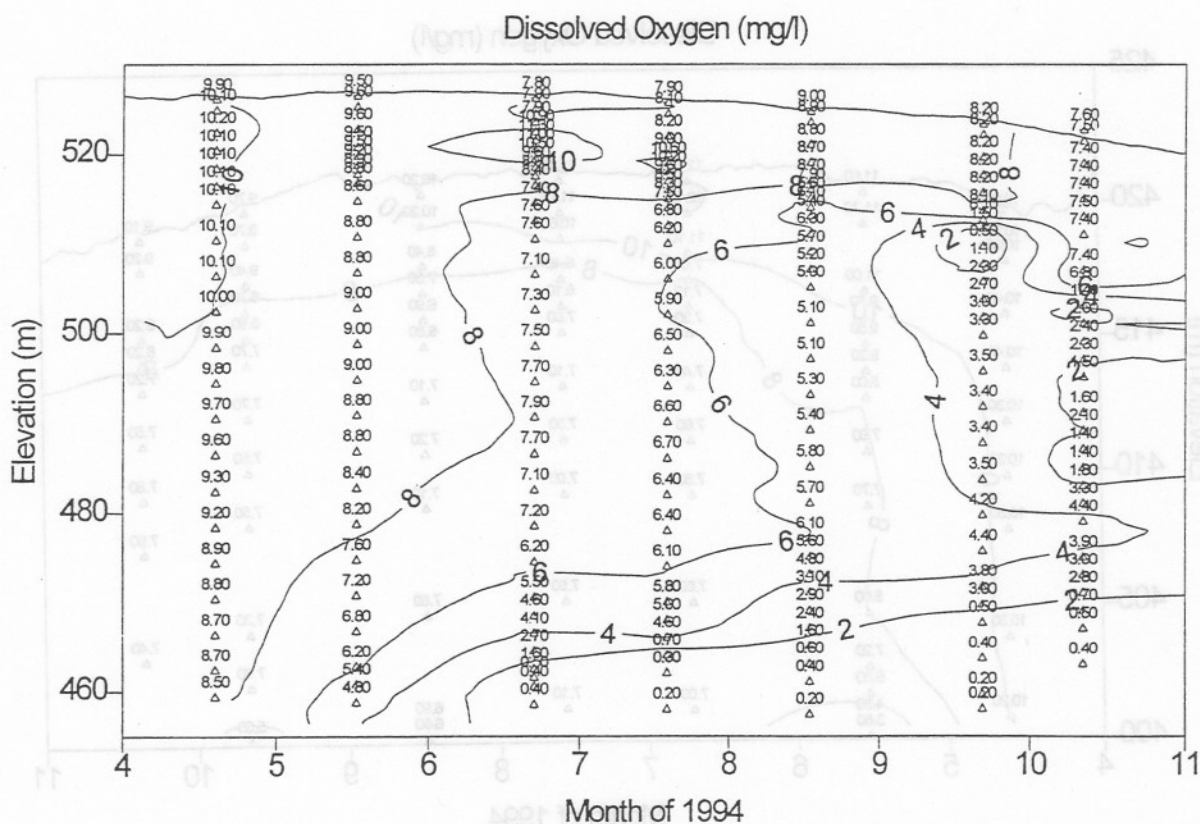
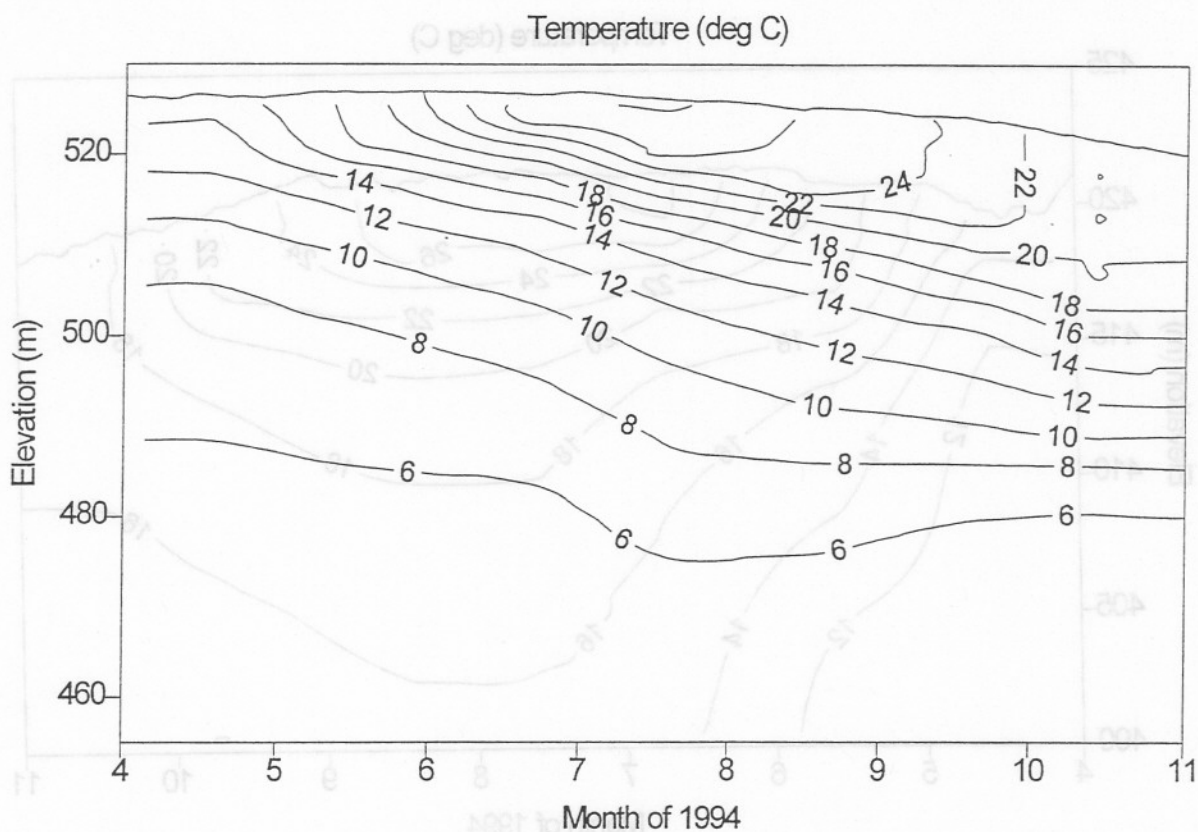
# Boone Reservoir - SFHRM 27.0



# Boone Reservoir - WRM 6.5

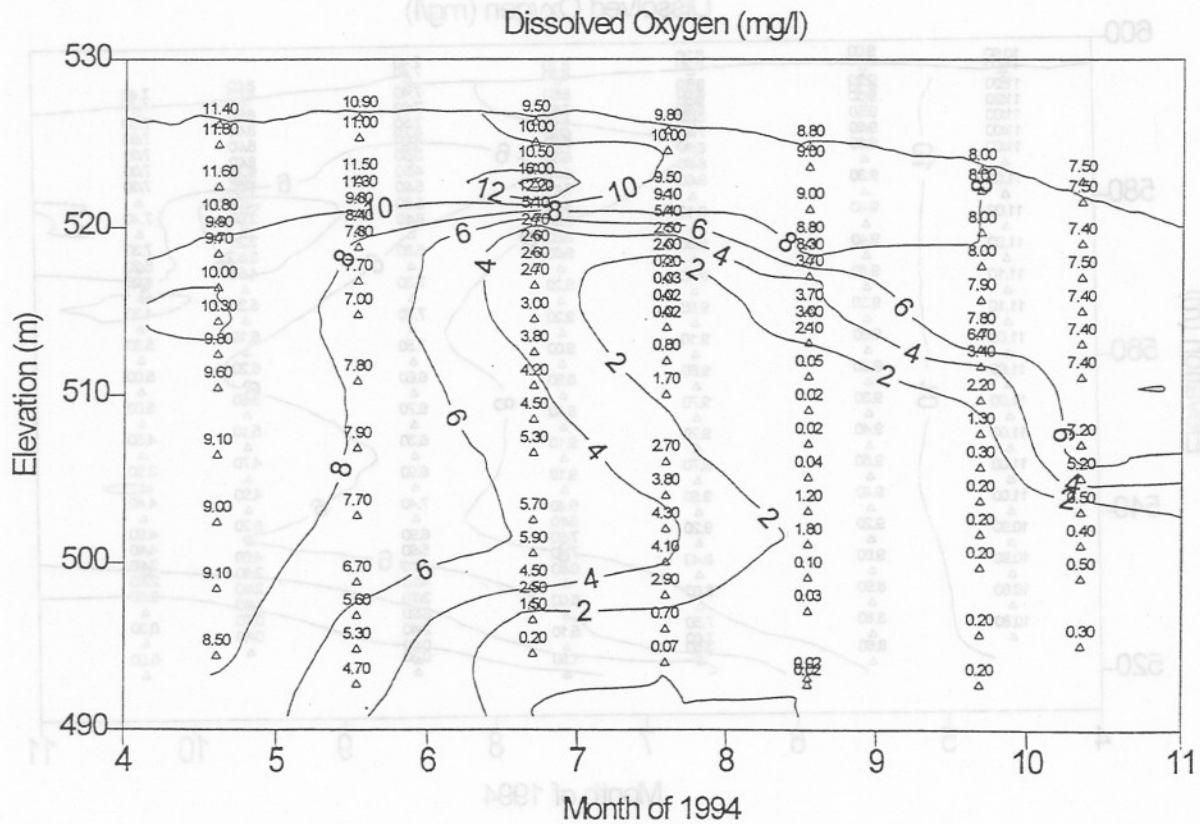
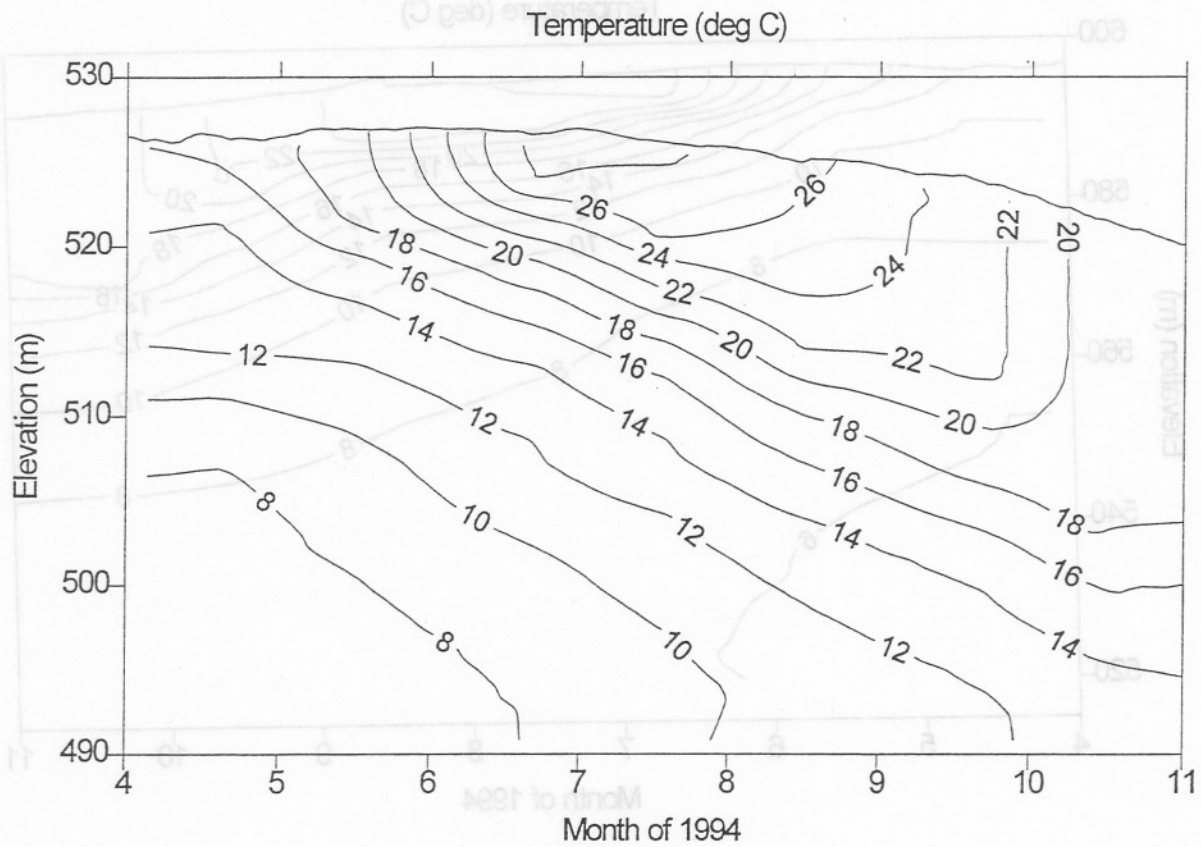


# South Holston Reservoir - SFHRM 51

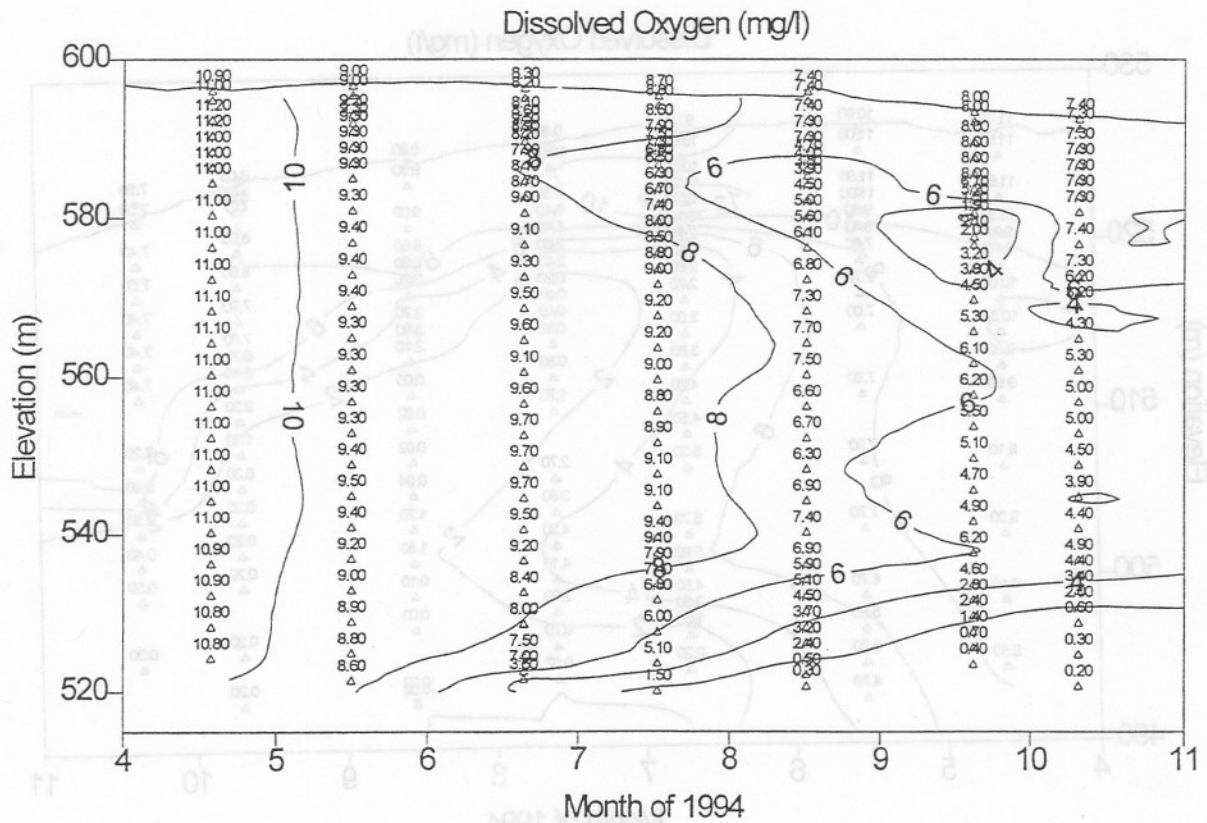
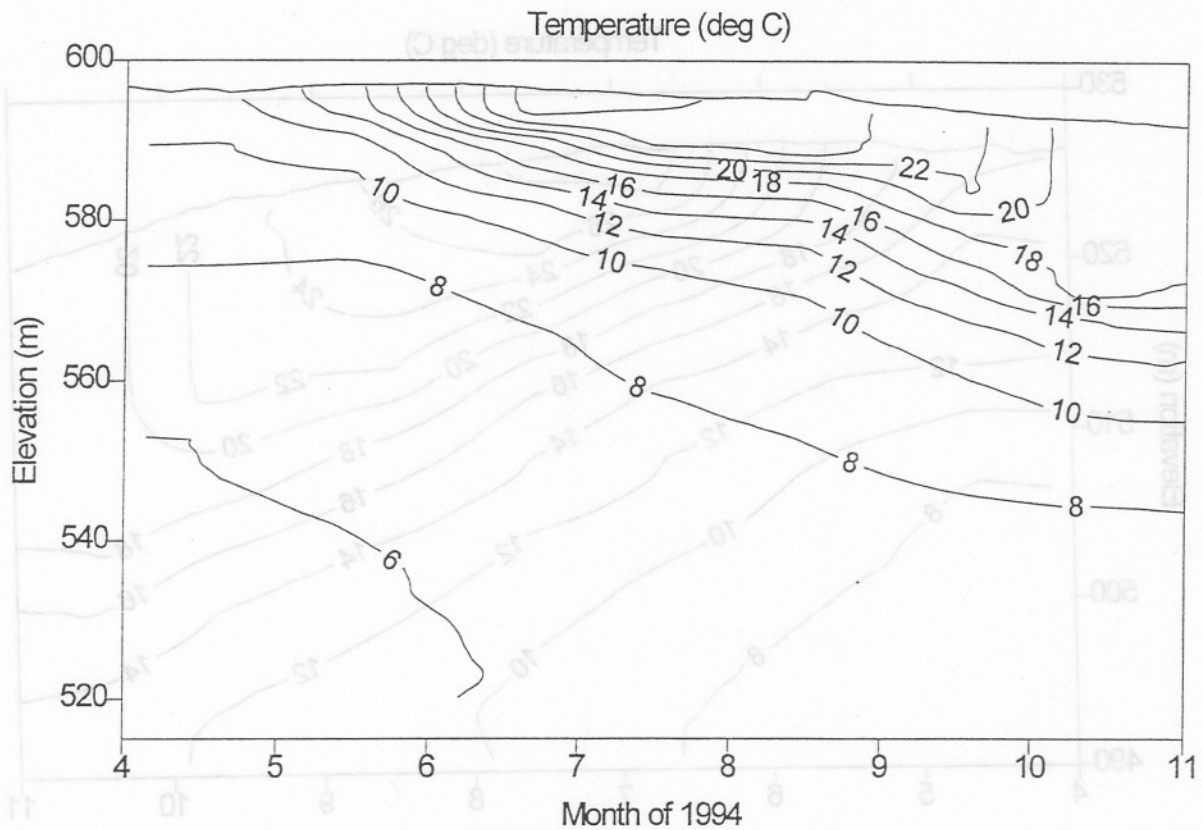




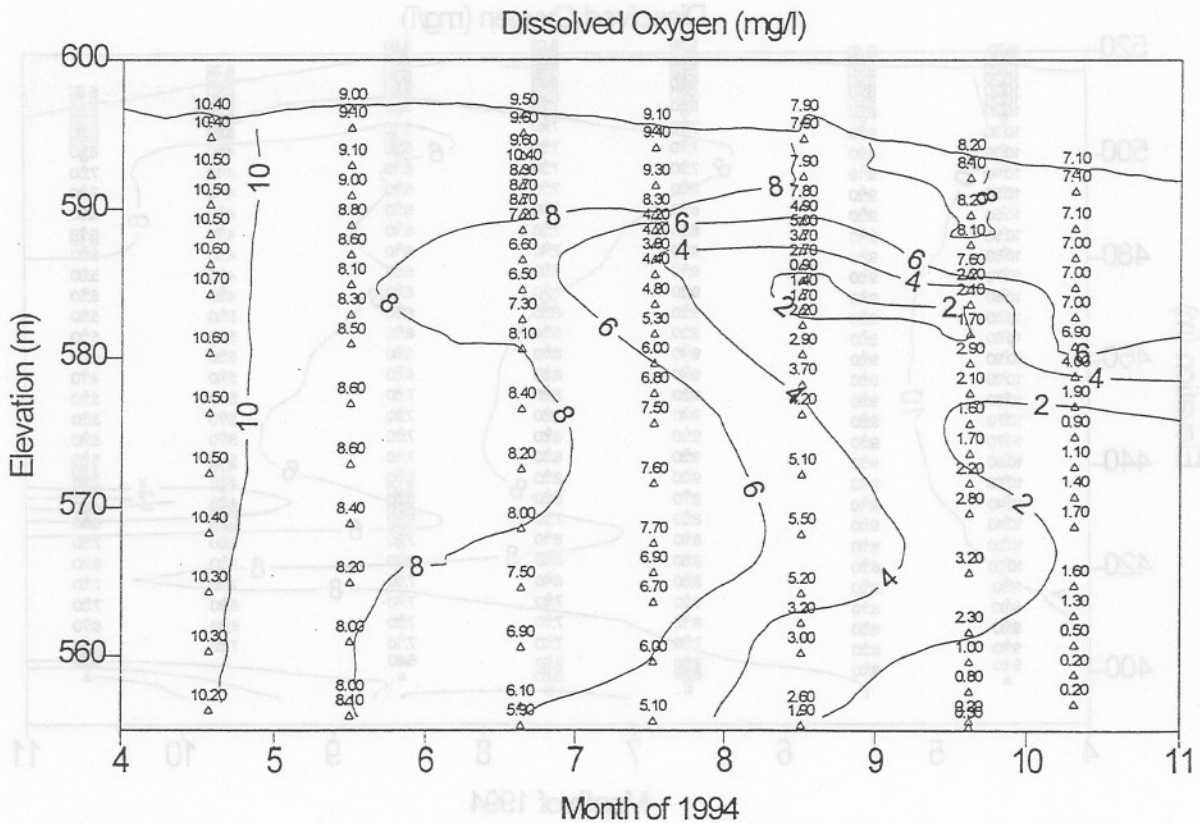
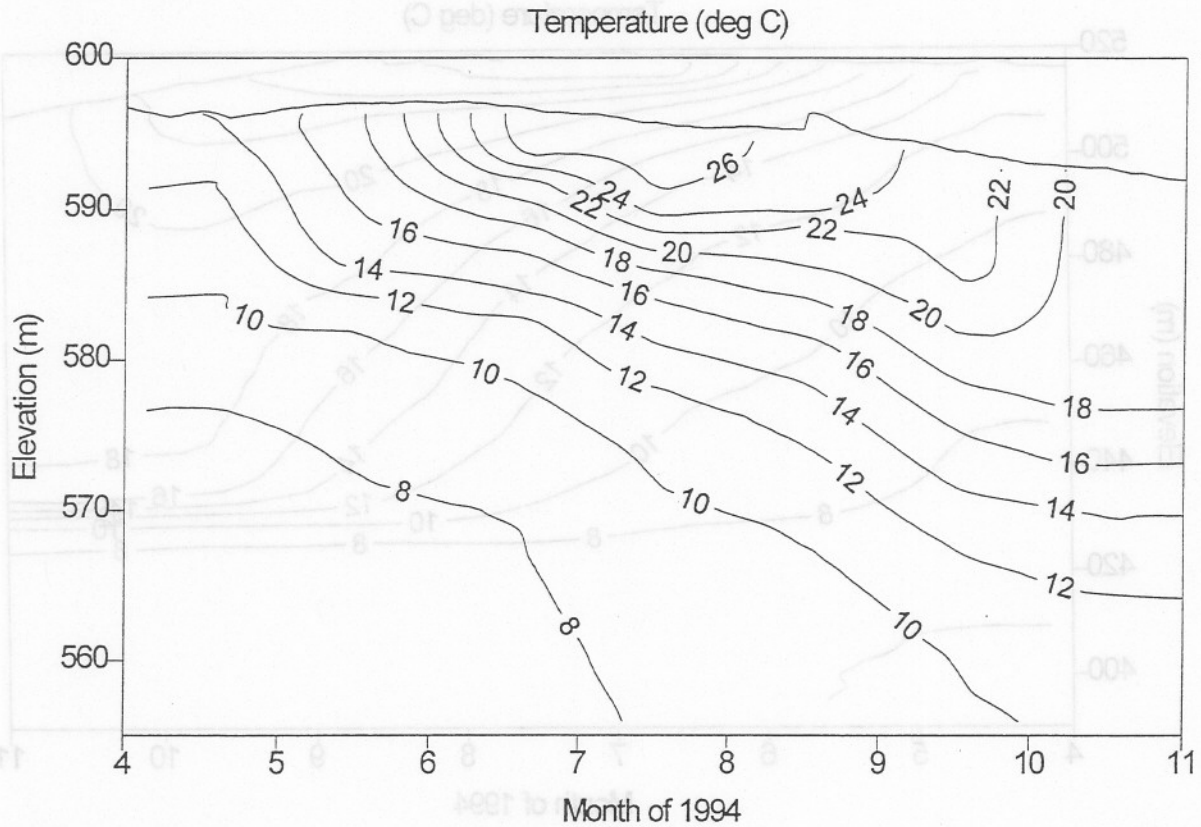
# South Holston Reservoir - SFHRM 62.5



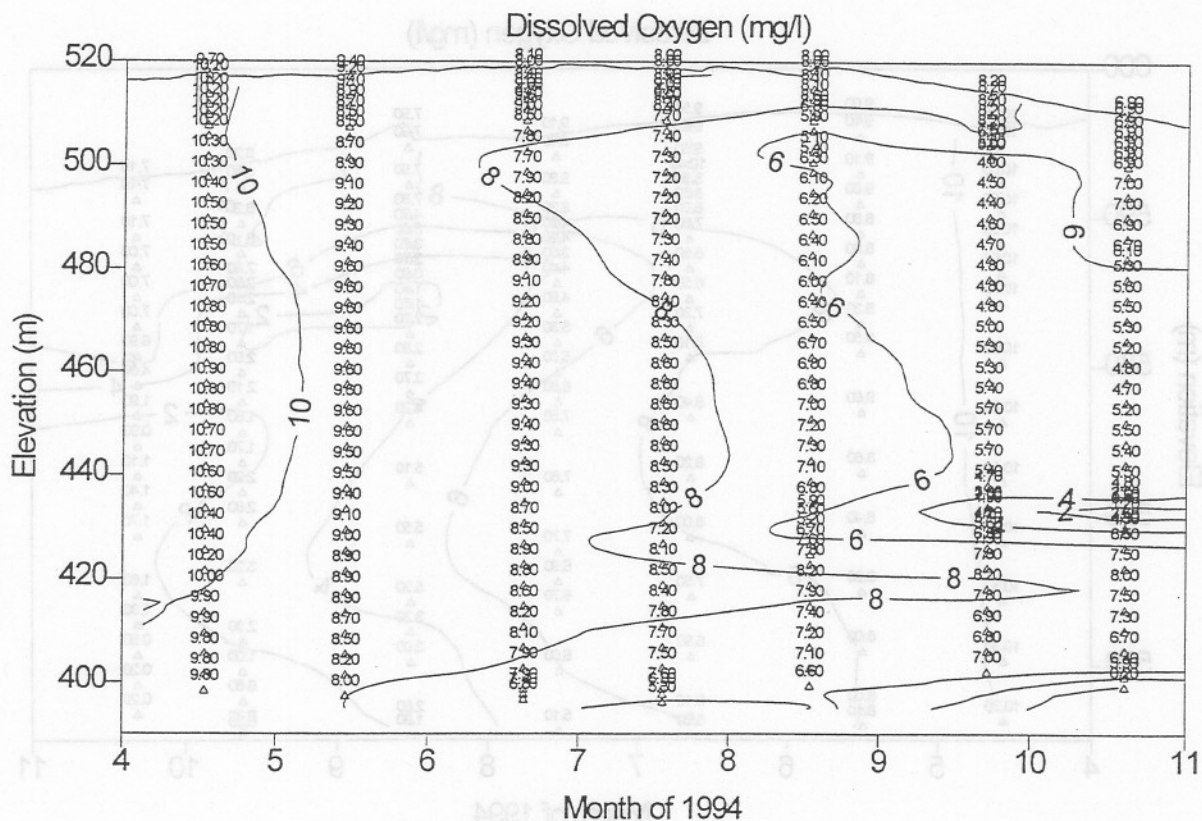
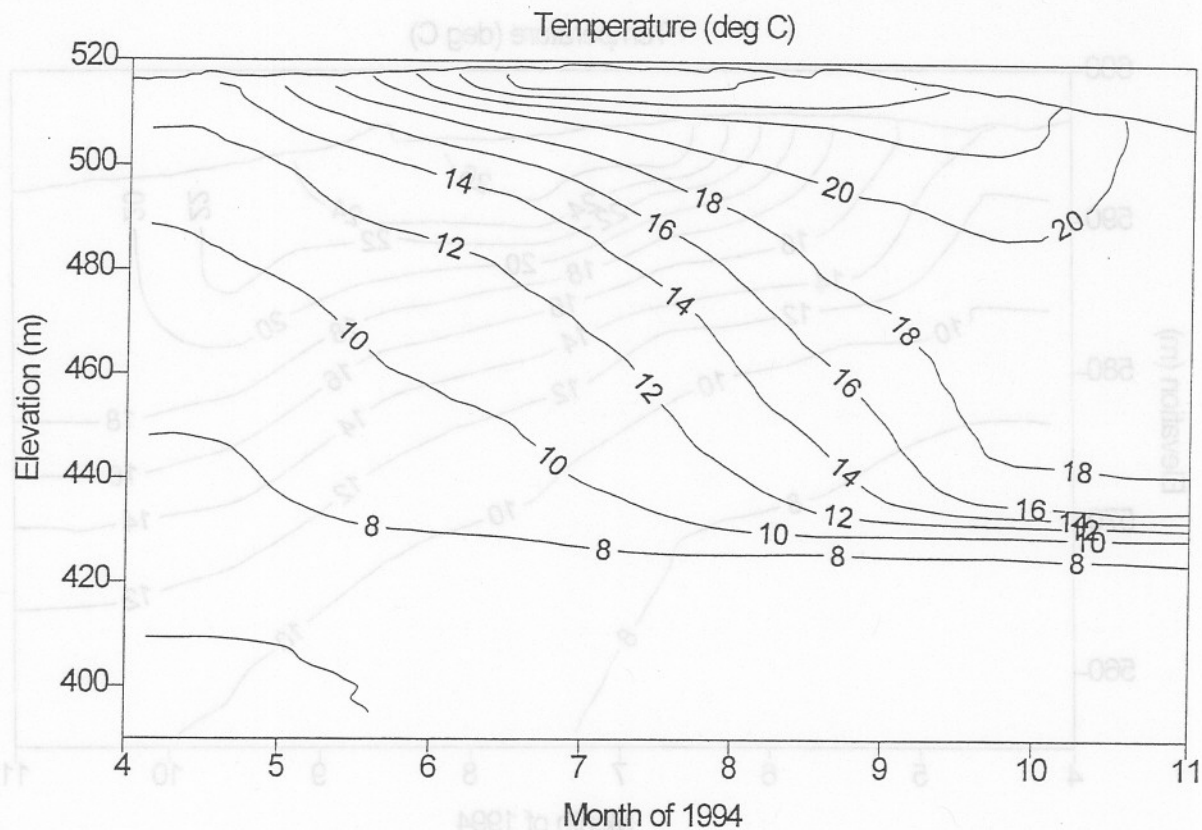
# Watauga Reservoir - WRM 37.4



# Watauga Reservoir - WRM 45.5

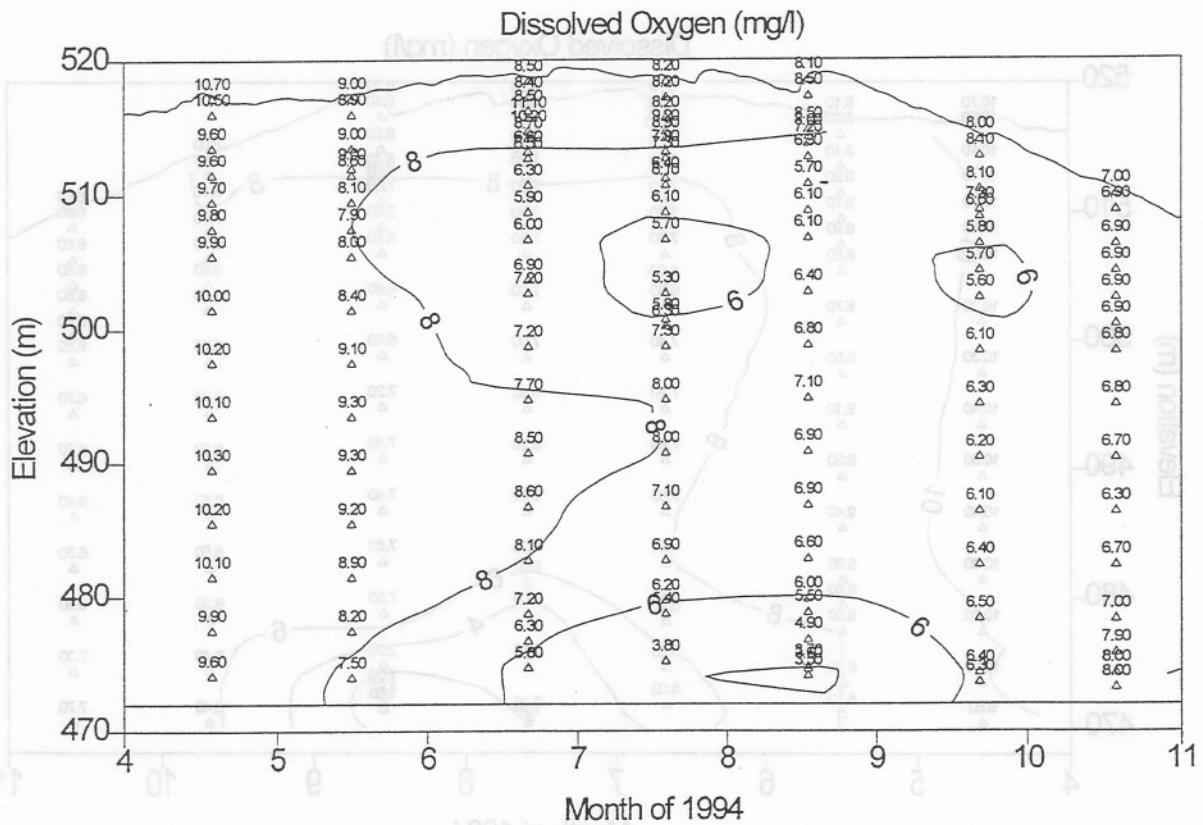
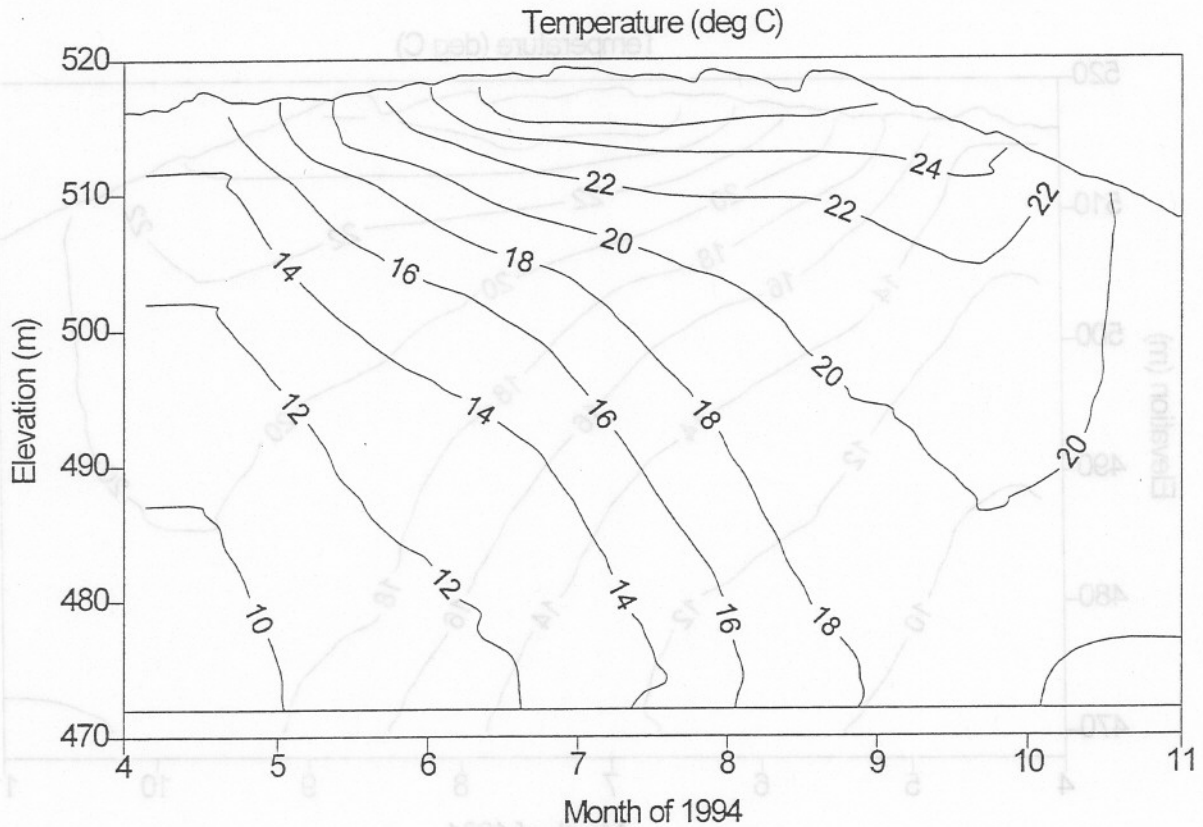


# Fontana Reservoir - LTRM 62

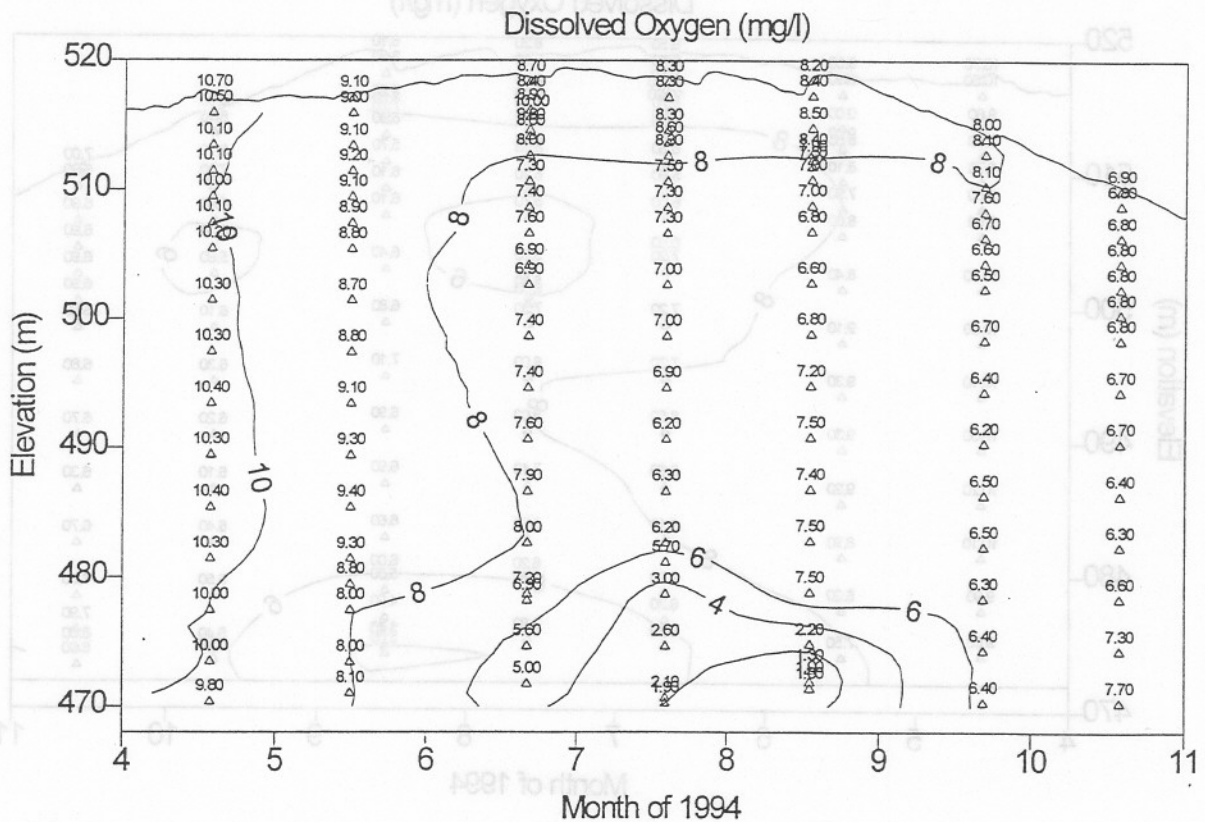
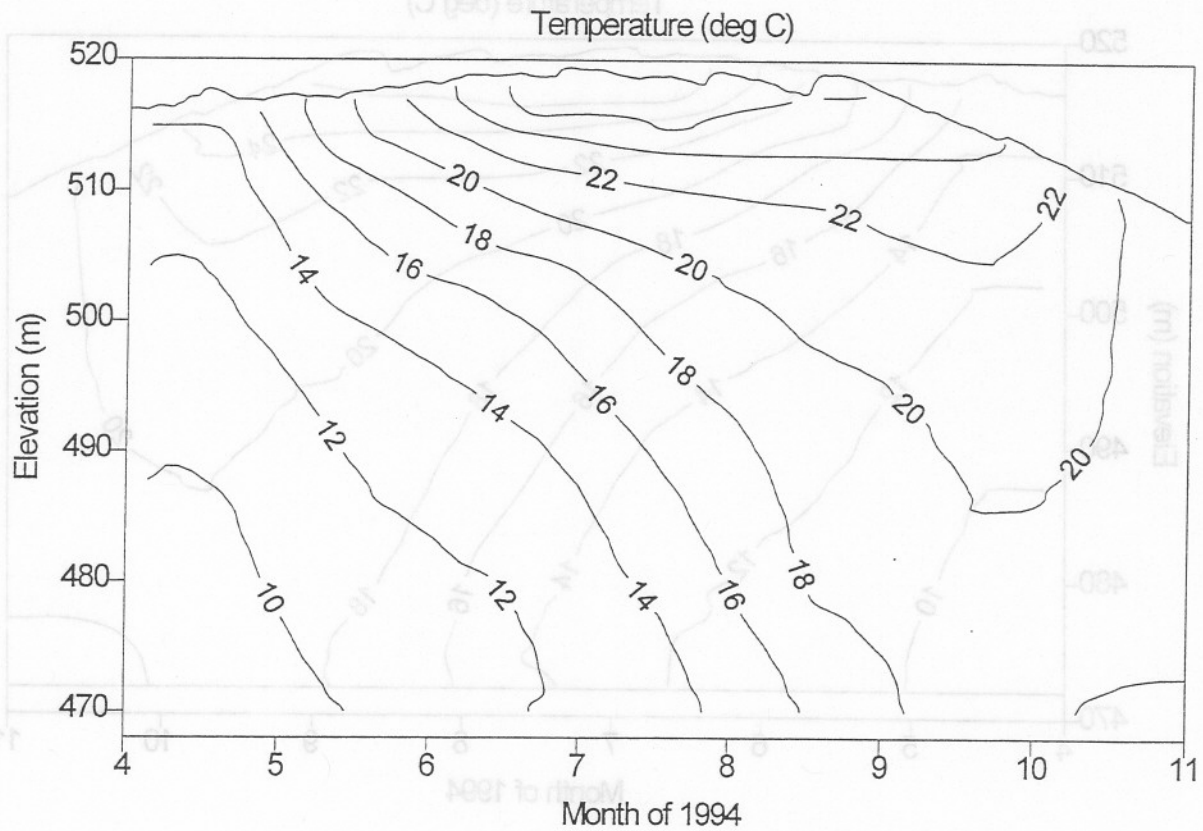




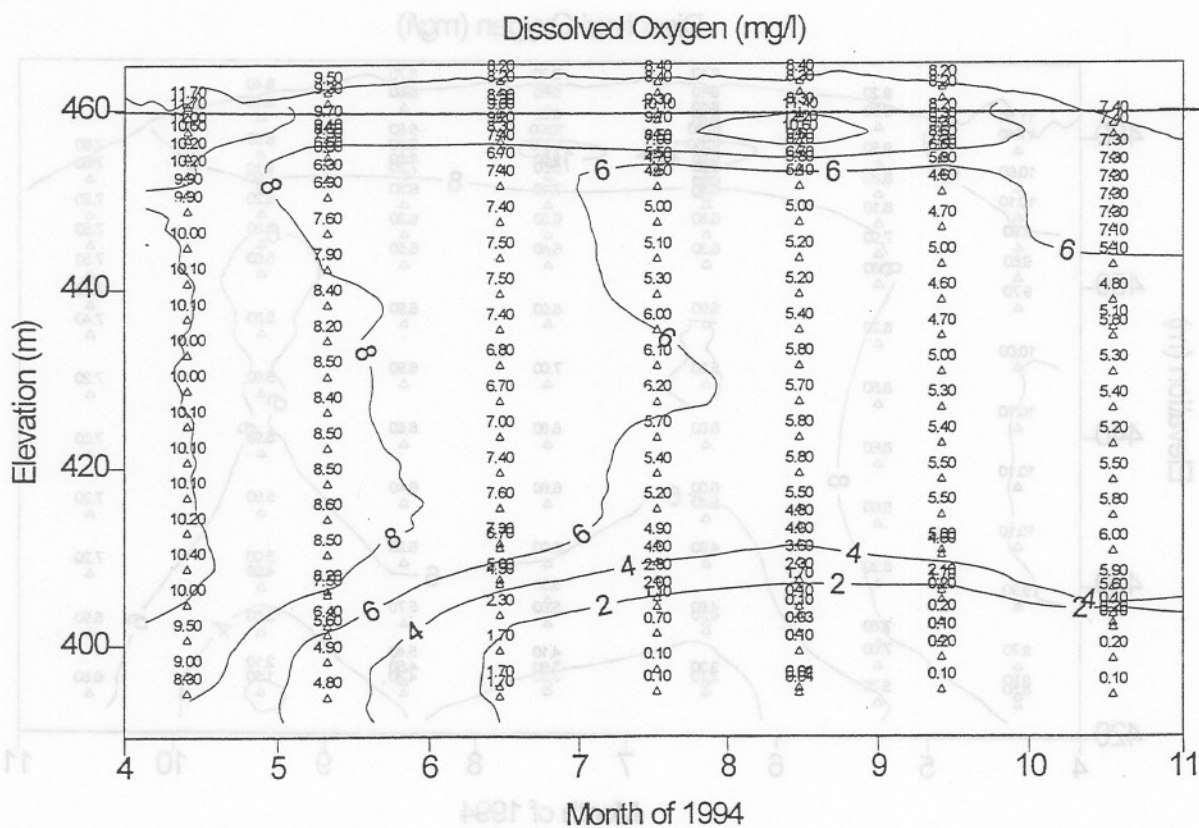
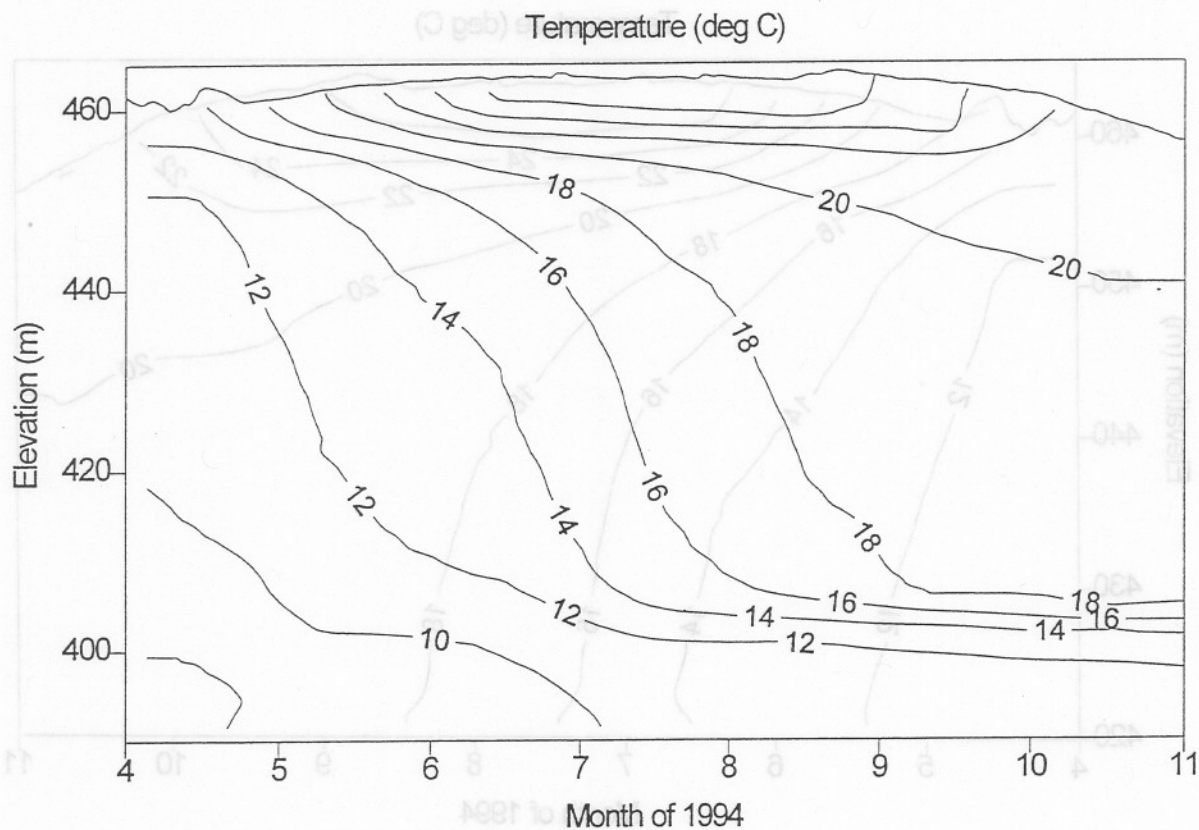
# Fontana Reservoir - LTRM 81.5



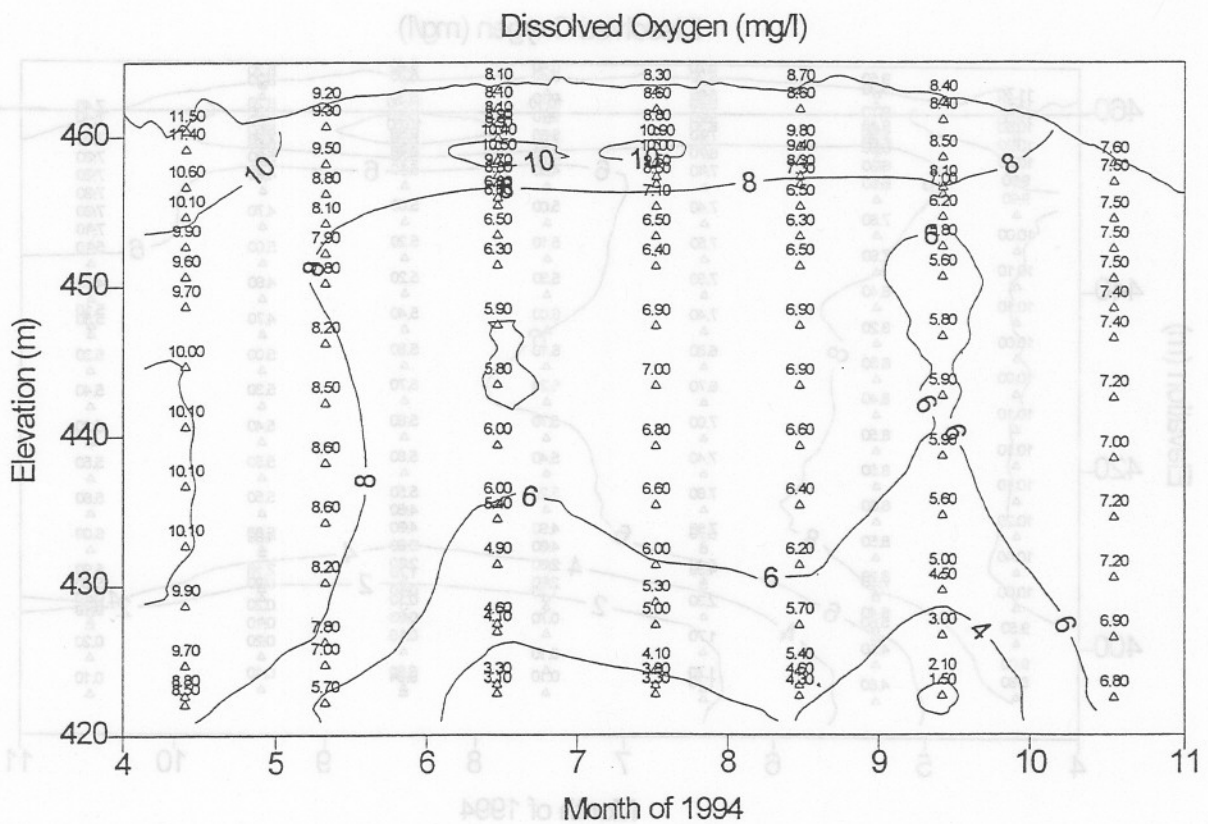
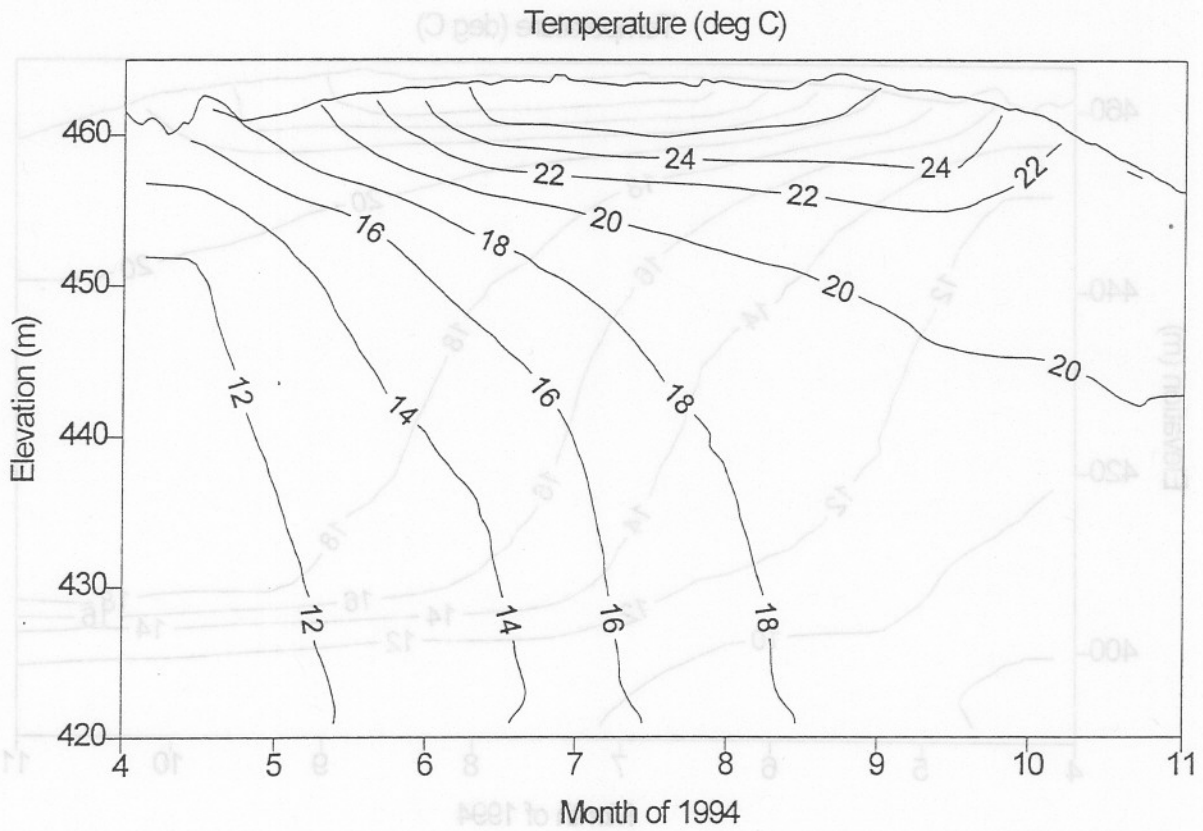
# Fontana Reservoir - Tuckaseegee River Mile 3



# Hiwassee Reservoir - HiRM 77

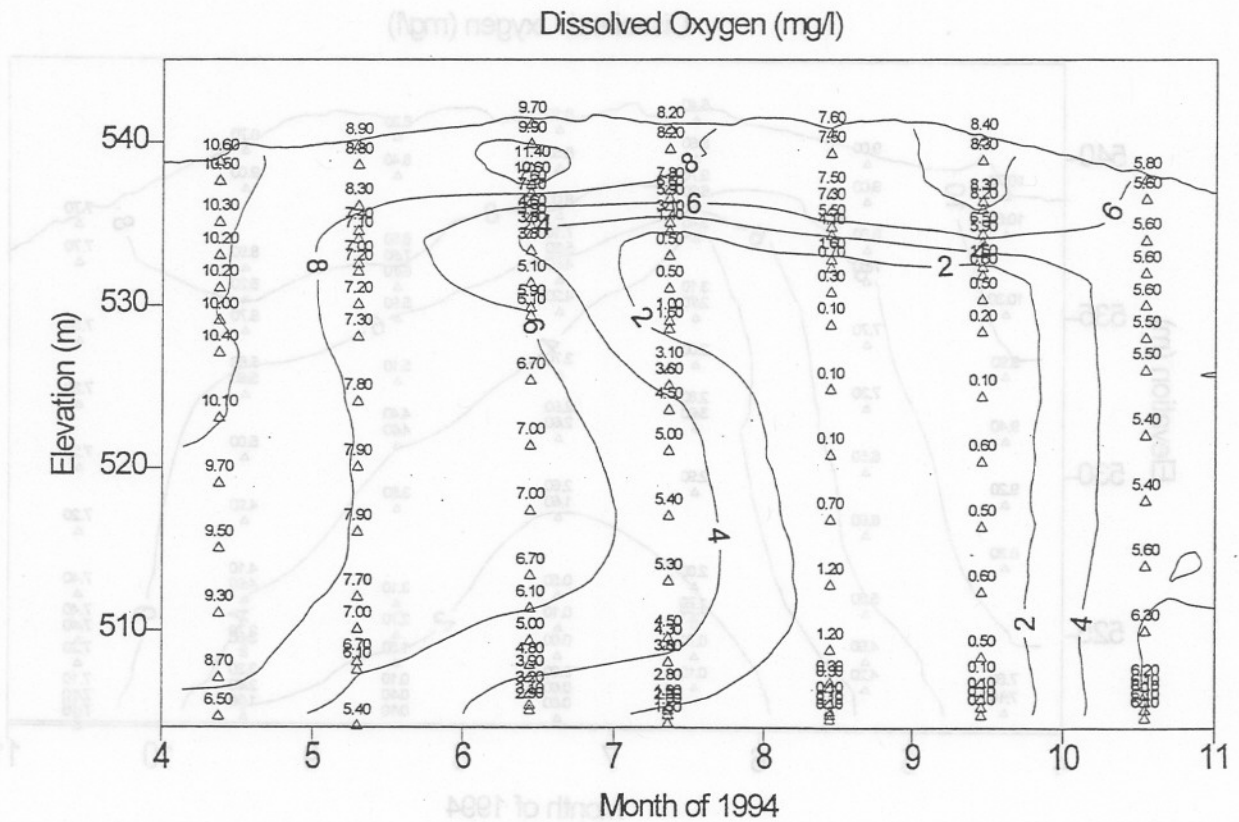
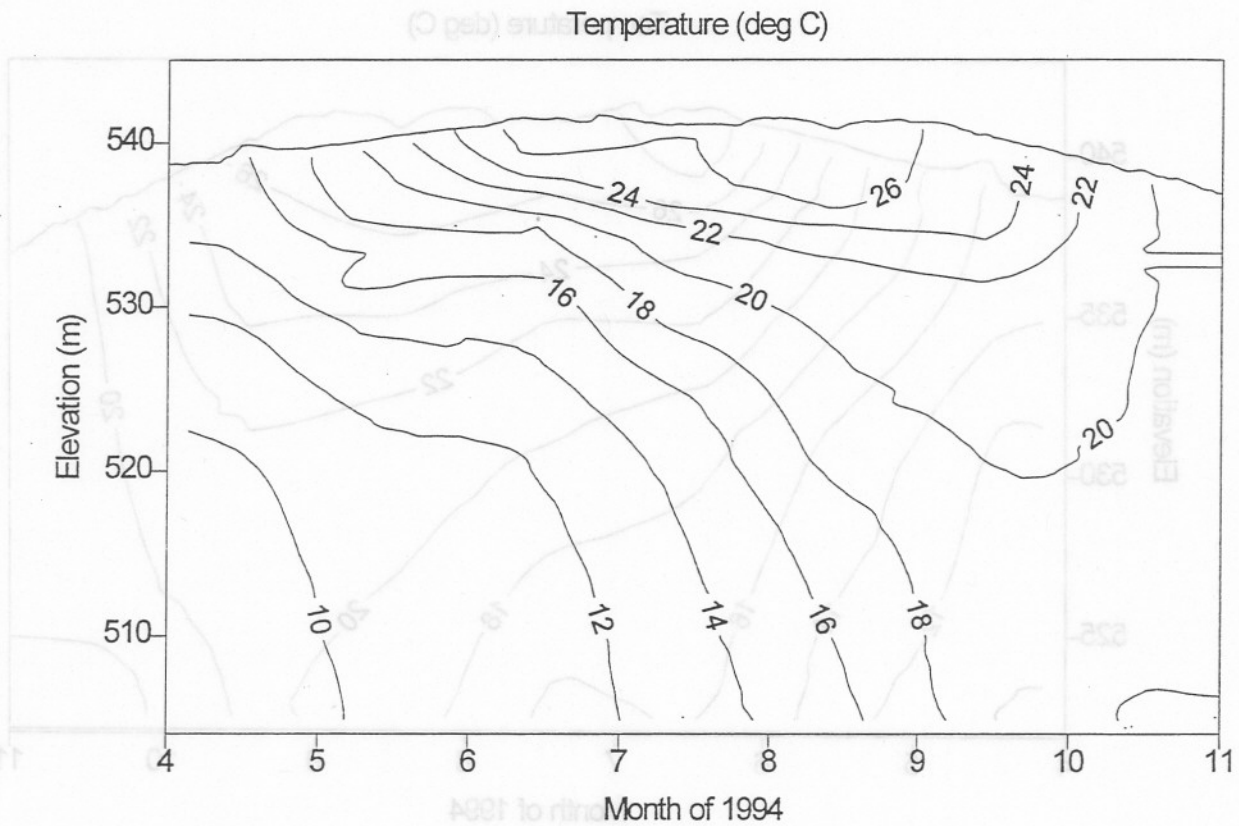


# Hiwassee Reservoir - HiRM 85

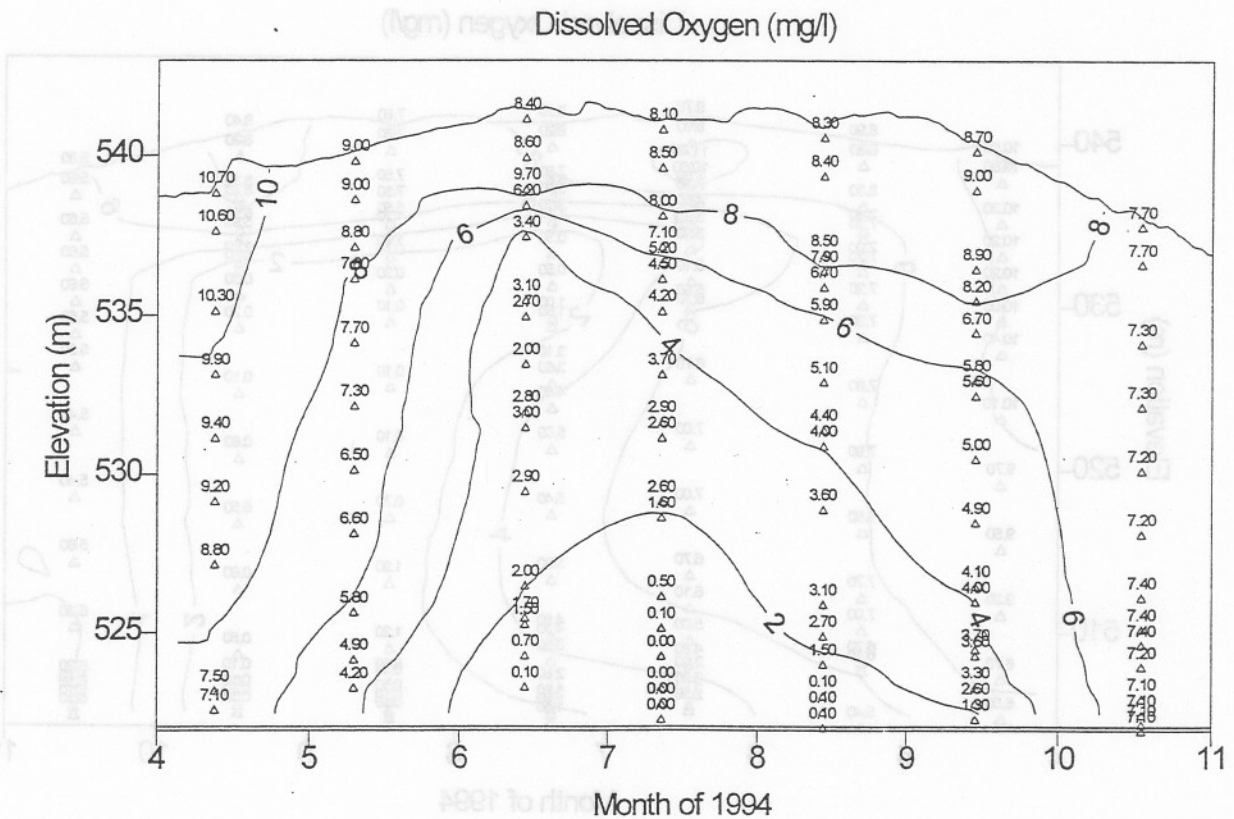
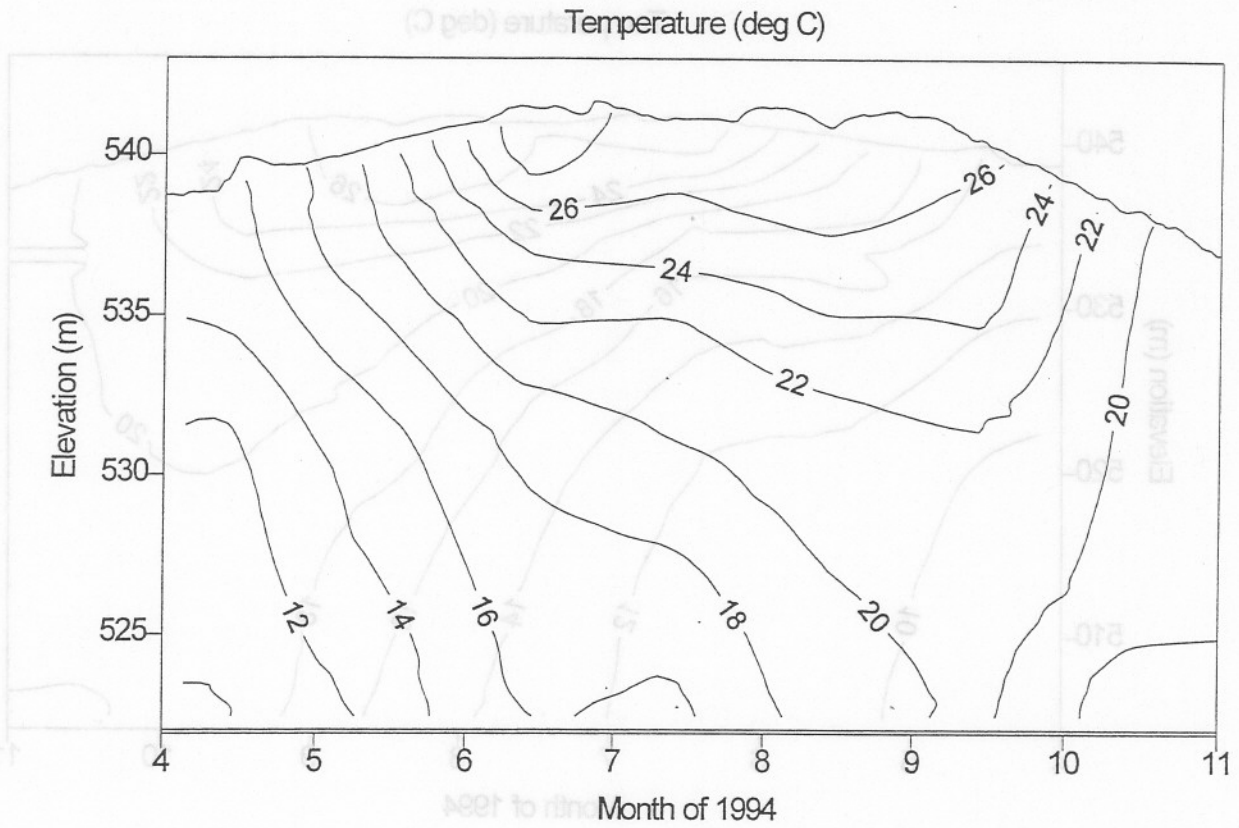




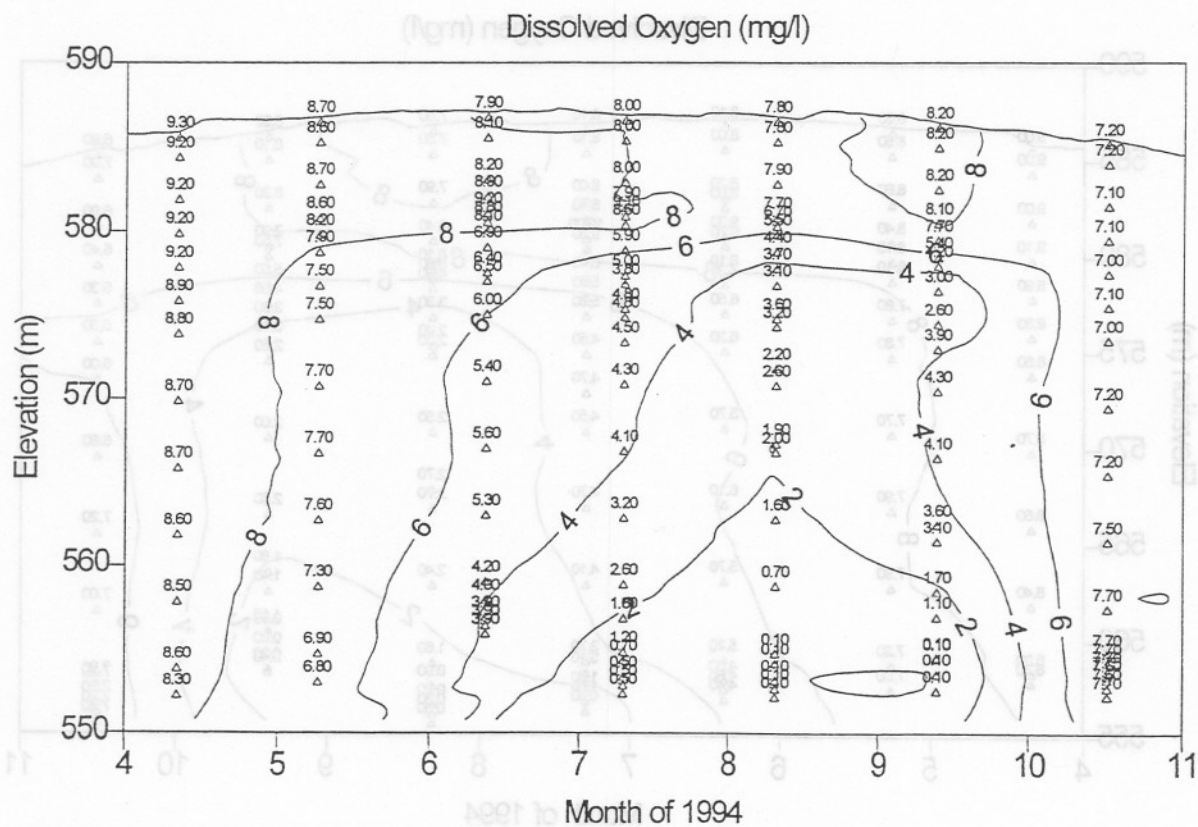
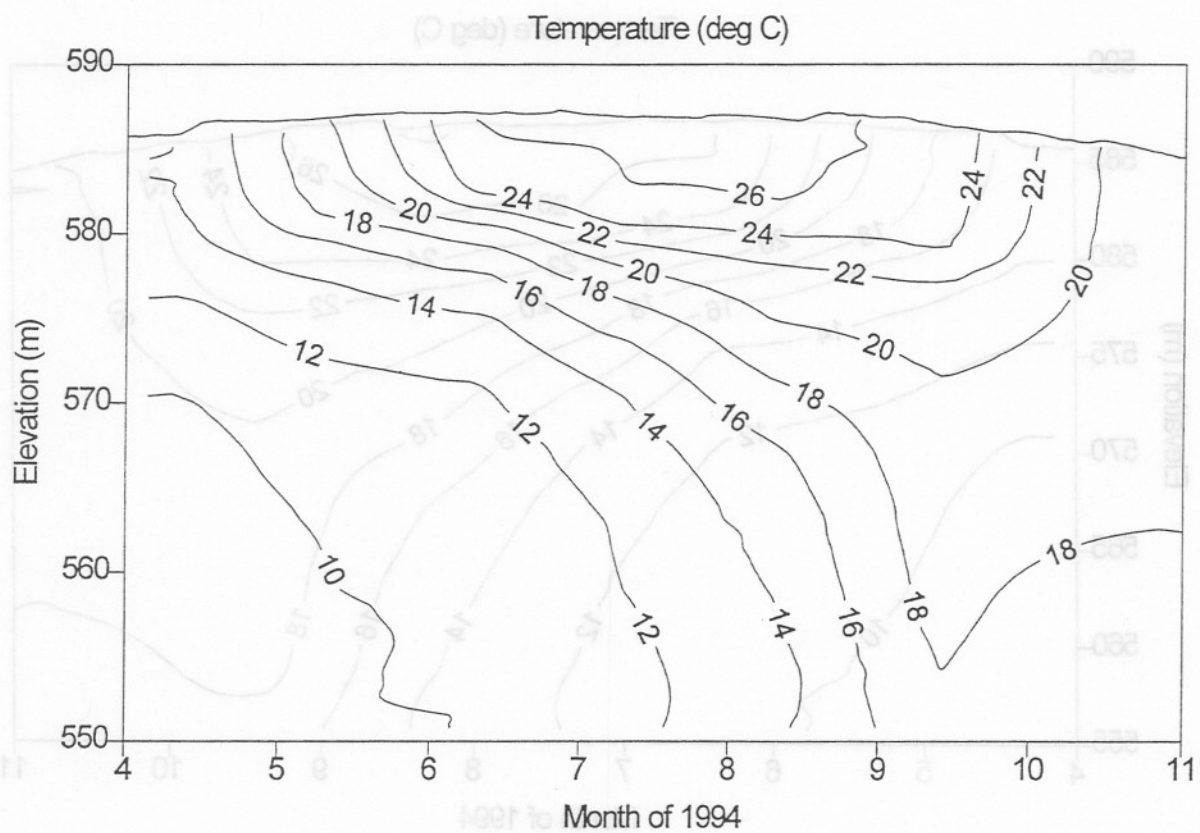
# Nottely Reservoir - NRM 23.5



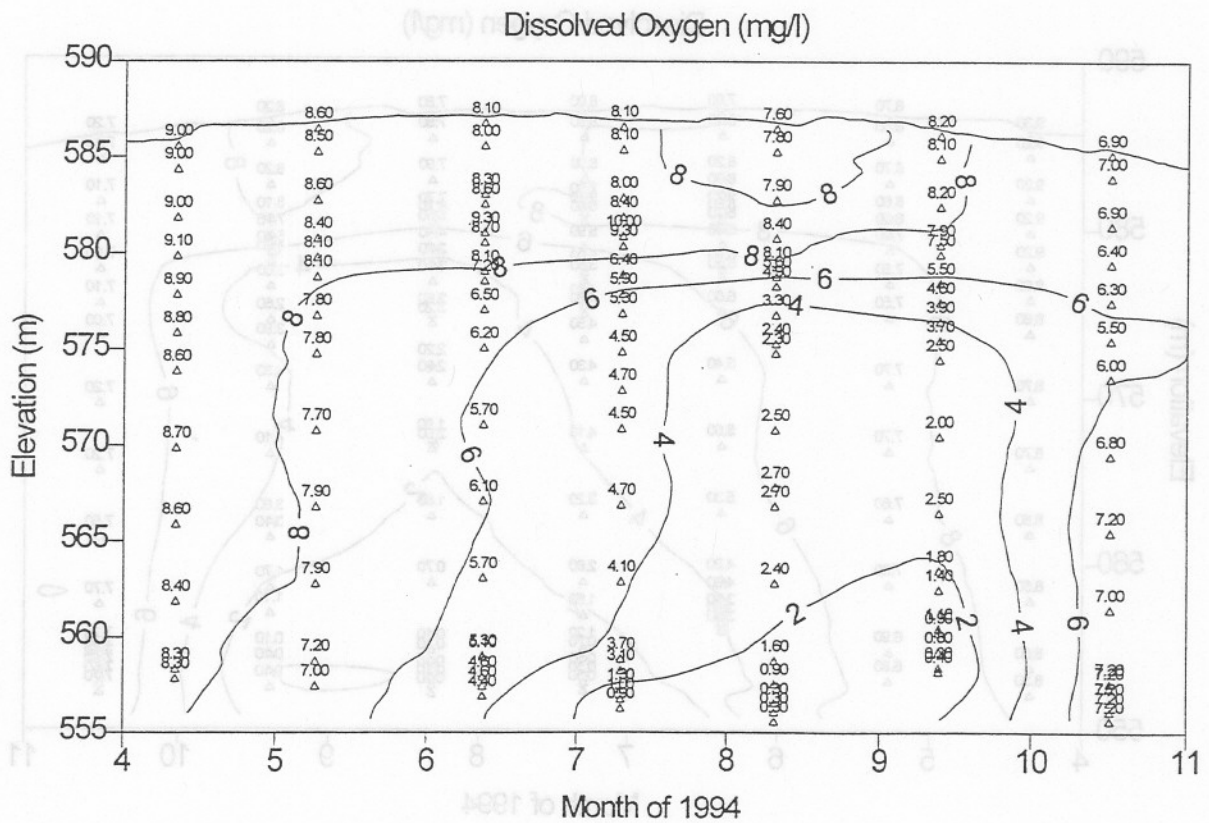
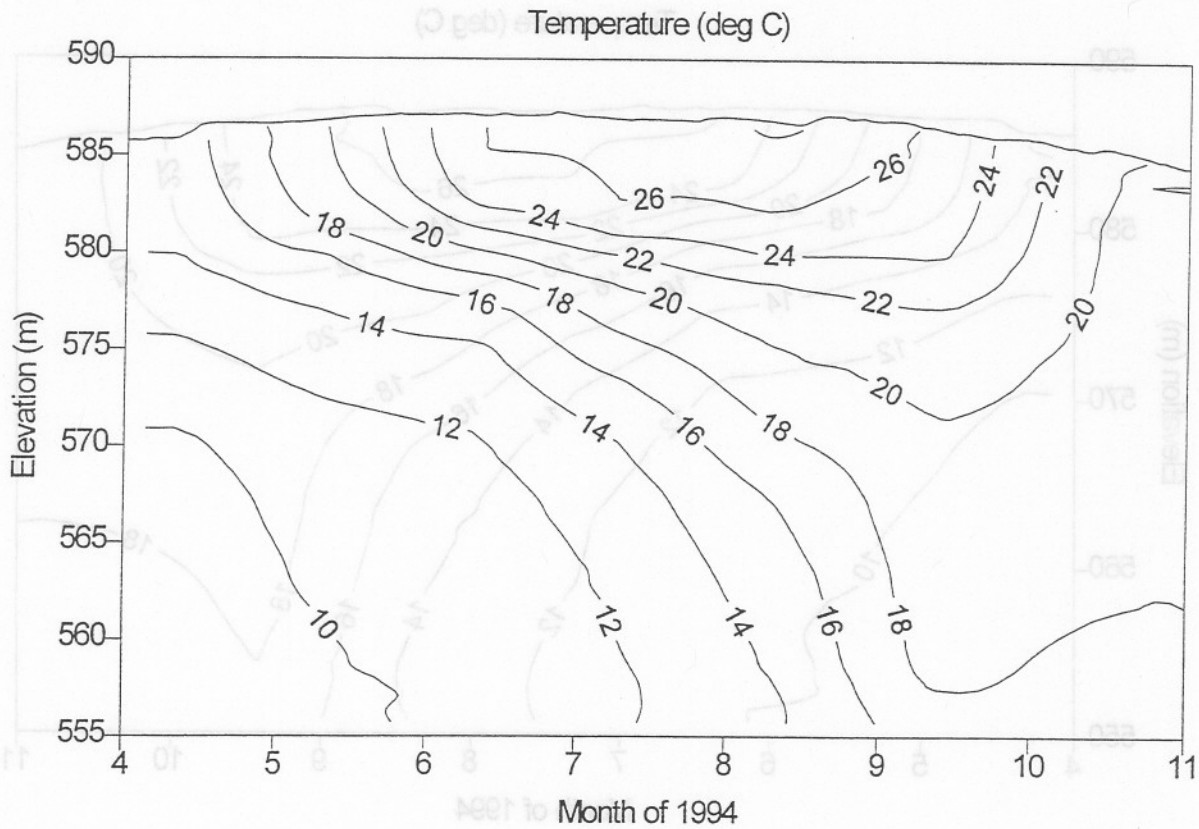
# Nottely Reservoir - NRM 31.0



# Chatuge Reservoir - HiRM 122

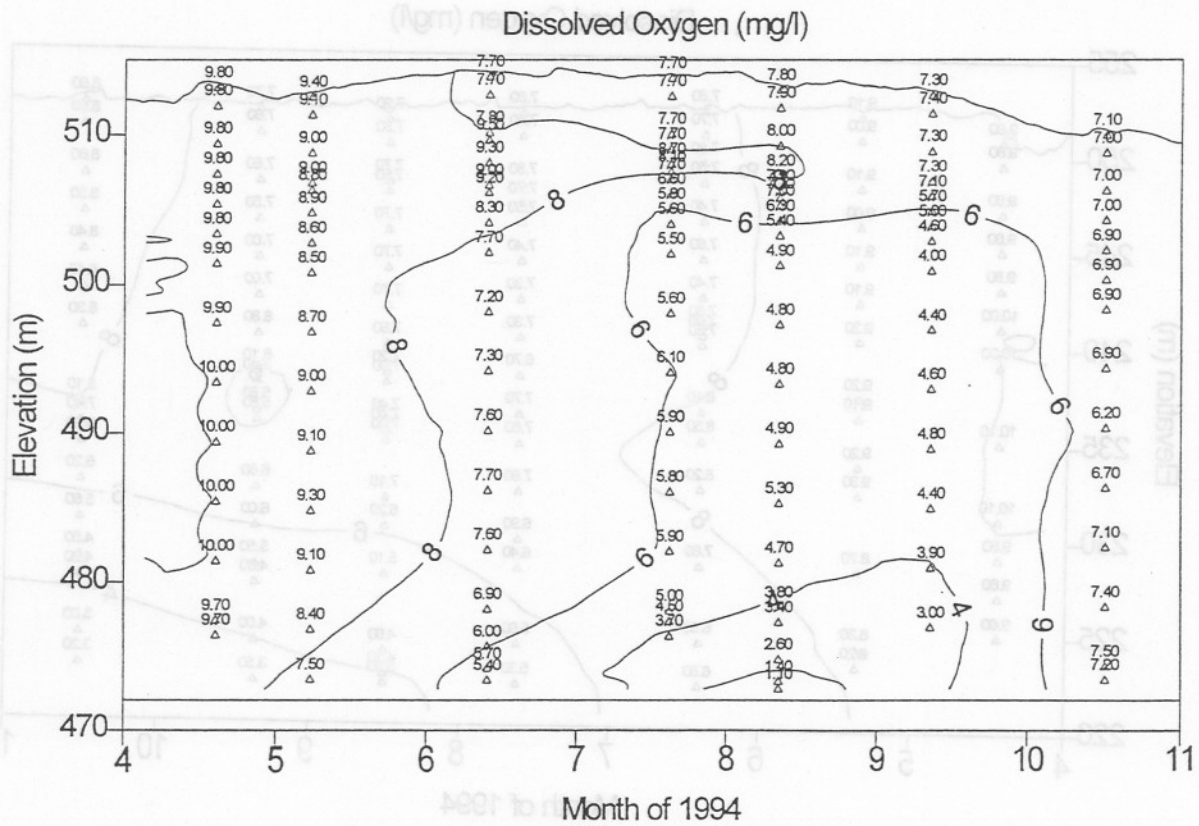
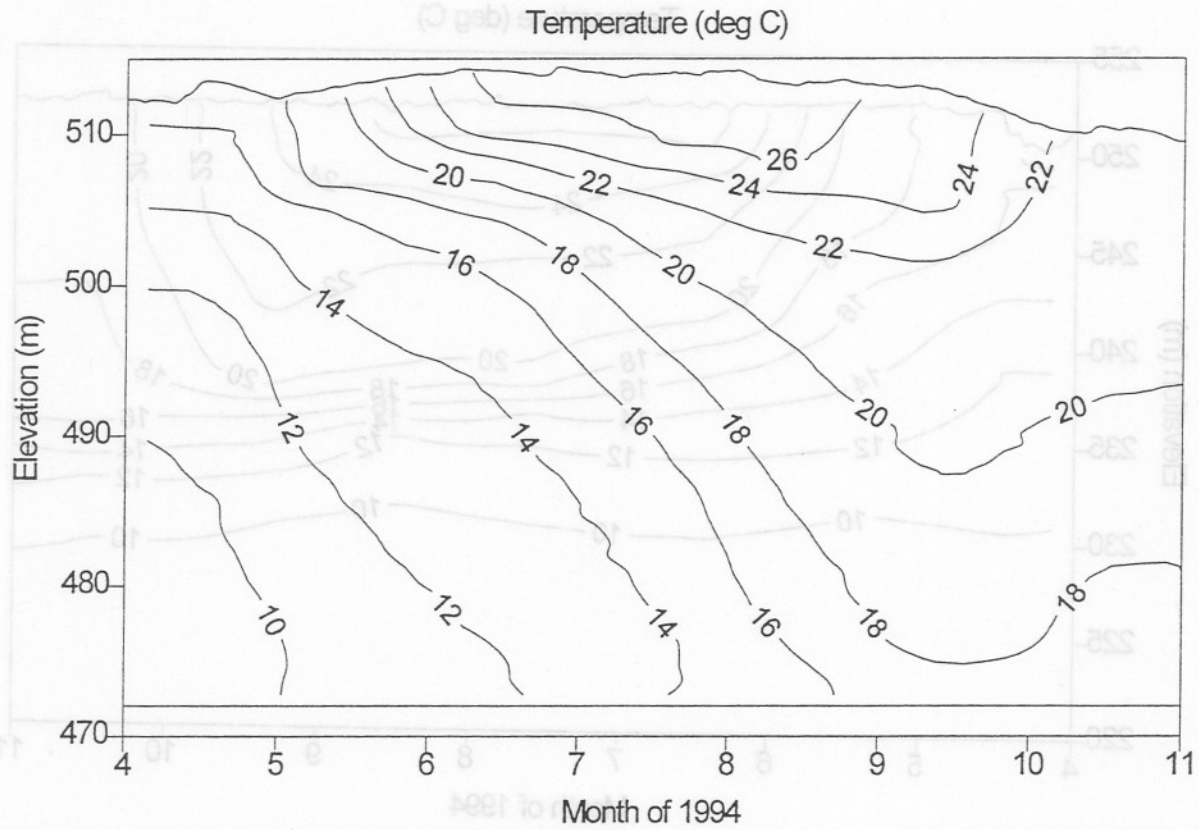


# Chatuge Reservoir - Shooting Creek Mile 1.5

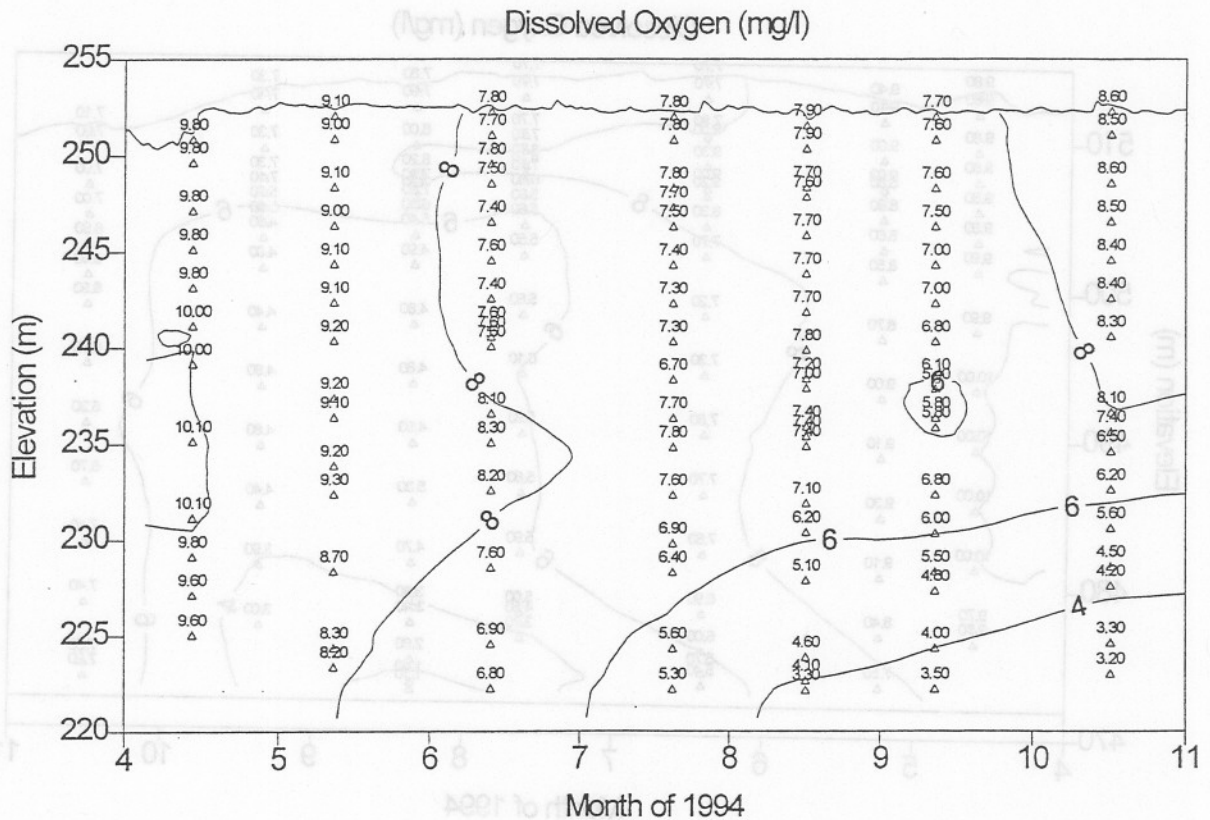
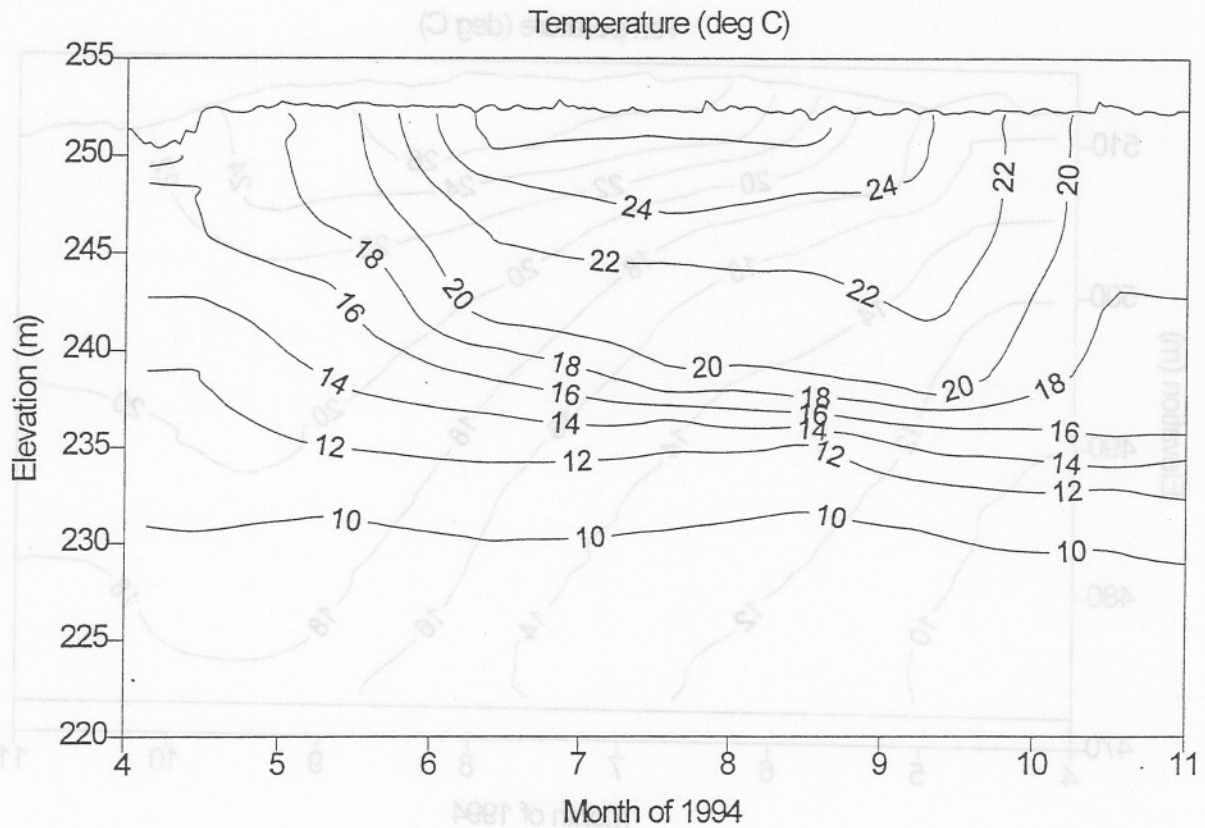




# Blue Ridge Reservoir - ToRM 54.1

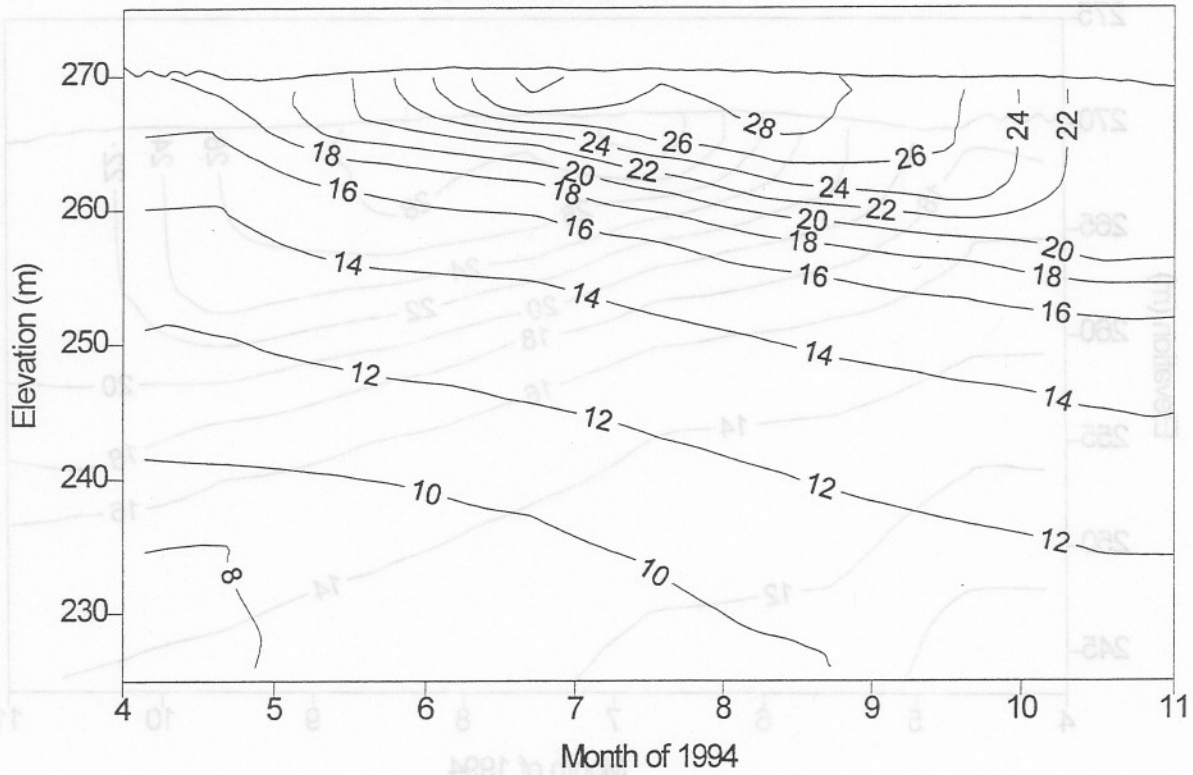


# Ocoee #1 Reservoir - ORM 12.5

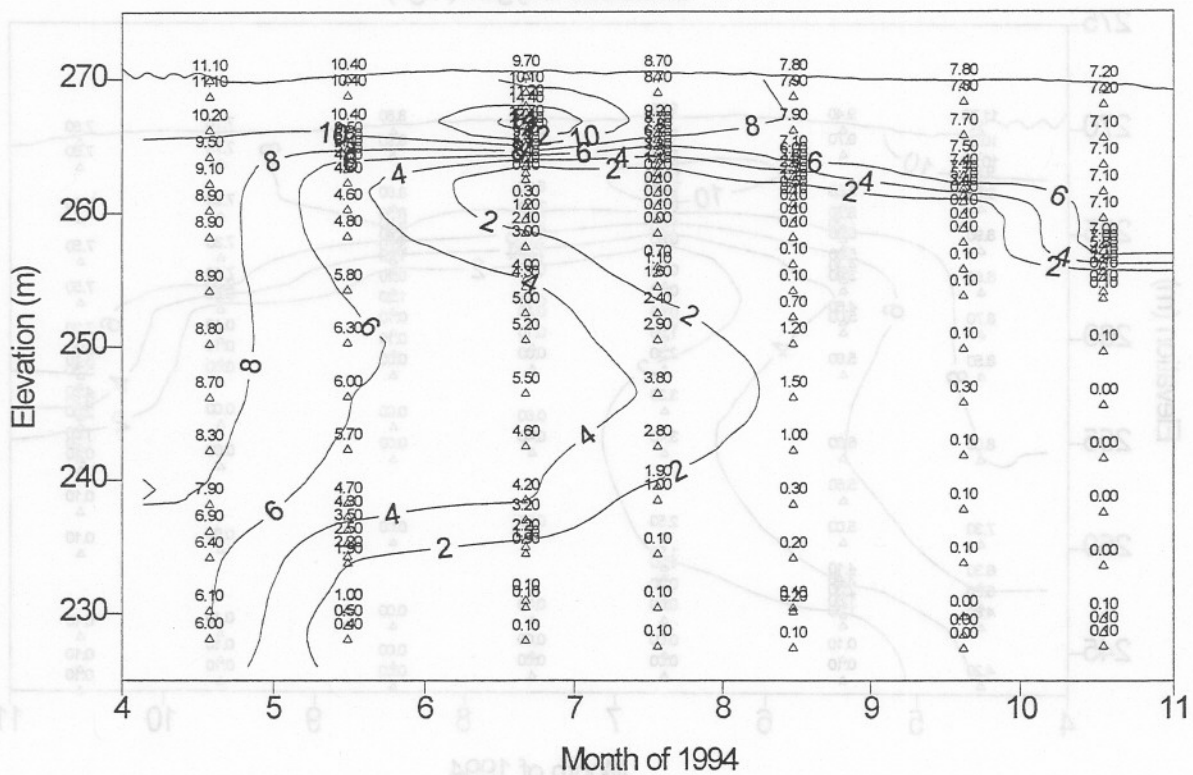


# Tims Ford Reservoir - ERM 135

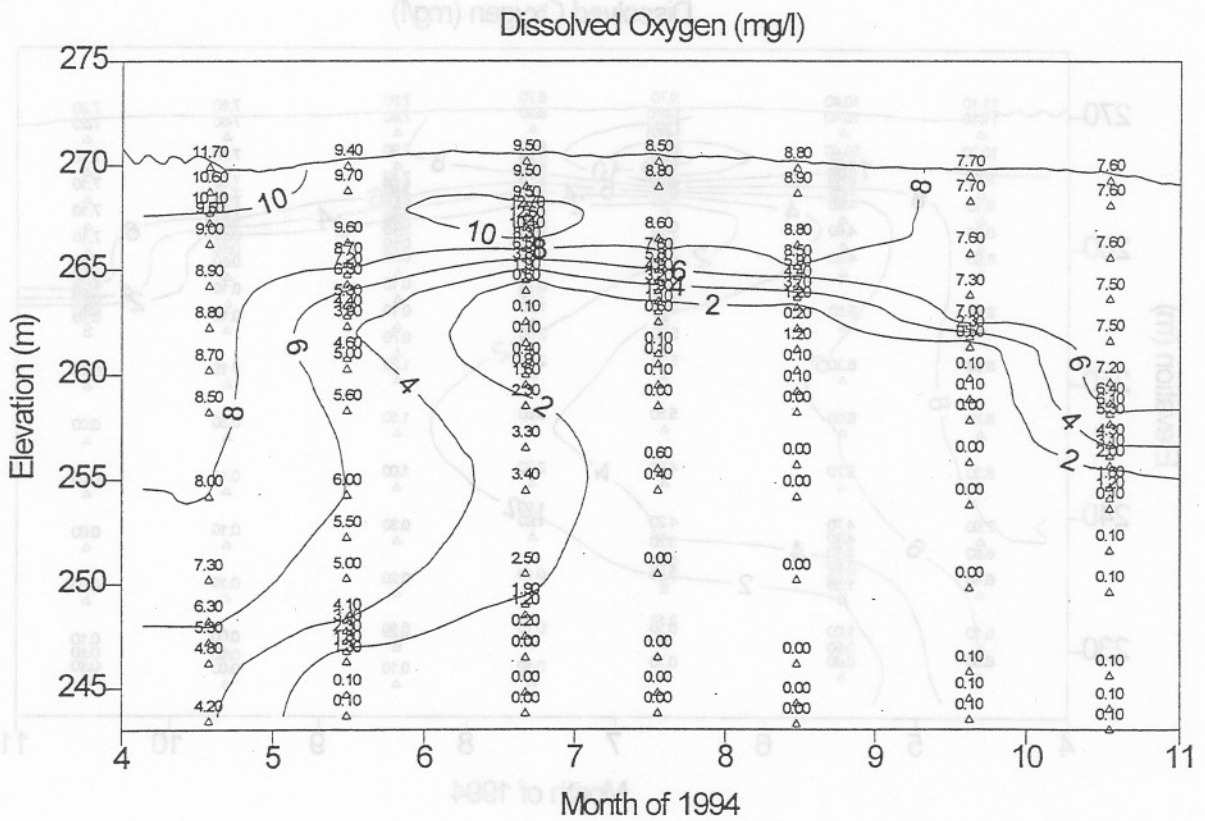
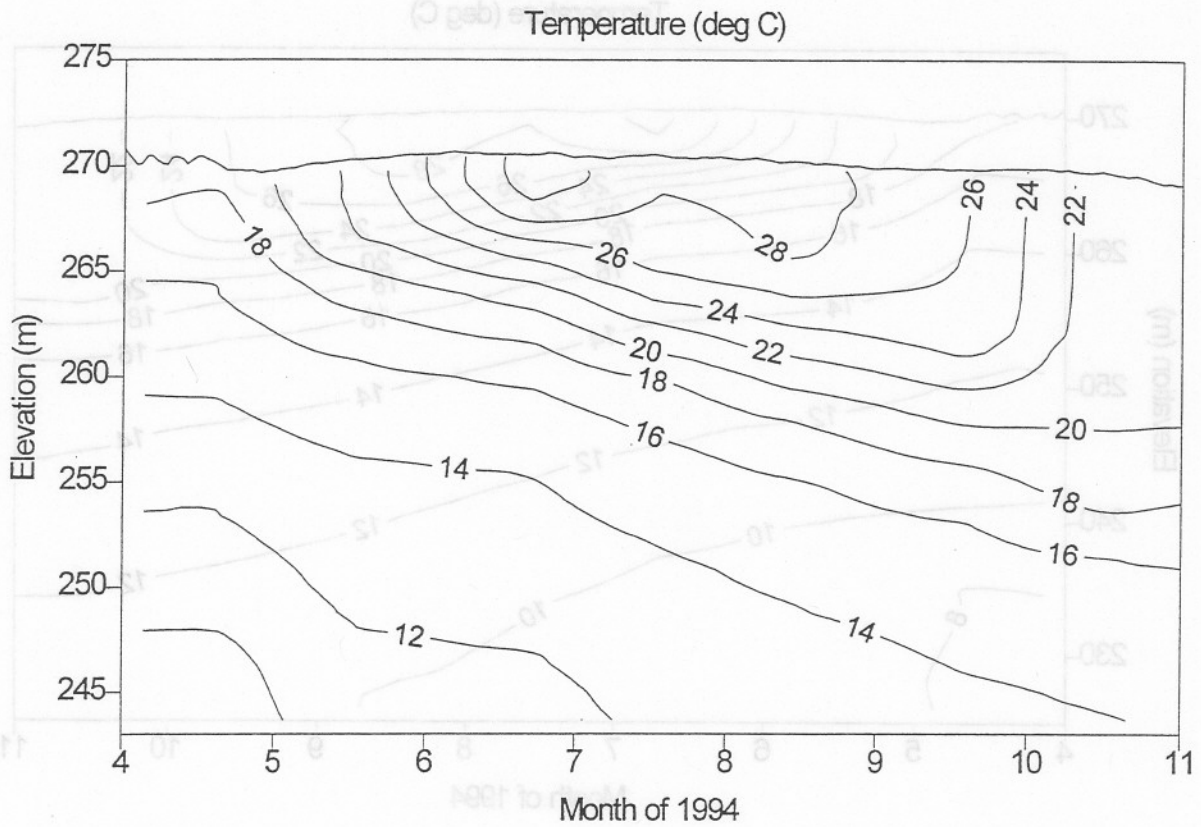
Temperature (deg C)



Dissolved Oxygen (mg/l)

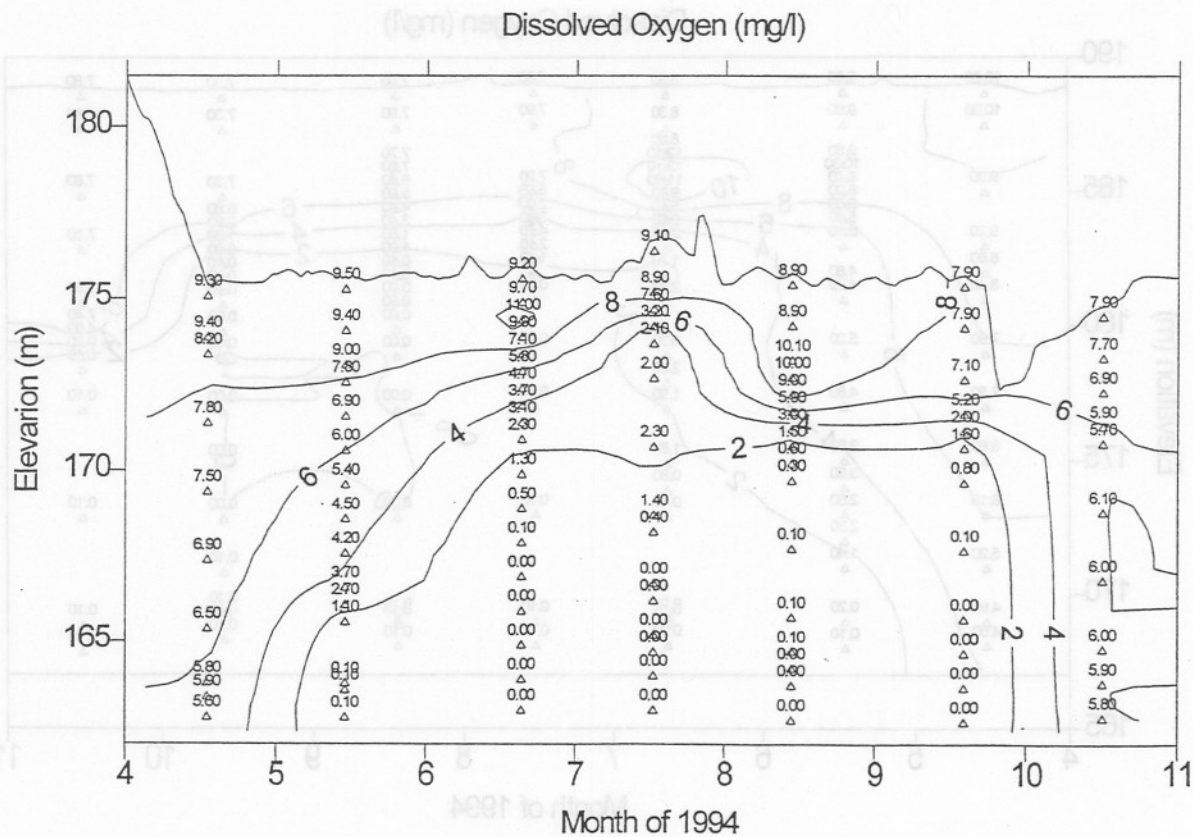
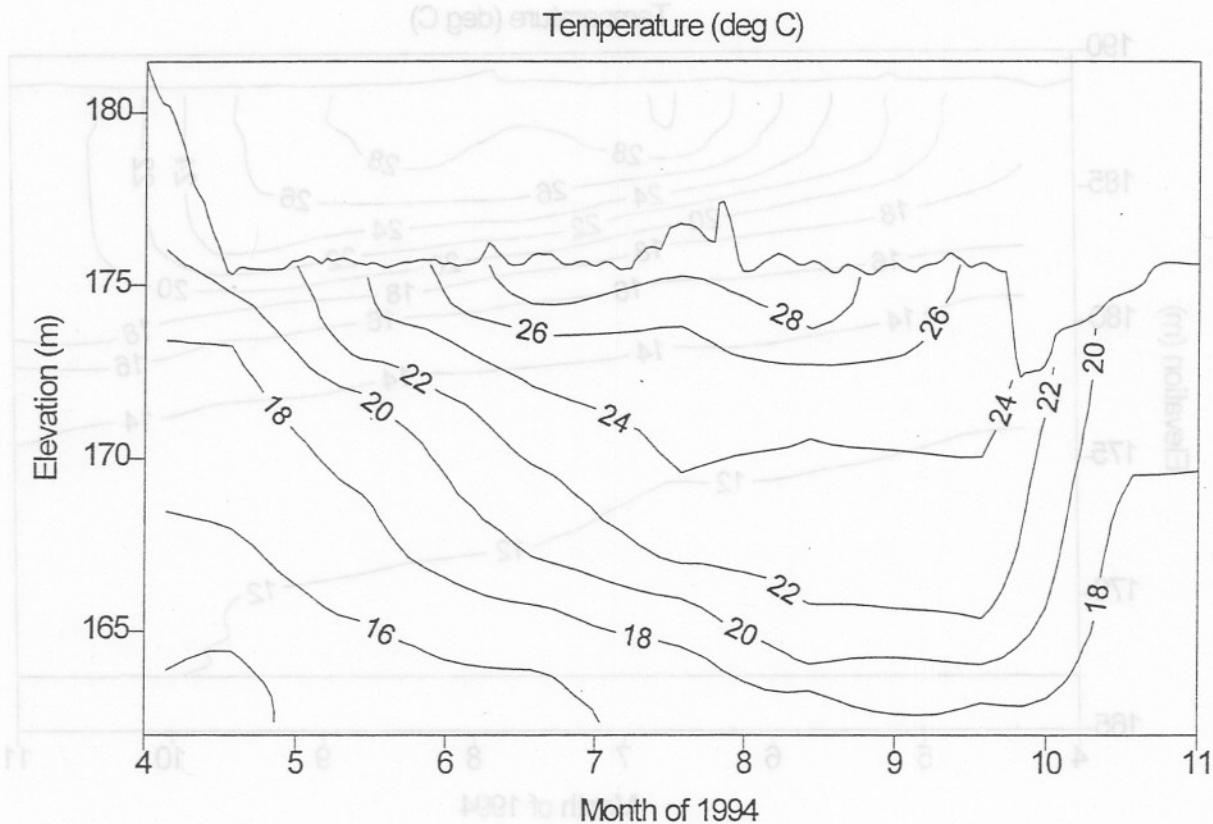


# Tims Ford Reservoir - ERM 150

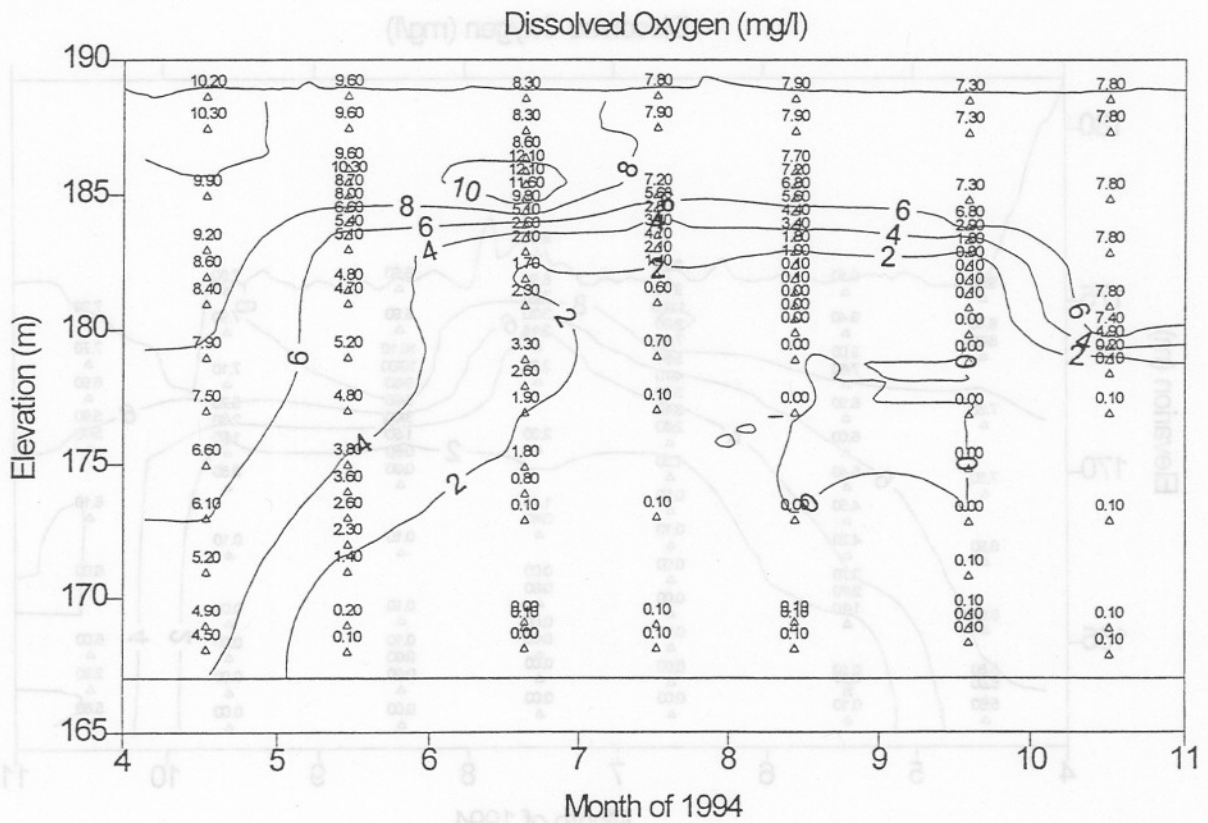
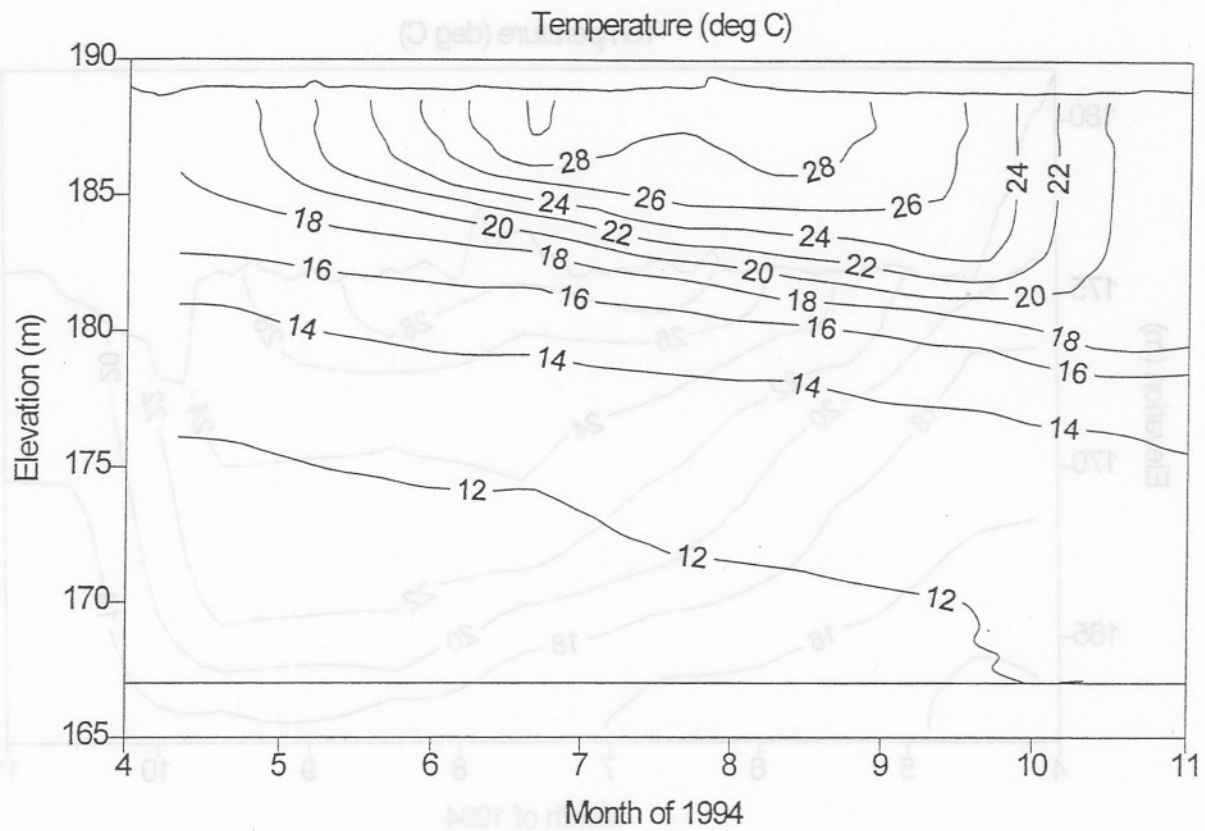




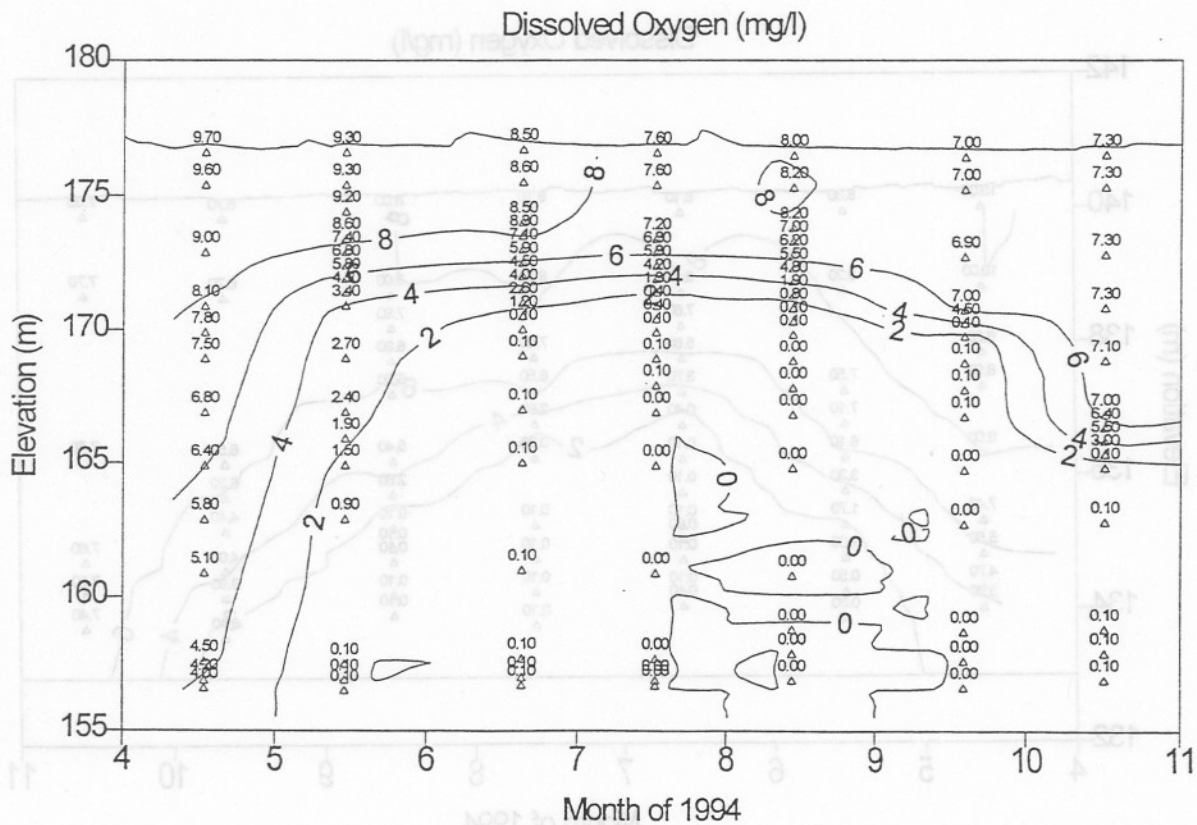
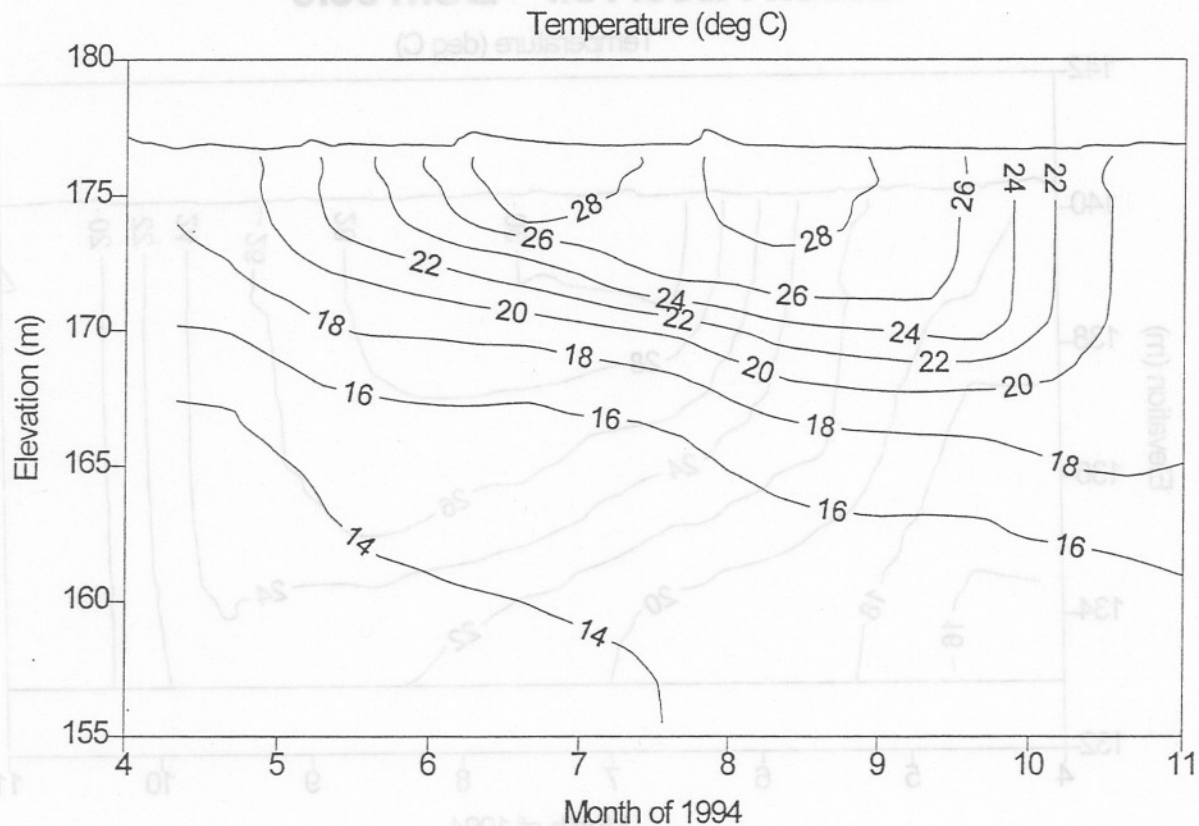
# Bear Creek Reservoir - BCM 75.0



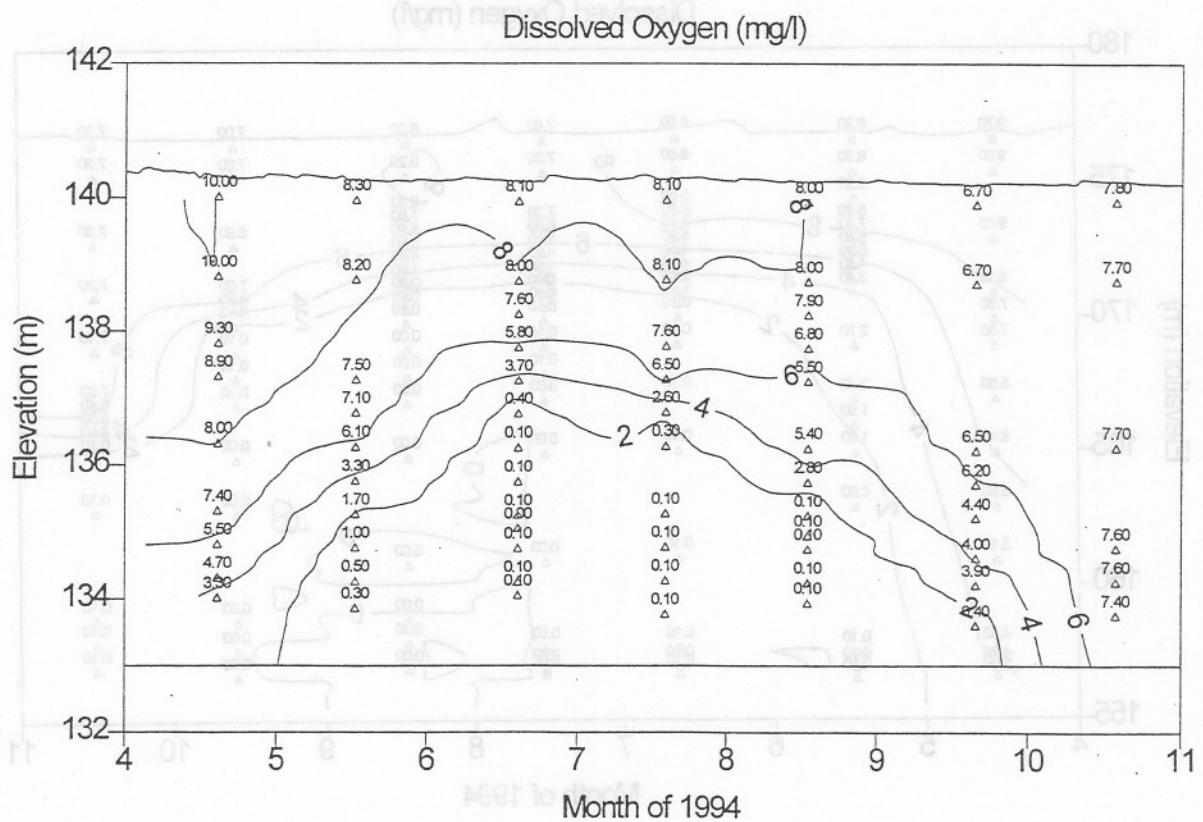
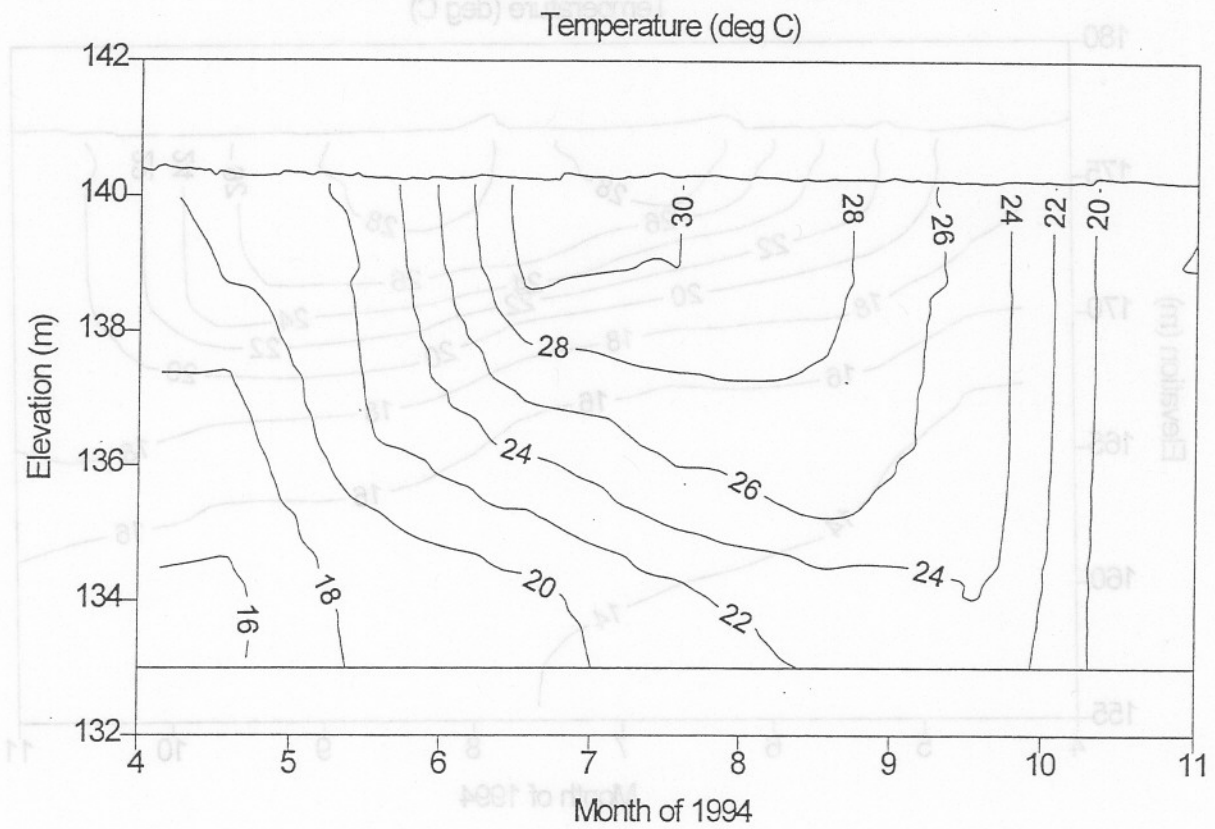
# Little Bear Creek Reservoir - LBCM 12.5



# Cedar Creek Reservoir - CCM 25.2

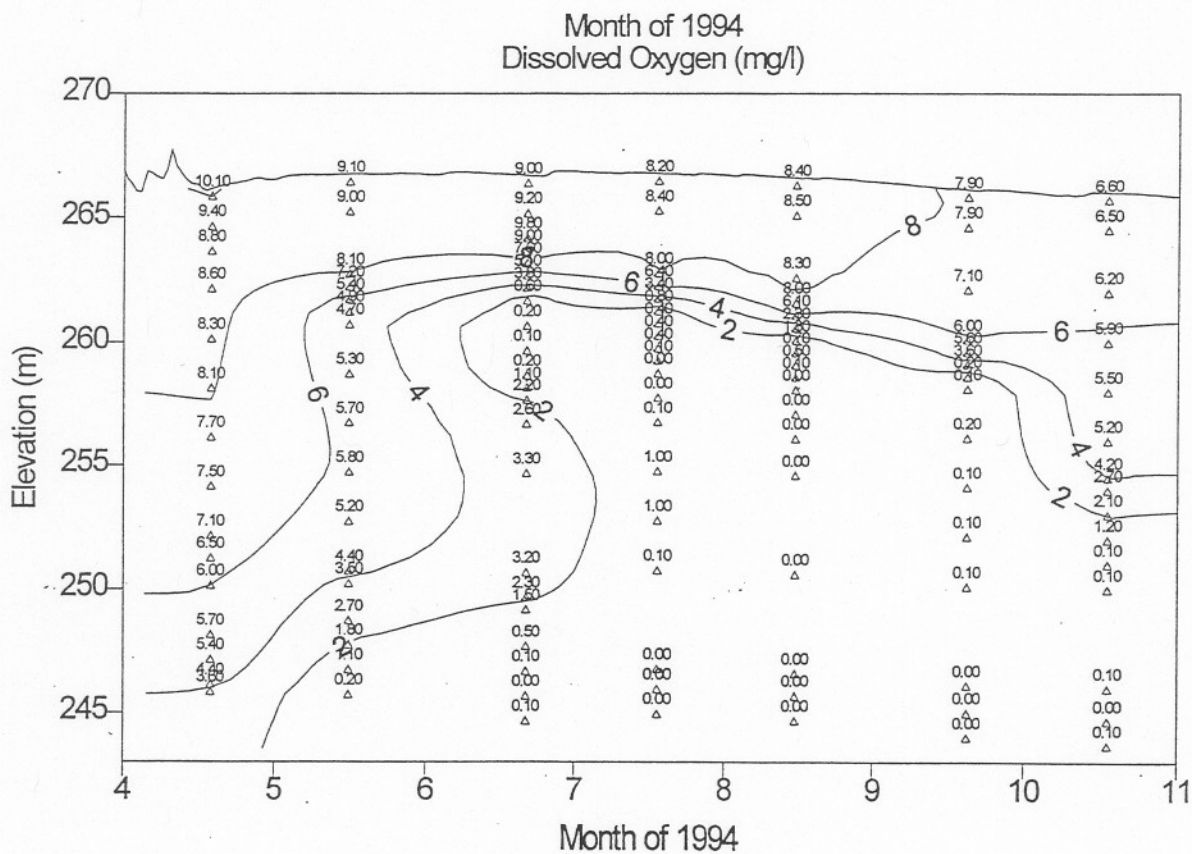
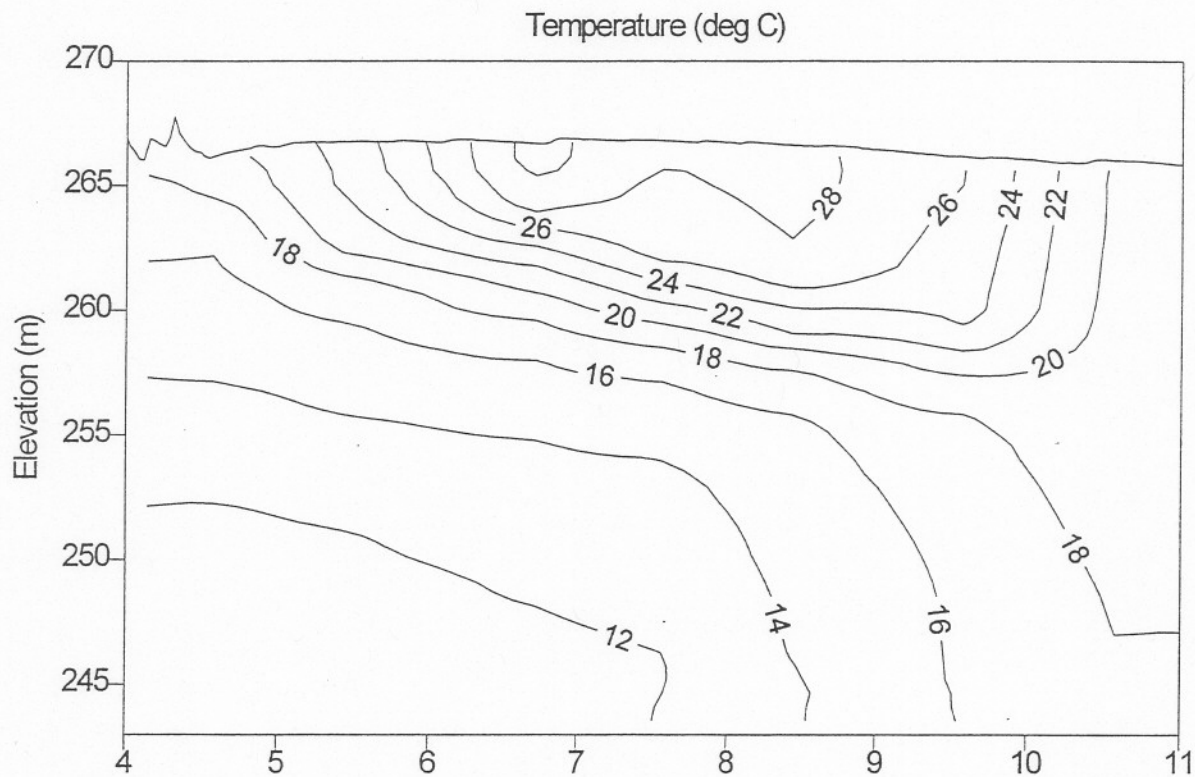


# Beech Reservoir - BCM 36.0





# Normandy Reservoir - DRM 249.5



**Section 4**  
**Benthic Macroinvertebrate Community**

**Appendix A.**

**Reservoir Benthic Macroinvertebrate Sampling -- Late  
Fall Versus Early Spring Collections**



## Reservoir Benthic Macroinvertebrate Sampling -- Late Fall vs Early Spring Collections

**Summary:** The TVA experience has shown that late winter/early spring sampling period is not acceptable for benthic macroinvertebrates because results are reflective of conditions which occurred the previous year. This causes results from this indicator to be out of synch with the other four indicators. Thorough evaluation showed late fall/early winter collection and use of field identification to the family and order levels would negate problems resulting from early spring sampling and would not impact the contribution of this important community to the overall evaluation.

**Detail:** Initially, benthic macroinvertebrate sampling was conducted in late winter/early spring (February - April) to avoid aquatic insect emergence. Late fall/early winter was not considered feasible because the required reporting date of mid-January would not allow processing time in the laboratory. Also, there was concern that insect instars would be so small that they could pass through the collection screen and or be difficult to identify.

A potential weakness in this approach was that samples would be collected so early in the year that results would be representative of conditions which had occurred the previous year causing them to be out of synch with results for the other four indicators. This potential was manifested in the TVA monitoring program during consecutive years when dissolved oxygen conditions were good in year one and two, poor the third year, then good again the fourth year. Benthos results were good in years one, two, and three, and poor the fourth year. The overall ecological health score should have been lowest in year three and high again in year four. This difference was not as discernable as it should have been because the good score for the benthos collected late winter the third year (actually representing the good DO in the second year) off-set the poor DO scores which resulted from very low DOs during the summer of the third year. Improved conditions the fourth year were not as evident in the overall score because of the poor rating for benthos.

A thorough evaluation was conducted to examine the feasibility of late fall/early winter sample collection.



- For data to be available by the Mid-January reporting data, rapid bioassessment techniques would have to be used. This would require field identification of specimens; to the family or order level, depending on the group. During years three and four, field identifications had been made in addition to detailed laboratory processing to evaluate the potential for using field identification as a cost cutting effort. Benthic index results based on field identifications were compared to corresponding results from the laboratory using correlation analysis. Results were very favorable: for the run-of-the river reservoirs  $r$  values were 0.80, 0.93, and 0.87 for forebays, transitions zones, and inflows.
- To test the validity of late fall sampling, special collections were conducted during late fall the fourth year. Benthic index scores based on field identifications during both spring and fall showed very little difference:

|                                       | <u>Spring</u> | <u>Fall</u> |
|---------------------------------------|---------------|-------------|
| Chickmauga Reservoir forebay          | 34            | 38          |
| Nickajack Reservoir forebay           | 36            | 38          |
| Chickmauga Reservoir inflow           | 26            | 26          |
| Nickajack Reservoir inflow            | 38            | 38          |
| Chickamauga Reservoir embayment       | 18            | 36          |
| Chickamauga Reservoir transition zone | 38            | 38          |

- There was only one location with a substantial difference between the two sample periods. Interestingly, results for fall sampling the fourth year were similar to results for spring sampling the third year, indicating unstable conditions which need to be watched closely in future sampling events.
- Concerns about size of insect instars and ability to identify them satisfactorily were allayed by the successful efforts during the fall test period described above.
  - One further test to compare fall versus spring collections was to use Sorensen's Quotient of Similarity to examine taxa present during the two periods. Results of the above test samples showed that taxa present in the fall were as comparable to those collected in the spring as replicate spring sample sets were to each other.

Package Subject: Reservoir Benthics

Item Title: Reservoir Benthics

During the past year, steps have been taken to determine if the cost and timeliness of the Reservoir Benthic Vital Signs data could be improved. Using statistics on past data, we have decided to go from a full laboratory analysis of the samples (approx. \$88,000/year lab cost) to a rapid bioassessment (approx \$10,000/year lab cost). This will drastically reduce our turn-around time of the data. The Benthic Vital Signs datalogger program already in place will be further implemented to add to the timeliness of the data. We've also decided to move the sampling season from early spring to early winter, so that when RiverPulse comes out in the spring, the benthic information won't be a year old and will correspond with the rest of the ecological health indicators. If you would like more information or would like to discuss these decisions please contact Amy Wales, Anita Masters, Tom McDonough, or Don Dycus.



Combined 93 + 94 RAPID 1510 VS 3121414

Figure 1. Run-of-River, Forebays (Spring Sampling)

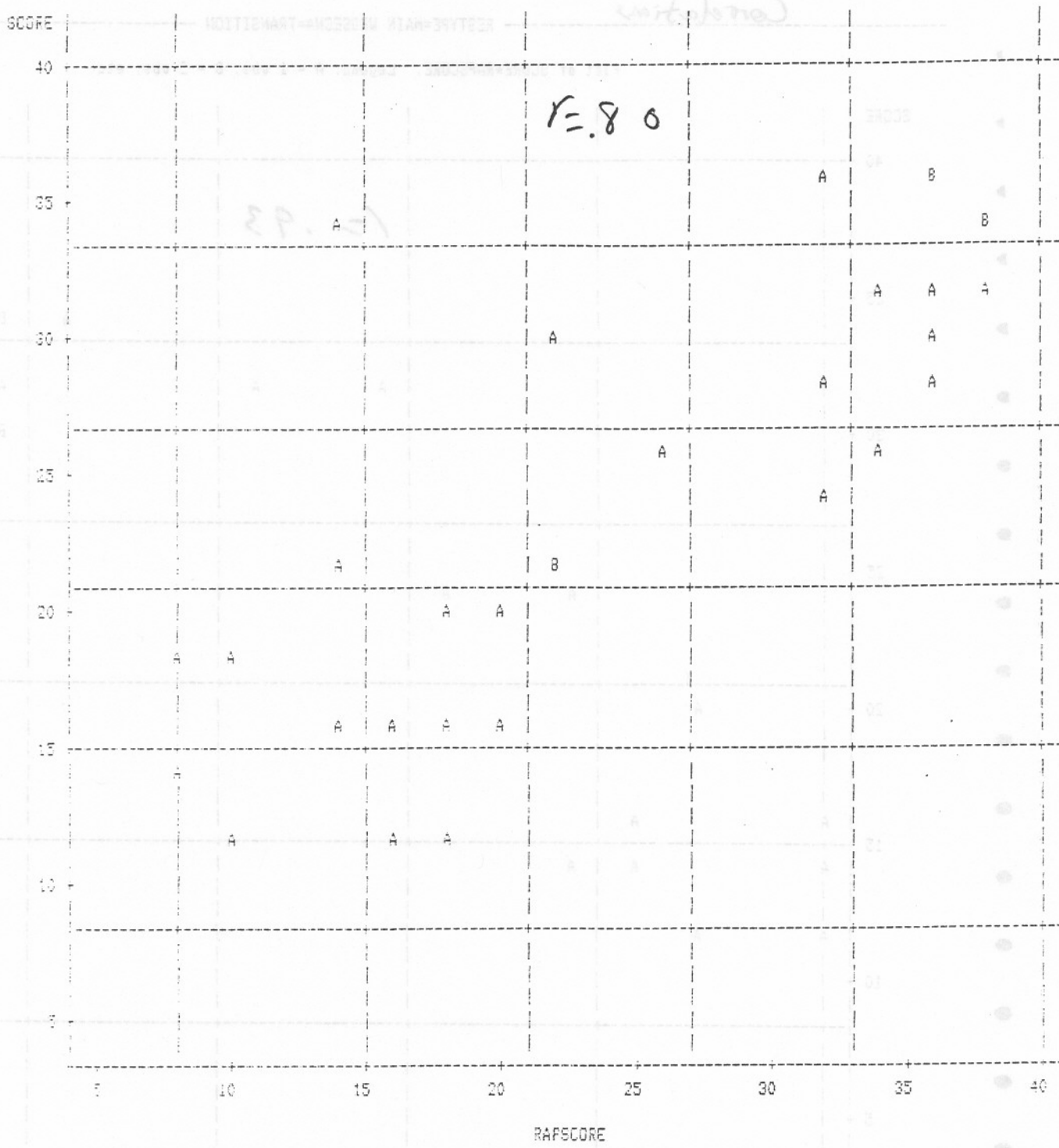
The SAS System

10:23 Tuesday, February 14, 1995

Correlations

RESTYPE=MAIN WBOSECNA=FOREBAY

Plot of SCORE\*RAPSCORE. Legend: A = 1 obs, B = 2 obs, etc.





Combined 93-94 Rapid Bio vs Standard

Figure 2. Run-of-River Reservoirs, Transition Zones (Spring collections)

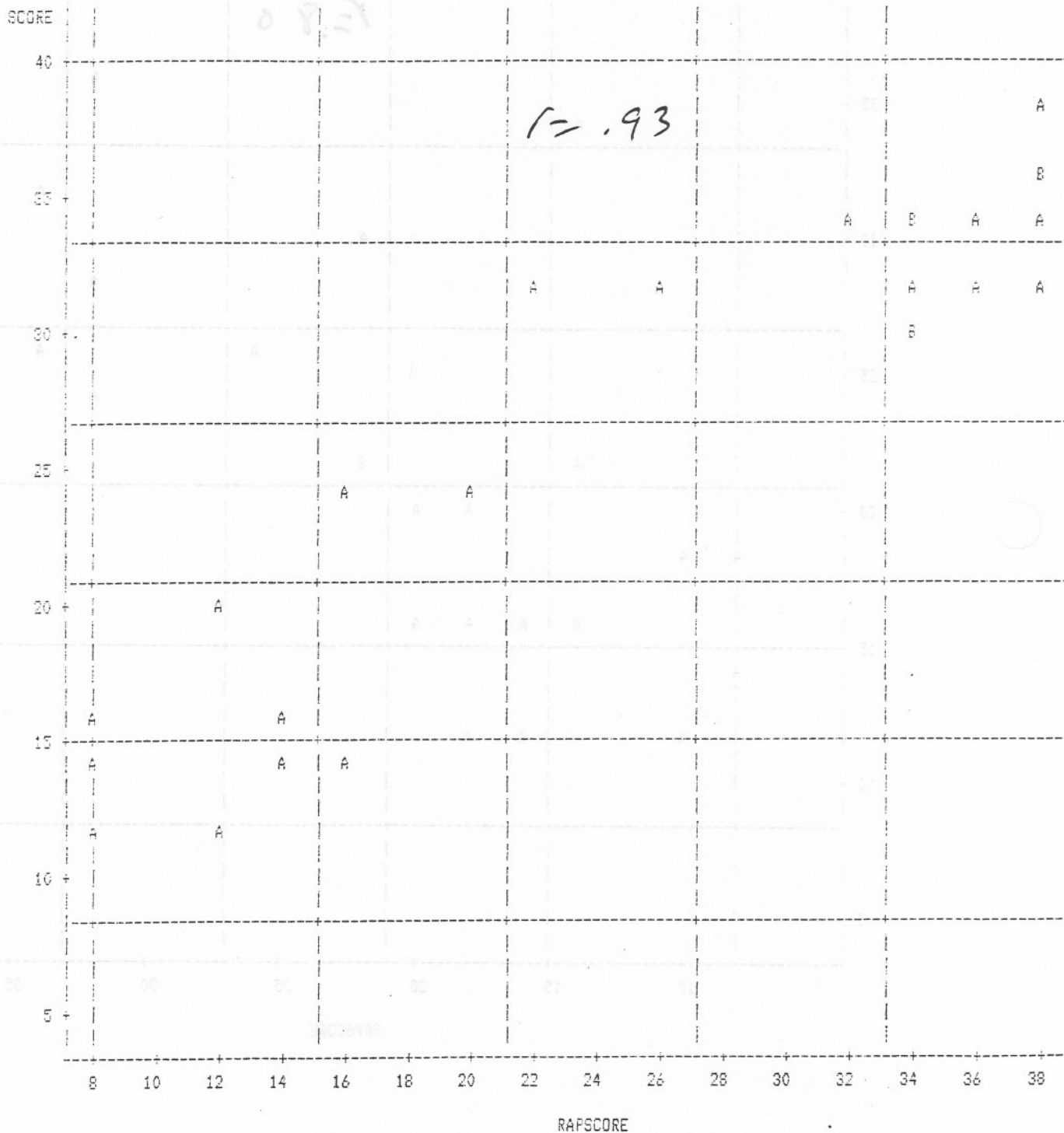
The SAS System

10:23 Tuesday, Feb 14

Correlations

RESTYPE=MAIN WBDSECONA=TRANSITION

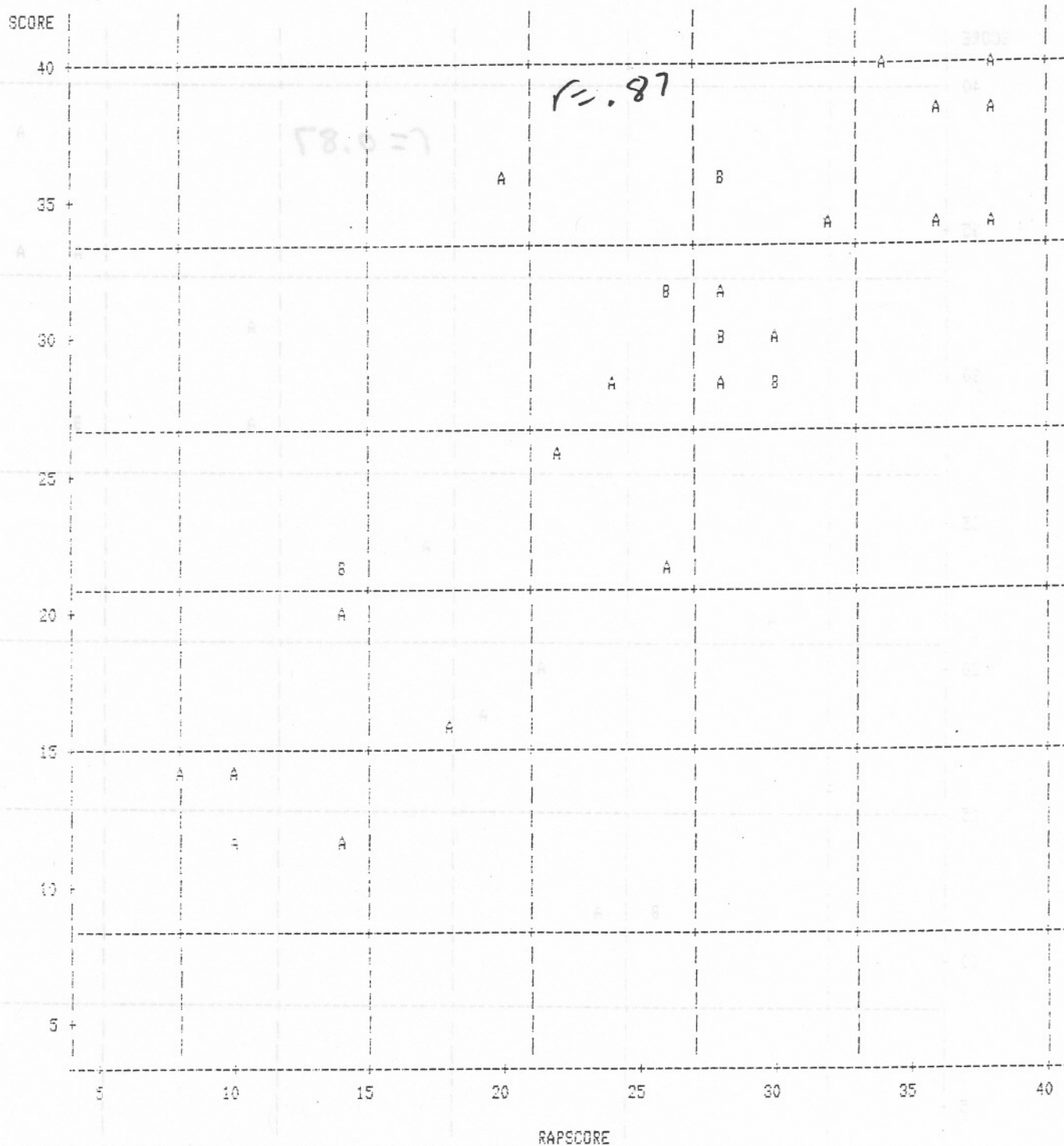
Plot of SCORE\*RAPSCORE. Legend: A = 1 obs, B = 2 obs, etc.



Correlations

RESTYPE=MAIN WBOSECMA=INFLOW

Plot of SCORE\*RAPSCORE. Legend: A = 1 obs, B = 2 obs, etc.



NOTE: 1 obs had missing values.

1994 Rap10 010 05 21 1994

# Figure 4. Run-of-River Reservoirs, Forebays (Spring Sampling)

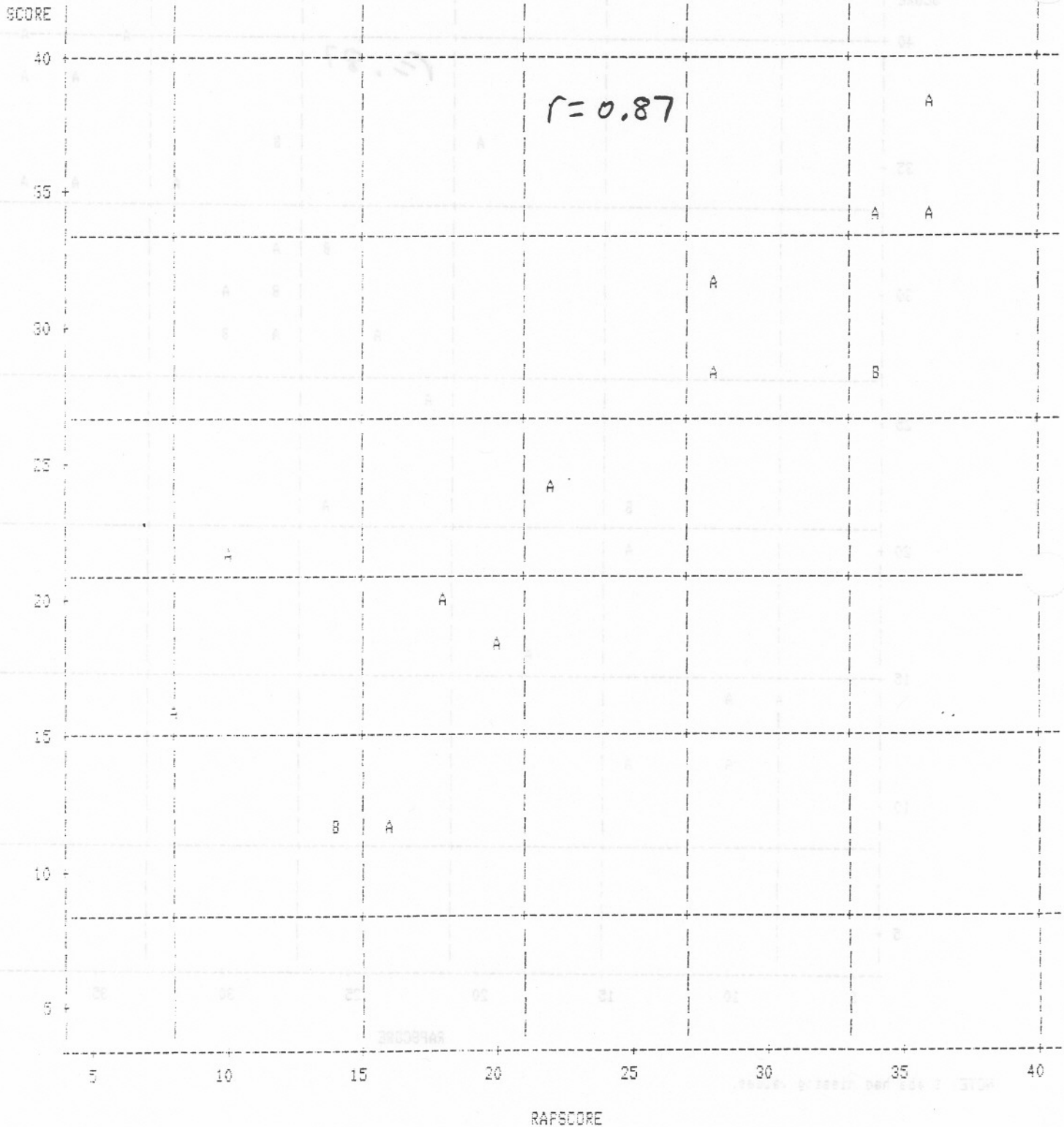
The SAS System

11:34 Wednesday, February 8, 1995

Correlations

RESTYPE=MAIN WBDSECNA=FOREBAY

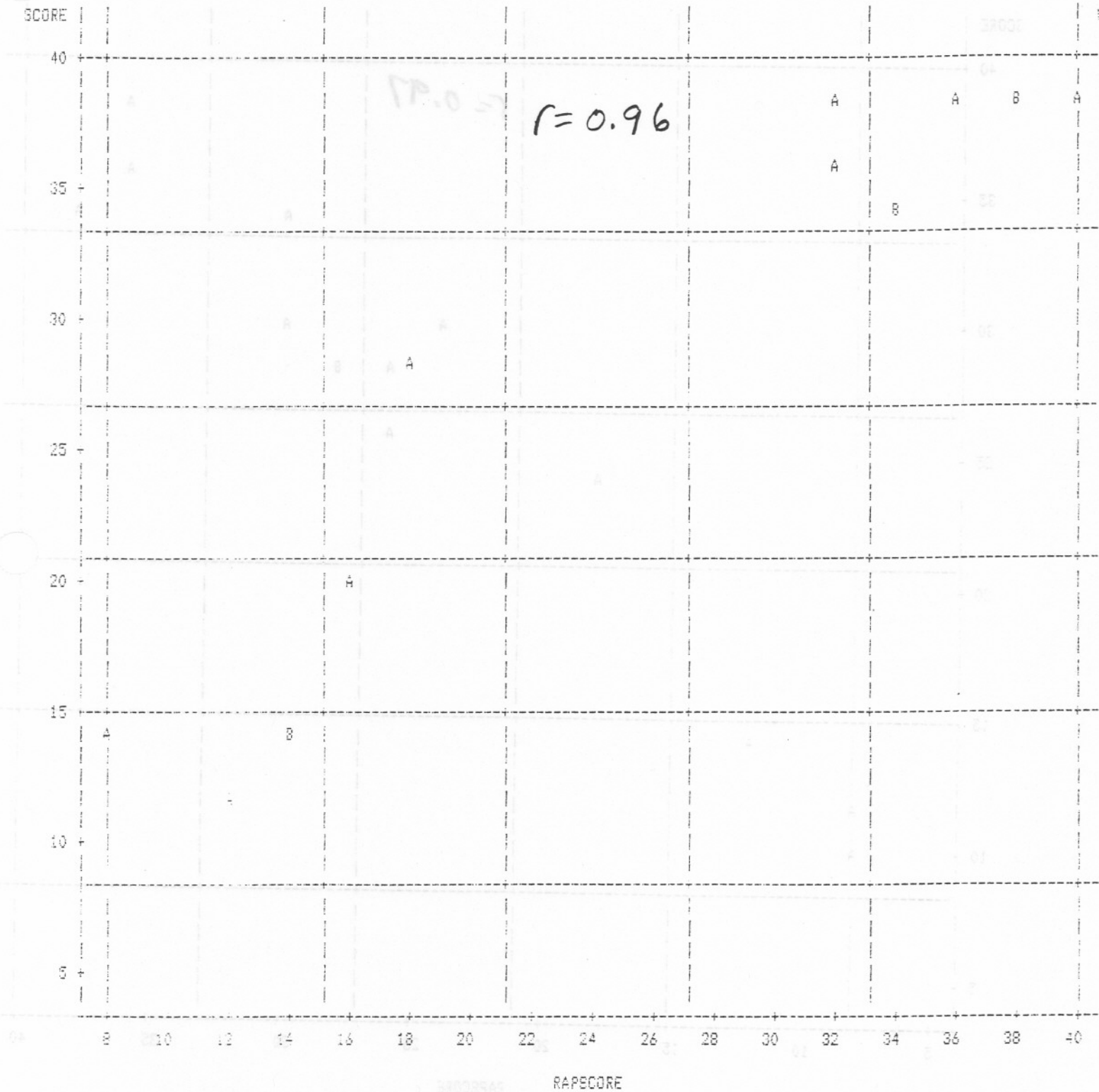
Plot of SCORE\*RAPSCORE. Legend: A = 1 obs, B = 2 obs, etc.



## Correlations

RESTYPE=MAIN WBOSECNA=TRANSITION

Plot of SCORE\*RAPSCORE. Legend: A = 1 obs, B = 2 obs, etc.





1994 Rapid Bio vs Standard

Figure 6. Run-of-River Reservoirs, Inflow

The SAS System

11:34 Wednesday, February 8, 1995

Correlations

RESTYPE=MAIN WDDSECNA=INFLOW

Plot of SCORE\*RAPSCORE. Legend: A = 1 obs, B = 2 obs, etc.

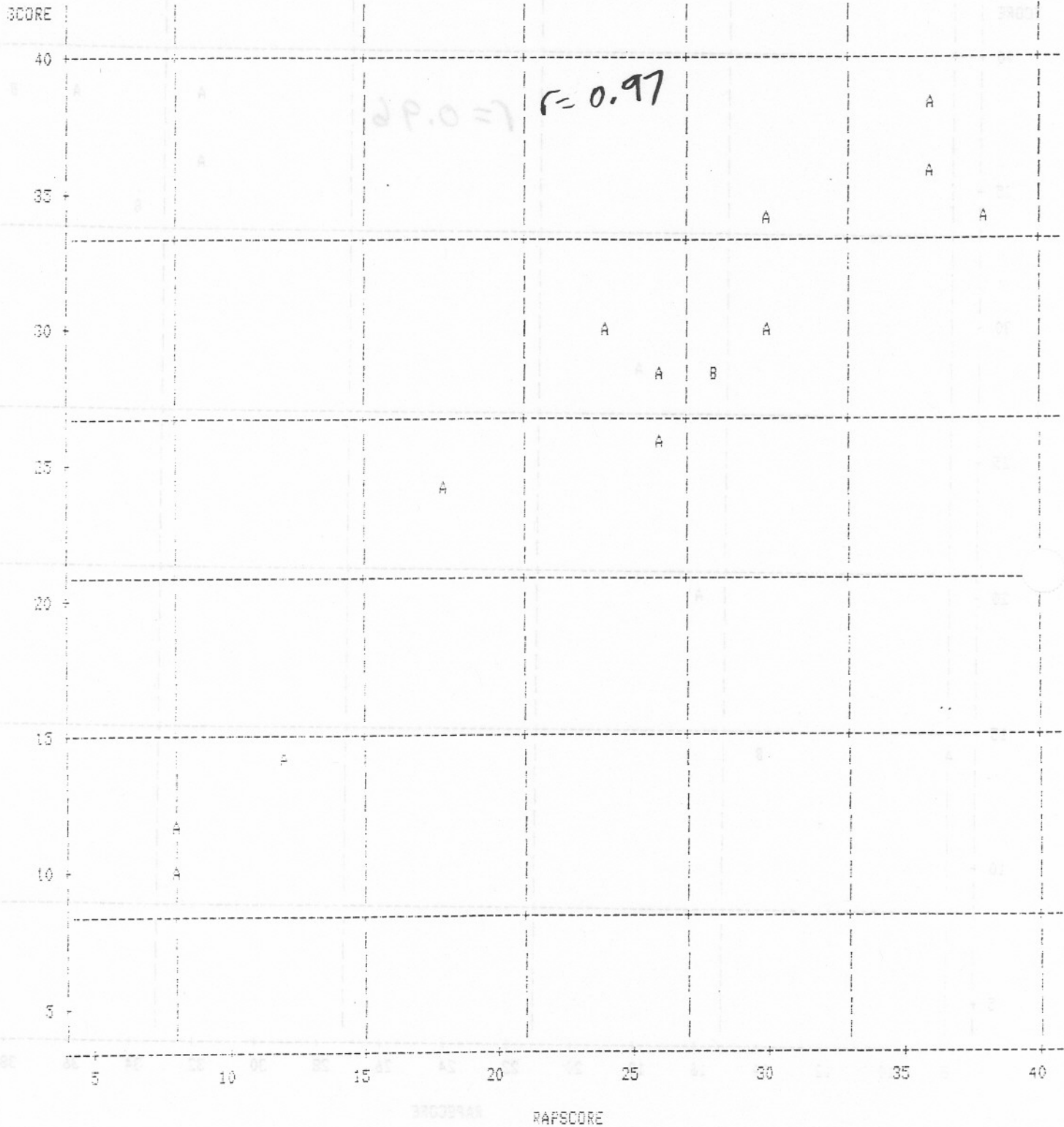


Table 1. Comparison of Benthos Scores -- Fall 1994 Sampling and Spring 1994 Sampling -- For Specific Reservoirs  
The SAS System

15:47 Tuesday, February 7, 1995

RESTYPE=MAIN W8DSECA=FOREBAY

| RESVORNA     | SITE       | YEAR  | BENIBI | RAPSCORE | TAXRAP | LONRAP | EPTRAP | NCTRAP | CHIRAP | TUBRAP | DOMRAP | ZERRAP |
|--------------|------------|-------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| BEAR CREEK   | PICK_EMBA_ | 8.4   | 94     | 16       | 3      | 1      | 1      | 1      | 1      | 3      | 1      | 5      |
| CHICKAMAUGA  | CHIC_FORE_ | 472.3 | 94     | 34       | 5      | 5      | 3      | 3      | 3      | 5      | 5      | 5      |
| CHICKAMAUGA  | CHIC_FORE_ | 472.3 | 94     | 38       | 5      | 5      | 3      | 5      | 5      | 5      | 5      | 5      |
| CHICKAMAUGA  | CHIC_FOREQ | 472.3 | 94     | 34       | 5      | 5      | 3      | 5      | 5      | 1      | 5      | 5      |
| FORT LOUDOUN | FORT_FORE_ | 605.5 | 94     | 14       | 1      | 1      | 1      | 1      | 3      | 1      | 1      | 3      |
| GUNTERSVILLE | GUNT_FORE_ | 350   | 94     | 28       | 3      | 5      | 3      | 3      | 3      | 3      | 3      | 5      |
| KENTUCKY     | KENT_EMBA_ | 7.4   | 94     | 22       | 5      | 3      | 1      | 1      | 1      | 5      | 1      | 5      |
| KENTUCKY     | KENT_FORE_ | 23    | 94     | 28       | 5      | 5      | 1      | 3      | 3      | 1      | 5      | 5      |
| MELTON HILL  | MELT_FORE_ | 24    | 94     | 14       | 1      | 3      | 3      | 1      | 1      | 3      | 1      | 1      |
| NICKAJACK    | NICK_FORE_ | 425.5 | 94     | 36       | 3      | 5      | 5      | 3      | 5      | 5      | 5      | 5      |
| NICKAJACK    | NICK_FORE_ | 425.5 | 94     | 38       | 5      | 5      | 3      | 5      | 5      | 5      | 5      | 5      |
| NICKAJACK    | NICK_FOREQ | 425.5 | 94     | 36       | 3      | 5      | 5      | 3      | 5      | 5      | 5      | 5      |
| PICKWICK     | PICK_FORE_ | 207.3 | 94     | 34       | 3      | 3      | 3      | 5      | 5      | 5      | 5      | 3      |
| TELLICO      | TELL_FORE_ | 1     | 94     | 8        | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      |
| WATTS BAR    | WATT_FORE_ | 531   | 94     | 10       | 1      | 3      | 1      | 1      | 1      | 1      | 1      | 1      |
| WHEELER      | WHEE_FORE_ | 277   | 94     | 18       | 3      | 3      | 1      | 1      | 1      | 3      | 1      | 5      |
| WILSON       | WILS_FORE_ | 260.8 | 94     | 20       | 3      | 3      | 1      | 1      | 1      | 5      | 1      | 5      |

RESTYPE=MAIN W8DSECA=INFLOW

| RESVORNA     | SITE       | YEAR  | BENIBI | RAPSCORE | TAXRAP | LONRAP | EPTRAP | NCTRAP | CHIRAP | TUBRAP | DOMRAP | ZERRAP |
|--------------|------------|-------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| CHICKAMAUGA  | CHIC_INFL_ | 518   | 94     | 26       | 1      | 5      | 1      | 3      | 5      | 5      | 1      | 5      |
| CHICKAMAUGA  | CHIC_INFL_ | 518   | 94     | 26       | 1      | 5      | 1      | 3      | 5      | 5      | 1      | 5      |
| FORT LOUDOUN | FORT_INFL_ | 652   | 94     | 8        | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      |
| GUNTERSVILLE | GUNT_INFL_ | 420   | 94     | 30       | 3      | 5      | 1      | 3      | 5      | 5      | 3      | 5      |
| KENTUCKY     | KENT_INFL_ | 15    | 94     | 26       | 3      | 5      | 1      | 1      | 5      | 3      | 3      | 5      |
| KENTUCKY     | KENT_INFL_ | 200   | 94     | 28       | 3      | 5      | 1      | 1      | 5      | 3      | 5      | 5      |
| MELTON HILL  | MELT_INFL_ | 58.8  | 94     | 8        | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      |
| NICKAJACK    | NICK_INFL_ | 469   | 94     | 38       | 5      | 5      | 5      | 5      | 5      | 5      | 3      | 5      |
| NICKAJACK    | NICK_INFL_ | 469   | 94     | 38       | 5      | 5      | 5      | 5      | 5      | 5      | 3      | 5      |
| NICKAJACK    | NICK_INFLQ | 469   | 94     | 36       | 5      | 5      | 5      | 3      | 5      | 5      | 3      | 5      |
| PICKWICK     | PICK_INFL_ | 253.2 | 94     | 28       | 3      | 3      | 3      | 1      | 5      | 5      | 3      | 5      |
| PICKWICK     | PICK_INFLQ | 253.2 | 94     | 24       | 3      | 3      | 1      | 1      | 5      | 5      | 1      | 5      |
| WATTS BAR    | WATT_INFL_ | 19    | 94     | 12       | 1      | 3      | 1      | 1      | 1      | 3      | 1      | 1      |
| WATTS BAR    | WATT_INFL_ | 600   | 94     | 18       | 1      | 1      | 1      | 1      | 3      | 5      | 1      | 5      |
| WHEELER      | WHEE_INFL_ | 347   | 94     | 36       | 5      | 5      | 3      | 3      | 5      | 5      | 5      | 5      |
| WILSON       | WILS_INFL_ | 273   | 94     | 30       | 3      | 5      | 1      | 3      | 5      | 5      | 3      | 5      |

RESTYPE=MAIN W8DSECA=TRANSITION

| RESVORNA     | SITE       | YEAR  | BENIBI | RAPSCORE | TAXRAP | LONRAP | EPTRAP | NCTRAP | CHIRAP | TUBRAP | DOMRAP | ZERRAP |
|--------------|------------|-------|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| CHICKAMAUGA  | CHIC_EMBA_ | 8.5   | 94     | 18       | 1      | 3      | 3      | 1      | 5      | 1      | 3      | 1      |
| CHICKAMAUGA  | CHIC_EMBA_ | 8.5   | 94     | 36       | 5      | 5      | 5      | 3      | 5      | 3      | 5      | 5      |
| CHICKAMAUGA  | CHIC_EMBAQ | 8.5   | 94     | 16       | 1      | 3      | 1      | 1      | 5      | 1      | 3      | 1      |
| CHICKAMAUGA  | CHIC_TRAN_ | 490.5 | 94     | 38       | 5      | 5      | 5      | 3      | 5      | 5      | 3      | 5      |
| CHICKAMAUGA  | CHIC_TRAN_ | 490.5 | 94     | 38       | 5      | 5      | 5      | 5      | 5      | 5      | 3      | 5      |
| CHICKAMAUGA  | CHIC_TRANQ | 490.5 | 94     | 40       | 5      | 5      | 5      | 5      | 5      | 5      | 3      | 5      |
| FORT LOUDOUN | FORT_TRAN_ | 624.5 | 94     | 14       | 1      | 3      | 1      | 1      | 1      | 1      | 1      | 3      |
| GUNTERSVILLE | GUNT_TRAN_ | 375.2 | 94     | 38       | 5      | 5      | 5      | 5      | 5      | 5      | 3      | 5      |
| KENTUCKY     | KENT_TRAN_ | 15    | 94     | 34       | 3      | 5      | 3      | 3      | 5      | 5      | 5      | 5      |

All scores based on field identifications (repeid bioassessment protocols)

Table 2. Sorensen's Quotient of Similarity

Sheet 1

Similarity  
(Sorensen)Standard  
Full

|      |    | CHIC<br>IN | CHIF<br>IN |            |  |  |
|------|----|------------|------------|------------|--|--|
| CHIC | IN | 1.00       |            |            |  |  |
| CHIF | IN | 0.42       | 1.00       |            |  |  |
|      |    | CHIC<br>EM | CHIF<br>EM | CHIQ<br>EM |  |  |
| CHIC | EM | 1.00       |            |            |  |  |
| CHIF | EM | 0.63       | 1.00       |            |  |  |
| CHIQ | EM | 0.68       | 0.76       | 1.00       |  |  |
|      |    | CHIC<br>FO | CHIF<br>FO | CHIQ<br>FO |  |  |
| CHIC | FO | 1.00       |            |            |  |  |
| CHIF | FO | 0.52       | 1.00       |            |  |  |
| CHIQ | FO | 0.75       | 0.62       | 1.00       |  |  |
|      |    | CHIC<br>TR | CHIF<br>TR | CHIQ<br>TR |  |  |
| CHIC | TR | 1.00       |            |            |  |  |
| CHIF | TR | 0.68       | 1.00       |            |  |  |
| CHIQ | TR | 0.75       | 0.67       | 1.00       |  |  |
|      |    | NICF<br>FO | NICK<br>FO | NICQ<br>FO |  |  |
| NICF | FO | 1.00       |            |            |  |  |
| NICK | FO | 0.61       | 1.00       |            |  |  |
| NICQ | FO | 0.69       | 0.65       | 1.00       |  |  |
|      |    | NICF<br>IN | NICK<br>IN | NICQ<br>IN |  |  |
| NICF | IN | 1.00       |            |            |  |  |
| NICK | IN | 0.57       | 1.00       |            |  |  |
| NICQ | IN | 0.55       | 0.62       | 1.00       |  |  |

DA

Full was about 0.42  
to spring as spring 0.42  
was to one and two

**Section 4**  
**Benthic Macroinvertebrate Community**

**Appendix B.**

**Mean Density for Each Species at  
Each Sample Location in 1994**



## Section 4

### Benthic Macroinvertebrate Community

#### Appendix B

#### Mean Density for Each Species at

#### Each Sample Location in 1994

| OBS | STREAM             | STREAMMI | STREAMMI | SAMCNT | SITECNT | SUMAREA | LATD | LATM | LATS | LONGD | LONGH |
|-----|--------------------|----------|----------|--------|---------|---------|------|------|------|-------|-------|
| 1   | BEAR CR            | 8.4      | 8.4      | 10     | 1       | 0.60    | 34   | 49   | 12   | 88    | 5     |
| 2   | BEAR CR            | 75.0     | 75.0     | 10     | 2       | 0.60    | 34   | 23   | 56   | 87    | 58    |
| 3   | BEECH R            | 36.0     | 36.0     | 10     | 3       | 0.60    | 35   | 40   | 31   | 88    | 25    |
| 4   | TOCCOA R           | 54.1     | 54.1     | 20     | 4       | 1.20    | 34   | 52   | 12   | 84    | 16    |
| 5   | S FK HOLSTON R     | 19.0     | 19.0     | 10     | 5       | 0.85    | 36   | 26   | 18   | 82    | 26    |
| 6   | S FK HOLSTON R     | 27.0     | 27.0     | 10     | 6       | 1.10    | 36   | 28   | 9    | 82    | 20    |
| 7   | WATAUGA R          | 6.5      | 6.5      | 10     | 7       | 0.65    | 36   | 24   | 48   | 82    | 22    |
| 8   | CEDAR CR           | 25.2     | 25.2     | 10     | 8       | 0.60    | 34   | 32   | 14   | 87    | 57    |
| 9   | HIWASSEE R         | 122.0    | 122.0    | 10     | 9       | 0.70    | 35   | 0    | 21   | 83    | 47    |
| 10  | SHOOTING CR        | 1.5      | 1.5      | 10     | 10      | 0.70    | 35   | 1    | 14   | 83    | 46    |
| 11  | HOLSTON R          | 53.0     | 53.0     | 10     | 11      | 0.60    | 36   | 10   | 1    | 83    | 29    |
| 12  | HOLSTON R          | 91.0     | 91.0     | 10     | 12      | 0.60    | 36   | 21   | 29   | 83    | 10    |
| 13  | TENNESSEE          | 472.3    | 472.3    | 20     | 13      | 1.20    | 35   | 6    | 13   | 85    | 12    |
| 14  | TENNESSEE          | 490.5    | 490.5    | 20     | 14      | 1.20    | 35   | 17   | 55   | 85    | 4     |
| 15  | TENNESSEE          | 518.0    | 518.0    | 10     | 15      | 0.60    | 35   | 32   | 16   | 84    | 52    |
| 16  | HIWASSEE R         | 8.5      | 8.5      | 20     | 16      | 1.20    | 35   | 21   | 38   | 84    | 53    |
| 17  | FRENCH BROAD R     | 33.0     | 33.0     | 10     | 17      | 0.60    | 35   | 57   | 52   | 83    | 31    |
| 18  | FRENCH BROAD R     | 51.0     | 51.0     | 10     | 18      | 0.60    | 35   | 59   | 49   | 83    | 15    |
| 19  | LITTLE TENNESSEE R | 81.5     | 81.5     | 10     | 19      | 0.65    | 35   | 24   | 36   | 83    | 33    |
| 20  | TUCKASEGEE R       | 3.0      | 3.0      | 10     | 20      | 0.60    | 35   | 26   | 27   | 83    | 33    |
| 21  | TENNESSEE          | 605.5    | 605.5    | 10     | 21      | 0.65    | 35   | 45   | 46   | 84    | 12    |
| 22  | TENNESSEE          | 624.6    | 624.6    | 10     | 22      | 0.60    | 35   | 49   | 49   | 84    | 3     |
| 23  | TENNESSEE          | 652.0    | 652.0    | 10     | 23      | 1.10    | 35   | 57   | 31   | 83    | 51    |
| 24  | S FK HOLSTON R     | 8.7      | 8.7      | 10     | 24      | 0.60    | 36   | 30   | 10   | 82    | 30    |
| 25  | TENNESSEE          | 350.0    | 350.0    | 10     | 25      | 0.60    | 34   | 25   | 25   | 86    | 22    |
| 26  | TENNESSEE          | 375.2    | 375.2    | 10     | 26      | 0.60    | 34   | 33   | 15   | 86    | 7     |
| 27  | TENNESSEE          | 420.0    | 420.0    | 10     | 27      | 1.10    | 35   | 1    | 45   | 85    | 40    |
| 28  | HIWASSEE R         | 77.0     | 77.0     | 10     | 28      | 0.70    | 35   | 9    | 58   | 84    | 10    |
| 29  | HIWASSEE R         | 85.0     | 85.0     | 20     | 29      | 1.55    | 35   | 6    | 27   | 84    | 8     |
| 30  | HIWASSEE R         | 90.0     | 90.0     | 10     | 30      | 0.60    | 35   | 5    | 31   | 84    | 5     |
| 31  | TENNESSEE          | 15.0     | 15.0     | 10     | 31      | 1.10    | 37   | 3    | 37   | 88    | 22    |
| 32  | TENNESSEE          | 23.0     | 23.0     | 10     | 32      | 0.60    | 37   | 0    | 12   | 88    | 15    |
| 33  | TENNESSEE          | 85.0     | 85.0     | 20     | 33      | 1.20    | 36   | 12   | 33   | 87    | 56    |
| 34  | TENNESSEE          | 200.0    | 200.0    | 10     | 34      | 1.10    | 35   | 7    | 39   | 88    | 18    |
| 35  | BIG SANDY R        | 7.4      | 7.4      | 10     | 35      | 0.60    | 36   | 20   | 31   | 88    | 5     |
| 36  | LITTLE BEAR CR     | 12.5     | 12.5     | 20     | 36      | 1.20    | 34   | 27   | 14   | 87    | 58    |
| 37  | CLINCH R           | 24.0     | 24.0     | 10     | 37      | 0.60    | 35   | 52   | 43   | 84    | 17    |
| 38  | CLINCH R           | 45.0     | 45.0     | 10     | 38      | 0.60    | 35   | 59   | 30   | 84    | 10    |
| 39  | CLINCH R           | 58.8     | 58.8     | 10     | 39      | 1.00    | 36   | 5    | 45   | 84    | 7     |
| 40  | TENNESSEE          | 425.5    | 425.5    | 20     | 40      | 1.20    | 35   | 0    | 3    | 85    | 36    |
| 41  | TENNESSEE          | 469.0    | 469.0    | 20     | 41      | 2.20    | 35   | 5    | 46   | 85    | 15    |
| 42  | DUCK R             | 249.5    | 249.5    | 10     | 42      | 0.60    | 35   | 28   | 21   | 86    | 14    |
| 43  | CLINCH R           | 80.4     | 80.4     | 10     | 43      | 1.10    | 36   | 13   | 46   | 84    | 5     |
| 44  | CLINCH R           | 125.0    | 125.0    | 10     | 44      | 0.65    | 36   | 21   | 37   | 83    | 41    |
| 45  | POWELL R           | 30.0     | 30.0     | 10     | 45      | 0.60    | 36   | 24   | 36   | 83    | 50    |
| 46  | NOTTELY R          | 23.5     | 23.5     | 10     | 46      | 0.85    | 34   | 56   | 17   | 84    | 5     |
| 47  | NOTTELY R          | 31.0     | 31.0     | 20     | 47      | 2.20    | 34   | 54   | 31   | 84    | 2     |
| 48  | OCOEE R            | 12.5     | 12.5     | 20     | 48      | 1.20    | 35   | 5    | 54   | 84    | 38    |
| 49  | TENNESSEE          | 207.3    | 207.3    | 10     | 49      | 0.60    | 35   | 4    | 14   | 88    | 14    |
| 50  | TENNESSEE          | 230.0    | 230.0    | 10     | 50      | 0.70    | 34   | 53   | 49   | 88    | 0     |
| 51  | TENNESSEE          | 253.2    | 253.2    | 20     | 51      | 2.20    | 34   | 45   | 43   | 87    | 43    |
| 52  | S FK HOLSTON R     | 51.0     | 51.0     | 10     | 52      | 1.10    | 36   | 31   | 31   | 82    | 4     |
| 53  | S FK HOLSTON R     | 62.5     | 62.5     | 10     | 53      | 1.05    | 36   | 35   | 26   | 82    | 0     |
| 54  | LITTLE TENNESSEE R | 1.0      | 1.0      | 10     | 54      | 0.60    | 35   | 46   | 21   | 84    | 15    |
| 55  | LITTLE TENNESSEE R | 15.0     | 15.0     | 10     | 55      | 0.60    | 35   | 38   | 0    | 84    | 15    |
| 56  | ELK R              | 135.0    | 135.0    | 10     | 56      | 0.60    | 35   | 13   | 4    | 86    | 16    |
| 57  | ELK R              | 150.0    | 150.0    | 10     | 57      | 0.60    | 35   | 12   | 58   | 86    | 11    |
| 58  | WATAUGA R          | 37.4     | 37.4     | 10     | 58      | 1.10    | 36   | 18   | 53   | 82    | 7     |
| 59  | WATAUGA R          | 45.5     | 45.5     | 20     | 59      | 1.20    | 36   | 19   | 52   | 81    | 59    |
| 60  | TENNESSEE          | 531.0    | 531.0    | 10     | 60      | 0.60    | 35   | 36   | 10   | 84    | 47    |
| 61  | TENNESSEE          | 560.8    | 560.8    | 10     | 61      | 0.60    | 35   | 49   | 50   | 84    | 36    |
| 62  | TENNESSEE          | 600.0    | 600.0    | 10     | 62      | 1.10    | 35   | 46   | 30   | 84    | 16    |
| 63  | CLINCH R           | 19.0     | 19.0     | 10     | 63      | 1.10    | 35   | 53   | 57   | 84    | 21    |
| 64  | TENNESSEE          | 277.0    | 277.0    | 10     | 64      | 0.60    | 34   | 48   | 42   | 87    | 20    |
| 65  | TENNESSEE          | 295.9    | 295.9    | 10     | 65      | 0.60    | 34   | 40   | 58   | 87    | 6     |
| 66  | TENNESSEE          | 347.0    | 347.0    | 10     | 66      | 1.10    | 34   | 26   | 24   | 86    | 25    |
| 67  | ELK R              | 6.0      | 6.0      | 10     | 67      | 0.60    | 34   | 48   | 53   | 87    | 12    |
| 68  | TENNESSEE          | 260.8    | 260.8    | 10     | 68      | 0.60    | 34   | 48   | 55   | 87    | 36    |
| 69  | TENNESSEE          | 273.0    | 273.0    | 10     | 69      | 0.65    | 34   | 48   | 2    | 87    | 24    |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | BEAR C<br>BEAR C<br>8.4 | BEAR C<br>BEAR C<br>75.0 |
|--------------------------------|-------------------------|--------------------------|
| SPECIES                        |                         |                          |
| Nematoda                       | 7                       | 23                       |
| Oligochaeta                    |                         |                          |
| Haplotaxida                    |                         |                          |
| Tubificidae                    | 280                     | 40                       |
| Branchiura sowerbyi            | 43                      | .                        |
| Limnodrilus hoffmeisteri       | 7                       | .                        |
| Insecta                        |                         |                          |
| Ephemeroptera                  |                         |                          |
| Ephemeridae                    |                         |                          |
| Hexagenia limbata              | .                       | 3                        |
| Trichoptera                    |                         |                          |
| Leptoceridae                   |                         |                          |
| Ceraclea sp.                   | .                       | 2                        |
| Oecetis sp.                    | .                       | 2                        |
| Diptera                        |                         |                          |
| Ceratopogonidae                |                         |                          |
| Bezzia sp.                     | 3                       | 3                        |
| Chironomidae                   | 2                       | 13                       |
| Ablabesmyia annulata           | 2                       | 3                        |
| Ablabesmyia sp.                |                         | 2                        |
| Chironomus sp.                 | 167                     | 62                       |
| Coelotanypus tricolor          | 168                     | .                        |
| Einfeldia sp.                  | 447                     | .                        |
| Glyptotendipes sp.             | .                       | 2                        |
| Nilotanypus sp.                | .                       | 2                        |
| Pagastiella sp.                | .                       | 2                        |
| Phaenopsectra sp.              | .                       | 12                       |
| Procladius sp.                 | 65                      | 68                       |
| Zalutschia zalutschicola       | .                       | 2                        |
| Arachnoidea                    |                         |                          |
| Hydrachnellae                  |                         |                          |
| Hygrobatidae                   |                         |                          |
| Atractides sp.                 | 2                       | .                        |
| Unionicolidae                  |                         |                          |
| Unionicola sp.                 | 2                       | .                        |
| Bivalvia                       |                         |                          |
| Veneroidea                     |                         |                          |
| Corbiculidae                   |                         |                          |
| Corbicula fluminea             | 2                       | .                        |
| Sphaeriidae                    | 5                       | .                        |
| Number of samples              | 10                      | 10                       |
| Sum                            | 1202                    | 241                      |
| Number of species              | 15                      | 16                       |
| Number of ept taxa             | 0                       | 3                        |
| Sum of area                    | 0.60                    | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM | BEECH<br>BEECH<br>STREAMMI |
|--------------------------|--------------------|----------------------------|
| SPECIES                  |                    |                            |
| Amatoda                  |                    | 27                         |
| igochaeta                |                    |                            |
| Haplotaxida              |                    |                            |
| Tubificidae              |                    | 67                         |
| Limnodrilus hoffmeisteri |                    | 13                         |
| Insecta                  |                    |                            |
| Ephemeroptera            |                    |                            |
| Ephemeridae              |                    |                            |
| Hexagenia limbata        |                    | 3                          |
| Trichoptera              |                    |                            |
| Leptoceridae             |                    |                            |
| Oecetis sp.              |                    | 3                          |
| Diptera                  |                    |                            |
| Ceratopogonidae          |                    |                            |
| Bezzia sp.               |                    | 30                         |
| Chironomidae             |                    | 10                         |
| Ablabesmyia annulata     |                    | 3                          |
| Chironomus sp.           |                    | 848                        |
| Coelotanypus sp.         |                    | 35                         |
| Cryptochironomus fulvus  |                    | 15                         |
| Glyptotendipes sp.       |                    | 507                        |
| Procladius sp.           |                    | 53                         |
| Arachnoidea              |                    |                            |
| Hydrachnellae            |                    | 8                          |
| Bivalvia                 |                    |                            |
| Veneroida                |                    |                            |
| Sphaeriidae              |                    | 22                         |
| Number of samples        |                    | 10                         |
| Sum                      |                    | 1644                       |
| Number of species        |                    | 15                         |
| Number of ept taxa       |                    | 2                          |
| Sum of area              |                    | 0.60                       |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM | BEECH<br>BEECH<br>STREAMMI |
|--------------------------|--------------------|----------------------------|
| SPECIES                  |                    |                            |
| Amatoda                  |                    | 27                         |
| igochaeta                |                    |                            |
| Haplotaxida              |                    |                            |
| Tubificidae              |                    | 67                         |
| Limnodrilus hoffmeisteri |                    | 13                         |
| Insecta                  |                    |                            |
| Ephemeroptera            |                    |                            |
| Ephemeridae              |                    |                            |
| Hexagenia limbata        |                    | 3                          |
| Trichoptera              |                    |                            |
| Leptoceridae             |                    |                            |
| Oecetis sp.              |                    | 3                          |
| Diptera                  |                    |                            |
| Ceratopogonidae          |                    |                            |
| Bezzia sp.               |                    | 30                         |
| Chironomidae             |                    | 10                         |
| Ablabesmyia annulata     |                    | 3                          |
| Chironomus sp.           |                    | 848                        |
| Coelotanypus sp.         |                    | 35                         |
| Cryptochironomus fulvus  |                    | 15                         |
| Glyptotendipes sp.       |                    | 507                        |
| Procladius sp.           |                    | 53                         |
| Arachnoidea              |                    |                            |
| Hydrachnellae            |                    | 8                          |
| Bivalvia                 |                    |                            |
| Veneroida                |                    |                            |
| Sphaeriidae              |                    | 22                         |
| Number of samples        |                    | 10                         |
| Sum                      |                    | 1644                       |
| Number of species        |                    | 15                         |
| Number of ept taxa       |                    | 2                          |
| Sum of area              |                    | 0.60                       |



## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                   | RESVORNA<br>STREAM<br>STREAMMI | BLUE R<br>TOCCOA<br>54.1 |
|---------------------------|--------------------------------|--------------------------|
| Nematoda                  |                                | 3                        |
| Oligochaeta               |                                |                          |
| Haplotaxida               |                                |                          |
| Tubificidae               |                                | 106                      |
| Limnodrilus hoffmeisteri  |                                | 18                       |
| Quistadrilus multisetosus |                                | 10                       |
| Crustacea                 |                                |                          |
| Amphipoda                 |                                |                          |
| Crangonyctidae            |                                |                          |
| Crangonyx sp.             |                                | 2                        |
| Insecta                   |                                |                          |
| Ephemeroptera             |                                |                          |
| Ephemeridae               |                                |                          |
| Hexagenia limbata         |                                | 13                       |
| Trichoptera               |                                |                          |
| Leptoceridae              |                                |                          |
| Oecetis sp.               |                                | 1                        |
| Diptera                   |                                |                          |
| Ceratopogonidae           |                                |                          |
| Bezzia sp.                |                                | 8                        |
| Chironomidae              |                                |                          |
| Chironomus sp.            |                                | 71                       |
| Cryptochironomus sp.      |                                | 1                        |
| Dicrotendipes sp.         |                                | 1                        |
| Polypedilum halterale     |                                | 1                        |
| Procladius sp.            |                                | 42                       |
| Bivalvia                  |                                |                          |
| Veneroida                 |                                |                          |
| Sphaeriidae               |                                | 136                      |
| Number of samples         |                                | 20                       |
| Sum                       |                                | 413                      |
| Number of species         |                                | 14                       |
| Number of ept taxa        |                                | 2                        |
| Sum of area               |                                | 1.20                     |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                   | RESVORNA<br>STREAM<br>STREAMMI | BLUE R<br>TOCCOA<br>54.1 |
|---------------------------|--------------------------------|--------------------------|
| Nematoda                  |                                | 3                        |
| Oligochaeta               |                                |                          |
| Haplotaxida               |                                |                          |
| Tubificidae               |                                | 106                      |
| Limnodrilus hoffmeisteri  |                                | 18                       |
| Quistadrilus multisetosus |                                | 10                       |
| Crustacea                 |                                |                          |
| Amphipoda                 |                                |                          |
| Crangonyctidae            |                                |                          |
| Crangonyx sp.             |                                | 2                        |
| Insecta                   |                                |                          |
| Ephemeroptera             |                                |                          |
| Ephemeridae               |                                |                          |
| Hexagenia limbata         |                                | 13                       |
| Trichoptera               |                                |                          |
| Leptoceridae              |                                |                          |
| Oecetis sp.               |                                | 1                        |
| Diptera                   |                                |                          |
| Ceratopogonidae           |                                |                          |
| Bezzia sp.                |                                | 8                        |
| Chironomidae              |                                |                          |
| Chironomus sp.            |                                | 71                       |
| Cryptochironomus sp.      |                                | 1                        |
| Dicrotendipes sp.         |                                | 1                        |
| Polypedilum halterale     |                                | 1                        |
| Procladius sp.            |                                | 42                       |
| Bivalvia                  |                                |                          |
| Veneroida                 |                                |                          |
| Sphaeriidae               |                                | 136                      |
| Number of samples         |                                | 20                       |
| Sum                       |                                | 413                      |
| Number of species         |                                | 14                       |
| Number of ept taxa        |                                | 2                        |
| Sum of area               |                                | 1.20                     |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | BOONE<br>S FK H<br>19.0 | BOONE<br>S FK H<br>27.0 | BOONE<br>WATAUG<br>6.5 |
|--------------------------|--------------------------------|-------------------------|-------------------------|------------------------|
| matoda                   |                                | 1                       | .                       | 2                      |
| ligochaeta               |                                |                         |                         |                        |
| Haplotaxida              |                                |                         |                         |                        |
| Tubificidae              |                                | 431                     | 134                     | 102                    |
| Limnodrilus sp.          |                                | 114                     | .                       | .                      |
| Limnodrilus hoffmeisteri |                                | 255                     | 180                     | 35                     |
| Crustacea                |                                |                         |                         |                        |
| Amphipoda                |                                |                         |                         |                        |
| Gammaridae               |                                |                         |                         |                        |
| Gammarus sp.             |                                | 1                       | .                       | .                      |
| Insecta                  |                                |                         |                         |                        |
| Diptera                  |                                |                         |                         |                        |
| Chironomidae             |                                | .                       | 1                       | .                      |
| Chironomus sp.           |                                | 28                      | 136                     | 25                     |
| Cryptochironomus sp.     |                                | .                       | 1                       | 3                      |
| Dicrotendipes sp.        |                                | .                       | 1                       | .                      |
| Harnischia sp.           |                                | .                       | .                       | 2                      |
| Phaenopsectra sp.        |                                | .                       | .                       | 2                      |
| Polypedilum sp.          |                                | .                       | 1                       | .                      |
| Procladius sp.           |                                | 13                      | 3                       | 38                     |
| Tanytarsus sp.           |                                | .                       | 1                       | 2                      |
| Tribelos sp.             |                                | .                       | 2                       | .                      |
| Arachnoidea              |                                |                         |                         |                        |
| Hydrachnellae            |                                |                         |                         |                        |
| Hygrobatidae             |                                |                         |                         |                        |
| Atractides sp.           |                                | 1                       | .                       | 2                      |
| Gastropoda               |                                |                         |                         |                        |
| Basommatophora           |                                |                         |                         |                        |
| Physidae                 |                                |                         |                         |                        |
| Physella sp.             |                                | 1                       | .                       | .                      |
| Bivalvia                 |                                |                         |                         |                        |
| Veneroida                |                                |                         |                         |                        |
| Corbiculidae             |                                |                         |                         |                        |
| Corbicula fluminea       |                                | .                       | .                       | 17                     |
| Sphaeriidae              |                                | .                       | .                       | 6                      |
| Number of samples        |                                | 10                      | 10                      | 10                     |
| Sum                      |                                | 845                     | 460                     | 236                    |
| Number of species        |                                | 9                       | 10                      | 12                     |
| Number of ept taxa       |                                | 0                       | 0                       | 0                      |
| Sum of area              |                                | 0.85                    | 1.10                    | 0.65                   |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | BOONE<br>S FK H<br>19.0 | BOONE<br>S FK H<br>27.0 | BOONE<br>WATAUG<br>6.5 |
|--------------------------|--------------------------------|-------------------------|-------------------------|------------------------|
| matoda                   |                                | 1                       | .                       | 2                      |
| ligochaeta               |                                |                         |                         |                        |
| Haplotaxida              |                                |                         |                         |                        |
| Tubificidae              |                                | 431                     | 134                     | 102                    |
| Limnodrilus sp.          |                                | 114                     | .                       | .                      |
| Limnodrilus hoffmeisteri |                                | 255                     | 180                     | 35                     |
| Crustacea                |                                |                         |                         |                        |
| Amphipoda                |                                |                         |                         |                        |
| Gammaridae               |                                |                         |                         |                        |
| Gammarus sp.             |                                | 1                       | .                       | .                      |
| Insecta                  |                                |                         |                         |                        |
| Diptera                  |                                |                         |                         |                        |
| Chironomidae             |                                | .                       | 1                       | .                      |
| Chironomus sp.           |                                | 28                      | 136                     | 25                     |
| Cryptochironomus sp.     |                                | .                       | 1                       | 3                      |
| Dicrotendipes sp.        |                                | .                       | 1                       | .                      |
| Harnischia sp.           |                                | .                       | .                       | 2                      |
| Phaenopsectra sp.        |                                | .                       | .                       | 2                      |
| Polypedilum sp.          |                                | .                       | 1                       | .                      |
| Procladius sp.           |                                | 13                      | 3                       | 38                     |
| Tanytarsus sp.           |                                | .                       | 1                       | 2                      |
| Tribelos sp.             |                                | .                       | 2                       | .                      |
| Arachnoidea              |                                |                         |                         |                        |
| Hydrachnellae            |                                |                         |                         |                        |
| Hygrobatidae             |                                |                         |                         |                        |
| Atractides sp.           |                                | 1                       | .                       | 2                      |
| Gastropoda               |                                |                         |                         |                        |
| Basommatophora           |                                |                         |                         |                        |
| Physidae                 |                                |                         |                         |                        |
| Physella sp.             |                                | 1                       | .                       | .                      |
| Bivalvia                 |                                |                         |                         |                        |
| Veneroida                |                                |                         |                         |                        |
| Corbiculidae             |                                |                         |                         |                        |
| Corbicula fluminea       |                                | .                       | .                       | 17                     |
| Sphaeriidae              |                                | .                       | .                       | 6                      |
| Number of samples        |                                | 10                      | 10                      | 10                     |
| Sum                      |                                | 845                     | 460                     | 236                    |
| Number of species        |                                | 9                       | 10                      | 12                     |
| Number of ept taxa       |                                | 0                       | 0                       | 0                      |
| Sum of area              |                                | 0.85                    | 1.10                    | 0.65                   |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | CEDAR<br>CEDAR<br>25.2 |
|--------------------------|--------------------------------|------------------------|
| SPECIES                  |                                |                        |
| Nematoda                 |                                | 17                     |
| Oligochaeta              |                                |                        |
| Haplotaxida              |                                |                        |
| Naididae                 |                                |                        |
| Nais communis            |                                | 2                      |
| Tubificidae              |                                | 147                    |
| Branchiura sowerbyi      |                                | 12                     |
| Limnodrilus hoffmeisteri |                                | 18                     |
| Insecta                  |                                |                        |
| Ephemeroptera            |                                |                        |
| Ephemeridae              |                                |                        |
| Hexagenia limbata        |                                | 25                     |
| Trichoptera              |                                |                        |
| Leptoceridae             |                                |                        |
| Oecetis sp.              |                                | 2                      |
| Diptera                  |                                |                        |
| Ceratopogonidae          |                                |                        |
| Bezzia sp.               |                                | 5                      |
| Chironomidae             |                                | 8                      |
| Ablabesmyia sp.          |                                | 3                      |
| Axarus sp.               |                                | 3                      |
| Chironomus sp.           |                                | 70                     |
| Coelotanypus tricolor    |                                | 2                      |
| Cryptochironomus sp.     |                                | 13                     |
| Dicrotendipes sp.        |                                | 2                      |
| Pagastiella sp.          |                                | 7                      |
| Polypedilum sp.          |                                | 18                     |
| Procladius sp.           |                                | 7                      |
| Tanytarsus sp.           |                                | 3                      |
| Tribelos sp.             |                                | 2                      |
| Bivalvia                 |                                |                        |
| Veneroida                |                                |                        |
| Corbiculidae             |                                |                        |
| Corbicula fluminea       |                                | 3                      |
| Sphaeriidae              |                                | 75                     |
| Number of samples        |                                | 10                     |
| Sum                      |                                | 444                    |
| Number of species        |                                | 22                     |
| Number of ept taxa       |                                | 2                      |
| Sum of area              |                                | 0.60                   |

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | 2 PK H<br>27.8 | 2 PK H<br>19.8 | 2 PK H<br>27.8 | 2 PK H<br>19.8 |
|--------------------------|--------------------------------|----------------|----------------|----------------|----------------|
| Nematoda                 |                                |                |                |                |                |
| Oligochaeta              |                                |                |                |                |                |
| Haplotaxida              |                                |                |                |                |                |
| Naididae                 |                                |                |                |                |                |
| Nais communis            |                                |                |                |                |                |
| Tubificidae              |                                |                |                |                |                |
| Branchiura sowerbyi      |                                |                |                |                |                |
| Limnodrilus hoffmeisteri |                                |                |                |                |                |
| Insecta                  |                                |                |                |                |                |
| Ephemeroptera            |                                |                |                |                |                |
| Ephemeridae              |                                |                |                |                |                |
| Hexagenia limbata        |                                |                |                |                |                |
| Trichoptera              |                                |                |                |                |                |
| Leptoceridae             |                                |                |                |                |                |
| Oecetis sp.              |                                |                |                |                |                |
| Diptera                  |                                |                |                |                |                |
| Ceratopogonidae          |                                |                |                |                |                |
| Bezzia sp.               |                                |                |                |                |                |
| Chironomidae             |                                |                |                |                |                |
| Ablabesmyia sp.          |                                |                |                |                |                |
| Axarus sp.               |                                |                |                |                |                |
| Chironomus sp.           |                                |                |                |                |                |
| Coelotanypus tricolor    |                                |                |                |                |                |
| Cryptochironomus sp.     |                                |                |                |                |                |
| Dicrotendipes sp.        |                                |                |                |                |                |
| Pagastiella sp.          |                                |                |                |                |                |
| Polypedilum sp.          |                                |                |                |                |                |
| Procladius sp.           |                                |                |                |                |                |
| Tanytarsus sp.           |                                |                |                |                |                |
| Tribelos sp.             |                                |                |                |                |                |
| Bivalvia                 |                                |                |                |                |                |
| Veneroida                |                                |                |                |                |                |
| Corbiculidae             |                                |                |                |                |                |
| Corbicula fluminea       |                                |                |                |                |                |
| Sphaeriidae              |                                |                |                |                |                |
| Number of samples        |                                |                |                |                |                |
| Sum                      |                                |                |                |                |                |
| Number of species        |                                |                |                |                |                |
| Number of ept taxa       |                                |                |                |                |                |
| Sum of area              |                                |                |                |                |                |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | CHATUG<br>HIWASS<br>122.0 | CHATUG<br>SHOOTI<br>1.5 |
|--------------------------|--------------------------------|---------------------------|-------------------------|
| SPECIES                  |                                |                           |                         |
| Amatoda                  |                                | 1                         | 19                      |
| Uligochaeta              |                                |                           |                         |
| Haplotaxida              |                                |                           |                         |
| Naididae                 |                                |                           |                         |
| Arcteonais lomondi       |                                | .                         | 20                      |
| Tubificidae              | 127                            |                           | 141                     |
| Aulodrilus pigueti       | 1                              |                           | .                       |
| Limnodrilus hoffmeisteri | 9                              |                           | 6                       |
| Insecta                  |                                |                           |                         |
| Ephemeroptera            |                                |                           |                         |
| Ephemeridae              |                                |                           |                         |
| Hexagenia limbata        | 4                              |                           | 6                       |
| Trichoptera              |                                |                           |                         |
| Leptoceridae             |                                |                           |                         |
| Oecetis sp.              | .                              |                           | 1                       |
| Megaloptera              |                                |                           |                         |
| Sialidae                 |                                |                           |                         |
| Sialis sp.               | .                              |                           | 3                       |
| Diptera                  |                                |                           |                         |
| Ceratopogonidae          |                                |                           |                         |
| Bezzia sp.               | .                              |                           | 1                       |
| Chironomidae             |                                |                           |                         |
| Ablabesmyia annulata     | .                              |                           | 1                       |
| Chironomus sp.           | 27                             |                           | 80                      |
| Cladotanytarsus sp.      | 3                              |                           | 4                       |
| Coelotanytarsus tricolor | 4                              |                           | 9                       |
| Cryptochironomus sp.     | 6                              |                           | .                       |
| Polypedilum sp.          | .                              |                           | 1                       |
| Procladius sp.           | 31                             |                           | 51                      |
| Tanytarsus sp.           | 3                              |                           | 4                       |
| Zalutschia zalutschicola | 71                             |                           | 141                     |
| Bivalvia                 |                                |                           |                         |
| Veneroida                |                                |                           |                         |
| Sphaeriidae              | .                              |                           | 1                       |
| Number of samples        | 10                             |                           | 10                      |
| Sum                      | 287                            |                           | 489                     |
| Number of species        | 12                             |                           | 17                      |
| Number of ept taxa       | 1                              |                           | 2                       |
| Sum of area              | 0.70                           |                           | 0.70                    |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | CHATUG<br>HIWASS<br>122.0 | CHATUG<br>SHOOTI<br>1.5 |
|--------------------------|--------------------------------|---------------------------|-------------------------|
| SPECIES                  |                                |                           |                         |
| Amatoda                  |                                | 1                         | 19                      |
| Uligochaeta              |                                |                           |                         |
| Haplotaxida              |                                |                           |                         |
| Naididae                 |                                |                           |                         |
| Arcteonais lomondi       |                                | .                         | 20                      |
| Tubificidae              | 127                            |                           | 141                     |
| Aulodrilus pigueti       | 1                              |                           | .                       |
| Limnodrilus hoffmeisteri | 9                              |                           | 6                       |
| Insecta                  |                                |                           |                         |
| Ephemeroptera            |                                |                           |                         |
| Ephemeridae              |                                |                           |                         |
| Hexagenia limbata        | 4                              |                           | 6                       |
| Trichoptera              |                                |                           |                         |
| Leptoceridae             |                                |                           |                         |
| Oecetis sp.              | .                              |                           | 1                       |
| Megaloptera              |                                |                           |                         |
| Sialidae                 |                                |                           |                         |
| Sialis sp.               | .                              |                           | 3                       |
| Diptera                  |                                |                           |                         |
| Ceratopogonidae          |                                |                           |                         |
| Bezzia sp.               | .                              |                           | 1                       |
| Chironomidae             |                                |                           |                         |
| Ablabesmyia annulata     | .                              |                           | 1                       |
| Chironomus sp.           | 27                             |                           | 80                      |
| Cladotanytarsus sp.      | 3                              |                           | 4                       |
| Coelotanytarsus tricolor | 4                              |                           | 9                       |
| Cryptochironomus sp.     | 6                              |                           | .                       |
| Polypedilum sp.          | .                              |                           | 1                       |
| Procladius sp.           | 31                             |                           | 51                      |
| Tanytarsus sp.           | 3                              |                           | 4                       |
| Zalutschia zalutschicola | 71                             |                           | 141                     |
| Bivalvia                 |                                |                           |                         |
| Veneroida                |                                |                           |                         |
| Sphaeriidae              | .                              |                           | 1                       |
| Number of samples        | 10                             |                           | 10                      |
| Sum                      | 287                            |                           | 489                     |
| Number of species        | 12                             |                           | 17                      |
| Number of ept taxa       | 1                              |                           | 2                       |
| Sum of area              | 0.70                           |                           | 0.70                    |



## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | CHEROK<br>HOLSTO<br>53.0 | CHEROK<br>HOLSTO<br>91.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| Nematoda                 |                                | 2                        | .                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Enchytraeidae            |                                | .                        | 2                        |
| Tubificidae              |                                | 158                      | 205                      |
| Branchiura sowerbyi      |                                | 2                        | 2                        |
| Limnodrilus sp.          |                                | .                        | 35                       |
| Limnodrilus hoffmeisteri |                                | 38                       | 2                        |
| Insecta                  |                                |                          |                          |
| Odonata                  |                                |                          |                          |
| Gomphidae                |                                |                          |                          |
| Gomphus sp.              |                                | .                        | 2                        |
| Ephemeroptera            |                                |                          |                          |
| Ephemeridae              |                                |                          |                          |
| Hexagenia limbata        |                                | 2                        | 95                       |
| Diptera                  |                                |                          |                          |
| Ceratopogonidae          |                                |                          |                          |
| Bezzia sp.               |                                | 2                        | .                        |
| Chironomidae             |                                | 3                        | 3                        |
| Ablabesmyia annulata     |                                | 2                        | 8                        |
| Chironomus sp.           |                                | 198                      | 17                       |
| Coelotanypus tricolor    |                                | .                        | 7                        |
| Cryptochironomus sp.     |                                | 3                        | 17                       |
| Epoicocladius sp.        |                                | .                        | 7                        |
| Polypedilum sp.          |                                | .                        | 3                        |
| Procladius sp.           |                                | 40                       | 10                       |
| Tipulidae                |                                |                          |                          |
| Pseudolimmophila sp.     |                                | .                        | 2                        |
| Coleoptera               |                                |                          |                          |
| Elmidae                  |                                |                          |                          |
| Dubiraphia sp.           |                                | .                        | 2                        |
| Arachnoidea              |                                |                          |                          |
| Hydrachnellae            |                                |                          |                          |
| Hygrobatidae             |                                |                          |                          |
| Atractides sp.           |                                | .                        | 3                        |
| Bivalvia                 |                                |                          |                          |
| Veneroida                |                                |                          |                          |
| Sphaeriidae              |                                | .                        | 5                        |
| Number of samples        |                                | 10                       | 10                       |
| Sum                      |                                | 450                      | 427                      |
| Number of species        |                                | 11                       | 19                       |
| Number of ept taxa       |                                | 1                        | 1                        |
| Sum of area              |                                | 0.60                     | 0.60                     |

VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | CHEROK<br>HOLSTO<br>53.0 | CHEROK<br>HOLSTO<br>91.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| Nematoda                 |                                | 2                        | .                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Enchytraeidae            |                                | .                        | 2                        |
| Tubificidae              |                                | 158                      | 205                      |
| Branchiura sowerbyi      |                                | 2                        | 2                        |
| Limnodrilus sp.          |                                | .                        | 35                       |
| Limnodrilus hoffmeisteri |                                | 38                       | 2                        |
| Insecta                  |                                |                          |                          |
| Odonata                  |                                |                          |                          |
| Gomphidae                |                                |                          |                          |
| Gomphus sp.              |                                | .                        | 2                        |
| Ephemeroptera            |                                |                          |                          |
| Ephemeridae              |                                |                          |                          |
| Hexagenia limbata        |                                | 2                        | 95                       |
| Diptera                  |                                |                          |                          |
| Ceratopogonidae          |                                |                          |                          |
| Bezzia sp.               |                                | 2                        | .                        |
| Chironomidae             |                                | 3                        | 3                        |
| Ablabesmyia annulata     |                                | 2                        | 8                        |
| Chironomus sp.           |                                | 198                      | 17                       |
| Coelotanypus tricolor    |                                | .                        | 7                        |
| Cryptochironomus sp.     |                                | 3                        | 17                       |
| Epoicocladius sp.        |                                | .                        | 7                        |
| Polypedilum sp.          |                                | .                        | 3                        |
| Procladius sp.           |                                | 40                       | 10                       |
| Tipulidae                |                                |                          |                          |
| Pseudolimmophila sp.     |                                | .                        | 2                        |
| Coleoptera               |                                |                          |                          |
| Elmidae                  |                                |                          |                          |
| Dubiraphia sp.           |                                | .                        | 2                        |
| Arachnoidea              |                                |                          |                          |
| Hydrachnellae            |                                |                          |                          |
| Hygrobatidae             |                                |                          |                          |
| Atractides sp.           |                                | .                        | 3                        |
| Bivalvia                 |                                |                          |                          |
| Veneroida                |                                |                          |                          |
| Sphaeriidae              |                                | .                        | 5                        |
| Number of samples        |                                | 10                       | 10                       |
| Sum                      |                                | 450                      | 427                      |
| Number of species        |                                | 11                       | 19                       |
| Number of ept taxa       |                                | 1                        | 1                        |
| Sum of area              |                                | 0.60                     | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | CHICKA<br>TENNE<br>472.3 | CHICKA<br>TENNE<br>490.5 | CHICKA<br>TENNE<br>518.0 | CHICKA<br>HIWASS<br>8.5 |
|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| Atoda                    | .                              | .                        | .                        | .                        | 6                       |
| Hydrozoa                 | .                              | .                        | .                        | .                        | .                       |
| Hydroidea                | .                              | .                        | .                        | .                        | .                       |
| Hydridae                 | .                              | .                        | .                        | .                        | .                       |
| Hydra americana          | .                              | .                        | 7                        | .                        | .                       |
| Turbellaria              | .                              | .                        | .                        | .                        | .                       |
| Tricladida               | .                              | .                        | .                        | .                        | .                       |
| Planariidae              | .                              | .                        | .                        | .                        | .                       |
| Dugesia tigrina          | .                              | .                        | 12                       | .                        | .                       |
| Oligochaeta              | .                              | .                        | .                        | .                        | .                       |
| Haplotaxida              | .                              | .                        | .                        | .                        | .                       |
| Naididae                 | .                              | .                        | .                        | .                        | .                       |
| Nais sp.                 | .                              | 1                        | .                        | .                        | .                       |
| Nais bretscheri          | .                              | .                        | .                        | .                        | 1                       |
| Tubificidae              | 219                            | 148                      | 10                       | 168                      | .                       |
| Aulodrilus pigueti       | 1                              | .                        | .                        | .                        | 9                       |
| Branchiura sowerbyi      | 15                             | 10                       | .                        | .                        | 18                      |
| Limnodrilus sp.          | .                              | .                        | .                        | .                        | .                       |
| Limnodrilus hoffmeisteri | .                              | .                        | 5                        | .                        | 1                       |
| Hirudinea                | 1                              | .                        | .                        | .                        | .                       |
| Rhynchobdellida          | .                              | .                        | .                        | .                        | .                       |
| Glossiphoniidae          | .                              | .                        | .                        | .                        | .                       |
| Helobdella stagnalis     | .                              | 2                        | .                        | .                        | .                       |
| Pharyngobdellida         | .                              | .                        | .                        | .                        | .                       |
| Erpobdellidae            | .                              | .                        | .                        | 2                        | .                       |
| Crustacea                | .                              | .                        | .                        | .                        | .                       |
| Isopoda                  | .                              | .                        | .                        | .                        | .                       |
| Asellidae                | .                              | .                        | .                        | .                        | 1                       |
| Lirceus sp.              | .                              | .                        | .                        | .                        | .                       |
| Amphipoda                | .                              | .                        | .                        | .                        | .                       |
| Gammaridae               | .                              | .                        | .                        | .                        | .                       |
| Gammarus sp.             | 5                              | 3                        | 302                      | .                        | .                       |
| Talitridae               | .                              | .                        | .                        | .                        | .                       |
| Hyalella azteca          | .                              | 1                        | .                        | .                        | .                       |
| Insecta                  | .                              | .                        | .                        | .                        | .                       |
| Ephemeroptera            | .                              | .                        | .                        | .                        | .                       |
| Baetidae                 | .                              | .                        | .                        | .                        | 2                       |
| Baetis sp.               | .                              | .                        | .                        | .                        | .                       |
| Caenidae                 | .                              | 1                        | .                        | .                        | .                       |
| Caenis sp.               | .                              | .                        | .                        | .                        | .                       |
| Ephemeridae              | .                              | .                        | .                        | .                        | 1                       |
| Hexagenia sp.            | .                              | .                        | .                        | .                        | 103                     |
| Hexagenia limbata        | 77                             | 371                      | .                        | .                        | .                       |
| Trichoptera              | .                              | .                        | .                        | .                        | .                       |
| Leptoceridae             | .                              | .                        | .                        | .                        | 1                       |
| Oecetis sp.              | .                              | .                        | .                        | .                        | .                       |
| Polycentropodidae        | .                              | .                        | .                        | .                        | .                       |
| Cyrnellus fraternus      | .                              | 2                        | .                        | .                        | .                       |
| Megaloptera              | .                              | .                        | .                        | .                        | .                       |
| Sialidae                 | .                              | .                        | .                        | .                        | .                       |
| Sialis sp.               | .                              | 1                        | .                        | .                        | .                       |
| Diptera                  | .                              | .                        | .                        | .                        | .                       |
| Ceratopogonidae          | .                              | .                        | .                        | .                        | 4                       |
| Bezzia sp.               | .                              | .                        | .                        | .                        | 3                       |
| Chironomidae             | 1                              | 2                        | .                        | .                        | 9                       |
| Ablabesmyia annulata     | 34                             | 37                       | .                        | .                        | 8                       |
| Axarus sp.               | 3                              | .                        | .                        | .                        | 7                       |
| Chironomus sp.           | 6                              | 36                       | .                        | .                        | 1                       |
| Coelotanyus sp.          | 54                             | 6                        | .                        | .                        | 9                       |
| Coelotanyus tricolor     | 261                            | 190                      | .                        | .                        | 1                       |
| Cricotopus sp.           | .                              | 1                        | .                        | .                        | 8                       |
| Cryptochironomus sp.     | 6                              | 11                       | .                        | .                        | 5                       |
| Dicrotendipes sp.        | 1                              | 8                        | .                        | .                        | 1                       |
| Einfeldia sp.            | 38                             | .                        | .                        | .                        | 1                       |
| Epoicocladus sp.         | .                              | 2                        | .                        | .                        | 1                       |
| Microtendipes sp.        | .                              | 1                        | .                        | .                        | 8                       |
| Parachironomus sp.       | .                              | .                        | .                        | .                        | 1                       |
| Polypedilum sp.          | .                              | .                        | .                        | .                        | 1                       |
| Procladius sp.           | 42                             | 86                       | .                        | .                        | .                       |
| Rheotanytarsus sp.       | .                              | 1                        | .                        | .                        | 4                       |
| Stictochironomus sp.     | .                              | .                        | 2                        | .                        | .                       |
| Tanytarsus sp.           | .                              | .                        | .                        | .                        | .                       |
| Tribelos sp.             | .                              | .                        | 2                        | .                        | .                       |
| Simuliidae               | .                              | .                        | .                        | .                        | .                       |
| Simulium sp.             | .                              | .                        | .                        | 4                        | .                       |
| Coleoptera               | .                              | .                        | .                        | .                        | .                       |
| Elmidae                  | .                              | .                        | .                        | .                        | .                       |
| Dubiraphia sp.           | .                              | 1                        | .                        | .                        | .                       |
| Arachnoidea              | .                              | .                        | .                        | .                        | .                       |
| Hydrachnellae            | .                              | .                        | .                        | .                        | .                       |
| Eylaidae                 | .                              | .                        | .                        | .                        | .                       |
| Eylais sp.               | .                              | 9                        | .                        | .                        | .                       |
| Hygrobatidae             | .                              | .                        | .                        | .                        | .                       |
| Hygrobatas sp.           | 1                              | .                        | .                        | .                        | .                       |
| Unionicolidae            | .                              | .                        | .                        | .                        | .                       |
| Unionicola sp.           | 2                              | .                        | .                        | .                        | .                       |
| Gastropoda               | .                              | .                        | .                        | .                        | .                       |
| Mesogastropoda           | .                              | .                        | .                        | .                        | .                       |
| Pleuroceridae            | .                              | .                        | .                        | .                        | .                       |
| Leptoxis praerosa        | 5                              | .                        | .                        | 1                        | .                       |
| Viviparidae              | .                              | .                        | .                        | .                        | .                       |
| Viviparus sp.            | 2                              | .                        | .                        | .                        | .                       |
| Bivalvia                 | .                              | .                        | .                        | .                        | .                       |

|     |     |     |     |
|-----|-----|-----|-----|
| 145 | 174 | 115 | 13  |
| 4   | 83  | .   | 158 |
| 48  | 77  | 2   | .   |

|      |      |      |      |
|------|------|------|------|
| 20   | 20   | 10   | 20   |
| 971  | 1265 | 457  | 550  |
| 23   | 27   | 9    | 29   |
| 1    | 3    | 0    | 4    |
| 1.20 | 1.20 | 0.60 | 1.20 |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | DOUGLA<br>FRENCH<br>33.0 | DOUGLA<br>FRENCH<br>51.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| SPECIES                  |                                |                          |                          |
| ematoda                  |                                | 2                        | .                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Tubificidae              |                                | 97                       | 100                      |
| Branchiura sowerbyi      |                                | .                        | 8                        |
| Limnodrilus hoffmeisteri |                                | 27                       | 10                       |
| Insecta                  |                                |                          |                          |
| Diptera                  |                                |                          |                          |
| Chironomidae             |                                | 5                        | 2                        |
| Chironomus sp.           |                                | 117                      | 147                      |
| Cryptochironomus sp.     |                                | .                        | 5                        |
| Dicrotendipes sp.        |                                | .                        | 2                        |
| Phaenopsectra sp.        |                                | .                        | 7                        |
| Procladius sp.           |                                | 110                      | 25                       |
| Rheotanytarsus sp.       |                                | .                        | 2                        |
| Number of samples        |                                | 10                       | 10                       |
| Sum                      |                                | 358                      | 308                      |
| Number of species        |                                | 6                        | 10                       |
| Number of ept taxa       |                                | 0                        | 0                        |
| Sum of area              |                                | 0.60                     | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | DOUGLA<br>FRENCH<br>33.0 | DOUGLA<br>FRENCH<br>51.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| SPECIES                  |                                |                          |                          |
| ematoda                  |                                | 2                        | .                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Tubificidae              |                                | 97                       | 100                      |
| Branchiura sowerbyi      |                                | .                        | 8                        |
| Limnodrilus hoffmeisteri |                                | 27                       | 10                       |
| Insecta                  |                                |                          |                          |
| Diptera                  |                                |                          |                          |
| Chironomidae             |                                | 5                        | 2                        |
| Chironomus sp.           |                                | 117                      | 147                      |
| Cryptochironomus sp.     |                                | .                        | 5                        |
| Dicrotendipes sp.        |                                | .                        | 2                        |
| Phaenopsectra sp.        |                                | .                        | 7                        |
| Procladius sp.           |                                | 110                      | 25                       |
| Rheotanytarsus sp.       |                                | .                        | 2                        |
| Number of samples        |                                | 10                       | 10                       |
| Sum                      |                                | 358                      | 308                      |
| Number of species        |                                | 6                        | 10                       |
| Number of ept taxa       |                                | 0                        | 0                        |
| Sum of area              |                                | 0.60                     | 0.60                     |



## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | FONTAN<br>LITTLE<br>81.5 | FONTAN<br>TUCKAS<br>3.0 |
|--------------------------|--------------------------------|--------------------------|-------------------------|
| Oligochaeta              |                                |                          |                         |
| Haplotaxida              |                                |                          |                         |
| Tubificidae              |                                | 335                      | 1057                    |
| Branchiura sowerbyi      |                                | 5                        | .                       |
| Limnodrilus hoffmeisteri |                                | 43                       | 15                      |
| Crustacea                |                                |                          |                         |
| Amphipoda                |                                |                          |                         |
| Crangonyctidae           |                                |                          |                         |
| Crangonyx sp.            |                                | .                        | 3                       |
| Insecta                  |                                |                          |                         |
| Diptera                  |                                |                          |                         |
| Chironomidae             |                                |                          |                         |
| Chironomus sp.           |                                | 454                      | 460                     |
| Cryptochironomus sp.     |                                | 2                        | .                       |
| Polypedilum sp.          |                                | 3                        | 8                       |
| Procladius sp.           |                                | 17                       | 33                      |
| Arachnoidea              |                                |                          |                         |
| Hydrachnellae            |                                |                          |                         |
| Hygrobatidae             |                                |                          |                         |
| Atractides sp.           |                                | 2                        | .                       |
| Number of samples        |                                | 10                       | 10                      |
| Sum                      |                                | 861                      | 1576                    |
| Number of species        |                                | 8                        | 6                       |
| Number of ept taxa       |                                | 0                        | 0                       |
| Sum of area              |                                | 0.65                     | 0.60                    |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | FONTAN<br>LITTLE<br>81.5 | FONTAN<br>TUCKAS<br>3.0 |
|--------------------------|--------------------------------|--------------------------|-------------------------|
| Oligochaeta              |                                |                          |                         |
| Haplotaxida              |                                |                          |                         |
| Tubificidae              |                                | 335                      | 1057                    |
| Branchiura sowerbyi      |                                | 5                        | .                       |
| Limnodrilus hoffmeisteri |                                | 43                       | 15                      |
| Crustacea                |                                |                          |                         |
| Amphipoda                |                                |                          |                         |
| Crangonyctidae           |                                |                          |                         |
| Crangonyx sp.            |                                | .                        | 3                       |
| Insecta                  |                                |                          |                         |
| Diptera                  |                                |                          |                         |
| Chironomidae             |                                |                          |                         |
| Chironomus sp.           |                                | 454                      | 460                     |
| Cryptochironomus sp.     |                                | 2                        | .                       |
| Polypedilum sp.          |                                | 3                        | 8                       |
| Procladius sp.           |                                | 17                       | 33                      |
| Arachnoidea              |                                |                          |                         |
| Hydrachnellae            |                                |                          |                         |
| Hygrobatidae             |                                |                          |                         |
| Atractides sp.           |                                | 2                        | .                       |
| Number of samples        |                                | 10                       | 10                      |
| Sum                      |                                | 861                      | 1576                    |
| Number of species        |                                | 8                        | 6                       |
| Number of ept taxa       |                                | 0                        | 0                       |
| Sum of area              |                                | 0.65                     | 0.60                    |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | FORT L<br>TENNE<br>605.5 | FORT L<br>TENNE<br>624.6 | FORT L<br>TENNE<br>652.0 |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| SPECIES                        |                          |                          |                          |
| ematoda                        | .                        | .                        | 2                        |
| ligochaeta                     |                          |                          |                          |
| Haplotaxida                    |                          |                          |                          |
| Tubificidae                    | 89                       | 72                       | 62                       |
| Branchiura sowerbyi            | 5                        | 17                       | .                        |
| Limnodrilus hoffmeisteri       | 12                       | 28                       | 24                       |
| Lumbriculida                   |                          |                          |                          |
| Lumbriculidae                  | 2                        | .                        | 5                        |
| Crustacea                      |                          |                          |                          |
| Amphipoda                      |                          |                          |                          |
| Gammaridae                     |                          |                          |                          |
| Gammarus sp.                   | .                        | .                        | 2                        |
| Insecta                        |                          |                          |                          |
| Odonata                        |                          |                          |                          |
| Gomphidae                      | .                        | 2                        | .                        |
| Gomphus sp.                    | .                        | .                        | 2                        |
| Ephemeroptera                  |                          |                          |                          |
| Ephemeridae                    |                          |                          |                          |
| Hexagenia limbata              | 5                        | 15                       | .                        |
| Heteroptera                    |                          |                          |                          |
| Corixidae                      | .                        | 2                        | .                        |
| Trichoptera                    |                          |                          |                          |
| Brachycentridae                |                          |                          |                          |
| Brachycentrus sp.              | .                        | .                        | 1                        |
| Hydropsychidae                 |                          |                          |                          |
| Cheumatopsyche sp.             | .                        | .                        | 1                        |
| Psychomyiidae                  |                          |                          |                          |
| Psychomyia flavida             | .                        | .                        | 1                        |
| Diptera                        |                          |                          |                          |
| Ceratopogonidae                |                          |                          |                          |
| Bezzia sp.                     | .                        | 2                        | .                        |
| Chironomidae                   |                          |                          |                          |
| Ablabesmyia annulata           | 2                        | 23                       | .                        |
| Chironomus sp.                 | 228                      | 342                      | .                        |
| Coelotanypus sp.               | 2                        | .                        | .                        |
| Coelotanypus tricolor          | 57                       | 17                       | .                        |
| Cricotopus sp.                 | .                        | .                        | 1                        |
| Cryptochironomus sp.           | 11                       | 8                        | 3                        |
| Epoicocladius sp.              | .                        | 2                        | .                        |
| Glyptotendipes sp.             | 2                        | .                        | .                        |
| Phaenopsectra sp.              | .                        | .                        | 2                        |
| Polypedilum sp.                | .                        | .                        | 7                        |
| Procladius sp.                 | 55                       | 62                       | .                        |
| Xenochironomus xenolabis       | .                        | .                        | 1                        |
| Simuliidae                     |                          |                          |                          |
| Simulium sp.                   | .                        | .                        | 1                        |
| Bivalvia                       |                          |                          |                          |
| Veneroida                      |                          |                          |                          |
| Corbiculidae                   |                          |                          |                          |
| Corbicula fluminea             | 17                       | 10                       | 151                      |
| Sphaeriidae                    |                          |                          |                          |
| Musculium transversum          | .                        | 50                       | .                        |
| Number of samples              | 10                       | 10                       | 10                       |
| Sum                            | 487                      | 652                      | 266                      |
| Number of species              | 13                       | 15                       | 16                       |
| Number of ept taxa             | 1                        | 1                        | 3                        |
| Sum of area                    | 0.65                     | 0.60                     | 1.10                     |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | FORT L<br>TENNE<br>605.5 | FORT L<br>TENNE<br>624.6 | FORT L<br>TENNE<br>652.0 |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| SPECIES                        |                          |                          |                          |
| ematoda                        | .                        | .                        | 2                        |
| ligochaeta                     |                          |                          |                          |
| Haplotaxida                    |                          |                          |                          |
| Tubificidae                    | 89                       | 72                       | 62                       |
| Branchiura sowerbyi            | 5                        | 17                       | .                        |
| Limnodrilus hoffmeisteri       | 12                       | 28                       | 24                       |
| Lumbriculida                   |                          |                          |                          |
| Lumbriculidae                  | 2                        | .                        | 5                        |
| Crustacea                      |                          |                          |                          |
| Amphipoda                      |                          |                          |                          |
| Gammaridae                     |                          |                          |                          |
| Gammarus sp.                   | .                        | .                        | 2                        |
| Insecta                        |                          |                          |                          |
| Odonata                        |                          |                          |                          |
| Gomphidae                      | .                        | 2                        | .                        |
| Gomphus sp.                    | .                        | .                        | 2                        |
| Ephemeroptera                  |                          |                          |                          |
| Ephemeridae                    |                          |                          |                          |
| Hexagenia limbata              | 5                        | 15                       | .                        |
| Heteroptera                    |                          |                          |                          |
| Corixidae                      | .                        | 2                        | .                        |
| Trichoptera                    |                          |                          |                          |
| Brachycentridae                |                          |                          |                          |
| Brachycentrus sp.              | .                        | .                        | 1                        |
| Hydropsychidae                 |                          |                          |                          |
| Cheumatopsyche sp.             | .                        | .                        | 1                        |
| Psychomyiidae                  |                          |                          |                          |
| Psychomyia flavida             | .                        | .                        | 1                        |
| Diptera                        |                          |                          |                          |
| Ceratopogonidae                |                          |                          |                          |
| Bezzia sp.                     | .                        | 2                        | .                        |
| Chironomidae                   |                          |                          |                          |
| Ablabesmyia annulata           | 2                        | 23                       | .                        |
| Chironomus sp.                 | 228                      | 342                      | .                        |
| Coelotanypus sp.               | 2                        | .                        | .                        |
| Coelotanypus tricolor          | 57                       | 17                       | .                        |
| Cricotopus sp.                 | .                        | .                        | 1                        |
| Cryptochironomus sp.           | 11                       | 8                        | 3                        |
| Epoicocladius sp.              | .                        | 2                        | .                        |
| Glyptotendipes sp.             | 2                        | .                        | .                        |
| Phaenopsectra sp.              | .                        | .                        | 2                        |
| Polypedilum sp.                | .                        | .                        | 7                        |
| Procladius sp.                 | 55                       | 62                       | .                        |
| Xenochironomus xenolabis       | .                        | .                        | 1                        |
| Simuliidae                     |                          |                          |                          |
| Simulium sp.                   | .                        | .                        | 1                        |
| Bivalvia                       |                          |                          |                          |
| Veneroida                      |                          |                          |                          |
| Corbiculidae                   |                          |                          |                          |
| Corbicula fluminea             | 17                       | 10                       | 151                      |
| Sphaeriidae                    |                          |                          |                          |
| Musculium transversum          | .                        | 50                       | .                        |
| Number of samples              | 10                       | 10                       | 10                       |
| Sum                            | 487                      | 652                      | 266                      |
| Number of species              | 13                       | 15                       | 16                       |
| Number of ept taxa             | 1                        | 1                        | 3                        |
| Sum of area                    | 0.65                     | 0.60                     | 1.10                     |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | FORT P<br>S FK H<br>8.7 |
|--------------------------|--------------------------------|-------------------------|
| Oligochaeta              |                                |                         |
| Haplotaxida              |                                |                         |
| Tubificidae              |                                | 107                     |
| Limnodrilus hoffmeisteri |                                | 77                      |
| Crustacea                |                                |                         |
| Isopoda                  |                                |                         |
| Asellidae                |                                |                         |
| Caecidotea sp.           |                                | 3                       |
| Insecta                  |                                |                         |
| Diptera                  |                                |                         |
| Chironomidae             |                                |                         |
| Chironomus sp.           |                                | 137                     |
| Cryptochironomus sp.     |                                | 2                       |
| Glyptotendipes sp.       |                                | 2                       |
| Procladius sp.           |                                | 70                      |
| Bivalvia                 |                                |                         |
| Veneroida                |                                |                         |
| Corbiculidae             |                                |                         |
| Corbicula fluminea       |                                | 3                       |
| Number of samples        |                                | 10                      |
| Sum                      |                                | 401                     |
| Number of species        |                                | 8                       |
| Number of ept taxa       |                                | 0                       |
| Sum of area              |                                | 0.60                    |

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | FORT P<br>S FK H<br>8.7 | FORT L<br>S FK H<br>8.7 | FORT I<br>S FK H<br>8.7 | FORT J<br>S FK H<br>8.7 |
|--------------------------|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Amphipoda                |                                |                         |                         |                         |                         |
| Haplotaxida              |                                |                         |                         |                         |                         |
| Tubificidae              |                                |                         |                         |                         |                         |
| Limnodrilus hoffmeisteri |                                |                         |                         |                         |                         |
| Crustacea                |                                |                         |                         |                         |                         |
| Isopoda                  |                                |                         |                         |                         |                         |
| Asellidae                |                                |                         |                         |                         |                         |
| Caecidotea sp.           |                                |                         |                         |                         |                         |
| Insecta                  |                                |                         |                         |                         |                         |
| Diptera                  |                                |                         |                         |                         |                         |
| Chironomidae             |                                |                         |                         |                         |                         |
| Chironomus sp.           |                                |                         |                         |                         |                         |
| Cryptochironomus sp.     |                                |                         |                         |                         |                         |
| Glyptotendipes sp.       |                                |                         |                         |                         |                         |
| Procladius sp.           |                                |                         |                         |                         |                         |
| Bivalvia                 |                                |                         |                         |                         |                         |
| Veneroida                |                                |                         |                         |                         |                         |
| Corbiculidae             |                                |                         |                         |                         |                         |
| Corbicula fluminea       |                                |                         |                         |                         |                         |
| Number of samples        |                                |                         |                         |                         |                         |
| Sum                      |                                |                         |                         |                         |                         |
| Number of species        |                                |                         |                         |                         |                         |
| Number of ept taxa       |                                |                         |                         |                         |                         |
| Sum of area              |                                |                         |                         |                         |                         |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | GUNTER<br>TENNE<br>350.0 | GUNTER<br>TENNE<br>375.2 | GUNTER<br>TENNE<br>420.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| Hydrozoa                 |                                |                          |                          |                          |
| Hydroidea                |                                |                          |                          |                          |
| Hydridae                 |                                |                          |                          |                          |
| Hydra americana          | .                              | .                        | .                        | 1                        |
| Turbellaria              |                                |                          |                          |                          |
| Tricladida               |                                |                          |                          |                          |
| Planariidae              |                                |                          |                          |                          |
| Dugesia tigrina          | .                              | .                        | .                        | 64                       |
| Oligochaeta              |                                |                          |                          |                          |
| Haplotaxida              |                                |                          |                          |                          |
| Naididae                 |                                |                          |                          | 7                        |
| Tubificidae              | 102                            | 52                       | 49                       |                          |
| Branchiura sowerbyi      | 10                             | 12                       | .                        |                          |
| Limnodrilus hoffmeisteri | 3                              | .                        | 3                        |                          |
| Lumbriculida             |                                |                          |                          |                          |
| Lumbriculidae            | .                              | 3                        | .                        |                          |
| Hirudinea                | .                              | .                        | .                        | 5                        |
| Rhynchobdellida          |                                |                          |                          |                          |
| Glossiphoniidae          |                                |                          |                          |                          |
| Helobdella stagnalis     | 10                             | 15                       | .                        |                          |
| Placobdella montifera    | 3                              | 2                        | .                        |                          |
| Crustacea                |                                |                          |                          |                          |
| Isopoda                  |                                |                          |                          |                          |
| Asellidae                |                                |                          |                          |                          |
| Lirceus sp.              | .                              | .                        | .                        | 8                        |
| Amphipoda                |                                |                          |                          |                          |
| Gammaridae               |                                |                          |                          |                          |
| Gammarus sp.             | .                              | 7                        | 160                      |                          |
| Talitridae               |                                |                          |                          |                          |
| Hyalella azteca          | .                              | 218                      | .                        |                          |
| Insecta                  |                                |                          |                          |                          |
| Ephemeroptera            |                                |                          |                          |                          |
| Ephemeridae              |                                |                          |                          |                          |
| Hexagenia limbata        | 68                             | 195                      | 4                        |                          |
| Heptageniidae            |                                |                          |                          |                          |
| Stenacron interpunctatum | .                              | .                        | 5                        |                          |
| Trichoptera              |                                |                          |                          |                          |
| Leptoceridae             |                                |                          |                          |                          |
| Ceraclea sp.             | .                              | .                        | 2                        |                          |
| Megaloptera              |                                |                          |                          |                          |
| Sialidae                 |                                |                          |                          |                          |
| Sialis sp.               | .                              | .                        | 2                        |                          |
| Diptera                  |                                |                          |                          |                          |
| Ceratopogonidae          |                                |                          |                          |                          |
| Bezzia sp.               | .                              | .                        | 4                        |                          |
| Chironomidae             | 2                              | 2                        | 5                        |                          |
| Ablabesmyia annulata     | 33                             | 18                       | 1                        |                          |
| Ablabesmyia mallochii    | .                              | 3                        | .                        |                          |
| Chironomus sp.           | .                              | 5                        | 3                        |                          |
| Coelotanytus tricolor    | 278                            | 127                      | 4                        |                          |
| Cryptochironomus sp.     | 8                              | 33                       | 3                        |                          |
| Dicrotendipes sp.        | 5                              | 60                       | 3                        |                          |
| Einfeldia sp.            | 43                             | 5                        | .                        |                          |
| Epoicocladus sp.         | 2                              | 2                        | .                        |                          |
| Harnischia sp.           | .                              | .                        | 1                        |                          |
| Polypedilum sp.          | .                              | .                        | 5                        |                          |
| Procladius sp.           | 32                             | 47                       | 3                        |                          |
| Pseudochironomus sp.     | .                              | .                        | 4                        |                          |
| Rheotanytarsus sp.       | .                              | 3                        | .                        |                          |
| Coleoptera               |                                |                          |                          |                          |
| Elmidae                  |                                |                          |                          |                          |
| Dubiraphia sp.           | .                              | .                        | 1                        |                          |
| Arachnoidea              |                                |                          |                          |                          |
| Hydrachnellae            |                                |                          |                          |                          |
| Unionicolidae            |                                |                          |                          |                          |
| Unionicola sp.           | .                              | 3                        | .                        |                          |
| Gastropoda               |                                |                          |                          |                          |
| Mesogastropoda           |                                |                          |                          |                          |
| Pleuroceridae            |                                |                          |                          |                          |
| Lithasia verrucosa       | .                              | .                        | 5                        |                          |
| Pleurocera sp.           | .                              | .                        | 2                        |                          |
| Viviparidae              |                                |                          |                          |                          |
| Campeloma sp.            | .                              | .                        | 3                        |                          |
| Viviparus sp.            | .                              | 2                        | .                        |                          |
| Basommatophora           |                                |                          |                          |                          |
| Physidae                 |                                |                          |                          |                          |
| Physella sp.             | .                              | 2                        | .                        |                          |
| Bivalvia                 |                                |                          |                          |                          |
| Unionoida                |                                |                          |                          |                          |
| Unionidae                |                                |                          |                          |                          |
| Cyclonaias tuberculata   | .                              | 2                        | .                        |                          |
| Potamilus alatus         | .                              | 2                        | .                        |                          |
| Veneroida                |                                |                          |                          |                          |
| Corbiculidae             |                                |                          |                          |                          |
| Corbicula fluminea       | 127                            | 328                      | 196                      |                          |
| Sphaeriidae              |                                |                          |                          |                          |
| Eupera cubensis          | 12                             | 13                       | .                        |                          |
| Musculium transversum    | .                              | 123                      | .                        |                          |
| Number of samples        | 10                             | 10                       | 10                       |                          |
| Sum                      | 738                            | 1284                     | 553                      |                          |
| Number of species        | 16                             | 27                       | 28                       |                          |
| Number of ept taxa       | 1                              | 1                        | 3                        |                          |





| RESVORNA<br>STREAM<br>STREAMMI | HIWASS<br>HIWASS<br>77.0 | HIWASS<br>HIWASS<br>85.0 | HIWASS<br>HIWASS<br>90.0 | RESVORNA<br>STREAM<br>STREAMMI | HIWASS<br>HIWASS<br>77.0 | HIWASS<br>HIWASS<br>85.0 | HIWASS<br>HIWASS<br>90.0 | RESVORNA<br>STREAM<br>STREAMMI |
|--------------------------------|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|--------------------------------|
| SPECIES                        |                          |                          |                          | SPECIES                        |                          |                          |                          | SPECIES                        |
| igochaeta                      |                          |                          |                          | igochaeta                      |                          |                          |                          | igochaeta                      |
| Haplotaxida                    |                          |                          |                          | Haplotaxida                    |                          |                          |                          | Haplotaxida                    |
| Naididae                       |                          | 1                        |                          | Naididae                       |                          | 1                        |                          | Naididae                       |
| Slavina appendiculata          |                          | 1                        |                          | Slavina appendiculata          |                          | 1                        |                          | Slavina appendiculata          |
| Stylaria lacustris             | 1                        | 1                        |                          | Stylaria lacustris             | 1                        | 1                        |                          | Stylaria lacustris             |
| Tubificidae                    | 51                       | 385                      | 167                      | Tubificidae                    | 51                       | 385                      | 167                      | Tubificidae                    |
| Limnodrilus hoffmeisteri       |                          | 1                        | 30                       | Limnodrilus hoffmeisteri       |                          | 1                        | 30                       | Limnodrilus hoffmeisteri       |
| Crustacea                      |                          |                          |                          | Crustacea                      |                          |                          |                          | Crustacea                      |
| Amphipoda                      |                          |                          |                          | Amphipoda                      |                          |                          |                          | Amphipoda                      |
| Corophiidae                    |                          |                          |                          | Corophiidae                    |                          |                          |                          | Corophiidae                    |
| Corophium lacustre             |                          | 1                        |                          | Corophium lacustre             |                          | 1                        |                          | Corophium lacustre             |
| Crangonyctidae                 |                          |                          |                          | Crangonyctidae                 |                          |                          |                          | Crangonyctidae                 |
| Crangonyx sp.                  | 10                       | 4                        |                          | Crangonyx sp.                  | 10                       | 4                        |                          | Crangonyx sp.                  |
| Insecta                        |                          |                          |                          | Insecta                        |                          |                          |                          | Insecta                        |
| Odonata                        |                          |                          |                          | Odonata                        |                          |                          |                          | Odonata                        |
| Macromiidae                    |                          |                          |                          | Macromiidae                    |                          |                          |                          | Macromiidae                    |
| Macromia sp.                   |                          | 1                        |                          | Macromia sp.                   |                          | 1                        |                          | Macromia sp.                   |
| Ephemeroptera                  |                          |                          |                          | Ephemeroptera                  |                          |                          |                          | Ephemeroptera                  |
| Ephemeridae                    |                          |                          |                          | Ephemeridae                    |                          |                          |                          | Ephemeridae                    |
| Hexagenia limbata              |                          | 1                        | 2                        | Hexagenia limbata              |                          | 1                        | 2                        | Hexagenia limbata              |
| Trichoptera                    |                          |                          |                          | Trichoptera                    |                          |                          |                          | Trichoptera                    |
| Leptoceridae                   |                          |                          |                          | Leptoceridae                   |                          |                          |                          | Leptoceridae                   |
| Oecetis sp.                    |                          | 1                        |                          | Oecetis sp.                    |                          | 1                        |                          | Oecetis sp.                    |
| Diptera                        |                          |                          |                          | Diptera                        |                          |                          |                          | Diptera                        |
| Ceratopogonidae                |                          |                          |                          | Ceratopogonidae                |                          |                          |                          | Ceratopogonidae                |
| Bezzia sp.                     |                          |                          | 2                        | Bezzia sp.                     |                          |                          | 2                        | Bezzia sp.                     |
| Chironomidae                   |                          |                          |                          | Chironomidae                   |                          |                          |                          | Chironomidae                   |
| Chironomus sp.                 | 3                        | 37                       | 260                      | Chironomus sp.                 | 3                        | 37                       | 260                      | Chironomus sp.                 |
| Cryptochironomus sp.           | 1                        | 1                        | 2                        | Cryptochironomus sp.           | 1                        | 1                        | 2                        | Cryptochironomus sp.           |
| Microtendipes sp.              |                          |                          | 2                        | Microtendipes sp.              |                          |                          | 2                        | Microtendipes sp.              |
| Phaenopsectra sp.              |                          |                          | 3                        | Phaenopsectra sp.              |                          |                          | 3                        | Phaenopsectra sp.              |
| Polypedilum sp.                |                          | 1                        |                          | Polypedilum sp.                |                          | 1                        |                          | Polypedilum sp.                |
| Polypedilum halterale          |                          | 1                        |                          | Polypedilum halterale          |                          | 1                        |                          | Polypedilum halterale          |
| Procladius sp.                 | 9                        | 26                       | 87                       | Procladius sp.                 | 9                        | 26                       | 87                       | Procladius sp.                 |
| Tanytarsus sp.                 | 1                        |                          |                          | Tanytarsus sp.                 | 1                        |                          |                          | Tanytarsus sp.                 |
| Arachnoidea                    |                          |                          |                          | Arachnoidea                    |                          |                          |                          | Arachnoidea                    |
| Hydrachnellae                  |                          |                          |                          | Hydrachnellae                  |                          |                          |                          | Hydrachnellae                  |
| Hygrobatidae                   |                          |                          |                          | Hygrobatidae                   |                          |                          |                          | Hygrobatidae                   |
| Atractides sp.                 |                          |                          | 2                        | Atractides sp.                 |                          |                          | 2                        | Atractides sp.                 |
| Gastropoda                     |                          |                          |                          | Gastropoda                     |                          |                          |                          | Gastropoda                     |
| Basommatophora                 |                          |                          |                          | Basommatophora                 |                          |                          |                          | Basommatophora                 |
| Planorbidae                    |                          | 1                        |                          | Planorbidae                    |                          | 1                        |                          | Planorbidae                    |
| Alvia                          |                          |                          |                          | Alvia                          |                          |                          |                          | Alvia                          |
| eneroida                       |                          |                          |                          | eneroida                       |                          |                          |                          | eneroida                       |
| Corbiculidae                   |                          |                          |                          | Corbiculidae                   |                          |                          |                          | Corbiculidae                   |
| Corbicula fluminea             |                          |                          | 2                        | Corbicula fluminea             |                          |                          | 2                        | Corbicula fluminea             |
| Sphaeriidae                    | 1                        | 3                        |                          | Sphaeriidae                    | 1                        | 3                        |                          | Sphaeriidae                    |
| Number of samples              | 10                       | 20                       | 10                       | Number of samples              | 10                       | 20                       | 10                       | Number of samples              |
| Sum                            | 77                       | 467                      | 559                      | Sum                            | 77                       | 467                      | 559                      | Sum                            |
| Number of species              | 8                        | 17                       | 11                       | Number of species              | 8                        | 17                       | 11                       | Number of species              |
| Number of ept taxa             | 0                        | 2                        | 1                        | Number of ept taxa             | 0                        | 2                        | 1                        | Number of ept taxa             |
| Sum of area                    | 0.70                     | 1.55                     | 0.60                     | Sum of area                    | 0.70                     | 1.55                     | 0.60                     | Sum of area                    |

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | KENTUC<br>TENNE<br>15.0 | KENTUC<br>TENNE<br>23.0 | KENTUC<br>TENNE<br>85.0 | KENTUC<br>TENNE<br>200.0 | KENTUC<br>BIG SA<br>7.4 |
|--------------------------|--------------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| Nematoda                 |                                | 2                       | .                       | 5                       | .                        | 15                      |
| Hydrozoa                 |                                |                         |                         |                         |                          |                         |
| Hydroida                 |                                |                         |                         |                         |                          |                         |
| Hydridae                 |                                |                         |                         |                         |                          |                         |
| Hydra americana          |                                | .                       | .                       | .                       | 1                        | .                       |
| Turbellaria              |                                |                         |                         |                         |                          |                         |
| Tricladida               |                                |                         |                         |                         |                          |                         |
| Planariidae              |                                |                         |                         |                         |                          |                         |
| Dugesia tigrina          |                                | .                       | .                       | .                       | 7                        | .                       |
| Oligochaeta              |                                |                         |                         |                         |                          |                         |
| Haplotaxida              |                                |                         |                         |                         |                          |                         |
| Naididae                 |                                |                         |                         |                         |                          |                         |
| Nais communis            |                                | .                       | .                       | .                       | 1                        | .                       |
| Nais simplex             |                                | .                       | .                       | .                       | .                        | .                       |
| Tubificidae              |                                | 8                       | 205                     | 193                     | 5                        | 62                      |
| Aulodrilus pigueti       |                                | .                       | .                       | .                       | .                        | 2                       |
| Branchiura sowerbyi      |                                | .                       | .                       | 2                       | .                        | 45                      |
| Limnodrilus hoffmeisteri |                                | .                       | 20                      | 11                      | .                        | .                       |
| Lumbriculida             |                                |                         |                         |                         |                          |                         |
| Lumbriculidae            |                                | 14                      | .                       | 1                       | 18                       | .                       |
| Hirudinea                |                                | .                       | .                       | .                       | 1                        | .                       |
| Rhynchobdellida          |                                |                         |                         |                         |                          |                         |
| Glossiphoniidae          |                                |                         |                         |                         |                          |                         |
| Helobdella stagnalis     |                                | .                       | 10                      | .                       | .                        | .                       |
| Crustacea                |                                |                         |                         |                         |                          |                         |
| Isopoda                  |                                |                         |                         |                         |                          |                         |
| Asellidae                |                                |                         |                         |                         |                          |                         |
| Caecidotea sp.           |                                | .                       | .                       | 1                       | 15                       | .                       |
| Lirceus sp.              |                                | 4                       | .                       | .                       | .                        | .                       |
| Amphipoda                |                                |                         |                         |                         |                          |                         |
| Corophiidae              |                                | .                       | .                       | 41                      | .                        | .                       |
| Corophium lacustre       |                                | .                       | .                       | .                       | .                        | .                       |
| Talitridae               |                                | .                       | .                       | 2                       | .                        | .                       |
| Hyalella azteca          |                                | .                       | .                       | .                       | .                        | .                       |
| Decapoda                 |                                |                         |                         |                         |                          |                         |
| Cambaridae               |                                | 1                       | .                       | .                       | .                        | .                       |
| Insecta                  |                                |                         |                         |                         |                          |                         |
| Odonata                  |                                |                         |                         |                         |                          |                         |
| Macromiidae              |                                |                         |                         |                         |                          |                         |
| Macromia sp.             |                                | 1                       | .                       | .                       | .                        | .                       |
| Ephemeroptera            |                                |                         |                         |                         |                          |                         |
| Caenidae                 |                                |                         |                         |                         |                          |                         |
| Caenis sp.               |                                | .                       | .                       | 2                       | .                        | .                       |
| Ephemeridae              |                                |                         |                         |                         |                          |                         |
| Hexagenia limbata        |                                | 1                       | 12                      | 176                     | .                        | .                       |
| Heptageniidae            |                                |                         |                         |                         |                          |                         |
| Stenacron sp.            |                                | 4                       | .                       | 1                       | .                        | .                       |
| Stenacron interpunctatum |                                | 27                      | .                       | .                       | 7                        | .                       |
| Trichoptera              |                                |                         |                         |                         |                          |                         |
| Leptoceridae             |                                |                         |                         |                         |                          |                         |
| Ceraclea sp.             |                                | 3                       | .                       | 3                       | 2                        | 7                       |
| Oecetis sp.              |                                | .                       | .                       | .                       | .                        | .                       |
| Polycentropodidae        |                                | .                       | .                       | 4                       | .                        | .                       |
| Cyrnellus fraternus      |                                | .                       | .                       | .                       | .                        | .                       |
| Megaloptera              |                                |                         |                         |                         |                          |                         |
| Sialidae                 |                                |                         |                         |                         |                          |                         |
| Sialis sp.               |                                | .                       | .                       | .                       | .                        | 2                       |
| Diptera                  |                                |                         |                         |                         |                          |                         |
| Ceratopogonidae          |                                |                         |                         |                         |                          |                         |
| Bezzia sp.               |                                | .                       | .                       | .                       | .                        | 35                      |
| Chironomidae             |                                | .                       | .                       | 3                       | 5                        | .                       |
| Ablabesmyia annulata     |                                | .                       | 7                       | 32                      | 4                        | 5                       |
| Ablabesmyia mallochi     |                                | .                       | .                       | 2                       | .                        | .                       |
| Axarus sp.               |                                | 14                      | .                       | 2                       | .                        | .                       |
| Chironomus sp.           |                                | 1                       | 2                       | 5                       | .                        | 180                     |
| Coelotanypus tricolor    |                                | 1                       | 200                     | 153                     | .                        | 277                     |
| Cricotopus sp.           |                                | .                       | .                       | .                       | 3                        | .                       |
| Cryptochironomus sp.     |                                | .                       | 3                       | 7                       | 3                        | .                       |
| Dicrotendipes sp.        |                                | 3                       | .                       | 6                       | 5                        | 3                       |
| Einfeldia sp.            |                                | 2                       | 295                     | 1                       | .                        | 332                     |
| Epoicocladus sp.         |                                | .                       | .                       | 2                       | .                        | .                       |
| Glyptotendipes sp.       |                                | .                       | .                       | .                       | 2                        | 2                       |
| Harnischia sp.           |                                | .                       | .                       | .                       | 1                        | .                       |
| Hydrobaenus sp.          |                                | .                       | .                       | 1                       | .                        | .                       |
| Nanocladius sp.          |                                | .                       | .                       | .                       | 28                       | .                       |
| Parachironomus sp.       |                                | .                       | .                       | 1                       | .                        | .                       |
| Polypedilum sp.          |                                | .                       | .                       | .                       | 1                        | .                       |
| Procladius sp.           |                                | .                       | 22                      | 23                      | .                        | 162                     |
| Psectrocladius sp.       |                                | .                       | .                       | 5                       | .                        | .                       |
| Rheotanytarsus sp.       |                                | .                       | .                       | .                       | 1                        | .                       |
| Tanytarsus sp.           |                                | .                       | 2                       | .                       | .                        | 10                      |
| Arachnoidea              |                                |                         |                         |                         |                          |                         |
| Hydrachnellae            |                                | .                       | .                       | 2                       | .                        | .                       |
| Krendowskiiidae          |                                | .                       | .                       | .                       | .                        | .                       |
| Krendowskia similis      |                                | .                       | .                       | .                       | .                        | 7                       |
| Unionicolidae            |                                | .                       | .                       | .                       | .                        | .                       |
| Unionicola sp.           |                                | .                       | .                       | 3                       | 1                        | .                       |
| Gastropoda               |                                |                         |                         |                         |                          |                         |
| Mesogastropoda           |                                |                         |                         |                         |                          |                         |
| Hydrobiidae              |                                | .                       | .                       | 1                       | .                        | .                       |
| Somatogyrus sp.          |                                | 110                     | 7                       | 1                       | .                        | .                       |
| Pleuroceridae            |                                | .                       | .                       | .                       | .                        | .                       |
| Leptoxis praerosa        |                                | .                       | 7                       | .                       | 18                       | .                       |

|                            | 3    | .    | .    | 1    | .    |
|----------------------------|------|------|------|------|------|
| Lithasia armigera          | 3    | .    | .    | 1    | .    |
| Lithasia sp.               | 6    | .    | .    | .    | .    |
| Lithasia verrucosa         | .    | .    | .    | 10   | .    |
| Pleurocera sp.             | .    | .    | .    | 4    | .    |
| Pleurocera canaliculata    | .    | .    | 11   | .    | .    |
| Viviparidae                |      |      |      |      |      |
| Campeloma sp.              | 3    | .    | 6    | .    | .    |
| Basommatophora             |      |      |      |      |      |
| Ancylidae                  |      |      |      |      |      |
| Ferrissia rivularis        | 2    | .    | .    | .    | 10   |
| Planorbidae                | .    | .    | .    | .    | .    |
| Bivalvia                   |      |      |      |      |      |
| Unionoida                  |      |      |      |      |      |
| Unionidae                  |      |      |      |      |      |
| Amblema plicata            | 1    | .    | .    | .    | .    |
| Cyclonaias tuberculata     | .    | .    | .    | 1    | .    |
| Ellipsaria lineolata       | .    | .    | .    | 1    | .    |
| Fusconaia ebena            | 2    | .    | 1    | 5    | .    |
| Megalonaia nervosa         | .    | 2    | .    | .    | .    |
| Obliquaria reflexa         | 1    | .    | .    | 5    | .    |
| Pleurobema sp.             | .    | .    | 1    | .    | .    |
| Quadrula metanevra         | 1    | .    | .    | 1    | .    |
| Quadrula pustulosa pustulo | 1    | .    | .    | 4    | .    |
| Quadrula quadrula          | 1    | .    | .    | .    | .    |
| Tritogonia verrucosa       | .    | .    | .    | 1    | .    |
| Truncilla donaciformis     | 2    | .    | .    | .    | .    |
| Truncilla truncata         | 1    | .    | .    | .    | .    |
| Veneroida                  |      |      |      |      |      |
| Corbiculidae               |      |      |      |      |      |
| Corbicula fluminea         | 113  | 55   | 219  | 49   | .    |
| Dreissenidae               |      |      |      |      |      |
| Dreissena polymorpha       | .    | 2    | .    | .    | 5    |
| Sphaeriidae                | .    | 122  | 5    | .    | 5    |
| Musculium transversum      | 1    | 43   | 33   | .    | 58   |
| Pisidium sp.               | .    | 25   | .    | .    | .    |
| Number of samples          | 10   | 10   | 20   | 10   | 10   |
| Sum                        | 334  | 1041 | 974  | 211  | 1219 |
| Number of species          | 30   | 19   | 39   | 32   | 19   |
| Number of ept taxa         | 4    | 1    | 5    | 2    | 1    |
| Sum of area                | 1.10 | 0.60 | 1.20 | 1.10 | 0.60 |





| SPECIES                   | RESVORNA<br>STREAM<br>STREAMMI | MELTON<br>CLINCH<br>24.0 | MELTON<br>CLINCH<br>45.0 | MELTON<br>CLINCH<br>58.8 |
|---------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| Rotifera                  |                                | 18                       | 5                        | 7                        |
| igochaeta                 |                                |                          |                          |                          |
| Haplotaxida               |                                |                          |                          |                          |
| Enchytraeidae             |                                |                          | 2                        |                          |
| Naididae                  |                                |                          | 2                        |                          |
| Nais communis             |                                |                          | 5                        |                          |
| Nais simplex              |                                |                          | 2                        |                          |
| Vejdovskyella intermedia  |                                |                          | 2                        |                          |
| Tubificidae               |                                | 83                       | 117                      | 99                       |
| Branchiura sowerbyi       |                                | 2                        | 48                       |                          |
| Limnodrilus hoffmeisteri  |                                | 8                        |                          | 29                       |
| Insecta                   |                                |                          |                          |                          |
| Ephemeroptera             |                                |                          |                          |                          |
| Ephemeridae               |                                |                          |                          |                          |
| Hexagenia limbata         |                                | 12                       | 5                        |                          |
| Trichoptera               |                                |                          |                          |                          |
| Leptoceridae              |                                |                          |                          |                          |
| Oecetis sp.               |                                |                          | 2                        |                          |
| Megaloptera               |                                |                          |                          |                          |
| Sialidae                  |                                |                          |                          |                          |
| Sialis sp.                |                                |                          | 2                        |                          |
| Diptera                   |                                |                          |                          |                          |
| Ceratopogonidae           |                                |                          |                          |                          |
| Bezzia sp.                |                                |                          | 2                        |                          |
| Chironomidae              |                                |                          | 5                        |                          |
| Ablabesmyia annulata      |                                | 13                       | 2                        |                          |
| Ablabesmyia sp.           |                                |                          | 2                        |                          |
| Chaetocladius sp.         |                                |                          | 3                        |                          |
| Chironomus sp.            |                                | 177                      | 135                      | 73                       |
| Conchapelopia sp.         |                                |                          | 2                        |                          |
| Cryptochironomus sp.      |                                | 13                       | 15                       |                          |
| Dicrotendipes sp.         |                                |                          | 10                       | 4                        |
| Glyptotendipes sp.        |                                |                          | 2                        |                          |
| Harnischia sp.            |                                | 12                       |                          |                          |
| Microtendipes sp.         |                                | 2                        |                          | 1                        |
| Paratendipes sp.          |                                |                          |                          | 10                       |
| Phaenopsectra sp.         |                                |                          |                          | 47                       |
| Polypedilum sp.           |                                |                          | 62                       | 3                        |
| Polypedilum halterale     |                                |                          | 7                        |                          |
| Procladius sp.            |                                | 55                       | 77                       |                          |
| Psectrocladius sp.        |                                |                          |                          | 1                        |
| Rheotanytarsus sp.        |                                |                          | 2                        |                          |
| Tanytarsus sp.            |                                | 5                        | 12                       | 3                        |
| Tribelos sp.              |                                |                          | 2                        |                          |
| Tvetenia discoloripes sp. |                                |                          |                          | 1                        |
| Coleoptera                |                                |                          |                          |                          |
| Ptilodactylidae           |                                |                          |                          |                          |
| Anchyrtarsus bicolor      |                                |                          | 2                        |                          |
| Arachnoidea               |                                |                          |                          |                          |
| Hydrachnellae             |                                | 2                        |                          |                          |
| Unionicolidae             |                                |                          |                          |                          |
| Neumania sp.              |                                |                          | 2                        |                          |
| Bivalvia                  |                                |                          |                          |                          |
| Veneroida                 |                                |                          |                          |                          |
| Corbiculidae              |                                |                          |                          |                          |
| Corbicula fluminea        |                                | 2                        | 2                        |                          |
| Sphaeriidae               |                                |                          | 5                        |                          |
| Number of samples         |                                | 10                       | 10                       | 10                       |
| Sum                       |                                | 406                      | 543                      | 278                      |
| Number of species         |                                | 15                       | 31                       | 12                       |
| Number of ept taxa        |                                | 1                        | 2                        | 0                        |
| Sum of area               |                                | 0.60                     | 0.60                     | 1.00                     |

| SPECIES                   | RESVORNA<br>STREAM<br>STREAMMI | MELTON<br>CLINCH<br>24.0 | MELTON<br>CLINCH<br>45.0 | MELTON<br>CLINCH<br>58.8 |
|---------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| Rotifera                  |                                |                          |                          |                          |
| igochaeta                 |                                |                          |                          |                          |
| Haplotaxida               |                                |                          |                          |                          |
| Enchytraeidae             |                                |                          |                          |                          |
| Naididae                  |                                |                          |                          |                          |
| Nais communis             |                                |                          |                          |                          |
| Nais simplex              |                                |                          |                          |                          |
| Vejdovskyella intermedia  |                                |                          |                          |                          |
| Tubificidae               |                                |                          |                          |                          |
| Branchiura sowerbyi       |                                |                          |                          |                          |
| Limnodrilus hoffmeisteri  |                                |                          |                          |                          |
| Insecta                   |                                |                          |                          |                          |
| Ephemeroptera             |                                |                          |                          |                          |
| Ephemeridae               |                                |                          |                          |                          |
| Hexagenia limbata         |                                |                          |                          |                          |
| Trichoptera               |                                |                          |                          |                          |
| Leptoceridae              |                                |                          |                          |                          |
| Oecetis sp.               |                                |                          |                          |                          |
| Megaloptera               |                                |                          |                          |                          |
| Sialidae                  |                                |                          |                          |                          |
| Sialis sp.                |                                |                          |                          |                          |
| Diptera                   |                                |                          |                          |                          |
| Ceratopogonidae           |                                |                          |                          |                          |
| Bezzia sp.                |                                |                          |                          |                          |
| Chironomidae              |                                |                          |                          |                          |
| Ablabesmyia annulata      |                                |                          |                          |                          |
| Ablabesmyia sp.           |                                |                          |                          |                          |
| Chaetocladius sp.         |                                |                          |                          |                          |
| Chironomus sp.            |                                |                          |                          |                          |
| Conchapelopia sp.         |                                |                          |                          |                          |
| Cryptochironomus sp.      |                                |                          |                          |                          |
| Dicrotendipes sp.         |                                |                          |                          |                          |
| Glyptotendipes sp.        |                                |                          |                          |                          |
| Harnischia sp.            |                                |                          |                          |                          |
| Microtendipes sp.         |                                |                          |                          |                          |
| Paratendipes sp.          |                                |                          |                          |                          |
| Phaenopsectra sp.         |                                |                          |                          |                          |
| Polypedilum sp.           |                                |                          |                          |                          |
| Polypedilum halterale     |                                |                          |                          |                          |
| Procladius sp.            |                                |                          |                          |                          |
| Psectrocladius sp.        |                                |                          |                          |                          |
| Rheotanytarsus sp.        |                                |                          |                          |                          |
| Tanytarsus sp.            |                                |                          |                          |                          |
| Tribelos sp.              |                                |                          |                          |                          |
| Tvetenia discoloripes sp. |                                |                          |                          |                          |
| Coleoptera                |                                |                          |                          |                          |
| Ptilodactylidae           |                                |                          |                          |                          |
| Anchyrtarsus bicolor      |                                |                          |                          |                          |
| Arachnoidea               |                                |                          |                          |                          |
| Hydrachnellae             |                                |                          |                          |                          |
| Unionicolidae             |                                |                          |                          |                          |
| Neumania sp.              |                                |                          |                          |                          |
| Bivalvia                  |                                |                          |                          |                          |
| Veneroida                 |                                |                          |                          |                          |
| Corbiculidae              |                                |                          |                          |                          |
| Corbicula fluminea        |                                |                          |                          |                          |
| Sphaeriidae               |                                |                          |                          |                          |
| Number of samples         |                                |                          |                          |                          |
| Sum                       |                                |                          |                          |                          |
| Number of species         |                                |                          |                          |                          |
| Number of ept taxa        |                                |                          |                          |                          |
| Sum of area               |                                |                          |                          |                          |

## VS 94 DENSITY/SQ.METER BY SITE

|                            | RESVORNA<br>STREAM<br>STREAMMI | NICKAJ<br>TENNE<br>425.5 | NICKAJ<br>TENNE<br>469.0 |
|----------------------------|--------------------------------|--------------------------|--------------------------|
| SPECIES                    |                                |                          |                          |
| Turbellaria                |                                |                          |                          |
| Tricladida                 |                                |                          |                          |
| Planariidae                |                                |                          |                          |
| Dugesia tigrina            | .                              |                          | 89                       |
| Oligochaeta                |                                |                          |                          |
| Haplotaxida                |                                |                          |                          |
| Naididae                   |                                |                          |                          |
| Chaetogaster sp.           | .                              |                          | 14                       |
| Tubificidae                | 63                             |                          | 11                       |
| Branchiura sowerbyi        | 9                              |                          | .                        |
| Limnodrilus hoffmeisteri   | .                              |                          | 1                        |
| Hirudinea                  | .                              |                          |                          |
| Pharyngobdellida           |                                |                          |                          |
| Erpobdellidae              |                                |                          |                          |
| Erpobdella punctata        | .                              |                          | 4                        |
| Crustacea                  |                                |                          |                          |
| Isopoda                    |                                |                          |                          |
| Asellidae                  |                                |                          |                          |
| Lirceus sp.                | .                              |                          | 5                        |
| Amphipoda                  |                                |                          |                          |
| Crangonyctidae             |                                |                          |                          |
| Crangonyx sp.              | 1                              |                          | 29                       |
| Gammaridae                 | 1                              |                          | .                        |
| Gammarus sp.               | 3                              |                          | 35                       |
| Talitridae                 |                                |                          |                          |
| Hyalella azteca            | 3                              |                          | .                        |
| Insecta                    |                                |                          |                          |
| Odonata                    |                                |                          |                          |
| Gomphidae                  | 1                              |                          | .                        |
| Ephemeroptera              |                                |                          |                          |
| Ephemeridae                |                                |                          |                          |
| Hexagenia limbata          | 96                             |                          | .                        |
| Heptageniidae              |                                |                          |                          |
| Stenacron sp.              | .                              |                          | 3                        |
| Stenacron interpunctatum   | .                              |                          | 10                       |
| Trichoptera                |                                |                          |                          |
| Hydropsychidae             | .                              |                          | 17                       |
| Cheumatopsyche sp.         | 1                              |                          | 136                      |
| Leptoceridae               |                                |                          |                          |
| Ceraclea sp.               | .                              |                          | 9                        |
| Polycentropodidae          |                                |                          |                          |
| Cynnellus fraternus        | .                              |                          | 1                        |
| Diptera                    |                                |                          |                          |
| Ceratopogonidae            |                                |                          |                          |
| Bezzia sp.                 | 1                              |                          | .                        |
| Chironomidae               |                                |                          |                          |
| Ablabesmyia annulata       | 25                             |                          | .                        |
| Chironomus sp.             | 48                             |                          | .                        |
| Coelotanypus sp.           | 3                              |                          | .                        |
| Coelotanypus tricolor      | 103                            |                          | .                        |
| Cryptochironomus sp.       | 8                              |                          | .                        |
| Dicrotendipes sp.          | 3                              |                          | .                        |
| Einfeldia sp.              | 28                             |                          | .                        |
| Procladius sp.             | 53                             |                          | .                        |
| Tanytarsus sp.             | 1                              |                          | .                        |
| Xenochironomus xenolabis   | .                              |                          | 1                        |
| Arachnoidea                |                                |                          |                          |
| Hydrachnellae              |                                |                          |                          |
| Hygrobatidae               |                                |                          |                          |
| Hygrobates sp.             | 1                              |                          | .                        |
| Unionicolidae              |                                |                          |                          |
| Unionicola sp.             | 3                              |                          | .                        |
| Gastropoda                 |                                |                          |                          |
| Mesogastropoda             |                                |                          |                          |
| Hydrobiidae                | .                              |                          | 23                       |
| Somatogyrus sp.            | .                              |                          | 35                       |
| Pleuroceridae              |                                |                          |                          |
| Elimia sp.                 | .                              |                          | 2                        |
| Elimia laqueata            | .                              |                          | .                        |
| Leptoxis praerosa          | .                              |                          | 12                       |
| Pleurocera sp.             | .                              |                          | 1                        |
| Pleurocera canaliculata    | .                              |                          | 6                        |
| Viviparidae                |                                |                          |                          |
| Campeloma sp.              | .                              |                          | 3                        |
| Viviparus georgianus       | .                              |                          | 1                        |
| Basommatophora             |                                |                          |                          |
| Ancylidae                  |                                |                          |                          |
| Ferrissia rivularis        | .                              |                          | 4                        |
| Planorbidae                |                                |                          |                          |
| Gyraulus sp.               | .                              |                          | .                        |
| Bivalvia                   |                                |                          |                          |
| Unionoida                  |                                |                          |                          |
| Unionidae                  |                                |                          |                          |
| Quadrula pustulosa pustulo | .                              |                          | .                        |
| Veneroida                  |                                |                          |                          |
| Corbiculidae               |                                |                          |                          |
| Corbicula fluminea         | 73                             |                          | 503                      |
| Sphaeriidae                | 2                              |                          | .                        |
| Eupera cubensis            | .                              |                          | 38                       |
| Musculium transversum      | 18                             |                          | 2                        |
| Number of samples          | 20                             |                          | 20                       |
| Sum                        | 549                            |                          | 995                      |

VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | NICKAJ<br>TENNE<br>425.5 | NICKAJ<br>TENNE<br>469.0 | Number of species |
|--------------------------------|--------------------------|--------------------------|-------------------|
| 1                              | 2                        | 10                       | 1                 |
| 2                              | 2                        | 10                       | 2                 |
| 3                              | 2                        | 10                       | 3                 |
| 4                              | 2                        | 10                       | 4                 |
| 5                              | 2                        | 10                       | 5                 |
| 6                              | 2                        | 10                       | 6                 |
| 7                              | 2                        | 10                       | 7                 |
| 8                              | 2                        | 10                       | 8                 |
| 9                              | 2                        | 10                       | 9                 |
| 10                             | 2                        | 10                       | 10                |
| 11                             | 2                        | 10                       | 11                |
| 12                             | 2                        | 10                       | 12                |
| 13                             | 2                        | 10                       | 13                |
| 14                             | 2                        | 10                       | 14                |
| 15                             | 2                        | 10                       | 15                |
| 16                             | 2                        | 10                       | 16                |
| 17                             | 2                        | 10                       | 17                |
| 18                             | 2                        | 10                       | 18                |
| 19                             | 2                        | 10                       | 19                |
| 20                             | 2                        | 10                       | 20                |
| 21                             | 2                        | 10                       | 21                |
| 22                             | 2                        | 10                       | 22                |
| 23                             | 2                        | 10                       | 23                |
| 24                             | 2                        | 10                       | 24                |
| 25                             | 2                        | 10                       | 25                |
| 26                             | 2                        | 10                       | 26                |
| 27                             | 2                        | 10                       | 27                |
| 28                             | 2                        | 10                       | 28                |
| 29                             | 2                        | 10                       | 29                |
| 30                             | 2                        | 10                       | 30                |
| 31                             | 2                        | 10                       | 31                |
| 32                             | 2                        | 10                       | 32                |
| 33                             | 2                        | 10                       | 33                |
| 34                             | 2                        | 10                       | 34                |
| 35                             | 2                        | 10                       | 35                |
| 36                             | 2                        | 10                       | 36                |
| 37                             | 2                        | 10                       | 37                |
| 38                             | 2                        | 10                       | 38                |
| 39                             | 2                        | 10                       | 39                |
| 40                             | 2                        | 10                       | 40                |
| 41                             | 2                        | 10                       | 41                |
| 42                             | 2                        | 10                       | 42                |
| 43                             | 2                        | 10                       | 43                |
| 44                             | 2                        | 10                       | 44                |
| 45                             | 2                        | 10                       | 45                |
| 46                             | 2                        | 10                       | 46                |
| 47                             | 2                        | 10                       | 47                |
| 48                             | 2                        | 10                       | 48                |
| 49                             | 2                        | 10                       | 49                |
| 50                             | 2                        | 10                       | 50                |
| 51                             | 2                        | 10                       | 51                |
| 52                             | 2                        | 10                       | 52                |
| 53                             | 2                        | 10                       | 53                |
| 54                             | 2                        | 10                       | 54                |
| 55                             | 2                        | 10                       | 55                |
| 56                             | 2                        | 10                       | 56                |
| 57                             | 2                        | 10                       | 57                |
| 58                             | 2                        | 10                       | 58                |
| 59                             | 2                        | 10                       | 59                |
| 60                             | 2                        | 10                       | 60                |
| 61                             | 2                        | 10                       | 61                |
| 62                             | 2                        | 10                       | 62                |
| 63                             | 2                        | 10                       | 63                |
| 64                             | 2                        | 10                       | 64                |
| 65                             | 2                        | 10                       | 65                |
| 66                             | 2                        | 10                       | 66                |
| 67                             | 2                        | 10                       | 67                |
| 68                             | 2                        | 10                       | 68                |
| 69                             | 2                        | 10                       | 69                |
| 70                             | 2                        | 10                       | 70                |
| 71                             | 2                        | 10                       | 71                |
| 72                             | 2                        | 10                       | 72                |
| 73                             | 2                        | 10                       | 73                |
| 74                             | 2                        | 10                       | 74                |
| 75                             | 2                        | 10                       | 75                |
| 76                             | 2                        | 10                       | 76                |
| 77                             | 2                        | 10                       | 77                |
| 78                             | 2                        | 10                       | 78                |
| 79                             | 2                        | 10                       | 79                |
| 80                             | 2                        | 10                       | 80                |
| 81                             | 2                        | 10                       | 81                |
| 82                             | 2                        | 10                       | 82                |
| 83                             | 2                        | 10                       | 83                |
| 84                             | 2                        | 10                       | 84                |
| 85                             | 2                        | 10                       | 85                |
| 86                             | 2                        | 10                       | 86                |
| 87                             | 2                        | 10                       | 87                |
| 88                             | 2                        | 10                       | 88                |
| 89                             | 2                        | 10                       | 89                |
| 90                             | 2                        | 10                       | 90                |
| 91                             | 2                        | 10                       | 91                |
| 92                             | 2                        | 10                       | 92                |
| 93                             | 2                        | 10                       | 93                |
| 94                             | 2                        | 10                       | 94                |
| 95                             | 2                        | 10                       | 95                |
| 96                             | 2                        | 10                       | 96                |
| 97                             | 2                        | 10                       | 97                |
| 98                             | 2                        | 10                       | 98                |
| 99                             | 2                        | 10                       | 99                |
| 100                            | 2                        | 10                       | 100               |

Number of species  
 Number of ept taxa  
 Sum of area

25 27  
 2 6  
 1.20 2.20

VS 26 26M11/26: METER BY SITE

| SPECIES                   |      | RESURVA | MORHAN |
|---------------------------|------|---------|--------|
|                           |      | STREAM  | DUCK R |
|                           |      | 24.2    | 24.2   |
| Number of species         | 18   |         |        |
| Sum                       | 202  |         |        |
| Number of species         | 8    |         |        |
| Number of ept taxa        | 9    |         |        |
| Sum of area               | 0.60 |         |        |
| Presidius sp.             | 2    |         |        |
| Chironomus attenuatus sp. | 122  |         |        |
| Chironomus sp.            | 33   |         |        |
| Chironomidae              | 3    |         |        |
| Basia sp.                 | 2    |         |        |
| Caratopogonidae           |      |         |        |
| Diptera                   |      |         |        |
| Insecta                   |      |         |        |
| Limodrilus sp.            | 33   |         |        |
| Branchiura sowerbyi       | 12   |         |        |
| Lubidilidae               | 102  |         |        |
| Hydroptilidae             |      |         |        |
| Oligoneuridae             |      |         |        |
| Heuroidea                 | 5    |         |        |

## VS 94 DENSITY/SQ.METER BY SITE

|                           | RESVORNA<br>STREAM<br>STREAMMI | NORMAN<br>DUCK R<br>249.5 |
|---------------------------|--------------------------------|---------------------------|
| SPECIES                   |                                |                           |
| Nematoda                  |                                | 2                         |
| Oligochaeta               |                                |                           |
| Haplotaxida               |                                |                           |
| Tubificidae               |                                | 103                       |
| Branchiura sowerbyi       |                                | 2                         |
| Limnodrilus sp.           |                                | 33                        |
| Insecta                   |                                |                           |
| Diptera                   |                                |                           |
| Ceratopogonidae           |                                |                           |
| Bezzia sp.                |                                | 2                         |
| Chironomidae              |                                |                           |
| Chironomus sp.            |                                | 33                        |
| Chironomus attenuatus gp. |                                | 122                       |
| Procladius sp.            |                                | 5                         |
| Number of samples         |                                | 10                        |
| Sum                       |                                | 302                       |
| Number of species         |                                | 8                         |
| Number of ept taxa        |                                | 0                         |
| Sum of area               |                                | 0.60                      |

VS 94  
249.5VS 94  
249.5

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | NORRIS<br>CLINCH<br>80.4 | NORRIS<br>CLINCH<br>125.0 | NORRIS<br>POWELL<br>30.0 |
|--------------------------|--------------------------------|--------------------------|---------------------------|--------------------------|
| SPECIES                  |                                |                          |                           |                          |
| Nematoda                 |                                | 2                        | .                         | 2                        |
| Oligochaeta              |                                |                          |                           |                          |
| Haplotaxida              |                                |                          |                           |                          |
| Tubificidae              |                                | 198                      | 363                       | 613                      |
| Branchiura sowerbyi      |                                | .                        | 3                         | 2                        |
| Limnodrilus sp.          |                                | 3                        | .                         | .                        |
| Limnodrilus hoffmeisteri |                                | 78                       | 48                        | 198                      |
| Insecta                  |                                |                          |                           |                          |
| Ephemeroptera            |                                |                          |                           |                          |
| Caenidae                 |                                |                          |                           |                          |
| Caenis sp.               |                                | .                        | 2                         | 2                        |
| Ephemeridae              |                                |                          |                           |                          |
| Hexagenia limbata        |                                | .                        | 11                        | 2                        |
| Trichoptera              |                                |                          |                           |                          |
| Leptoceridae             |                                |                          |                           |                          |
| Oecetis sp.              |                                | .                        | 2                         | .                        |
| Diptera                  |                                |                          |                           |                          |
| Ceratopogonidae          |                                |                          |                           |                          |
| Bezzia sp.               |                                | 2                        | 14                        | .                        |
| Chironomidae             |                                | .                        | .                         | 3                        |
| Ablabesmyia annulata     |                                | .                        | 6                         | .                        |
| Chironomus sp.           |                                | .                        | 351                       | 335                      |
| Coelotanypus sp.         |                                | 1                        | 2                         | .                        |
| Coelotanypus tricolor    |                                | .                        | 5                         | .                        |
| Cryptochironomus sp.     |                                | .                        | 34                        | 28                       |
| Cryptochironomus fulvus  |                                | 2                        | .                         | .                        |
| Dicrotendipes sp.        |                                | .                        | 3                         | .                        |
| Phaenopsectra sp.        |                                | .                        | .                         | 5                        |
| Procladius sp.           |                                | 2                        | 154                       | 118                      |
| Gastropoda               |                                |                          |                           |                          |
| Basommatophora           |                                |                          |                           |                          |
| Planorbidae              |                                | .                        | 2                         | .                        |
| Bivalvia                 |                                |                          |                           |                          |
| Veneroida                |                                |                          |                           |                          |
| Corbiculidae             |                                |                          |                           |                          |
| Corbicula fluminea       |                                | 45                       | .                         | .                        |
| Sphaeriidae              |                                | 2                        | 12                        | 8                        |
| Musculium transversum    |                                | .                        | 8                         | 50                       |
| Number of samples        |                                | 10                       | 10                        | 10                       |
| Sum                      |                                | 335                      | 1020                      | 1366                     |
| Number of species        |                                | 10                       | 17                        | 13                       |
| Number of ept taxa       |                                | 0                        | 3                         | 2                        |
| Sum of area              |                                | 1.10                     | 0.65                      | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | NORRIS<br>CLINCH<br>80.4 | NORRIS<br>CLINCH<br>125.0 | NORRIS<br>POWELL<br>30.0 |
|--------------------------|--------------------------------|--------------------------|---------------------------|--------------------------|
| SPECIES                  |                                |                          |                           |                          |
| Nematoda                 |                                | 2                        | .                         | 2                        |
| Oligochaeta              |                                |                          |                           |                          |
| Haplotaxida              |                                |                          |                           |                          |
| Tubificidae              |                                | 198                      | 363                       | 613                      |
| Branchiura sowerbyi      |                                | .                        | 3                         | 2                        |
| Limnodrilus sp.          |                                | 3                        | .                         | .                        |
| Limnodrilus hoffmeisteri |                                | 78                       | 48                        | 198                      |
| Insecta                  |                                |                          |                           |                          |
| Ephemeroptera            |                                |                          |                           |                          |
| Caenidae                 |                                |                          |                           |                          |
| Caenis sp.               |                                | .                        | 2                         | 2                        |
| Ephemeridae              |                                |                          |                           |                          |
| Hexagenia limbata        |                                | .                        | 11                        | 2                        |
| Trichoptera              |                                |                          |                           |                          |
| Leptoceridae             |                                |                          |                           |                          |
| Oecetis sp.              |                                | .                        | 2                         | .                        |
| Diptera                  |                                |                          |                           |                          |
| Ceratopogonidae          |                                |                          |                           |                          |
| Bezzia sp.               |                                | 2                        | 14                        | .                        |
| Chironomidae             |                                | .                        | .                         | 3                        |
| Ablabesmyia annulata     |                                | .                        | 6                         | .                        |
| Chironomus sp.           |                                | .                        | 351                       | 335                      |
| Coelotanypus sp.         |                                | 1                        | 2                         | .                        |
| Coelotanypus tricolor    |                                | .                        | 5                         | .                        |
| Cryptochironomus sp.     |                                | .                        | 34                        | 28                       |
| Cryptochironomus fulvus  |                                | 2                        | .                         | .                        |
| Dicrotendipes sp.        |                                | .                        | 3                         | .                        |
| Phaenopsectra sp.        |                                | .                        | .                         | 5                        |
| Procladius sp.           |                                | 2                        | 154                       | 118                      |
| Gastropoda               |                                |                          |                           |                          |
| Basommatophora           |                                |                          |                           |                          |
| Planorbidae              |                                | .                        | 2                         | .                        |
| Bivalvia                 |                                |                          |                           |                          |
| Veneroida                |                                |                          |                           |                          |
| Corbiculidae             |                                |                          |                           |                          |
| Corbicula fluminea       |                                | 45                       | .                         | .                        |
| Sphaeriidae              |                                | 2                        | 12                        | 8                        |
| Musculium transversum    |                                | .                        | 8                         | 50                       |
| Number of samples        |                                | 10                       | 10                        | 10                       |
| Sum                      |                                | 335                      | 1020                      | 1366                     |
| Number of species        |                                | 10                       | 17                        | 13                       |
| Number of ept taxa       |                                | 0                        | 3                         | 2                        |
| Sum of area              |                                | 1.10                     | 0.65                      | 0.60                     |



## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAHMI | NOTTEL<br>NOTTEL<br>23.5 | NOTTEL<br>NOTTEL<br>31.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| Nematoda                 |                                | 1                        | 6                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Naididae                 |                                |                          |                          |
| Stylaria lacustris       |                                | 2                        | .                        |
| Tubificidae              |                                | 155                      | 18                       |
| Limnodrilus hoffmeisteri |                                | 4                        | 4                        |
| Insecta                  |                                |                          |                          |
| Ephemeroptera            |                                |                          |                          |
| Ephemeridae              |                                |                          |                          |
| Hexagenia limbata        |                                | .                        | 14                       |
| Trichoptera              |                                |                          |                          |
| Leptoceridae             |                                |                          |                          |
| Oecetis sp.              |                                | 1                        | .                        |
| Megaloptera              |                                |                          |                          |
| Sialidae                 |                                |                          |                          |
| Sialis sp.               |                                | .                        | 1                        |
| Diptera                  |                                |                          |                          |
| Ceratopogonidae          |                                |                          |                          |
| Bezzia sp.               |                                | .                        | 19                       |
| Chironomidae             |                                |                          |                          |
| Chironomus sp.           |                                | 181                      | 270                      |
| Cladotanytarsus sp.      |                                | .                        | 1                        |
| Cryptochironomus sp.     |                                | .                        | 2                        |
| Cryptochironomus fulvus  |                                | 2                        | 4                        |
| Harnischia sp.           |                                | 1                        | .                        |
| Phaenopsectra sp.        |                                | 1                        | 7                        |
| Procladius sp.           |                                | 14                       | 28                       |
| Tribelos sp.             |                                | .                        | 1                        |
| Zalutschia zalutschicola |                                | 7                        | .                        |
| Arachnoidea              |                                |                          |                          |
| Hydrachnellae            |                                |                          |                          |
| Hygrobatidae             |                                |                          |                          |
| Atractides sp.           |                                | .                        | .                        |
| Number of samples        | 10                             | 20                       |                          |
| Sum                      | 369                            | 375                      |                          |
| Number of species        | 11                             | 13                       |                          |
| Number of ept taxa       | 1                              | 1                        |                          |
| Sum of area              | 0.85                           | 2.20                     |                          |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAHMI | NOTTEL<br>NOTTEL<br>23.5 | NOTTEL<br>NOTTEL<br>31.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| Nematoda                 |                                | 1                        | 6                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Naididae                 |                                |                          |                          |
| Stylaria lacustris       |                                | 2                        | .                        |
| Tubificidae              |                                | 155                      | 18                       |
| Limnodrilus hoffmeisteri |                                | 4                        | 4                        |
| Insecta                  |                                |                          |                          |
| Ephemeroptera            |                                |                          |                          |
| Ephemeridae              |                                |                          |                          |
| Hexagenia limbata        |                                | .                        | 14                       |
| Trichoptera              |                                |                          |                          |
| Leptoceridae             |                                |                          |                          |
| Oecetis sp.              |                                | 1                        | .                        |
| Megaloptera              |                                |                          |                          |
| Sialidae                 |                                |                          |                          |
| Sialis sp.               |                                | .                        | 1                        |
| Diptera                  |                                |                          |                          |
| Ceratopogonidae          |                                |                          |                          |
| Bezzia sp.               |                                | .                        | 19                       |
| Chironomidae             |                                |                          |                          |
| Chironomus sp.           |                                | 181                      | 270                      |
| Cladotanytarsus sp.      |                                | .                        | 1                        |
| Cryptochironomus sp.     |                                | .                        | 2                        |
| Cryptochironomus fulvus  |                                | 2                        | 4                        |
| Harnischia sp.           |                                | 1                        | .                        |
| Phaenopsectra sp.        |                                | 1                        | 7                        |
| Procladius sp.           |                                | 14                       | 28                       |
| Tribelos sp.             |                                | .                        | 1                        |
| Zalutschia zalutschicola |                                | 7                        | .                        |
| Arachnoidea              |                                |                          |                          |
| Hydrachnellae            |                                |                          |                          |
| Hygrobatidae             |                                |                          |                          |
| Atractides sp.           |                                | .                        | .                        |
| Number of samples        | 10                             | 20                       |                          |
| Sum                      | 369                            | 375                      |                          |
| Number of species        | 11                             | 13                       |                          |
| Number of ept taxa       | 1                              | 1                        |                          |
| Sum of area              | 0.85                           | 2.20                     |                          |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | PARKSV<br>OCOE<br>12.5 |
|--------------------------|--------------------------------|------------------------|
| matoda                   |                                | 1                      |
| Uligochaeta              |                                |                        |
| Haplotaxida              |                                |                        |
| Tubificidae              |                                | 48                     |
| Branchiura sowerbyi      |                                | 1                      |
| Limnodrilus hoffmeisteri |                                | 7                      |
| Crustacea                |                                |                        |
| Amphipoda                |                                |                        |
| Crangonyctidae           |                                |                        |
| Crangonyx sp.            |                                | 5                      |
| Insecta                  |                                |                        |
| Trichoptera              |                                |                        |
| Polycentropodidae        |                                |                        |
| Polycentropus sp.        |                                | 1                      |
| Diptera                  |                                |                        |
| Chironomidae             |                                |                        |
| Procladius sp.           |                                | 1                      |
| Stenochironomus sp.      |                                | 1                      |
| Number of samples        |                                | 20                     |
| Sum                      |                                | 65                     |
| Number of species        |                                | 8                      |
| Number of ept taxa       |                                | 1                      |
| Sum of area              |                                | 1.20                   |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | PARKSV<br>OCOE<br>12.5 | PICKW<br>TENN<br>252.3 | PICKW<br>TENN<br>252.3 | PICKW<br>TENN<br>252.3 |
|--------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|
| matoda                   |                                |                        |                        |                        |                        |
| Uligochaeta              |                                |                        |                        |                        |                        |
| Haplotaxida              |                                |                        |                        |                        |                        |
| Tubificidae              |                                |                        |                        |                        |                        |
| Branchiura sowerbyi      |                                |                        |                        |                        |                        |
| Limnodrilus hoffmeisteri |                                |                        |                        |                        |                        |
| Crustacea                |                                |                        |                        |                        |                        |
| Amphipoda                |                                |                        |                        |                        |                        |
| Crangonyctidae           |                                |                        |                        |                        |                        |
| Crangonyx sp.            |                                |                        |                        |                        |                        |
| Insecta                  |                                |                        |                        |                        |                        |
| Trichoptera              |                                |                        |                        |                        |                        |
| Polycentropodidae        |                                |                        |                        |                        |                        |
| Polycentropus sp.        |                                |                        |                        |                        |                        |
| Diptera                  |                                |                        |                        |                        |                        |
| Chironomidae             |                                |                        |                        |                        |                        |
| Procladius sp.           |                                |                        |                        |                        |                        |
| Stenochironomus sp.      |                                |                        |                        |                        |                        |
| Number of samples        |                                |                        |                        |                        |                        |
| Sum                      |                                |                        |                        |                        |                        |
| Number of species        |                                |                        |                        |                        |                        |
| Number of ept taxa       |                                |                        |                        |                        |                        |
| Sum of area              |                                |                        |                        |                        |                        |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | PICKWI<br>TENNE<br>207.3 | PICKWI<br>TENNE<br>230.0 | PICKWI<br>TENNE<br>253.2 |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| SPECIES                        |                          |                          |                          |
| Nematoda                       | 2                        | 1                        | .                        |
| Hydrozoa                       |                          |                          |                          |
| Hydroidea                      |                          |                          |                          |
| Hydridae                       |                          |                          |                          |
| Hydra americana                | 2                        | .                        | 1                        |
| Turbellaria                    |                          |                          |                          |
| Tricladida                     |                          |                          |                          |
| Planariidae                    |                          |                          |                          |
| Dugesia tigrina                | 7                        | 1                        | 81                       |
| Oligochaeta                    |                          |                          |                          |
| Haplotaxida                    |                          |                          |                          |
| Tubificidae                    | 145                      | 114                      | 35                       |
| Branchiura sowerbyi            | 8                        | 7                        | .                        |
| Limnodrilus hoffmeisteri       | 2                        | 6                        | 3                        |
| Lumbriculida                   |                          |                          |                          |
| Lumbriculidae                  | 2                        | .                        | 40                       |
| Hirudinea                      |                          |                          |                          |
| Rhynchobdellida                |                          |                          |                          |
| Glossiphoniidae                | .                        | 1                        | .                        |
| Helobdella stagnalis           | 2                        | 1                        | .                        |
| Placobdella sp.                | .                        | .                        | 2                        |
| Pharyngobdellida               |                          |                          |                          |
| Erpobdellidae                  | 2                        | .                        | .                        |
| Crustacea                      |                          |                          |                          |
| Isopoda                        |                          |                          |                          |
| Asellidae                      |                          |                          |                          |
| Caecidotea sp.                 | .                        | 1                        | .                        |
| Lirceus sp.                    | 2                        | .                        | 45                       |
| Amphipoda                      |                          |                          |                          |
| Corophiidae                    |                          |                          |                          |
| Corophium lacustre             | 2                        | .                        | .                        |
| Crangonyctidae                 |                          |                          |                          |
| Crangonyx sp.                  | 2                        | .                        | 5                        |
| Gammaridae                     |                          |                          |                          |
| Gammarus sp.                   | .                        | 3                        | 1                        |
| Talitridae                     |                          |                          |                          |
| Hyalella azteca                | 2                        | .                        | .                        |
| Insecta                        |                          |                          |                          |
| Odonata                        |                          |                          |                          |
| Coenagrionidae                 |                          |                          |                          |
| Argia sp.                      | .                        | 1                        | .                        |
| Ephemeroptera                  |                          |                          |                          |
| Caenidae                       |                          |                          |                          |
| Caenis sp.                     | .                        | 7                        | 1                        |
| Ephemeridae                    |                          |                          |                          |
| Hexagenia limbata              | 35                       | 163                      | .                        |
| Heptageniidae                  | .                        | .                        | 1                        |
| Stenacron sp.                  | .                        | .                        | .                        |
| Stenacron interpunctatum       | .                        | .                        | 21                       |
| Stenonema sp.                  | .                        | .                        | .                        |
| Trichoptera                    |                          |                          |                          |
| Hydropsychidae                 | .                        | .                        | .                        |
| Cheumatopsyche sp.             | .                        | .                        | .                        |
| Hydropsyche sp.                | .                        | .                        | .                        |
| Leptoceridae                   | 2                        | 1                        | .                        |
| Ceraclea sp.                   | .                        | .                        | 6                        |
| Oecetis sp.                    | 5                        | 3                        | .                        |
| Polycentropodidae              |                          |                          |                          |
| Cyrnellus fraternus            | 2                        | 3                        | .                        |
| Diptera                        |                          |                          |                          |
| Ceratopogonidae                |                          |                          |                          |
| Bezzia sp.                     | .                        | 1                        | .                        |
| Chironomidae                   | 7                        | 33                       | 1                        |
| Ablabesmyia annulata           | 12                       | 33                       | .                        |
| Chironomus sp.                 | 23                       | 41                       | 7                        |
| Cladotanytarsus sp.            | .                        | .                        | .                        |
| Coelotanytarsus tricolor       | 128                      | 291                      | .                        |
| Cryptochironomus sp.           | 3                        | 1                        | .                        |
| Cryptochironomus fulvus        | .                        | .                        | .                        |
| Dicrotendipes sp.              | .                        | 10                       | .                        |
| Einfeldia sp.                  | 25                       | .                        | .                        |
| Glyptotendipes sp.             | .                        | 1                        | 2                        |
| Harnischia sp.                 | 2                        | .                        | .                        |
| Larsia sp.                     | .                        | .                        | .                        |
| Nanocladius sp.                | .                        | .                        | 1                        |
| Phaenopsectra sp.              | .                        | .                        | 1                        |
| Polypedilum sp.                | .                        | .                        | 1                        |
| Procladius sp.                 | 25                       | 29                       | .                        |
| Pseudochironomus sp.           | .                        | .                        | .                        |
| Rheotanytarsus sp.             | .                        | .                        | .                        |
| Stenochironomus sp.            | .                        | 1                        | .                        |
| Tanytarsus sp.                 | .                        | 1                        | .                        |
| Arachnoidea                    |                          |                          |                          |
| Hydrachnellae                  |                          |                          |                          |
| Unionicolidae                  |                          |                          |                          |
| Unionicola sp.                 | 2                        | .                        | .                        |
| Gastropoda                     |                          |                          |                          |
| Mesogastropoda                 |                          |                          |                          |
| Hydrobiidae                    |                          | 3                        | 1                        |
| Somatogyrus sp.                | 15                       | .                        | .                        |
| Pleuroceridae                  | .                        | .                        | 1                        |
| Leptoxis praerosa              | .                        | 11                       | .                        |
| Lithasia armigera              | .                        | .                        | .                        |

VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | PICKWI<br>TENNE<br>207.3 | PICKWI<br>TENNE<br>230.0 | PICKWI<br>TENNE<br>253.2 |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| SPECIES                        |                          |                          |                          |
| Nematoda                       | 2                        | 1                        | .                        |
| Hydrozoa                       |                          |                          |                          |
| Hydroidea                      |                          |                          |                          |
| Hydridae                       |                          |                          |                          |
| Hydra americana                | 2                        | .                        | 1                        |
| Turbellaria                    |                          |                          |                          |
| Tricladida                     |                          |                          |                          |
| Planariidae                    |                          |                          |                          |
| Dugesia tigrina                | 7                        | 1                        | 81                       |
| Oligochaeta                    |                          |                          |                          |
| Haplotaxida                    |                          |                          |                          |
| Tubificidae                    | 145                      | 114                      | 35                       |
| Branchiura sowerbyi            | 8                        | 7                        | .                        |
| Limnodrilus hoffmeisteri       | 2                        | 6                        | 3                        |
| Lumbriculida                   |                          |                          |                          |
| Lumbriculidae                  | 2                        | .                        | 40                       |
| Hirudinea                      |                          |                          |                          |
| Rhynchobdellida                |                          |                          |                          |
| Glossiphoniidae                | .                        | 1                        | .                        |
| Helobdella stagnalis           | 2                        | 1                        | .                        |
| Placobdella sp.                | .                        | .                        | 2                        |
| Pharyngobdellida               |                          |                          |                          |
| Erpobdellidae                  | 2                        | .                        | .                        |
| Crustacea                      |                          |                          |                          |
| Isopoda                        |                          |                          |                          |
| Asellidae                      |                          |                          |                          |
| Caecidotea sp.                 | .                        | 1                        | .                        |
| Lirceus sp.                    | 2                        | .                        | 45                       |
| Amphipoda                      |                          |                          |                          |
| Corophiidae                    |                          |                          |                          |
| Corophium lacustre             | 2                        | .                        | .                        |
| Crangonyctidae                 |                          |                          |                          |
| Crangonyx sp.                  | 2                        | .                        | 5                        |
| Gammaridae                     |                          |                          |                          |
| Gammarus sp.                   | .                        | 3                        | 1                        |
| Talitridae                     |                          |                          |                          |
| Hyalella azteca                | 2                        | .                        | .                        |
| Insecta                        |                          |                          |                          |
| Odonata                        |                          |                          |                          |
| Coenagrionidae                 |                          |                          |                          |
| Argia sp.                      | .                        | 1                        | .                        |
| Ephemeroptera                  |                          |                          |                          |
| Caenidae                       |                          |                          |                          |
| Caenis sp.                     | .                        | 7                        | 1                        |
| Ephemeridae                    |                          |                          |                          |
| Hexagenia limbata              | 35                       | 163                      | .                        |
| Heptageniidae                  | .                        | .                        | 1                        |
| Stenacron sp.                  | .                        | .                        | .                        |
| Stenacron interpunctatum       | .                        | .                        | 21                       |
| Stenonema sp.                  | .                        | .                        | .                        |
| Trichoptera                    |                          |                          |                          |
| Hydropsychidae                 | .                        | .                        | .                        |
| Cheumatopsyche sp.             | .                        | .                        | .                        |
| Hydropsyche sp.                | .                        | .                        | .                        |
| Leptoceridae                   | 2                        | 1                        | .                        |
| Ceraclea sp.                   | .                        | .                        | 6                        |
| Oecetis sp.                    | 5                        | 3                        | .                        |
| Polycentropodidae              |                          |                          |                          |
| Cyrnellus fraternus            | 2                        | 3                        | .                        |
| Diptera                        |                          |                          |                          |
| Ceratopogonidae                |                          |                          |                          |
| Bezzia sp.                     | .                        | 1                        | .                        |
| Chironomidae                   | 7                        | 33                       | 1                        |
| Ablabesmyia annulata           | 12                       | 33                       | .                        |
| Chironomus sp.                 | 23                       | 41                       | 7                        |
| Cladotanytarsus sp.            | .                        | .                        | .                        |
| Coelotanytarsus tricolor       | 128                      | 291                      | .                        |
| Cryptochironomus sp.           | 3                        | 1                        | .                        |
| Cryptochironomus fulvus        | .                        | .                        | .                        |
| Dicrotendipes sp.              | .                        | 10                       | .                        |
| Einfeldia sp.                  | 25                       | .                        | .                        |
| Glyptotendipes sp.             | .                        | 1                        | 2                        |
| Harnischia sp.                 | 2                        | .                        | .                        |
| Larsia sp.                     | .                        | .                        | .                        |
| Nanocladius sp.                | .                        | .                        | 1                        |
| Phaenopsectra sp.              | .                        | .                        | 1                        |
| Polypedilum sp.                | .                        | .                        | 1                        |
| Procladius sp.                 | 25                       | 29                       | .                        |
| Pseudochironomus sp.           | .                        | .                        | .                        |
| Rheotanytarsus sp.             | .                        | .                        | .                        |
| Stenochironomus sp.            | .                        | 1                        | .                        |
| Tanytarsus sp.                 | .                        | 1                        | .                        |
| Arachnoidea                    |                          |                          |                          |
| Hydrachnellae                  |                          |                          |                          |
| Unionicolidae                  |                          |                          |                          |
| Unionicola sp.                 | 2                        | .                        | .                        |
| Gastropoda                     |                          |                          |                          |
| Mesogastropoda                 |                          |                          |                          |
| Hydrobiidae                    |                          | 3                        | 1                        |
| Somatogyrus sp.                | 15                       | .                        | .                        |
| Pleuroceridae                  | .                        | .                        | 1                        |
| Leptoxis praerosa              | .                        | 11                       | .                        |
| Lithasia armigera              | .                        | .                        | .                        |

|                            |      |      |      |
|----------------------------|------|------|------|
| Lithasia sp.               | .    | .    | .    |
| Lithasia verrucosa         | .    | .    | 6    |
| Pleurocera sp.             | .    | .    | 3    |
| Pleurocera canaliculata    | 5    | 11   | .    |
| Viviparidae                | .    | .    | .    |
| Campelema sp.              | 32   | 16   | .    |
| Basommatophora             | .    | .    | .    |
| Ancylidae                  | .    | .    | .    |
| Ferrissia rivularis        | .    | 1    | .    |
| Planorbidae                | .    | .    | 1    |
| Bivalvia                   | .    | .    | .    |
| Unionoida                  | .    | .    | .    |
| Unionidae                  | .    | .    | .    |
| Fusconaia ebena            | .    | .    | .    |
| Fusconaia flava            | .    | .    | .    |
| Obliquaria reflexa         | .    | .    | .    |
| Quadrula pustulosa pustulo | .    | .    | .    |
| Veneroida                  | .    | .    | .    |
| Corbiculidae               | .    | .    | .    |
| Corbicula fluminea         | 80   | 83   | 264  |
| Dreissenidae               | .    | .    | .    |
| Dreissena polymorpha       | 2    | .    | .    |
| Sphaeriidae                | 283  | 6    | .    |
| Eupera cubensis            | 8    | .    | 1    |
| Musculium transversum      | 133  | 79   | .    |
| Number of samples          | 10   | 10   | 20   |
| Sum                        | 1009 | 932  | 532  |
| Number of species          | 34   | 33   | 26   |
| Number of ept taxa         | 4    | 5    | 4    |
| Sum of area                | 0.60 | 0.70 | 2.20 |

| VS 2% DENSITY/20 METER BY SITE |      |      |      |
|--------------------------------|------|------|------|
| SPECIES                        |      |      |      |
| Corbicula fluminea             | 10   | 10   | 20   |
| Dreissena polymorpha           | 2    | .    | .    |
| Sphaeriidae                    | 283  | 6    | .    |
| Eupera cubensis                | 8    | .    | 1    |
| Musculium transversum          | 133  | 79   | .    |
| Corbicula fluminea             | 80   | 83   | 264  |
| Dreissenidae                   | .    | .    | .    |
| Dreissena polymorpha           | 2    | .    | .    |
| Sphaeriidae                    | 283  | 6    | .    |
| Eupera cubensis                | 8    | .    | 1    |
| Musculium transversum          | 133  | 79   | .    |
| Number of samples              | 10   | 10   | 20   |
| Sum                            | 1009 | 932  | 532  |
| Number of species              | 34   | 33   | 26   |
| Number of ept taxa             | 4    | 5    | 4    |
| Sum of area                    | 0.60 | 0.70 | 2.20 |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | SOUTH<br>S FK H<br>51.0 | SOUTH<br>S FK H<br>62.5 |
|--------------------------------|-------------------------|-------------------------|
| SPECIES                        |                         |                         |
| Oligochaeta                    |                         |                         |
| Haplotaxida                    |                         |                         |
| Tubificidae                    | 111                     | 160                     |
| Branchiura sowerbyi            | 2                       | .                       |
| Limnodrilus hoffmeisteri       | 23                      | 42                      |
| Crustacea                      |                         |                         |
| Isopoda                        |                         |                         |
| Asellidae                      |                         |                         |
| Caecidotea sp.                 | 1                       | .                       |
| Insecta                        |                         |                         |
| Ephemeroptera                  |                         |                         |
| Ephemeridae                    |                         |                         |
| Hexagenia limbata              | 6                       | .                       |
| Diptera                        |                         |                         |
| Ceratopogonidae                |                         |                         |
| Bezzia sp.                     | 1                       | .                       |
| Chironomidae                   |                         | 2                       |
| Ablabesmyia annulata           | 2                       | .                       |
| Chironomus sp.                 | 15                      | 74                      |
| Cryptochironomus sp.           | .                       | 3                       |
| Dicrotendipes sp.              | .                       | 3                       |
| Polypedilum halterale          | .                       | 2                       |
| Procladius sp.                 | 6                       | 6                       |
| Tanytarsus sp.                 | 2                       | 3                       |
| Bivalvia                       |                         |                         |
| Veneroida                      |                         |                         |
| Corbiculidae                   |                         |                         |
| Corbicula fluminea             | 3                       | .                       |
| Number of samples              | 10                      | 10                      |
| Sum                            | 172                     | 295                     |
| Number of species              | 11                      | 9                       |
| Number of ept taxa             | 1                       | 0                       |
| Sum of area                    | 1.10                    | 1.05                    |



## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | TELLIC<br>LITTLE<br>1.0 | TELLIC<br>LITTLE<br>15.0 |
|--------------------------|--------------------------------|-------------------------|--------------------------|
| matoda                   |                                |                         | 2                        |
| Oligochaeta              |                                |                         |                          |
| Haplotaxida              |                                |                         |                          |
| Naididae                 |                                | 2                       |                          |
| Tubificidae              |                                | 155                     | 25                       |
| Branchiura sowerbyi      |                                |                         | 2                        |
| Limnodrilus hoffmeisteri |                                | 18                      |                          |
| Lumbriculida             |                                |                         |                          |
| Lumbriculidae            |                                |                         | 2                        |
| Insecta                  |                                |                         |                          |
| Ephemeroptera            |                                |                         |                          |
| Ephemeridae              |                                |                         |                          |
| Hexagenia limbata        |                                |                         | 8                        |
| Trichoptera              |                                |                         |                          |
| Leptoceridae             |                                |                         |                          |
| Oecetis sp.              |                                | 2                       |                          |
| Diptera                  |                                |                         |                          |
| Chironomidae             |                                |                         |                          |
| Ablabesmyia annulata     |                                | 2                       | 3                        |
| Chironomus sp.           |                                | 13                      | 17                       |
| Cryptochironomus sp.     |                                |                         | 2                        |
| Parachironomus sp.       |                                |                         | 2                        |
| Procladius sp.           |                                | 23                      | 10                       |
| Stictochironomus sp.     |                                |                         | 15                       |
| Tanytarsus sp.           |                                |                         | 20                       |
| Zalutschia zalutschicola |                                |                         | 60                       |
| Bivalvia                 |                                |                         |                          |
| Veneroida                |                                |                         |                          |
| Corbiculidae             |                                |                         |                          |
| Corbicula fluminea       |                                | 23                      | 2                        |
| Sphaeriidae              |                                | 2                       |                          |
| Number of samples        |                                | 10                      | 10                       |
| Sum                      |                                | 240                     | 170                      |
| Number of species        |                                | 9                       | 14                       |
| Number of ept taxa       |                                | 1                       | 1                        |
| Sum of area              |                                | 0.60                    | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

| SPECIES                  | RESVORNA<br>STREAM<br>STREAMMI | TELLIC<br>LITTLE<br>1.0 | TELLIC<br>LITTLE<br>15.0 |
|--------------------------|--------------------------------|-------------------------|--------------------------|
| matoda                   |                                |                         | 2                        |
| Oligochaeta              |                                |                         |                          |
| Haplotaxida              |                                |                         |                          |
| Naididae                 |                                | 2                       |                          |
| Tubificidae              |                                | 155                     | 25                       |
| Branchiura sowerbyi      |                                |                         | 2                        |
| Limnodrilus hoffmeisteri |                                | 18                      |                          |
| Lumbriculida             |                                |                         |                          |
| Lumbriculidae            |                                |                         | 2                        |
| Insecta                  |                                |                         |                          |
| Ephemeroptera            |                                |                         |                          |
| Ephemeridae              |                                |                         |                          |
| Hexagenia limbata        |                                |                         | 8                        |
| Trichoptera              |                                |                         |                          |
| Leptoceridae             |                                |                         |                          |
| Oecetis sp.              |                                | 2                       |                          |
| Diptera                  |                                |                         |                          |
| Chironomidae             |                                |                         |                          |
| Ablabesmyia annulata     |                                | 2                       | 3                        |
| Chironomus sp.           |                                | 13                      | 17                       |
| Cryptochironomus sp.     |                                |                         | 2                        |
| Parachironomus sp.       |                                |                         | 2                        |
| Procladius sp.           |                                | 23                      | 10                       |
| Stictochironomus sp.     |                                |                         | 15                       |
| Tanytarsus sp.           |                                |                         | 20                       |
| Zalutschia zalutschicola |                                |                         | 60                       |
| Bivalvia                 |                                |                         |                          |
| Veneroida                |                                |                         |                          |
| Corbiculidae             |                                |                         |                          |
| Corbicula fluminea       |                                | 23                      | 2                        |
| Sphaeriidae              |                                | 2                       |                          |
| Number of samples        |                                | 10                      | 10                       |
| Sum                      |                                | 240                     | 170                      |
| Number of species        |                                | 9                       | 14                       |
| Number of ept taxa       |                                | 1                       | 1                        |
| Sum of area              |                                | 0.60                    | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | TIMS F<br>ELK R<br>135.0 | TIMS F<br>ELK R<br>150.0 |
|--------------------------------|--------------------------|--------------------------|
| SPECIES                        |                          |                          |
| Oligochaeta                    |                          |                          |
| Haplotaxida                    |                          |                          |
| Tubificidae                    | 33                       | 2                        |
| Limnodrilus hoffmeisteri       | 5                        | .                        |
| Insecta                        |                          |                          |
| Ephemeroptera                  |                          |                          |
| Ephemeridae                    |                          |                          |
| Hexagenia limbata              | .                        | 2                        |
| Diptera                        |                          |                          |
| Chironomidae                   |                          |                          |
| Chironomus sp.                 | 2                        | 20                       |
| Cryptochironomus sp.           | .                        | 2                        |
| Polypedilum sp.                | .                        | 2                        |
| Polypedilum halterale          | 15                       | .                        |
| Procladius sp.                 | .                        | 3                        |
| Tanytarsus sp.                 | .                        | 2                        |
| Number of samples              | 10                       | 10                       |
| Sum                            | 55                       | 33                       |
| Number of species              | 4                        | 7                        |
| Number of ept taxa             | 0                        | 1                        |
| Sum of area                    | 0.60                     | 0.60                     |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | TIMS F<br>ELK R<br>135.0 | TIMS F<br>ELK R<br>150.0 |
|--------------------------------|--------------------------|--------------------------|
| SPECIES                        |                          |                          |
| Oligochaeta                    |                          |                          |
| Haplotaxida                    |                          |                          |
| Tubificidae                    | 33                       | 2                        |
| Limnodrilus hoffmeisteri       | 5                        | .                        |
| Insecta                        |                          |                          |
| Ephemeroptera                  |                          |                          |
| Ephemeridae                    |                          |                          |
| Hexagenia limbata              | .                        | 2                        |
| Diptera                        |                          |                          |
| Chironomidae                   |                          |                          |
| Chironomus sp.                 | 2                        | 20                       |
| Cryptochironomus sp.           | .                        | 2                        |
| Polypedilum sp.                | .                        | 2                        |
| Polypedilum halterale          | 15                       | .                        |
| Procladius sp.                 | .                        | 3                        |
| Tanytarsus sp.                 | .                        | 2                        |
| Number of samples              | 10                       | 10                       |
| Sum                            | 55                       | 33                       |
| Number of species              | 4                        | 7                        |
| Number of ept taxa             | 0                        | 1                        |
| Sum of area                    | 0.60                     | 0.60                     |

| SPECIES                  | WATAUG<br>37.4 | WATAUG<br>45.5 |
|--------------------------|----------------|----------------|
| Urbellaria               |                |                |
| Tricladida               |                |                |
| Planariidae              |                |                |
| Dugesia tigrina          |                | 8              |
| Oligochaeta              |                |                |
| Haplotaenidae            |                |                |
| Tubificidae              | 14             | 463            |
| Limnodrilus hoffmeisteri |                | 38             |
| Lumbriculida             |                |                |
| Lumbriculidae            |                | 3              |
| Crustacea                |                |                |
| Isopoda                  |                |                |
| Asellidae                |                |                |
| Caecidotea sp.           |                | 75             |
| Amphipoda                |                |                |
| Crangonyctidae           |                |                |
| Crangonyx sp.            |                | 131            |
| Insecta                  |                |                |
| Ephemeroptera            |                |                |
| Ephemeridae              |                |                |
| Hexagenia limbata        |                | 2              |
| Diptera                  |                |                |
| Chironomidae             |                |                |
| Ablabesmyia annulata     |                | 1              |
| Chironomus sp.           |                | 323            |
| Cryptochironomus sp.     |                | 6              |
| Microtendipes sp.        | 2              | 3              |
| Procladius sp.           |                | 3              |
| Tanytarsus sp.           | 2              | 16             |
| Zalutschia zalutschicola |                | 1              |
| Simuliidae               | 1              |                |
| Bivalvia                 |                |                |
| Veneroida                |                |                |
| Corbiculidae             |                |                |
| Corbicula fluminea       | 2              | 2              |
| Sphaeriidae              | 2              |                |
| Number of samples        | 10             | 20             |
| Sum                      | 23             | 1072           |
| Number of species        | 6              | 14             |
| Number of ept taxa       | 0              | 1              |
| Sum of area              | 1.10           | 1.20           |

## VS 94 DENSITY/SQ.METER BY SITE

| RESVORNA<br>STREAM<br>STREAMMI | WATTS<br>TENNE<br>531.0 | WATTS<br>TENNE<br>560.8 | WATTS<br>TENNE<br>600.0 | WATTS<br>CLINCH<br>19.0 |
|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| SPECIES                        |                         |                         |                         |                         |
| Nematoda                       | 2                       | 2                       | .                       | .                       |
| Hydrozoa                       |                         |                         |                         |                         |
| Hydroida                       |                         |                         |                         |                         |
| Hydridae                       |                         |                         |                         |                         |
| Hydra americana                | .                       | .                       | 4                       | .                       |
| Turbellaria                    |                         |                         |                         |                         |
| Tricladida                     |                         |                         |                         |                         |
| Planariidae                    |                         |                         |                         |                         |
| Dugesia tigrina                | .                       | .                       | 1                       | 2                       |
| Oligochaeta                    |                         |                         |                         |                         |
| Haplotaxida                    |                         |                         |                         |                         |
| Enchytraeidae                  | .                       | 2                       | .                       | .                       |
| Tubificidae                    | 58                      | 177                     | 26                      | .                       |
| Branchiura sowerbyi            | 20                      | 3                       | .                       | .                       |
| Limnodrilus hoffmeisteri       | 3                       | 12                      | 1                       | .                       |
| Lumbriculida                   |                         |                         |                         |                         |
| Lumbriculidae                  | .                       | .                       | 2                       | .                       |
| Hirudinea                      | .                       | .                       | .                       | 1                       |
| Crustacea                      |                         |                         |                         |                         |
| Isopoda                        |                         |                         |                         |                         |
| Asellidae                      |                         |                         |                         |                         |
| Caecidotea sp.                 | .                       | .                       | 1                       | 1                       |
| Lirceus sp.                    | .                       | .                       | 2                       | 3                       |
| Amphipoda                      |                         |                         |                         |                         |
| Corophiidae                    |                         |                         |                         |                         |
| Corophium lacustre             | .                       | .                       | 3                       | .                       |
| Crangonyctidae                 |                         |                         |                         |                         |
| Crangonyx sp.                  | .                       | .                       | .                       | 1                       |
| Gammaridae                     |                         |                         |                         |                         |
| Gammarus sp.                   | .                       | .                       | 32                      | .                       |
| Talitridae                     |                         |                         |                         |                         |
| Hyalella azteca                | .                       | .                       | .                       | 1                       |
| Insecta                        |                         |                         |                         |                         |
| Odonata                        |                         |                         |                         |                         |
| Cordulegastridae               |                         |                         |                         |                         |
| Cordulegaster sp.              | .                       | 2                       | .                       | .                       |
| Ephemeroptera                  |                         |                         |                         |                         |
| Ephemeridae                    |                         |                         |                         |                         |
| Hexagenia limbata              | 10                      | 410                     | .                       | .                       |
| Heptageniidae                  |                         |                         |                         |                         |
| Stenacron interpunctatum       | .                       | .                       | 2                       | 3                       |
| Trichoptera                    |                         |                         |                         |                         |
| Leptoceridae                   |                         |                         |                         |                         |
| Ceraclea sp.                   | 2                       | .                       | 6                       | 6                       |
| Polycentropodidae              |                         |                         |                         |                         |
| Cyrnellus fraternus            | .                       | 2                       | 8                       | 4                       |
| Diptera                        |                         |                         |                         |                         |
| Ceratopogonidae                |                         |                         |                         |                         |
| Bezzia sp.                     | .                       | 2                       | .                       | .                       |
| Chironomidae                   |                         |                         |                         |                         |
| Ablabesmyia annulata           | 2                       | 95                      | .                       | 5                       |
| Axarus sp.                     | .                       | .                       | 1                       | 1                       |
| Chironomus sp.                 | 292                     | 180                     | 8                       | .                       |
| Coelotanypus tricolor          | 67                      | 122                     | .                       | .                       |
| Cricotopus sp.                 | .                       | .                       | .                       | 4                       |
| Cryptochironomus sp.           | 5                       | 15                      | .                       | 6                       |
| Dicrotendipes sp.              | .                       | .                       | 20                      | .                       |
| Einfeldia sp.                  | .                       | 13                      | .                       | .                       |
| Epoicocladus sp.               | .                       | 10                      | .                       | .                       |
| Glyptotendipes sp.             | .                       | 2                       | .                       | 6                       |
| Harnischia sp.                 | .                       | 2                       | .                       | .                       |
| Microtendipes sp.              | .                       | 2                       | .                       | .                       |
| Nanocladus sp.                 | .                       | .                       | 24                      | 1                       |
| Paratendipes sp.               | .                       | .                       | 1                       | .                       |
| Procladius sp.                 | 18                      | 117                     | 1                       | .                       |
| Pseudochironomus sp.           | .                       | 2                       | 1                       | .                       |
| Rheotanytarsus sp.             | .                       | .                       | 14                      | 4                       |
| Stenochironomus sp.            | .                       | 2                       | .                       | .                       |
| Tanytarsus sp.                 | .                       | .                       | 1                       | 3                       |
| Tvetenia bavarica sp. gp.      | .                       | .                       | .                       | 1                       |
| Empididae                      |                         |                         |                         |                         |
| Hemerodromia sp.               | .                       | .                       | .                       | 1                       |
| Simuliidae                     |                         |                         |                         |                         |
| Prosimulium sp.                | .                       | 2                       | .                       | .                       |
| Coleoptera                     |                         |                         |                         |                         |
| Elmidae                        |                         |                         |                         |                         |
| Dubiraphia sp.                 | .                       | 2                       | .                       | .                       |
| Arachnoidea                    |                         |                         |                         |                         |
| Hydrachnellae                  |                         |                         |                         |                         |
| Unionicolidae                  |                         |                         |                         |                         |
| Unionicola sp.                 | .                       | 2                       | .                       | .                       |
| Gastropoda                     |                         |                         |                         |                         |
| Mesogastropoda                 |                         |                         |                         |                         |
| Hydrobiidae                    | .                       | .                       | .                       | 4                       |
| Bivalvia                       |                         |                         |                         |                         |
| Unionoida                      |                         |                         |                         |                         |
| Unionidae                      |                         |                         |                         |                         |
| Obliquaria reflexa             | .                       | .                       | 1                       | .                       |
| Truncilla truncata             | .                       | .                       | 1                       | .                       |
| Veneroida                      |                         |                         |                         |                         |
| Corbiculidae                   |                         |                         |                         |                         |
| Corbicula fluminea             | 20                      | .                       | 103                     | 35                      |
| Sphaeriidae                    | 15                      | 267                     | .                       | .                       |

## 7

|      |      |      |      |
|------|------|------|------|
| 10   | 10   | 10   | 10   |
| 519  | 1454 | 283  | 93   |
| 14   | 26   | 25   | 21   |
| 2    | 2    | 3    | 3    |
| 0.60 | 0.60 | 1.10 | 1.10 |



## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | WHEEL<br>TENNE<br>277.0 | WHEEL<br>TENNE<br>295.9 | WHEEL<br>TENNE<br>347.0 | WHEEL<br>ELK R<br>6.0 |
|--------------------------|--------------------------------|-------------------------|-------------------------|-------------------------|-----------------------|
| SPECIES                  |                                |                         |                         |                         |                       |
| Nematoda                 |                                | .                       | .                       | .                       | 15                    |
| Hydrozoa                 |                                |                         |                         |                         |                       |
| Hydroida                 |                                |                         |                         |                         |                       |
| Hydridae                 |                                |                         |                         |                         |                       |
| Hydra americana          | .                              | .                       | .                       | 7                       | .                     |
| Turbellaria              |                                |                         |                         |                         |                       |
| Tricladida               |                                |                         |                         |                         |                       |
| Planariidae              |                                |                         |                         |                         |                       |
| Dugesia tigrina          | .                              | .                       | .                       | 30                      | .                     |
| Oligochaeta              |                                |                         |                         |                         |                       |
| Haplotaxida              |                                |                         |                         |                         |                       |
| Naididae                 | .                              | .                       | 2                       | .                       | .                     |
| Nais communis            | .                              | .                       | .                       | 1                       | .                     |
| Nais simplex             | .                              | .                       | 2                       | .                       | .                     |
| Tubificidae              | 125                            | 98                      | .                       | .                       | 2555                  |
| Branchiura sowerbyi      | 2                              | 12                      | .                       | .                       | 92                    |
| Limnodrilus hoffmeisteri | 5                              | .                       | .                       | .                       | 163                   |
| Lumbriculida             |                                |                         |                         |                         |                       |
| Lumbriculidae            | .                              | 3                       | .                       | 5                       | .                     |
| Hirudinea                |                                |                         |                         |                         |                       |
| Rhynchobdellida          |                                |                         |                         |                         |                       |
| Glossiphoniidae          |                                |                         |                         |                         |                       |
| Helobdella stagnalis     | 42                             | .                       | .                       | .                       | .                     |
| Helobdella triserialis   | .                              | .                       | .                       | 1                       | .                     |
| Crustacea                |                                |                         |                         |                         |                       |
| Isopoda                  |                                |                         |                         |                         |                       |
| Asellidae                |                                |                         |                         |                         |                       |
| Lirceus sp.              | .                              | .                       | .                       | 8                       | .                     |
| Amphipoda                |                                |                         |                         |                         |                       |
| Crangonyctidae           |                                |                         |                         |                         |                       |
| Crangonyx sp.            | .                              | .                       | .                       | 17                      | .                     |
| Gammaridae               |                                |                         |                         |                         |                       |
| Gammarus sp.             | .                              | .                       | .                       | 42                      | .                     |
| Talitridae               | .                              | .                       | .                       | .                       | .                     |
| Hyalella azteca          | .                              | 15                      | .                       | .                       | .                     |
| Insecta                  |                                |                         |                         |                         |                       |
| Odonata                  |                                |                         |                         |                         |                       |
| Coenagrionidae           |                                |                         |                         |                         |                       |
| Enallagma sp.            | .                              | .                       | .                       | 1                       | .                     |
| Ephemeroptera            |                                |                         |                         |                         |                       |
| Caenidae                 |                                |                         |                         |                         |                       |
| Caenis sp.               | .                              | 3                       | .                       | 2                       | .                     |
| Ephemerellidae           |                                |                         |                         |                         |                       |
| Ephemerella sp.          | .                              | .                       | .                       | 1                       | .                     |
| Ephemeridae              |                                |                         |                         |                         |                       |
| Hexagenia limbata        | 2                              | 175                     | .                       | .                       | 5                     |
| Heptageniidae            |                                |                         |                         |                         |                       |
| Stenacron interpunctatum | .                              | .                       | .                       | 23                      | .                     |
| Trichoptera              |                                |                         |                         |                         |                       |
| Leptoceridae             | .                              | .                       | .                       | 1                       | .                     |
| Ceraclea sp.             | .                              | .                       | .                       | 9                       | .                     |
| Oecetis sp.              | .                              | 2                       | .                       | .                       | .                     |
| Polycentropodidae        |                                |                         |                         |                         |                       |
| Cyrnellus fraternus      | .                              | 2                       | .                       | 4                       | .                     |
| Diptera                  |                                |                         |                         |                         |                       |
| Ceratopogonidae          |                                |                         |                         |                         |                       |
| Bezzia sp.               | .                              | .                       | .                       | .                       | 23                    |
| Chironomidae             |                                |                         |                         |                         |                       |
| Abalatesmyia annulata    | 2                              | 17                      | .                       | 3                       | .                     |
| Axarus sp.               | .                              | 2                       | .                       | .                       | 2                     |
| Chironomus sp.           | 210                            | 27                      | .                       | .                       | 657                   |
| Coelotanypus sp.         | .                              | 35                      | .                       | .                       | 58                    |
| Coelotanypus tricolor    | 217                            | 103                     | .                       | 1                       | 122                   |
| Cryptochironomus sp.     | .                              | 27                      | .                       | 3                       | 18                    |
| Dicrotendipes sp.        | .                              | 27                      | .                       | 4                       | 2                     |
| Einfeldia sp.            | 17                             | 13                      | .                       | .                       | 190                   |
| Glyptotendipes sp.       | .                              | .                       | .                       | .                       | 2                     |
| Nanocladius sp.          | .                              | .                       | .                       | 7                       | .                     |
| Parachironomus sp.       | .                              | .                       | .                       | 3                       | .                     |
| Paralauterborniella sp.  | .                              | .                       | .                       | .                       | 2                     |
| Phaenopsectra sp.        | .                              | .                       | .                       | .                       | 2                     |
| Procladius sp.           | 60                             | 42                      | .                       | .                       | 347                   |
| Tanytarsus sp.           | .                              | .                       | .                       | 1                       | 3                     |
| Tribelos sp.             | .                              | .                       | .                       | .                       | 2                     |
| Coleoptera               |                                |                         |                         |                         |                       |
| Hydrophilidae            |                                |                         |                         |                         |                       |
| Berosus sp.              | .                              | .                       | .                       | 1                       | .                     |
| Arachnoidea              |                                |                         |                         |                         |                       |
| Hydrachnellae            | .                              | .                       | .                       | .                       | 2                     |
| Hygrobatidae             |                                |                         |                         |                         |                       |
| Atractides sp.           | 2                              | .                       | .                       | .                       | .                     |
| Unionicolidae            |                                |                         |                         |                         |                       |
| Unionicola sp.           | 3                              | 2                       | .                       | .                       | 3                     |
| Gastropoda               |                                |                         |                         |                         |                       |
| Mesogastropoda           |                                |                         |                         |                         |                       |
| Hydrobiidae              | .                              | 3                       | .                       | 21                      | .                     |
| Somatogyrus sp.          | 2                              | .                       | .                       | .                       | .                     |
| Pleuroceridae            | .                              | .                       | .                       | 3                       | .                     |
| Elimia sp.               | .                              | 2                       | .                       | .                       | .                     |
| Pleurocera sp.           | .                              | 3                       | .                       | 9                       | .                     |
| Pleurocera canaliculata  | .                              | 8                       | .                       | .                       | 2                     |
| Viviparidae              |                                |                         |                         |                         |                       |
| Campeloma sp.            | 5                              | 2                       | .                       | .                       | .                     |

| Species                    | Station 1 | Station 2 | Station 3 | Station 4 |
|----------------------------|-----------|-----------|-----------|-----------|
| Viviparus sp.              | 7         | 2         |           |           |
| Basommatophora             |           |           |           |           |
| Ancylidae                  |           |           |           |           |
| Ferrissia rivularis        |           | 12        |           |           |
| Planorbidae                | 3         |           |           |           |
| Bivalvia                   |           |           |           |           |
| Unionoida                  |           |           |           |           |
| Unionidae                  |           |           |           |           |
| Ellipsaria lineolata       |           | 1         |           |           |
| Elliptio crassidens        |           | 2         |           |           |
| Quadrula pustulosa pustulo |           | 2         |           |           |
| Veneroida                  |           |           |           |           |
| Corbiculidae               |           |           |           |           |
| Corbicula fluminea         | 20        | 130       | 203       |           |
| Sphaeriidae                | 23        | 2         |           | 2         |
| Eupera cubensis            |           |           | 1         |           |
| Musculium transversum      | 3         | 30        |           | 5         |
| Pisidium compressum        |           |           |           | 3         |
| Number of samples          | 10        | 10        | 10        | 10        |
| Sum                        | 740       | 799       | 436       | 4277      |
| Number of species          | 17        | 30        | 34        | 25        |
| Number of ept taxa         | 1         | 4         | 6         | 1         |
| Sum of area                | 0.60      | 0.60      | 1.10      | 0.60      |

## VS 94 DENSITY/SQ.METER BY SITE

|                          | RESVORNA<br>STREAM<br>STREAMMI | WILSON<br>TENNE<br>260.8 | WILSON<br>TENNE<br>273.0 |
|--------------------------|--------------------------------|--------------------------|--------------------------|
| SPECIES                  |                                |                          |                          |
| Turbellaria              |                                |                          |                          |
| Tricladida               |                                |                          |                          |
| Planariidae              |                                |                          |                          |
| Dugesia tigrina          | .                              |                          | 6                        |
| Oligochaeta              |                                |                          |                          |
| Haplotaxida              |                                |                          |                          |
| Tubificidae              | 78                             | 158                      |                          |
| Limnodrilus sp.          | 8                              |                          |                          |
| Limnodrilus hoffmeisteri | .                              |                          | 6                        |
| Hirudinea                | .                              |                          | 22                       |
| Rhynchobdellida          |                                |                          |                          |
| Glossiphoniidae          |                                |                          |                          |
| Helobdella stagnalis     | 52                             | 8                        |                          |
| Pharyngobdellida         |                                |                          |                          |
| Erpobdellidae            | .                              |                          | 2                        |
| Erpobdella sp.           | .                              |                          | 8                        |
| Crustacea                |                                |                          |                          |
| Isopoda                  |                                |                          |                          |
| Asellidae                |                                |                          |                          |
| Caecidotea sp.           | .                              |                          | 3                        |
| Lirceus sp.              | .                              |                          | 14                       |
| Amphipoda                |                                |                          |                          |
| Crangonyctidae           |                                |                          |                          |
| Crangonyx sp.            | .                              |                          | 29                       |
| Gammaridae               |                                |                          |                          |
| Gammarus sp.             | .                              |                          | 45                       |
| Talitridae               |                                |                          |                          |
| Hyalella azteca          | 2                              | 3                        |                          |
| Insecta                  |                                |                          |                          |
| Odonata                  |                                |                          |                          |
| Coenagrionidae           |                                |                          |                          |
| Enallagma sp.            | .                              |                          | 3                        |
| Ephemeroptera            |                                |                          |                          |
| Caenidae                 |                                |                          |                          |
| Caenis sp.               | .                              |                          | 3                        |
| Ephemeridae              |                                |                          |                          |
| Hexagenia limbata        | .                              |                          | 2                        |
| Heptageniidae            |                                |                          |                          |
| Stenacron sp.            | .                              |                          | 3                        |
| Stenacron interpunctatum | .                              |                          | 2                        |
| Trichoptera              |                                |                          |                          |
| Hydroptilidae            |                                |                          |                          |
| Hydroptila sp.           | .                              |                          | 2                        |
| Leptoceridae             |                                |                          |                          |
| Ceraclea sp.             | .                              |                          | 3                        |
| Oecetis sp.              | .                              |                          | 9                        |
| Polycentropodidae        |                                |                          |                          |
| Cynnellus fraternus      | .                              |                          | 48                       |
| Diptera                  |                                |                          |                          |
| Chironomidae             | 3                              |                          |                          |
| Ablabesmyia sp.          | .                              |                          | 25                       |
| Chironomus sp.           | 485                            |                          |                          |
| Coelotanypus sp.         | 7                              |                          |                          |
| Coelotanypus tricolor    | 20                             |                          |                          |
| Cryptochironomus fulvus  | .                              |                          | 3                        |
| Glyptotendipes sp.       | .                              |                          | 9                        |
| Nanocladius sp.          | .                              |                          | 2                        |
| Procladius sp.           | 27                             |                          | 3                        |
| Stenochironomus sp.      | .                              |                          | 2                        |
| Xenochironomus xenolabis | .                              |                          | 2                        |
| Coleoptera               |                                |                          |                          |
| Elmidae                  |                                |                          |                          |
| Ancyronyx variegatus     | .                              |                          | 2                        |
| Gastropoda               |                                |                          |                          |
| Mesogastropoda           |                                |                          |                          |
| Hydrobiidae              | .                              |                          | 2                        |
| Pleuroceridae            | .                              |                          | 25                       |
| Pleurocera sp.           | .                              |                          | 3                        |
| Pleurocera canaliculata  | .                              |                          | 3                        |
| Viviparidae              |                                |                          |                          |
| Campeloma sp.            | .                              |                          | 15                       |
| Viviparus sp.            | .                              |                          | 3                        |
| Basommatophora           |                                |                          |                          |
| Ancylidae                |                                |                          |                          |
| Ferrissia rivularis      | .                              |                          | 2                        |
| Physidae                 |                                |                          |                          |
| Physella sp.             | .                              |                          | 3                        |
| Bivalvia                 |                                |                          |                          |
| Unionoida                |                                |                          |                          |
| Unionidae                | .                              |                          | 8                        |
| Anodonta imbecillis      | .                              |                          | 8                        |
| Veneroida                |                                |                          |                          |
| Corbiculidae             |                                |                          |                          |
| Corbicula fluminea       | .                              |                          | 315                      |
| Sphaeriidae              | 30                             |                          | 69                       |
| Eupera cubensis          | .                              |                          | 20                       |
| Musculium transversum    | 8                              |                          | 100                      |
| Number of samples        | 10                             | 10                       |                          |
| Sum                      | 720                            | 1003                     |                          |
| Number of species        | 11                             | 43                       |                          |
| Number of ept taxa       | 0                              | 8                        |                          |
| Sum of area              | 0.60                           | 0.65                     |                          |

## **Section 5**

### **Fish Community**

#### **Appendix A.**

#### **Results and Ratings for Individual Metrics and Final RFAI Score for Each Sample Location in 1994**





Table 1. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Beach Lake Reservoir.

| Metric                              | Forebay              |       |
|-------------------------------------|----------------------|-------|
|                                     | Obs.                 | Score |
| A. Species richness and composition |                      |       |
| 1. Number of species                | 18                   | 3     |
| 2. Piscivore species                | 6                    | 3     |
| 3. Sunfish species                  | 6                    | 5     |
| 4. Sucker species                   | 1                    | 1     |
| 5. Intolerant species               | 1                    | 1     |
| 6. Percent tolerant species         | electrofishing 27.8% | 1.5   |
|                                     | gill netting 54.3%   | 0.5   |
| 7. Dominance *                      | electrofishing 32.9% | 2.5   |
|                                     | gill netting 50.7%   | 0.5   |
| B. Trophic composition              |                      |       |
| 8. Percent omnivores                | electrofishing 28.7% | 0.5   |
|                                     | gill netting 60.1%   | 0.5   |
| 9. Percent insectivores             | electrofishing 39.5% | 0.5   |
|                                     | gill netting 0.4%    | 0.5   |
| C. Reproductive composition         |                      |       |
| 10. Lithophilic spawning species    | 1                    | 1     |
| D. Fish abundance and health        |                      |       |
| 11. Average number of individuals   | electrofishing 35.3  | 0.5   |
|                                     | gill netting 27.6    | 2.5   |
| 12. Percent anomalies               | 1.5%                 | 5     |
| RFAI                                |                      | 29    |
|                                     |                      | poor  |

\* Percent composition of most abundant species.

Table 2 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Bear Creek Reservoir.

| Metric                              | Forebay              |       |
|-------------------------------------|----------------------|-------|
|                                     | Obs.                 | Score |
| A. Species richness and composition |                      |       |
| 1. Number of species                | 23                   | 5     |
| 2. Piscivore species                | 6                    | 3     |
| 3. Sunfish species                  | 5                    | 5     |
| 4. Sucker species                   | 7                    | 5     |
| 5. Intolerant species               | 3                    | 5     |
| 6. Percent tolerant species         | electrofishing 38.8% | 0.5   |
|                                     | gill netting 27.2%   | 1.5   |
| 7. Dominance *                      | electrofishing 33.5% | 2.5   |
|                                     | gill netting 26.5%   | 2.5   |
| B. Trophic composition              |                      |       |
| 8. Percent omnivores                | electrofishing 36.1% | 0.5   |
|                                     | gill netting 55.8%   | 1.5   |
| 9. Percent insectivores             | electrofishing 39.5% | 0.5   |
|                                     | gill netting 16.3%   | 2.5   |
| C. Reproductive composition         |                      |       |
| 10. Lithophilic spawning species    | 6                    | 3     |
| D. Fish abundance and health        |                      |       |
| 11. Average number of individuals   | electrofishing 43.0  | 1.5   |
|                                     | gill netting 14.7    | 1.5   |
| 12. Percent anomalies               | 2.7%                 | 3     |
| RFAI                                |                      | 44    |
|                                     |                      | good  |

\* Percent composition of most abundant species.

Table 3. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Blue Ridge Reservoir.

| Forebay                             |       | Transition 1 |       | Transition 2 |       | Forebay |       |
|-------------------------------------|-------|--------------|-------|--------------|-------|---------|-------|
| Obs.                                | Score | Obs.         | Score | Obs.         | Score | Obs.    | Score |
| A. Species richness and composition |       |              |       |              |       |         |       |
| 16                                  | 5     | 21           | 5     | 19           | 5     | 16      | 5     |
| 6                                   | 5     | 9            | 5     | 7            | 5     | 6       | 5     |
| 4                                   | 5     | 3            | 5     | 4            | 5     | 4       | 5     |
| 3                                   | 3     | 5            | 3     | 3            | 3     | 3       | 3     |
| 2                                   | 3     | 0            | 3     | 0            | 3     | 2       | 3     |
| 6.0%                                | 2.5   | 6.0%         | 2.5   | 6.0%         | 2.5   | 6.0%    | 2.5   |
| 35.8%                               | 0.5   | 35.8%        | 0.5   | 35.8%        | 0.5   | 35.8%   | 0.5   |
| 45.8%                               | 1.5   | 45.8%        | 1.5   | 45.8%        | 1.5   | 45.8%   | 1.5   |
| 35.8%                               | 1.5   | 35.8%        | 1.5   | 35.8%        | 1.5   | 35.8%   | 1.5   |
| B. Trophic composition              |       |              |       |              |       |         |       |
| 0.0%                                | 2.5   | 0.0%         | 2.5   | 0.0%         | 2.5   | 0.0%    | 2.5   |
| 40.3%                               | 0.5   | 40.3%        | 0.5   | 40.3%        | 0.5   | 40.3%   | 0.5   |
| 81.7%                               | 1.5   | 81.7%        | 1.5   | 81.7%        | 1.5   | 81.7%   | 1.5   |
| 4.5%                                | 1.5   | 4.5%         | 1.5   | 4.5%         | 1.5   | 4.5%    | 1.5   |
| C. Reproductive composition         |       |              |       |              |       |         |       |
| 5                                   | 5     | 3            | 5     | 3            | 5     | 5       | 5     |
| D. Fish abundance and health        |       |              |       |              |       |         |       |
| 18.9                                | 0.5   | 18.9         | 0.5   | 18.9         | 0.5   | 18.9    | 0.5   |
| 6.7                                 | 0.5   | 6.7          | 0.5   | 6.7          | 0.5   | 6.7     | 0.5   |
| 2.5%                                | 3     | 2.5%         | 3     | 2.5%         | 3     | 2.5%    | 3     |
| RFAI                                |       |              |       |              |       | 42      | good  |

\* Percent composition of most abundant species.

Table 4. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Boone Reservoir.

| Metric                              |                | Transition 1 |       | Transition 2 |       | Forebay |       |
|-------------------------------------|----------------|--------------|-------|--------------|-------|---------|-------|
|                                     |                | Obs.         | Score | Obs.         | Score | Obs.    | Score |
| A. Species richness and composition |                |              |       |              |       |         |       |
| 1. Number of species                |                | 20           | 3     | 21           | 5     | 19      | 3     |
| 2. Piscivore species                |                | 9            | 5     | 9            | 5     | 7       | 5     |
| 3. Sunfish species                  |                | 4            | 5     | 3            | 3     | 4       | 5     |
| 4. Sucker species                   |                | 3            | 3     | 2            | 1     | 2       | 1     |
| 5. Intolerant species               |                | 1            | 1     | 0            | 1     | 0       | 1     |
| 6. Percent tolerant species         | electrofishing | 29.1%        | 1.5   | 14.9%        | 2.5   | 30.3%   | 0.5   |
|                                     | gill netting   | 54.8%        | 0.5   | 59.2%        | 0.5   | 39.3%   | 1.5   |
| 7. Dominance *                      | electrofishing | 31.9%        | 2.5   | 50.7%        | 1.5   | 39.6%   | 2.5   |
|                                     | gill netting   | 32.2%        | 1.5   | 37.4%        | 1.5   | 29.5%   | 2.5   |
| B. Trophic composition              |                |              |       |              |       |         |       |
| 8. Percent omnivores                | electrofishing | 27.6%        | 0.5   | 13.5%        | 1.5   | 22.4%   | 1.5   |
|                                     | gill netting   | 61.0%        | 0.5   | 88.3%        | 0.5   | 51.6%   | 1.5   |
| 9. Percent insectivores             | electrofishing | 64.4%        | 1.5   | 67.0%        | 1.5   | 67.1%   | 1.5   |
|                                     | gill netting   | 3.4%         | 1.5   | 1.7%         | 0.5   | 4.1%    | 1.5   |
| C. Reproductive composition         |                |              |       |              |       |         |       |
| 10. Lithophilic spawning species    |                | 5            | 3     | 3            | 3     | 3       | 3     |
| D. Fish abundance and health        |                |              |       |              |       |         |       |
| 11. Average number of individuals   | electrofishing | 88.0         | 2.5   | 81.0         | 2.5   | 57.9    | 1.5   |
|                                     | gill netting   | 14.6         | 0.5   | 17.9         | 1.5   | 12.2    | 0.5   |
| 12. Percent anomalies               |                | 2.4%         | 3     | 1.2%         | 5     | 5.7%    | 1     |
| RFAI                                |                |              | 36    |              | 37    |         | 34    |
|                                     |                |              | fair  |              | fair  |         | fair  |

\* Percent composition of most abundant species.

Table 5 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Cedar Creek Reservoir.

|                                     |                | Forebay |       |
|-------------------------------------|----------------|---------|-------|
|                                     |                | Obs.    | Score |
| Metric                              |                |         |       |
| A. Species richness and composition |                |         |       |
| 1. Number of species                |                | 28      | 5     |
| 2. Piscivore species                |                | 9       | 5     |
| 3. Sunfish species                  |                | 4       | 5     |
| 4. Sucker species                   |                | 7       | 5     |
| 5. Intolerant species               |                | 3       | 5     |
| 6. Percent tolerant species         | electrofishing | 13.4%   | 2.5   |
|                                     | gill netting   | 26.9%   | 1.5   |
| 7. Dominance *                      | electrofishing | 55.4%   | 1.5   |
|                                     | gill netting   | 22.6%   | 2.5   |
| B. Trophic composition              |                |         |       |
| 8. Percent omnivores                | electrofishing | 12.5%   | 1.5   |
|                                     | gill netting   | 39.2%   | 2.5   |
| 9. Percent insectivores             | electrofishing | 76.3%   | 1.5   |
|                                     | gill netting   | 6.6%    | 2.5   |
| C. Reproductive composition         |                |         |       |
| 10. Lithophilic spawning species    |                | 8       | 5     |
| D. Fish abundance and health        |                |         |       |
| 11. Average number of individuals   | electrofishing | 39.3    | 0.5   |
|                                     | gill netting   | 21.2    | 2.5   |
| 12. Percent anomalies               |                | 6.3%    | 1     |
| RFAI                                |                |         | 50    |
|                                     |                |         | good  |

\* Percent composition of most abundant species.



Table 6. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Chatuge Reservoir.

| Metric                                     | Forebay        |       | Shooting Creek |       |
|--------------------------------------------|----------------|-------|----------------|-------|
|                                            | Obs.           | Score | Obs.           | Score |
| <b>A. Species richness and composition</b> |                |       |                |       |
| 1. Number of species                       | 18             | 5     | 16             | 5     |
| 2. Piscivore species                       | 8              | 5     | 7              | 5     |
| 3. Sunfish species                         | 4              | 5     | 4              | 5     |
| 4. Sucker species                          | 1              | 1     | 0              | 1     |
| 5. Intolerant species                      | 0              | 1     | 0              | 1     |
| 6. Percent tolerant species                | electrofishing | 10.7% | 2.5            | 7.6%  |
|                                            | gill netting   | 12.8% | 1.5            | 13.4% |
| 7. Dominance *                             | electrofishing | 47.8% | 1.5            | 57.0% |
|                                            | gill netting   | 29.7% | 2.5            | 31.7% |
| <b>B. Trophic composition</b>              |                |       |                |       |
| 8. Percent omnivores                       | electrofishing | 0.5%  | 2.5            | 0.8%  |
|                                            | gill netting   | 15.4% | 1.5            | 14.8% |
| 9. Percent insectivores                    | electrofishing | 76.8% | 1.5            | 84.2% |
|                                            | gill netting   | 10.3% | 2.5            | 4.2%  |
| <b>C. Reproductive composition</b>         |                |       |                |       |
| 10. Lithophilic spawning species           | 3              | 3     | 2              | 1     |
| <b>D. Fish abundance and health</b>        |                |       |                |       |
| 11. Average number of individuals          | electrofishing | 37.4  | 1.5            | 42.1  |
|                                            | gill netting   | 19.5  | 2.5            | 14.2  |
| 12. Percent anomalies                      | 2.5%           | 3     | 3.5%           | 3     |
| RFAI                                       |                | 43    | 39             |       |
|                                            |                | good  | fair           |       |

\* Percent composition of most abundant species.

Table 7. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Cherokee Reservoir.

| Metric                                     | Transition |       | Forebay |       |
|--------------------------------------------|------------|-------|---------|-------|
|                                            | Obs.       | Score | Obs.    | Score |
| <b>A. Species richness and composition</b> |            |       |         |       |
| 1. Number of species                       | 23         | 5     | 23      | 5     |
| 2. Piscivore species                       | 10         | 5     | 7       | 5     |
| 3. Sunfish species                         | 3          | 3     | 2       | 3     |
| 4. Sucker species                          | 2          | 1     | 4       | 3     |
| 5. Intolerant species                      | 0          | 1     | 0       | 1     |
| 6. Percent tolerant species                | 11.8%      | 2.5   | 4.0%    | 2.5   |
|                                            | 40.1%      | 1.5   | 17.1%   | 2.5   |
| 7. Dominance *                             | 49.1%      | 1.5   | 51.2%   | 1.5   |
|                                            | 31.1%      | 1.5   | 41.7%   | 1.5   |
| <b>B. Trophic composition</b>              |            |       |         |       |
| 8. Percent omnivores                       | 11.9%      | 1.5   | 13.6%   | 1.5   |
|                                            | 68.2%      | 0.5   | 65.9%   | 0.5   |
| 9. Percent insectivores                    | 82.9%      | 2.5   | 78.8%   | 1.5   |
|                                            | 3.4%       | 1.5   | 3.3%    | 1.5   |
| <b>C. Reproductive composition</b>         |            |       |         |       |
| 10. Lithophilic spawning species           | 3          | 3     | 4       | 3     |
| <b>D. Fish abundance and health</b>        |            |       |         |       |
| 11. Average number of individuals          | 85.6       | 2.5   | 36.7    | 0.5   |
|                                            | 26.7       | 1.5   | 21.1    | 1.5   |
| 12. Percent anomalies                      | 3.9%       | 3     | 4.0%    | 3     |
| RFAI                                       |            | 38    | 38      |       |
|                                            |            | fair  | fair    |       |

\* Percent composition of most abundant species.

Table 8. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Chickamauga Reservoir.

| Metric                              |                | Inflow          |       | Transition |       | Forebay    |       |
|-------------------------------------|----------------|-----------------|-------|------------|-------|------------|-------|
|                                     |                | Obs.            | Score | Obs.       | Score | Obs.       | Score |
| A. Species richness and composition |                |                 |       |            |       |            |       |
| 1. Number of species                |                | 36              | 5     | 29         | 3     | 27         | 3     |
| 2. Piscivore species                |                | 10              | 5     | 10         | 5     | 9          | 5     |
| 3. Sunfish species                  |                | 6               | 5     | 6          | 5     | 5          | 5     |
| 4. Sucker species                   |                | 5               | 3     | 2          | 1     | 2          | 1     |
| 5. Intolerant species               |                | 4               | 3     | 3          | 3     | 3          | 3     |
| 6. Percent tolerant species         | electrofishing | 15.3%           | 5     | 27.2%      | 1.5   | 10.5%      | 2.5   |
|                                     | gill netting   | .               | .     | 18.7%      | 2.5   | 45.9%      | 0.5   |
| 7. Dominance *                      | electrofishing | 28.8%           | 5     | 32.1%      | 2.5   | 33.6%      | 2.5   |
|                                     | gill netting   | .               | .     | 40.0%      | 1.5   | 41.5%      | 1.5   |
| B. Trophic composition              |                |                 |       |            |       |            |       |
| 8. Percent omnivores                | electrofishing | 14.7%           | 5     | 26.1%      | 1.5   | 7.1%       | 2.5   |
|                                     | gill netting   | .               | .     | 23.9%      | 2.5   | 56.3%      | 0.5   |
| 9. Percent insectivores             | electrofishing | 67.8%           | 5     | 61.0%      | 2.5   | 77.9%      | 2.5   |
|                                     | gill netting   | .               | .     | 13.5%      | 1.5   | 10.4%      | 1.5   |
| C. Reproductive composition         |                |                 |       |            |       |            |       |
| 10. Lithophilic spawning species    |                | 9               | 5     | 6          | 3     | 6          | 3     |
| D. Fish abundance and health        |                |                 |       |            |       |            |       |
| 11. Average number of individuals   | electrofishing | 111.7           | 5     | 45.1       | 0.5   | 71.8       | 1.5   |
|                                     | gill netting   | .               | .     | 15.5       | 1.5   | 13.5       | 0.5   |
| 12. Percent anomalies               |                | 8.6%            | 1     | 3.1%       | 3     | 1.7%       | 5     |
| RFAI                                |                | 52<br>excellent |       | 41<br>good |       | 41<br>good |       |

\* Percent composition of most abundant species.

Table 9. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Douglas Reservoir.

| Forebay                             |       | Transition |       | Metric                            | Transition |       | Forebay |       |
|-------------------------------------|-------|------------|-------|-----------------------------------|------------|-------|---------|-------|
| Obs.                                | Score | Obs.       | Score |                                   | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |       |            |       |                                   |            |       |         |       |
|                                     |       |            |       | 1. Number of species              | 24         | 5     | 24      | 5     |
|                                     |       |            |       | 2. Piscivore species              | 8          | 5     | 8       | 5     |
|                                     |       |            |       | 3. Sunfish species                | 4          | 5     | 3       | 3     |
|                                     |       |            |       | 4. Sucker species                 | 6          | 3     | 6       | 5     |
|                                     |       |            |       | 5. Intolerant species             | 1          | 1     | 1       | 1     |
|                                     |       |            |       | 6. Percent tolerant species       | 12.0%      | 2.5   | 28.2%   | 1.5   |
|                                     |       |            |       | electrofishing                    | 33.8%      | 1.5   | 62.2%   | 0.5   |
|                                     |       |            |       | gill netting                      | 33.8%      | 1.5   | 62.2%   | 0.5   |
|                                     |       |            |       | 7. Dominance *                    | 52.8%      | 1.5   | 33.6%   | 2.5   |
|                                     |       |            |       | electrofishing                    | 30.8%      | 1.5   | 60.9%   | 0.5   |
|                                     |       |            |       | gill netting                      | 30.8%      | 1.5   | 60.9%   | 0.5   |
| B. Trophic composition              |       |            |       |                                   |            |       |         |       |
|                                     |       |            |       | 8. Percent omnivores              | 11.8%      | 1.5   | 27.6%   | 0.5   |
|                                     |       |            |       | electrofishing                    | 62.7%      | 0.5   | 65.5%   | 0.5   |
|                                     |       |            |       | gill netting                      | 62.7%      | 0.5   | 65.5%   | 0.5   |
|                                     |       |            |       | 9. Percent insectivores           | 73.8%      | 2.5   | 61.0%   | 1.5   |
|                                     |       |            |       | electrofishing                    | 7.5%       | 2.5   | 3.4%    | 1.5   |
|                                     |       |            |       | gill netting                      | 7.5%       | 2.5   | 3.4%    | 1.5   |
| C. Reproductive composition         |       |            |       |                                   |            |       |         |       |
|                                     |       |            |       | 10. Lithophilic spawning species  | 6          | 3     | 7       | 5     |
| D. Fish abundance and health        |       |            |       |                                   |            |       |         |       |
|                                     |       |            |       | 11. Average number of individuals | 76.0       | 1.5   | 40.1    | 1.5   |
|                                     |       |            |       | electrofishing                    | 20.1       | 1.5   | 32.5    | 2.5   |
|                                     |       |            |       | gill netting                      | 20.1       | 1.5   | 32.5    | 2.5   |
|                                     |       |            |       | 12. Percent anomalies             | 1.4%       | 5     | 0.6%    | 5     |
| RFAI                                |       |            |       |                                   | 44         |       | 42      |       |
|                                     |       |            |       |                                   | good       |       | good    |       |

\* Percent composition of most abundant species.

Table 10 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Fontana Reservoir.

| Metric                              |                | Transition 1 |       | Transition 2 |       | Forebay |       |
|-------------------------------------|----------------|--------------|-------|--------------|-------|---------|-------|
|                                     |                | Obs.         | Score | Obs.         | Score | Obs.    | Score |
| A. Species richness and composition |                |              |       |              |       |         |       |
| 1. Number of species                |                | 19           | 5     | 14           | 3     | 18      | 5     |
| 2. Piscivore species                |                | 6            | 5     | 6            | 5     | 6       | 5     |
| 3. Sunfish species                  |                | 2            | 3     | 2            | 3     | 2       | 3     |
| 4. Sucker species                   |                | 4            | 5     | 2            | 3     | 2       | 3     |
| 5. Intolerant species               |                | 2            | 3     | 1            | 1     | 2       | 3     |
| 6. Percent tolerant species         | electrofishing | 49.0%        | 0.5   | 65.3%        | 0.5   | 25.3%   | 1.5   |
|                                     | gill netting   | 19.0%        | 1.5   | 7.9%         | 2.5   | 5.2%    | 2.5   |
| 7. Dominance *                      | electrofishing | 46.5%        | 1.5   | 65.0%        | 0.5   | 51.5%   | 1.5   |
|                                     | gill netting   | 39.5%        | 1.5   | 34.1%        | 1.5   | 40.9%   | 1.5   |
| B. Trophic composition              |                |              |       |              |       |         |       |
| 8. Percent omnivores                | electrofishing | 2.4%         | 2.5   | 0.3%         | 2.5   | 0.8%    | 2.5   |
|                                     | gill netting   | 23.8%        | 1.5   | 9.8%         | 2.5   | 8.7%    | 2.5   |
| 9. Percent insectivores             | electrofishing | 78.7%        | 1.5   | 91.0%        | 2.5   | 89.5%   | 2.5   |
|                                     | gill netting   | 7.5%         | 2.5   | 6.1%         | 2.5   | 6.1%    | 2.5   |
| C. Reproductive composition         |                |              |       |              |       |         |       |
| 10. Lithophilic spawning species    |                | 6            | 5     | 4            | 3     | 4       | 3     |
| D. Fish abundance and health        |                |              |       |              |       |         |       |
| 11. Average number of individuals   | electrofishing | 19.1         | 0.5   | 23.6         | 0.5   | 43.2    | 1.5   |
|                                     | gill netting   | 14.7         | 1.5   | 16.4         | 1.5   | 11.5    | 1.5   |
| 12. Percent anomalies               |                | 5.7%         | 1     | 1.4%         | 5     | 11.7%   | 1     |
| RFAI                                |                |              | 42    |              | 40    |         | 43    |
|                                     |                |              | good  |              | fair  |         | good  |

\* Percent composition of most abundant species.



Table 11. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Fort Loudoun Reservoir.

|                                     |                | Inflow |       | Transition |       | Forebay |       |
|-------------------------------------|----------------|--------|-------|------------|-------|---------|-------|
| Metric                              |                | Obs.   | Score | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |                |        |       |            |       |         |       |
| 1. Number of species                |                | 29     | 5     | 30         | 5     | 27      | 3     |
| 2. Piscivore species                |                | 7      | 5     | 9          | 5     | 8       | 5     |
| 3. Sunfish species                  |                | 4      | 3     | 5          | 5     | 5       | 5     |
| 4. Sucker species                   |                | 8      | 5     | 3          | 1     | 4       | 3     |
| 5. Intolerant species               |                | 2      | 3     | 2          | 3     | 1       | 1     |
| 6. Percent tolerant species         | electrofishing | 68.6%  | 1     | 63.1%      | 0.5   | 66.8%   | 0.5   |
|                                     | gill netting   | .      | .     | 30.8%      | 1.5   | 17.4%   | 2.5   |
| 7. Dominance *                      | electrofishing | 56.4%  | 3     | 54.8%      | 1.5   | 63.4%   | 0.5   |
|                                     | gill netting   | .      | .     | 19.7%      | 2.5   | 47.6%   | 1.5   |
| B. Trophic composition              |                |        |       |            |       |         |       |
| 8. Percent omnivores                | electrofishing | 71.5%  | 1     | 65.5%      | 0.5   | 67.2%   | 0.5   |
|                                     | gill netting   | .      | .     | 47.9%      | 0.5   | 25.1%   | 2.5   |
| 9. Percent insectivores             | electrofishing | 21.9%  | 1     | 28.0%      | 0.5   | 24.5%   | 0.5   |
|                                     | gill netting   | .      | .     | 13.7%      | 1.5   | 6.4%    | 1.5   |
| C. Reproductive composition         |                |        |       |            |       |         |       |
| 10. Lithophilic spawning species    |                | 10     | 5     | 6          | 3     | 5       | 3     |
| D. Fish abundance and health        |                |        |       |            |       |         |       |
| 11. Average number of individuals   | electrofishing | 32.5   | 1     | 71.6       | 1.5   | 118.8   | 2.5   |
|                                     | gill netting   | .      | .     | 11.7       | 0.5   | 31.1    | 1.5   |
| 12. Percent anomalies               |                | 2.2%   | 3     | 1.7%       | 5     | 2.2%    | 3     |
| RFAI                                |                |        | 36    | 38         | 37    |         |       |
|                                     |                |        | fair  | fair       | fair  |         |       |

\* Percent composition of most abundant species.

Table 12. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Fort Patrick Henry Reservoir.

|                                     |                                   | Forebay              |       |
|-------------------------------------|-----------------------------------|----------------------|-------|
|                                     | Metric                            | Obs.                 | Score |
| A. Species richness and composition |                                   |                      |       |
|                                     | 1. Number of species              | 19                   | 3     |
|                                     | 2. Piscivore species              | 7                    | 5     |
|                                     | 3. Sunfish species                | 4                    | 5     |
|                                     | 4. Sucker species                 | 2                    | 1     |
|                                     | 5. Intolerant species             | 2                    | 3     |
|                                     | 6. Percent tolerant species       | electrofishing 34.1% | 0.5   |
|                                     |                                   | gill netting 86.4%   | 0.5   |
|                                     | 7. Dominance *                    | electrofishing 32.4% | 2.5   |
|                                     |                                   | gill netting 59.9%   | 0.5   |
| B. Trophic composition              |                                   |                      |       |
|                                     | 8. Percent omnivores              | electrofishing 33.2% | 0.5   |
|                                     |                                   | gill netting 93.2%   | 0.5   |
|                                     | 9. Percent insectivores           | electrofishing 55.7% | 0.5   |
|                                     |                                   | gill netting 0.7%    | 0.5   |
| C. Reproductive composition         |                                   |                      |       |
|                                     | 10. Lithophilic spawning species  | 2                    | 3     |
| D. Fish abundance and health        |                                   |                      |       |
|                                     | 11. Average number of individuals | electrofishing 72.2  | 1.5   |
|                                     |                                   | gill netting 14.7    | 0.5   |
|                                     | 12. Percent anomalies             | 1.0%                 | 5     |
| RFAI                                |                                   | 33                   |       |
|                                     |                                   | fair                 |       |

\* Percent composition of most abundant species.

Table 13 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Guntersville Reservoir.

|                                     |                | Inflow |       | Transition |       | Forebay |       |
|-------------------------------------|----------------|--------|-------|------------|-------|---------|-------|
| Metric                              |                | Obs.   | Score | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |                |        |       |            |       |         |       |
| 1. Number of species                |                | 30     | 5     | 24         | 3     | 24      | 3     |
| 2. Piscivore species                |                | 10     | 5     | 8          | 5     | 10      | 5     |
| 3. Sunfish species                  |                | 5      | 5     | 4          | 3     | 4       | 3     |
| 4. Sucker species                   |                | 5      | 3     | 1          | 1     | 1       | 1     |
| 5. Intolerant species               |                | 3      | 3     | 3          | 3     | 3       | 3     |
| 6. Percent tolerant species         | electrofishing | 32.8%  | 3     | 64.3%      | 0.5   | 20.8%   | 1.5   |
|                                     | gill netting   | .      | .     | 27.7%      | 1.5   | 57.7%   | 0.5   |
| 7. Dominance *                      | electrofishing | 22.6%  | 5     | 62.5%      | 0.5   | 46.5%   | 1.5   |
|                                     | gill netting   | .      | .     | 41.5%      | 1.5   | 57.7%   | 0.5   |
| B. Trophic composition              |                |        |       |            |       |         |       |
| 8. Percent omnivores                | electrofishing | 39.5%  | 3     | 64.2%      | 0.5   | 19.7%   | 2.5   |
|                                     | gill netting   | .      | .     | 37.4%      | 1.5   | 63.5%   | 0.5   |
| 9. Percent insectivores             | electrofishing | 41.2%  | 3     | 30.3%      | 1.5   | 65.2%   | 1.5   |
|                                     | gill netting   | .      | .     | 8.7%       | 1.5   | 5.1%    | 1.5   |
| C. Reproductive composition         |                |        |       |            |       |         |       |
| 10. Lithophilic spawning species    |                | 7      | 3     | 6          | 3     | 5       | 3     |
| D. Fish abundance and health        |                |        |       |            |       |         |       |
| 11. Average number of individuals   | electrofishing | 41.9   | 1     | 64.2       | 1.5   | 44.6    | 0.5   |
|                                     | gill netting   | .      | .     | 19.5       | 1.5   | 13.7    | 0.5   |
| 12. Percent anomalies               |                | 5.0%   | 3     | 1.4%       | 5     | 6.8%    | 1     |
| RFAI                                |                |        | 42    |            | 35    |         | 30    |
|                                     |                |        | good  |            | fair  |         | poor  |

\* Percent composition of most abundant species.

Table 14 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Hiwassee Reservoir.

| Metric                              | Transition   |       | Transition |       | Forebay |       |
|-------------------------------------|--------------|-------|------------|-------|---------|-------|
|                                     | Obs.         | Score | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |              |       |            |       |         |       |
| 1. Number of species                | 17           | 5     | 23         | 5     |         |       |
| 2. Piscivore species                | 7            | 5     | 7          | 5     |         |       |
| 3. Sunfish species                  | 2            | 3     | 3          | 3     |         |       |
| 4. Sucker species                   | 4            | 5     | 6          | 5     |         |       |
| 5. Intolerant species               | 1            | 1     | 3          | 5     |         |       |
| 6. Percent tolerant species         | 6.9%         | 2.5   | 42.9%      | 0.5   |         |       |
|                                     | gill netting | 20.1% | 0.5        | 11.5% |         |       |
| 7. Dominance *                      | 76.9%        | 0.5   | 42.9%      | 1.5   |         |       |
|                                     | gill netting | 24.8% | 2.5        | 23.1% |         |       |
| B. Trophic composition              |              |       |            |       |         |       |
| 8. Percent omnivores                | 0.8%         | 2.5   | 3.2%       | 2.5   |         |       |
|                                     | gill netting | 20.1% | 1.5        | 13.7% |         |       |
| 9. Percent insectivores             | 84.1%        | 1.5   | 84.3%      | 1.5   |         |       |
|                                     | gill netting | 8.7%  | 2.5        | 18.1% |         |       |
| C. Reproductive composition         |              |       |            |       |         |       |
| 10. Lithophilic spawning species    | 6            | 5     | 8          | 5     |         |       |
| D. Fish abundance and health        |              |       |            |       |         |       |
| 11. Average number of individuals   | 26.0         | 0.5   | 31.4       | 1.5   |         |       |
|                                     | gill netting | 14.9  | 1.5        | 18.2  |         |       |
| 12. Percent anomalies               | 2.4%         | 3     | 1.7%       | 5     |         |       |
| RFAI                                | 43           |       | 52         |       |         |       |
|                                     | good         |       | excellent  |       |         |       |

\* Percent composition of most abundant species.

Table 15. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Kentucky Reservoir.

| Metric                              |                | Inflow |            | Transition |            | Forebay |            |
|-------------------------------------|----------------|--------|------------|------------|------------|---------|------------|
|                                     |                | Obs.   | Score      | Obs.       | Score      | Obs.    | Score      |
| A. Species richness and composition |                |        |            |            |            |         |            |
| 1. Number of species                |                | 34     | 5          | 39         | 5          | 39      | 5          |
| 2. Piscivore species                |                | 14     | 5          | 12         | 5          | 14      | 5          |
| 3. Sunfish species                  |                | 3      | 3          | 5          | 5          | 5       | 5          |
| 4. Sucker species                   |                | 7      | 3          | 4          | 3          | 6       | 3          |
| 5. Intolerant species               |                | 4      | 3          | 4          | 3          | 3       | 3          |
| 6. Percent tolerant species         | electrofishing | 84.2%  | 1          | 72.2%      | 0.5        | 94.1%   | 0.5        |
|                                     | gill netting   | .      | .          | 34.7%      | 1.5        | 63.9%   | 0.5        |
| 7. Dominance *                      | electrofishing | 84.0%  | 1          | 71.3%      | 0.5        | 93.6%   | 0.5        |
|                                     | gill netting   | .      | .          | 30.0%      | 2.5        | 62.6%   | 0.5        |
| B. Trophic composition              |                |        |            |            |            |         |            |
| 8. Percent omnivores                | electrofishing | 84.7%  | 1          | 72.5%      | 0.5        | 94.2%   | 0.5        |
|                                     | gill netting   | .      | .          | 38.0%      | 1.5        | 72.4%   | 0.5        |
| 9. Percent insectivores             | electrofishing | 4.1%   | 1          | 21.1%      | 0.5        | 4.0%    | 0.5        |
|                                     | gill netting   | .      | .          | 19.3%      | 2.5        | 4.2%    | 0.5        |
| C. Reproductive composition         |                |        |            |            |            |         |            |
| 10. Lithophilic spawning species    |                | 9      | 5          | 9          | 5          | 8       | 5          |
| D. Fish abundance and health        |                |        |            |            |            |         |            |
| 11. Average number of individuals   | electrofishing | 548.1  | 5          | 134.9      | 2.5        | 756.9   | 2.5        |
|                                     | gill netting   | .      | .          | 33.7       | 1.5        | 62.0    | 2.5        |
| 12. Percent anomalies               |                | 9.0%   | 1          | 2.6%       | 3          | 2.4%    | 3          |
| RFAI                                |                |        | 34<br>fair |            | 43<br>good |         | 38<br>fair |

\* Percent composition of most abundant species.



Table 16 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Little Bear Creek Reservoir.

| Metric                              | Forebay              |       |
|-------------------------------------|----------------------|-------|
|                                     | Obs.                 | Score |
| A. Species richness and composition |                      |       |
| 1. Number of species                | 23                   | 5     |
| 2. Piscivore species                | 6                    | 3     |
| 3. Sunfish species                  | 4                    | 5     |
| 4. Sucker species                   | 4                    | 3     |
| 5. Intolerant species               | 3                    | 5     |
| 6. Percent tolerant species         | electrofishing 2.9%  | 2.5   |
|                                     | gill netting 35.6%   | 0.5   |
| 7. Dominance *                      | electrofishing 63.7% | 0.5   |
|                                     | gill netting 31.9%   | 1.5   |
| B. Trophic composition              |                      |       |
| 8. Percent omnivores                | electrofishing 16.5% | 1.5   |
|                                     | gill netting 47.2%   | 1.5   |
| 9. Percent insectivores             | electrofishing 80.2% | 2.5   |
|                                     | gill netting 29.4%   | 2.5   |
| C. Reproductive composition         |                      |       |
| 10. Lithophilic spawning species    | 6                    | 3     |
| D. Fish abundance and health        |                      |       |
| 11. Average number of individuals   | electrofishing 105.2 | 2.5   |
|                                     | gill netting 16.3    | 1.5   |
| 12. Percent anomalies               | 1.6%                 | 5     |
| RFAI                                |                      | 46    |
|                                     |                      | good  |

\* Percent composition of most abundant species.

Table 17. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Melton Hill Reservoir.

| Metric                                     | Inflow               |       | Transition |       | Forebay |       |
|--------------------------------------------|----------------------|-------|------------|-------|---------|-------|
|                                            | Obs.                 | Score | Obs.       | Score | Obs.    | Score |
| <b>A. Species richness and composition</b> |                      |       |            |       |         |       |
| 1. Number of species                       | 15                   | 3     | 31         | 5     | 25      | 5     |
| 2. Piscivore species                       | 2                    | 1     | 9          | 5     | 9       | 5     |
| 3. Sunfish species                         | 3                    | 3     | 5          | 5     | 4       | 3     |
| 4. Sucker species                          | 4                    | 3     | 7          | 5     | 4       | 3     |
| 5. Intolerant species                      | 0                    | 1     | 2          | 3     | 2       | 3     |
| 6. Percent tolerant species                | electrofishing 57.7% | 1     | 43.9%      | 1.5   | 17.1%   | 2.5   |
|                                            | gill netting .       | .     | 24.1%      | 1.5   | 10.2%   | 2.5   |
| 7. Dominance *                             | electrofishing 49.7% | 3     | 40.0%      | 2.5   | 55.3%   | 1.5   |
|                                            | gill netting .       | .     | 21.8%      | 2.5   | 22.6%   | 2.5   |
| <b>B. Trophic composition</b>              |                      |       |            |       |         |       |
| 8. Percent omnivores                       | electrofishing 69.1% | 1     | 46.5%      | 1.5   | 17.1%   | 2.5   |
|                                            | gill netting .       | .     | 59.8%      | 0.5   | 20.4%   | 2.5   |
| 9. Percent insectivores                    | electrofishing 28.0% | 3     | 44.9%      | 1.5   | 78.4%   | 2.5   |
|                                            | gill netting .       | .     | 9.2%       | 1.5   | 5.3%    | 1.5   |
| <b>C. Reproductive composition</b>         |                      |       |            |       |         |       |
| 10. Lithophilic spawning species           | 3                    | 3     | 7          | 3     | 4       | 3     |
| <b>D. Fish abundance and health</b>        |                      |       |            |       |         |       |
| 11. Average number of individuals          | electrofishing 11.7  | 1     | 47.2       | 0.5   | 111.3   | 2.5   |
|                                            | gill netting .       | .     | 8.7        | 0.5   | 22.6    | 1.5   |
| 12. Percent anomalies                      | 0.0%                 | 5     | 3.9%       | 3     | 2.0%    | 5     |
| RFAI                                       |                      | 28    |            | 43    |         | 49    |
|                                            |                      | poor  |            | good  |         | good  |

\* Percent composition of most abundant species.

Table 18. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Nickajack Reservoir.

| Metric                              | Inflow |       | Forebay |       |
|-------------------------------------|--------|-------|---------|-------|
|                                     | Obs.   | Score | Obs.    | Score |
| A. Species richness and composition |        |       |         |       |
| 1. Number of species                | 33     | 5     | 30      | 5     |
| 2. Piscivore species                | 11     | 5     | 9       | 5     |
| 3. Sunfish species                  | 5      | 5     | 6       | 5     |
| 4. Sucker species                   | 5      | 3     | 3       | 1     |
| 5. Intolerant species               | 5      | 5     | 4       | 3     |
| 6. Percent tolerant species         | 18.1%  | 5     | 21.7%   | 1.5   |
| 7. Dominance *                      | 17.0%  | 5     | 37.9%   | 2.5   |
| 8. Percent omnivores                | 27.3%  | 5     | 14.4%   | 2.5   |
| 9. Percent insectivores             | 39.5%  | 3     | 71.6%   | 2.5   |
| 10. Lithophilic spawning species    | 9      | 5     | 7       | 5     |
| 11. Average number of individuals   | 70.5   | 3     | 50.0    | 1.5   |
| 12. Percent anomalies               | 6.8%   | 1     | 4.8%    | 3     |
| RFAI                                | 50     | 45    | good    | good  |

\* Percent composition of most abundant species.

Table 19. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Normandy Reservoir.

|                                                 |                | Forebay |       |
|-------------------------------------------------|----------------|---------|-------|
| Metric                                          |                | Obs.    | Score |
| A. Species richness and composition             |                |         |       |
| 1. Number of species                            |                | 23      | 5     |
| 2. Piscivore species                            |                | 10      | 5     |
| 3. Sunfish species                              |                | 3       | 3     |
| 4. Sucker species                               |                | 3       | 3     |
| 5. Intolerant species                           |                | 4       | 5     |
| 6. Percent tolerant species                     | electrofishing | 21.4%   | 1.5   |
|                                                 | gill netting   | 37.8%   | 0.5   |
| 7. Dominance *                                  | electrofishing | 34.4%   | 2.5   |
|                                                 | gill netting   | 27.0%   | 2.5   |
| B. Trophic composition                          |                |         |       |
| 8. Percent omnivores                            | electrofishing | 7.2%    | 2.5   |
|                                                 | gill netting   | 41.3%   | 1.5   |
| 9. Percent insectivores                         | electrofishing | 80.2%   | 2.5   |
|                                                 | gill netting   | 12.8%   | 2.5   |
| C. Reproductive composition                     |                |         |       |
| 10. Lithophilic spawning species                |                | 6       | 3     |
| D. Fish abundance and health                    |                |         |       |
| 11. Average number of individuals               | electrofishing | 39.0    | 0.5   |
|                                                 | gill netting   | 19.6    | 2.5   |
| 12. Percent anomalous                           |                | 3.5%    | 3     |
| RFAI                                            |                | 46      |       |
|                                                 |                | good    |       |
| * Percent composition of most abundant species. |                |         |       |

Table 20 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Norris Reservoir.

| Metric                              |                | Transition Clinch |       | Transition Powell |       | Forebay    |       |
|-------------------------------------|----------------|-------------------|-------|-------------------|-------|------------|-------|
|                                     |                | Obs.              | Score | Obs.              | Score | Obs.       | Score |
| A. Species richness and composition |                |                   |       |                   |       |            |       |
| 1. Number of species                |                | 28                | 5     | 31                | 5     | 17         | 3     |
| 2. Piscivore species                |                | 12                | 5     | 11                | 5     | 7          | 5     |
| 3. Sunfish species                  |                | 2                 | 3     | 1                 | 1     | 1          | 1     |
| 4. Sucker species                   |                | 6                 | 3     | 8                 | 5     | 3          | 3     |
| 5. Intolerant species               |                | 4                 | 5     | 3                 | 5     | 2          | 3     |
| 6. Percent tolerant species         | electrofishing | 10.2%             | 2.5   | 3.4%              | 2.5   | 2.0%       | 2.5   |
|                                     | gill netting   | 27.2%             | 2.5   | 30.6%             | 1.5   | 26.5%      | 2.5   |
| 7. Dominance *                      | electrofishing | 39.1%             | 2.5   | 37.6%             | 2.5   | 79.6%      | 0.5   |
|                                     | gill netting   | 24.7%             | 2.5   | 24.4%             | 2.5   | 46.9%      | 1.5   |
| B. Trophic composition              |                |                   |       |                   |       |            |       |
| 8. Percent omnivores                | electrofishing | 10.0%             | 1.5   | 3.9%              | 2.5   | 2.0%       | 2.5   |
|                                     | gill netting   | 55.1%             | 1.5   | 35.0%             | 2.5   | 26.5%      | 2.5   |
| 9. Percent insectivores             | electrofishing | 65.7%             | 1.5   | 81.3%             | 2.5   | 87.9%      | 2.5   |
|                                     | gill netting   | 6.3%              | 2.5   | 26.9%             | 2.5   | 8.0%       | 2.5   |
| C. Reproductive composition         |                |                   |       |                   |       |            |       |
| 10. Lithophilic spawning species    |                | 9                 | 5     | 10                | 5     | 6          | 5     |
| D. Fish abundance and health        |                |                   |       |                   |       |            |       |
| 11. Average number of individuals   | electrofishing | 32.9              | 0.5   | 27.4              | 0.5   | 33.7       | 0.5   |
|                                     | gill netting   | 15.8              | 1.5   | 16.0              | 1.5   | 11.3       | 0.5   |
| 12. Percent anomalies               |                | 1.6%              | 5     | 0.7%              | 5     | 1.3%       | 5     |
| RFAI                                |                | 50<br>good        |       | 52<br>excellent   |       | 43<br>good |       |

\* Percent composition of most abundant species.



Table 21 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Nottely Reservoir.

| Metric                                     | Transition           |       | Forebay |       |
|--------------------------------------------|----------------------|-------|---------|-------|
|                                            | Obs.                 | Score | Obs.    | Score |
| <b>A. Species richness and composition</b> |                      |       |         |       |
| 1. Number of species                       | 19                   | 5     | 21      | 5     |
| 2. Piscivore species                       | 8                    | 5     | 9       | 5     |
| 3. Sunfish species                         | 4                    | 5     | 3       | 3     |
| 4. Sucker species                          | 1                    | 1     | 1       | 1     |
| 5. Intolerant species                      | 0                    | 1     | 0       | 1     |
| 6. Percent tolerant species                | electrofishing 13.7% | 2.5   | 8.9%    | 2.5   |
|                                            | gill netting 29.5%   | 0.5   | 21.0%   | 0.5   |
| 7. Dominance *                             | electrofishing 71.0% | 0.5   | 78.9%   | 0.5   |
|                                            | gill netting 24.2%   | 2.5   | 17.8%   | 2.5   |
| <b>B. Trophic composition</b>              |                      |       |         |       |
| 8. Percent omnivores                       | electrofishing 4.0%  | 2.5   | 6.6%    | 1.5   |
|                                            | gill netting 34.4%   | 0.5   | 26.2%   | 1.5   |
| 9. Percent insectivores                    | electrofishing 86.0% | 2.5   | 83.1%   | 1.5   |
|                                            | gill netting 0.8%    | 0.5   | 0.9%    | 0.5   |
| <b>C. Reproductive composition</b>         |                      |       |         |       |
| 10. Lithophilic spawning species           | 3                    | 3     | 3       | 3     |
| <b>D. Fish abundance and health</b>        |                      |       |         |       |
| 11. Average number of individuals          | electrofishing 56.7  | 1.5   | 32.3    | 1.5   |
|                                            | gill netting 24.4    | 2.5   | 21.4    | 2.5   |
| 12. Percent anomalies                      | 10.3%                | 1     | 1.3%    | 5     |
| <b>RFAI</b>                                |                      |       |         |       |
|                                            |                      | 37    |         | 38    |
|                                            |                      | fair  |         | fair  |

\* Percent composition of most abundant species.

Table 22. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Parksville - ocoee no 1 Reservoir.

| Forebay                             |       | Transition |       | Metric                            | Forebay              |       |
|-------------------------------------|-------|------------|-------|-----------------------------------|----------------------|-------|
| Obs.                                | Score | Obs.       | Score |                                   | Obs.                 | Score |
| A. Species richness and composition |       |            |       |                                   |                      |       |
| 2                                   | 21    | 2          | 2     | 1. Number of species              | 18                   | 5     |
| 2                                   | 2     | 2          | 2     | 2. Piscivore species              | 5                    | 3     |
| 3                                   | 3     | 3          | 3     | 3. Sunfish species                | 5                    | 5     |
| 1                                   | 1     | 1          | 1     | 4. Sucker species                 | 1                    | 1     |
| 1                                   | 0     | 1          | 1     | 5. Intolerant species             | 2                    | 3     |
| 2.2                                 | 2.2   | 2.2        | 2.2   | 6. Percent tolerant species       | electrofishing 0.6%  | 2.5   |
| 0.2                                 | 0.2   | 0.2        | 0.2   |                                   | gill netting 0.0%    | 2.5   |
| 0.2                                 | 0.2   | 0.2        | 0.2   | 7. Dominance *                    | electrofishing 79.5% | 0.5   |
| 2.2                                 | 2.2   | 2.2        | 2.2   |                                   | gill netting 41.5%   | 1.5   |
| B. Trophic composition              |       |            |       |                                   |                      |       |
| 2.2                                 | 2.2   | 2.2        | 2.2   | 8. Percent omnivores              | electrofishing 0.5%  | 2.5   |
| 1.2                                 | 1.2   | 0.2        | 0.2   |                                   | gill netting 18.9%   | 1.5   |
| 1.2                                 | 1.2   | 2.2        | 2.2   | 9. Percent insectivores           | electrofishing 96.0% | 2.5   |
| 0.2                                 | 0.2   | 0.2        | 0.2   |                                   | gill netting 32.1%   | 2.5   |
| C. Reproductive composition         |       |            |       |                                   |                      |       |
| 2                                   | 2     | 2          | 2     | 10. Lithophilic spawning species  | 2                    | 1     |
| D. Fish abundance and health        |       |            |       |                                   |                      |       |
| 2.2                                 | 2.2   | 1.2        | 1.2   | 11. Average number of individuals | electrofishing 98.7  | 2.5   |
| 2.2                                 | 2.2   | 2.2        | 2.2   |                                   | gill netting 5.3     | 0.5   |
| 2                                   | 2     | 1          | 1     | 12. Percent anomalies             | 1.3%                 | 5     |
| 38                                  | 38    | 37         | 37    | RFAI                              | 42                   | good  |

\* Percent composition of most abundant species.

Table 23 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Pickwick Reservoir.

| Metric                              |                | Inflow |       | Transition |       | Forebay |       |
|-------------------------------------|----------------|--------|-------|------------|-------|---------|-------|
|                                     |                | Obs.   | Score | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |                |        |       |            |       |         |       |
| 1. Number of species                |                | 35     | 5     | 38         | 5     | 34      | 5     |
| 2. Piscivore species                |                | 13     | 5     | 10         | 5     | 11      | 5     |
| 3. Sunfish species                  |                | 3      | 3     | 4          | 5     | 5       | 5     |
| 4. Sucker species                   |                | 8      | 5     | 6          | 3     | 4       | 3     |
| 5. Intolerant species               |                | 8      | 5     | 6          | 5     | 3       | 3     |
| 6. Percent tolerant species         | electrofishing | 40.2%  | 3     | 23.8%      | 2.5   | 38.6%   | 1.5   |
|                                     | gill netting   | .      | .     | 44.2%      | 0.5   | 34.5%   | 1.5   |
| 7. Dominance *                      | electrofishing | 33.7%  | 5     | 22.9%      | 2.5   | 35.2%   | 2.5   |
|                                     | gill netting   | .      | .     | 43.4%      | 1.5   | 33.4%   | 1.5   |
| B. Trophic composition              |                |        |       |            |       |         |       |
| 8. Percent omnivores                | electrofishing | 50.4%  | 3     | 25.8%      | 1.5   | 38.5%   | 1.5   |
|                                     | gill netting   | .      | .     | 56.6%      | 0.5   | 40.3%   | 1.5   |
| 9. Percent insectivores             | electrofishing | 35.3%  | 3     | 67.8%      | 2.5   | 53.6%   | 1.5   |
|                                     | gill netting   | .      | .     | 20.2%      | 2.5   | 6.5%    | 1.5   |
| C. Reproductive composition         |                |        |       |            |       |         |       |
| 10. Lithophilic spawning species    |                | 13     | 5     | 9          | 5     | 7       | 5     |
| D. Fish abundance and health        |                |        |       |            |       |         |       |
| 11. Average number of individuals   | electrofishing | 88.3   | 3     | 58.7       | 1.5   | 92.7    | 1.5   |
|                                     | gill netting   | .      | .     | 12.9       | 0.5   | 29.3    | 1.5   |
| 12. Percent anomalies               |                | 7.9%   | 1     | 3.3%       | 3     | 22.3%   | 1     |
| RFAI                                |                |        | 46    |            | 47    |         | 43    |
|                                     |                |        | good  |            | good  |         | good  |

\* Percent composition of most abundant species.

Table 24. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for South Holston Reservoir.

| Metric                                     | Transition     |       | Transition  |       | Forebay     |       |
|--------------------------------------------|----------------|-------|-------------|-------|-------------|-------|
|                                            | Obs.           | Score | Obs.        | Score | Obs.        | Score |
| <b>A. Species richness and composition</b> |                |       |             |       |             |       |
| 1. Number of species                       | 22             | 5     | 21          | 5     |             |       |
| 2. Piscivore species                       | 6              | 3     | 8           | 5     |             |       |
| 3. Sunfish species                         | 2              | 3     | 2           | 3     |             |       |
| 4. Sucker species                          | 7              | 5     | 4           | 3     |             |       |
| 5. Intolerant species                      | 2              | 3     | 1           | 1     |             |       |
| 6. Percent tolerant species                | electrofishing | 25.3% | 1.5         | 4.9%  | 2.5         |       |
|                                            | gill netting   | 33.6% | 1.5         | 41.9% | 1.5         |       |
| 7. Dominance *                             | electrofishing | 53.2% | 1.5         | 75.9% | 0.5         |       |
|                                            | gill netting   | 22.1% | 2.5         | 31.6% | 1.5         |       |
| <b>B. Trophic composition</b>              |                |       |             |       |             |       |
| 8. Percent omnivores                       | electrofishing | 25.5% | 0.5         | 9.2%  | 2.5         |       |
|                                            | gill netting   | 52.2% | 1.5         | 45.6% | 1.5         |       |
| 9. Percent insectivores                    | electrofishing | 70.2% | 2.5         | 87.4% | 2.5         |       |
|                                            | gill netting   | 3.2%  | 1.5         | 0.7%  | 0.5         |       |
| <b>C. Reproductive composition</b>         |                |       |             |       |             |       |
| 10. Lithophilic spawning species           | 8              | 5     | 5           | 5     |             |       |
| <b>D. Fish abundance and health</b>        |                |       |             |       |             |       |
| 11. Average number of individuals          | electrofishing | 38.5  | 0.5         | 94.6  | 2.5         |       |
|                                            | gill netting   | 25.3  | 1.5         | 13.6  | 0.5         |       |
| 12. Percent anomalies                      |                | 1.6%  | 5           | 1.3%  | 5           |       |
| <b>RFAI</b>                                |                |       | <b>44</b>   |       | <b>43</b>   |       |
|                                            |                |       | <b>good</b> |       | <b>good</b> |       |

\* Percent composition of most abundant species.

Table 25 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Tellico Reservoir.

| Metric                              | Transition           |       | Forebay |       |
|-------------------------------------|----------------------|-------|---------|-------|
|                                     | Obs.                 | Score | Obs.    | Score |
| A. Species richness and composition |                      |       |         |       |
| 1. Number of species                | 30                   | 5     | 33      | 5     |
| 2. Piscivore species                | 11                   | 5     | 12      | 5     |
| 3. Sunfish species                  | 5                    | 5     | 4       | 3     |
| 4. Sucker species                   | 5                    | 3     | 5       | 3     |
| 5. Intolerant species               | 2                    | 3     | 3       | 3     |
| 6. Percent tolerant species         | electrofishing 16.1% | 2.5   | 8.7%    | 2.5   |
|                                     | gill netting 30.3%   | 1.5   | 16.7%   | 2.5   |
| 7. Dominance *                      | electrofishing 31.8% | 2.5   | 33.8%   | 2.5   |
|                                     | gill netting 22.5%   | 2.5   | 24.8%   | 2.5   |
| B. Trophic composition              |                      |       |         |       |
| 8. Percent omnivores                | electrofishing 16.2% | 2.5   | 7.8%    | 2.5   |
|                                     | gill netting 47.2%   | 0.5   | 26.6%   | 2.5   |
| 9. Percent insectivores             | electrofishing 78.0% | 2.5   | 84.7%   | 2.5   |
|                                     | gill netting 3.9%    | 0.5   | 6.3%    | 1.5   |
| C. Reproductive composition         |                      |       |         |       |
| 10. Lithophilic spawning species    | 7                    | 3     | 8       | 5     |
| D. Fish abundance and health        |                      |       |         |       |
| 11. Average number of individuals   | electrofishing 36.9  | 0.5   | 67.7    | 1.5   |
|                                     | gill netting 17.8    | 1.5   | 22.2    | 1.5   |
| 12. Percent anomalies               | 3.0%                 | 3     | 6.9%    | 1     |
| RFAI                                | 44                   |       | 47      |       |
|                                     | good                 |       | good    |       |

\* Percent composition of most abundant species.



Table 26 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Tims Ford Reservoir.

| Metric                              | Transition           |       | Forebay |       |
|-------------------------------------|----------------------|-------|---------|-------|
|                                     | Obs.                 | Score | Obs.    | Score |
| A. Species richness and composition |                      |       |         |       |
| 1. Number of species                | 24                   | 5     | 23      | 5     |
| 2. Piscivore species                | 8                    | 5     | 10      | 5     |
| 3. Sunfish species                  | 2                    | 3     | 4       | 5     |
| 4. Sucker species                   | 6                    | 3     | 4       | 3     |
| 5. Intolerant species               | 2                    | 3     | 3       | 5     |
| 6. Percent tolerant species         | electrofishing 22.4% | 1.5   | 7.1%    | 2.5   |
|                                     | gill netting 13.5%   | 2.5   | 19.0%   | 2.5   |
| 7. Dominance *                      | electrofishing 46.2% | 1.5   | 74.9%   | 0.5   |
|                                     | gill netting 24.0%   | 2.5   | 19.0%   | 2.5   |
| B. Trophic composition              |                      |       |         |       |
| 8. Percent omnivores                | electrofishing 12.6% | 1.5   | 1.8%    | 2.5   |
|                                     | gill netting 42.1%   | 1.5   | 30.6%   | 2.5   |
| 9. Percent insectivores             | electrofishing 81.1% | 2.5   | 92.6%   | 2.5   |
|                                     | gill netting 3.5%    | 1.5   | 4.1%    | 1.5   |
| C. Reproductive composition         |                      |       |         |       |
| 10. Lithophilic spawning species    | 8                    | 5     | 5       | 3     |
| D. Fish abundance and health        |                      |       |         |       |
| 11. Average number of individuals   | electrofishing 61.7  | 1.5   | 100.7   | 2.5   |
|                                     | gill netting 17.1    | 1.5   | 12.1    | 1.5   |
| 12. Percent anomalies               | 1.8%                 | 5     | 4.3%    | 3     |
| RFAI                                | 47                   |       | 50      |       |
|                                     | good                 |       | good    |       |

\* Percent composition of most abundant species.

Table 27. 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Watauga Reservoir.

|                                     |                | Transition |       | Forebay |       |
|-------------------------------------|----------------|------------|-------|---------|-------|
|                                     |                | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |                |            |       |         |       |
| 1. Number of species                |                | 14         | 3     | 15      | 3     |
| 2. Piscivore species                |                | 6          | 5     | 5       | 3     |
| 3. Sunfish species                  |                | 1          | 1     | 1       | 1     |
| 4. Sucker species                   |                | 2          | 3     | 3       | 3     |
| 5. Intolerant species               |                | 2          | 3     | 2       | 3     |
| 6. Percent tolerant species         | electrofishing | 9.5%       | 2.5   | 3.1%    | 2.5   |
|                                     | gill netting   | 12.2%      | 1.5   | 46.3%   | 0.5   |
| 7. Dominance *                      | electrofishing | 60.3%      | 0.5   | 54.4%   | 1.5   |
|                                     | gill netting   | 61.5%      | 0.5   | 37.0%   | 1.5   |
| B. Trophic composition              |                |            |       |         |       |
| 8. Percent omnivores                | electrofishing | 11.6%      | 0.5   | 5.7%    | 1.5   |
|                                     | gill netting   | 12.2%      | 2.5   | 50.0%   | 0.5   |
| 9. Percent insectivores             | electrofishing | 75.1%      | 1.5   | 66.3%   | 0.5   |
|                                     | gill netting   | 0.0%       | 0.5   | 0.0%    | 0.5   |
| C. Reproductive composition         |                |            |       |         |       |
| 10. Lithophilic spawning species    |                | 3          | 3     | 4       | 3     |
| D. Fish abundance and health        |                |            |       |         |       |
| 11. Average number of individuals   | electrofishing | 24.7       | 0.5   | 23.5    | 0.5   |
|                                     | gill netting   | 14.8       | 1.5   | 5.4     | 0.5   |
| 12. Percent anomalies               |                | 1.2%       | 5     | 0.7%    | 5     |
| RFAI                                |                | 35         |       | 31      |       |
|                                     |                | fair       |       | poor    |       |

\* Percent composition of most abundant species.

Table 28 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Watts Bar Reservoir.

|                                     |                | Inflow Clinch |       | Inflow Tennessee |       | Transition |       | Forebay |       |
|-------------------------------------|----------------|---------------|-------|------------------|-------|------------|-------|---------|-------|
| Metric                              |                | Obs.          | Score | Obs.             | Score | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |                |               |       |                  |       |            |       |         |       |
| 1. Number of species                |                | 29            | 5     | 33               | 5     | 32         | 5     | 31      | 5     |
| 2. Piscivore species                |                | 8             | 5     | 12               | 5     | 10         | 5     | 11      | 5     |
| 3. Sunfish species                  |                | 4             | 3     | 4                | 3     | 6          | 5     | 4       | 3     |
| 4. Sucker species                   |                | 5             | 3     | 6                | 3     | 3          | 1     | 3       | 1     |
| 5. Intolerant species               |                | 4             | 3     | 4                | 3     | 3          | 3     | 2       | 3     |
| 6. Percent tolerant species         | electrofishing | 46.7%         | 3     | 28.6%            | 5     | 8.8%       | 2.5   | 5.7%    | 2.5   |
|                                     | gill netting   | .             | .     | .                | .     | 5.1%       | 2.5   | 10.7%   | 2.5   |
| 7. Dominance *                      | electrofishing | 44.1%         | 3     | 23.1%            | 5     | 33.0%      | 2.5   | 69.1%   | 0.5   |
|                                     | gill netting   | .             | .     | .                | .     | 31.4%      | 1.5   | 46.4%   | 1.5   |
| B. Trophic composition              |                |               |       |                  |       |            |       |         |       |
| 8. Percent omnivores                | electrofishing | 48.5%         | 3     | 30.1%            | 3     | 9.5%       | 2.5   | 5.3%    | 2.5   |
|                                     | gill netting   | .             | .     | .                | .     | 17.7%      | 2.5   | 15.7%   | 2.5   |
| 9. Percent insectivores             | electrofishing | 20.5%         | 1     | 48.2%            | 3     | 74.5%      | 2.5   | 91.3%   | 2.5   |
|                                     | gill netting   | .             | .     | .                | .     | 4.0%       | 0.5   | 4.3%    | 0.5   |
| C. Reproductive composition         |                |               |       |                  |       |            |       |         |       |
| 10. Lithophilic spawning species    |                | 8             | 5     | 11               | 5     | 6          | 3     | 7       | 5     |
| D. Fish abundance and health        |                |               |       |                  |       |            |       |         |       |
| 11. Average number of individuals   | electrofishing | 61.5          | 3     | 54.1             | 3     | 124.0      | 2.5   | 157.9   | 2.5   |
|                                     | gill netting   | .             | .     | .                | .     | 17.5       | 1.5   | 14.0    | 0.5   |
| 12. Percent anomalies               |                | 2.3%          | 3     | 3.2%             | 3     | 3.1%       | 3     | 2.9%    | 3     |
| RFAI                                |                |               | 40    |                  | 46    |            | 46    |         | 43    |
|                                     |                |               | fair  |                  | good  |            | good  |         | good  |

\* Percent composition of most abundant species.

Table 29 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Wheeler Reservoir.

| Metric                              |                | Inflow |       | Transition |       | Forebay |       |
|-------------------------------------|----------------|--------|-------|------------|-------|---------|-------|
|                                     |                | Obs.   | Score | Obs.       | Score | Obs.    | Score |
| A. Species richness and composition |                |        |       |            |       |         |       |
| 1. Number of species                |                | 34     | 5     | 33         | 5     | 26      | 3     |
| 2. Piscivore species                |                | 12     | 5     | 11         | 5     | 10      | 5     |
| 3. Sunfish species                  |                | 4      | 3     | 5          | 5     | 4       | 5     |
| 4. Sucker species                   |                | 9      | 5     | 6          | 3     | 4       | 3     |
| 5. Intolerant species               |                | 4      | 3     | 4          | 3     | 4       | 3     |
| 6. Percent tolerant species         | electrofishing | 22.3%  | 5     | 26.4%      | 1.5   | 50.7%   | 0.5   |
|                                     | gill netting   | .      | .     | 30.1%      | 1.5   | 21.6%   | 1.5   |
| 7. Dominance *                      | electrofishing | 26.2%  | 5     | 30.1%      | 2.5   | 50.6%   | 1.5   |
|                                     | gill netting   | .      | .     | 28.9%      | 2.5   | 39.9%   | 1.5   |
| B. Trophic composition              |                |        |       |            |       |         |       |
| 8. Percent omnivores                | electrofishing | 26.6%  | 5     | 26.8%      | 1.5   | 51.4%   | 0.5   |
|                                     | gill netting   | .      | .     | 45.8%      | 0.5   | 26.8%   | 2.5   |
| 9. Percent insectivores             | electrofishing | 29.3%  | 3     | 58.4%      | 1.5   | 42.4%   | 1.5   |
|                                     | gill netting   | .      | .     | 18.1%      | 2.5   | 14.4%   | 1.5   |
| C. Reproductive composition         |                |        |       |            |       |         |       |
| 10. Lithophilic spawning species    |                | 11     | 5     | 9          | 5     | 7       | 5     |
| D. Fish abundance and health        |                |        |       |            |       |         |       |
| 11. Average number of individuals   | electrofishing | 82.3   | 3     | 55.7       | 1.5   | 81.1    | 1.5   |
|                                     | gill netting   | .      | .     | 8.3        | 0.5   | 15.3    | 1.5   |
| 12. Percent anomalies               |                | 7.3%   | 1     | 8.0%       | 1     | 3.5%    | 3     |
| RFAI                                |                |        | 48    |            | 43    |         | 41    |
|                                     |                |        | good  |            | good  |         | good  |

\* Percent composition of most abundant species.

Table 30 . 1994 scoring results for the twelve metrics and overall Reservoir Fish Assemblage Index (RFAI) for Wilson Reservoir.

| Metric                              | Inflow |       | Forebay |       |
|-------------------------------------|--------|-------|---------|-------|
|                                     | Obs.   | Score | Obs.    | Score |
| A. Species richness and composition |        |       |         |       |
| 1. Number of species                | 31     | 5     | 29      | 5     |
| 2. Piscivore species                | 12     | 5     | 10      | 5     |
| 3. Sunfish species                  | 5      | 5     | 4       | 5     |
| 4. Sucker species                   | 4      | 3     | 4       | 3     |
| 5. Intolerant species               | 4      | 3     | 4       | 3     |
| 6. Percent tolerant species         | 42.4%  | 3     | 40.8%   | 1.5   |
|                                     |        |       | 17.6%   | 2.5   |
| 7. Dominance *                      | 41.8%  | 3     | 40.4%   | 1.5   |
|                                     |        |       | 17.6%   | 2.5   |
| B. Trophic composition              |        |       |         |       |
| 8. Percent omnivores                | 47.0%  | 3     | 41.5%   | 1.5   |
|                                     |        |       | 35.2%   | 1.5   |
| 9. Percent insectivores             | 41.8%  | 3     | 48.8%   | 1.5   |
|                                     |        |       | 14.8%   | 1.5   |
| C. Reproductive composition         |        |       |         |       |
| 10. Lithophilic spawning species    | 6      | 3     | 8       | 5     |
| D. Fish abundance and health        |        |       |         |       |
| 11. Average number of individuals   | 87.2   | 3     | 77.5    | 1.5   |
|                                     |        |       | 10.8    | 0.5   |
| 12. Percent anomalies               | 7.8%   | 1     | 4.0%    | 3     |
| RFAI                                | 40     |       | 45      |       |
|                                     | fair   |       | good    |       |

\* Percent composition of most abundant species.



## **Section 5**

### **Fish Community**

#### **Appendix B.**

#### **Mean Catch Per Effort by Species for Electrofishing and Gill Netting Efforts at Each Location in 1994**



Table 1. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Bear Creek, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name            | Electrofishing | Gill Netting |
|------------------------|----------------|--------------|
|                        | Forebay        | Forebay      |
| Gizzard shad           | 14.4           | 3.9          |
| Threadfin shad         | 2.8            | .            |
| Common carp            | .              | 0.1          |
| River carpsucker       | .              | 0.1          |
| Quillback carpsucker   | 0.1            | 2.7          |
| Northern hogsucker     | 0.6            | .            |
| Black buffalo          | 0.6            | 0.4          |
| Spotted sucker         | 0.8            | 1.2          |
| Black redhorse         | 2.9            | 0.6          |
| Golden redhorse        | 0.6            | 0.3          |
| Channel catfish        | 0.5            | 1.0          |
| Flathead catfish       | 0.1            | 0.4          |
| Blackspotted topminnow | 2.1            | .            |
| White bass             | .              | 0.6          |
| Striped x white bass   | .              | 0.1          |
| Warmouth               | 0.1            | 0.1          |
| Green sunfish          | 2.3            | .            |
| Bluegill               | 6.6            | 0.2          |
| Longear sunfish        | 0.7            | .            |
| Redear sunfish         | 0.1            | .            |
| Spotted bass           | 8.5            | 0.2          |
| Largemouth bass        | 4.1            | 0.1          |
| White crappie          | 2.2            | 2.7          |
| Logperch               | 0.5            | .            |
| Total                  | 50.6           | 14.7         |
| Number of samples      | 15             | 10           |
| Number collected       | 759            | 147          |
| Species collected      | 20             | 17           |

Table 2. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Beech lake, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name           | Electrofishing | Gill Netting |
|-----------------------|----------------|--------------|
|                       | Forebay        | Forebay      |
| Gizzard shad          | 8.7            | 14.0         |
| Hybrid shad           | 3.8            | .            |
| Common carp           | 1.0            | 0.3          |
| Golden shiner         | .              | 0.2          |
| Pugnose minnow        | 0.7            | .            |
| Lake chubsucker       | 0.1            | .            |
| Yellow bullhead       | .              | 0.5          |
| Channel catfish       | 0.4            | 1.6          |
| Yellow bass           | 0.5            | 8.4          |
| Striped x white bass  | .              | 0.1          |
| Warmouth              | 0.3            | .            |
| Green sunfish         | 0.1            | .            |
| Orangespotted sunfish | 0.1            | .            |
| Bluegill              | 30.8           | 0.1          |
| Longear sunfish       | 0.5            | .            |
| Redear sunfish        | 0.8            | .            |
| Smallmouth bass       | 0.1            | .            |
| Largemouth bass       | 9.7            | 1.0          |
| White crappie         | .              | 0.5          |
| Black crappie         | 0.1            | 0.9          |
| Total                 | 57.5           | 27.6         |
| Number of samples     | 15             | 10           |
| Number collected      | 863            | 276          |
| Species collected     | 16             | 11           |

Table 3. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Blue Ridge, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name        | Electrofishing |         | Gill Netting |         |
|--------------------|----------------|---------|--------------|---------|
|                    | Transition     | Forebay | Transition   | Forebay |
| Gizzard shad       | 0.1            | 5.5     | 0.1          | 2.4     |
| Whitetail shiner   | 0.1            | 0.1     | 0.1          | 0.1     |
| Northern hogsucker | 0.1            | 0.1     | 0.1          | 0.1     |
| River redhorse     | 0.1            | 0.1     | 0.1          | 0.1     |
| Black redhorse     | 0.1            | 0.1     | 0.1          | 0.1     |
| Channel catfish    | 0.1            | 1.2     | 0.1          | 0.3     |
| Flathead catfish   | 0.1            | 0.1     | 0.1          | 0.5     |
| White bass         | 0.1            | 0.1     | 0.1          | 0.7     |
| Warmouth           | 0.1            | 0.1     | 0.1          | 0.1     |
| Redbreast sunfish  | 0.1            | 4.0     | 0.1          | 0.1     |
| Green sunfish      | 0.1            | 0.3     | 0.1          | 0.1     |
| Bluegill           | 0.1            | 10.4    | 0.1          | 0.1     |
| Smallmouth bass    | 0.1            | 3.3     | 0.1          | 1.8     |
| Largemouth bass    | 0.1            | 3.9     | 0.1          | 0.1     |
| Black crappie      | 0.1            | 1.3     | 0.1          | 0.1     |
| Walleye            | 0.1            | 0.1     | 0.1          | 0.7     |
| Total              | 0.1            | 30.1    | 0.1          | 6.7     |
| Number of samples  | 0.1            | 15      | 0.1          | 10      |
| Number collected   | 0.1            | 452     | 0.1          | 67      |
| Species collected  | 0.1            | 11      | 0.1          | 9       |



Table 4. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Boone, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Transition<br>Watauga | Electrofishing<br>Transition<br>South Fork of<br>the Holston | Electrofishing<br>Forebay | Gill Netting<br>Transition<br>Watauga | Gill Netting<br>Transition<br>South Fork of<br>the Holston | Gill Netting<br>Forebay |
|----------------------|-----------------------------------------|--------------------------------------------------------------|---------------------------|---------------------------------------|------------------------------------------------------------|-------------------------|
| Longnose gar         | .                                       | .                                                            | .                         | .                                     | 0.8                                                        | .                       |
| Alewife              | 1.0                                     | .                                                            | .                         | .                                     | .                                                          | 0.1                     |
| Gizzard shad         | 4.9                                     | 21.8                                                         | 11.7                      | 3.9                                   | 4.7                                                        | 3.0                     |
| Threadfin shad       | 5.3                                     | .                                                            | 0.1                       | .                                     | .                                                          | .                       |
| Common carp          | 5.5                                     | 2.3                                                          | 0.9                       | 6.7                                   | 2.5                                                        | 1.8                     |
| Spotfin shiner       | 10.0                                    | 28.1                                                         | 9.5                       | .                                     | .                                                          | .                       |
| Bluntnose minnow     | 0.1                                     | .                                                            | 0.4                       | .                                     | .                                                          | .                       |
| Quillback carpsucker | 0.3                                     | .                                                            | .                         | 0.5                                   | .                                                          | .                       |
| Northern hogsucker   | .                                       | 0.2                                                          | 0.1                       | .                                     | .                                                          | .                       |
| Black redhorse       | .                                       | 0.5                                                          | .                         | .                                     | .                                                          | .                       |
| Golden redhorse      | 0.1                                     | 1.3                                                          | 0.1                       | .                                     | 0.1                                                        | .                       |
| Blue catfish         | .                                       | .                                                            | .                         | 1.2                                   | 0.1                                                        | .                       |
| Channel catfish      | 0.1                                     | 0.1                                                          | .                         | 3.5                                   | 1.6                                                        | 1.5                     |
| Flathead catfish     | 0.1                                     | 0.1                                                          | 0.2                       | 0.3                                   | 0.5                                                        | 0.4                     |
| White bass           | .                                       | .                                                            | .                         | 0.3                                   | 0.1                                                        | 0.1                     |
| Striped bass         | 0.1                                     | .                                                            | .                         | 0.2                                   | .                                                          | 0.7                     |
| Striped x white bass | .                                       | .                                                            | 0.1                       | 0.7                                   | 2.2                                                        | 3.6                     |
| Warmouth             | 0.1                                     | 0.2                                                          | 1.3                       | .                                     | .                                                          | .                       |
| Redbreast sunfish    | .                                       | 0.3                                                          | 0.1                       | .                                     | .                                                          | .                       |
| Green sunfish        | 1.6                                     | 1.6                                                          | 4.8                       | .                                     | .                                                          | .                       |
| Bluegill             | 42.2                                    | 25.0                                                         | 30.7                      | 0.3                                   | 0.4                                                        | 0.5                     |
| Hybrid sunfish       | .                                       | 0.1                                                          | 0.1                       | .                                     | .                                                          | .                       |
| Smallmouth bass      | 6.3                                     | 3.4                                                          | 4.1                       | 0.3                                   | 1.2                                                        | 0.3                     |
| Spotted bass         | 0.2                                     | .                                                            | .                         | .                                     | .                                                          | .                       |
| Largemouth bass      | 11.3                                    | 3.9                                                          | 3.7                       | .                                     | 0.1                                                        | .                       |
| White crappie        | 0.1                                     | 0.3                                                          | .                         | .                                     | 0.1                                                        | .                       |
| Black crappie        | 0.7                                     | 0.2                                                          | .                         | .                                     | 0.1                                                        | 0.2                     |
| Logperch             | 1.3                                     | .                                                            | .                         | .                                     | .                                                          | .                       |
| Walleye              | .                                       | .                                                            | .                         | .                                     | 0.1                                                        | .                       |
| Total                | 90.5                                    | 89.5                                                         | 67.9                      | 17.9                                  | 14.6                                                       | 12.2                    |
| Number of samples    | 15                                      | 15                                                           | 15                        | 10                                    | 10                                                         | 10                      |
| Number collected     | 1357                                    | 1343                                                         | 1018                      | 179                                   | 146                                                        | 122                     |
| Species collected    | 19                                      | 17                                                           | 16                        | 11                                    | 15                                                         | 11                      |

Table 5. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Cedar Creek, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name            | Electrofishing |         | Gill Netting |         |
|------------------------|----------------|---------|--------------|---------|
|                        | Forebay        | Forebay | Forebay      | Forebay |
| Longnose gar           | .              | 0.2     | .            | 0.2     |
| Gizzard shad           | 2.6            | 4.2     | .            | 4.2     |
| Hybrid shad            | 0.1            | .       | .            | .       |
| Common carp            | 2.1            | 1.3     | .            | 1.3     |
| Spotfin shiner         | 0.1            | .       | .            | .       |
| Bluntnose minnow       | 0.1            | .       | .            | .       |
| Quillback carpsucker   | 0.1            | 2.0     | .            | 2.0     |
| Black buffalo          | 0.1            | .       | .            | .       |
| Spotted sucker         | 0.7            | 0.6     | .            | 0.6     |
| Silver redhorse        | .              | 0.1     | .            | 0.1     |
| Shorthead redhorse     | 0.1            | .       | .            | .       |
| Black redhorse         | 0.1            | .       | .            | .       |
| Golden redhorse        | 0.5            | 0.4     | .            | 0.4     |
| Channel catfish        | 0.1            | 0.8     | .            | 0.8     |
| Flathead catfish       | 0.1            | 0.1     | .            | 0.1     |
| Blackspotted topminnow | 3.6            | .       | .            | .       |
| White bass             | 0.1            | 4.8     | .            | 4.8     |
| Yellow bass            | .              | 0.4     | .            | 0.4     |
| Striped x white bass   | 0.1            | 0.5     | .            | 0.5     |
| Green sunfish          | 0.6            | .       | .            | .       |
| Bluegill               | 28.0           | 0.1     | .            | 0.1     |
| Longear sunfish        | 1.2            | .       | .            | .       |
| Redear sunfish         | 0.1            | .       | .            | .       |
| Smallmouth bass        | 0.1            | 0.1     | .            | 0.1     |
| Spotted bass           | 3.9            | 4.5     | .            | 4.5     |
| Largemouth bass        | 1.9            | 0.7     | .            | 0.7     |
| White crappie          | 0.1            | 0.2     | .            | 0.2     |
| Logperch               | 1.3            | .       | .            | .       |
| Freshwater drum        | .              | 0.2     | .            | 0.2     |
| Brook silverside       | 0.1            | .       | .            | .       |
| Total                  | 47.3           | 21.2    | .            | 21.2    |
| Number of samples      | 15             | 10      | .            | 10      |
| Number collected       | 710            | 212     | .            | 212     |
| Species collected      | 24             | 18      | .            | 18      |

Table 6. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Chatuge, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Forebay | Electrofishing<br>Shooting<br>Creek | Gill Netting<br>Forebay | Gill Netting<br>Shooting<br>Creek |
|----------------------|---------------------------|-------------------------------------|-------------------------|-----------------------------------|
| Gizzard shad         | 0.0                       | 0.3                                 | 2.1                     | 1.6                               |
| Hybrid shad          | 0.1                       | .                                   | 0.2                     | 0.2                               |
| Common carp          | 0.1                       | 0.1                                 | 0.4                     | 0.3                               |
| Whitetail shiner     | 0.1                       | 6.5                                 | 7.1                     | .                                 |
| Northern hogsucker   | 0.1                       | 0.1                                 | 0.1                     | .                                 |
| Channel catfish      | 0.1                       | 0.1                                 | 0.5                     | 0.2                               |
| Snail bullhead       | 0.1                       | .                                   | 1.5                     | 0.5                               |
| White bass           | 0.0                       | .                                   | 5.8                     | 3.0                               |
| Striped x white bass | 0.0                       | .                                   | 4.6                     | 4.5                               |
| Warmouth             | 0.1                       | 0.3                                 | 1.3                     | .                                 |
| Redbreast sunfish    | 0.1                       | 3.9                                 | 5.1                     | .                                 |
| Bluegill             | 0.0                       | 21.9                                | 44.4                    | 0.1                               |
| Redear sunfish       | 0.1                       | 0.1                                 | 0.1                     | .                                 |
| Smallmouth bass      | 0.1                       | 0.2                                 | 0.3                     | 0.1                               |
| Spotted bass         | 0.0                       | 15.9                                | 7.1                     | 3.1                               |
| Largemouth bass      | 0.1                       | 2.0                                 | 3.5                     | .                                 |
| Black crappie        | 0.0                       | .                                   | 0.3                     | 0.2                               |
| Yellow perch         | 0.0                       | 0.1                                 | 0.1                     | .                                 |
| Walleye              | 0.0                       | .                                   | 0.1                     | 0.4                               |
| Total                | 0.1                       | 51.1                                | 69.7                    | 14.2                              |
| Number of samples    | 12                        | 15                                  | 10                      | 10                                |
| Number collected     | 766                       | 1046                                | 195                     | 142                               |
| Species collected    | 12                        | 14                                  | 13                      | 12                                |

Table 7. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Cherokee, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing |         | Gill Netting |         |
|----------------------|----------------|---------|--------------|---------|
|                      | Transition     | Forebay | Transition   | Forebay |
| Longnose gar         | .              | 0.1     | 0.1          | .       |
| Alewife              | .              | 0.1     | .            | .       |
| Gizzard shad         | 8.6            | 0.9     | 8.3          | 2.7     |
| Threadfin shad       | .              | .       | 0.4          | .       |
| Hybrid shad          | .              | .       | 0.1          | .       |
| Common carp          | 1.3            | 0.5     | 2.3          | 0.9     |
| Spotfin shiner       | 45.1           | 9.1     | .            | .       |
| Bluntnose minnow     | 0.1            | 3.4     | .            | .       |
| River carpsucker     | .              | .       | 2.6          | 0.8     |
| Quillback carpsucker | .              | .       | 3.8          | 8.8     |
| Smallmouth buffalo   | .              | .       | 0.1          | 0.1     |
| Golden redhorse      | .              | 0.1     | .            | .       |
| Blue catfish         | .              | .       | .            | 0.2     |
| Channel catfish      | 0.2            | 0.1     | 1.3          | 0.4     |
| Flathead catfish     | 0.3            | 0.2     | 0.8          | 0.5     |
| White bass           | .              | 0.1     | 1.0          | .       |
| Striped bass         | .              | 0.1     | 2.1          | 3.4     |
| Warmouth             | 1.3            | 0.1     | .            | .       |
| Green sunfish        | 0.2            | .       | .            | .       |
| Bluegill             | 19.3           | 22.6    | 0.8          | 0.2     |
| Smallmouth bass      | 0.8            | 0.3     | .            | .       |
| Spotted bass         | 0.1            | 0.1     | .            | .       |
| Largemouth bass      | 4.5            | 2.3     | 0.5          | 0.4     |
| White crappie        | 0.1            | 0.1     | 0.2          | .       |
| Black crappie        | 0.1            | 0.1     | 1.6          | 0.4     |
| Logperch             | 8.1            | 0.9     | .            | .       |
| Walleye              | 0.2            | 0.2     | 1.3          | 1.7     |
| Freshwater drum      | 0.6            | 0.1     | 0.1          | 0.5     |
| Brook silverside     | 2.1            | .       | .            | .       |
| Total                | 92.9           | 40.8    | 26.8         | 21.5    |
| Number of samples    | 15             | 15      | 10           | 10      |
| Number collected     | 1393           | 612     | 268          | 215     |
| Species collected    | 17             | 17      | 15           | 16      |

Table 8. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Chickamauga, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name         | Electrofishing<br>Inflow | Electrofishing<br>Transition | Electrofishing<br>Forebay | Electrofishing<br>Embayment | Gill Netting<br>Transition | Gill Netting<br>Forebay | Gill Netting<br>Embayment |
|---------------------|--------------------------|------------------------------|---------------------------|-----------------------------|----------------------------|-------------------------|---------------------------|
| Chestnut lamprey    | 0.1                      | 0.2                          | .                         | 0.1                         | .                          | .                       | .                         |
| Spotted gar         | .                        | .                            | .                         | 0.2                         | .                          | .                       | .                         |
| Skipjack herring    | 0.7                      | 0.9                          | 0.1                       | .                           | 0.8                        | 1.7                     | .                         |
| Gizzard shad        | 12.4                     | 10.1                         | 4.1                       | 4.3                         | 2.8                        | 5.6                     | 0.8                       |
| Threadfin shad      | 7.1                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Central stoneroller | 0.4                      | 0.3                          | 1.3                       | .                           | .                          | .                       | .                         |
| Common carp         | 0.9                      | 1.4                          | 1.0                       | 2.1                         | .                          | 0.1                     | 0.5                       |
| Golden shiner       | 0.4                      | 0.1                          | 0.1                       | 2.9                         | 0.1                        | 0.5                     | .                         |
| Emerald shiner      | 4.0                      | 5.8                          | 6.3                       | 2.5                         | .                          | .                       | .                         |
| Spotfin shiner      | 0.8                      | 1.9                          | .                         | 0.1                         | .                          | .                       | .                         |
| Steelcolor shiner   | 6.2                      | .                            | 0.1                       | .                           | .                          | .                       | .                         |
| Bluntnose minnow    | 1.6                      | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Bullhead minnow     | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| River carpsucker    | 1.1                      | 0.1                          | 0.3                       | .                           | .                          | .                       | .                         |
| Northern hogsucker  | 0.1                      | 0.1                          | 0.2                       | .                           | .                          | .                       | .                         |
| Smallmouth buffalo  | 0.3                      | 0.1                          | .                         | .                           | .                          | .                       | 0.1                       |
| Spotted sucker      | 1.9                      | 0.3                          | 0.4                       | 2.3                         | 0.5                        | .                       | 1.3                       |
| Black redbhorse     | 0.4                      | 0.1                          | 0.3                       | .                           | .                          | .                       | .                         |
| Golden redbhorse    | 0.5                      | .                            | 0.3                       | .                           | .                          | .                       | 0.4                       |
| Blue catfish        | 0.1                      | 0.3                          | 0.3                       | .                           | 0.4                        | 0.7                     | .                         |
| Channel catfish     | 0.7                      | 0.3                          | 0.1                       | .                           | 0.4                        | 0.7                     | 0.6                       |
| Flathead catfish    | 0.5                      | 0.1                          | 0.3                       | .                           | 0.5                        | 0.3                     | 0.4                       |
| White bass          | 0.4                      | 0.1                          | 0.3                       | .                           | .                          | .                       | 0.3                       |
| Yellow bass         | 4.9                      | 0.3                          | 0.3                       | 0.7                         | 6.2                        | 1.4                     | 1.2                       |
| Striped bass        | 0.4                      | 0.1                          | 0.1                       | .                           | .                          | 0.1                     | .                         |
| Warmouth            | 0.6                      | 0.1                          | 0.1                       | 0.2                         | .                          | .                       | .                         |
| Redbreast sunfish   | 3.4                      | 0.5                          | 2.0                       | 0.2                         | .                          | .                       | .                         |
| Green sunfish       | 0.5                      | 0.1                          | 0.7                       | .                           | .                          | .                       | .                         |
| Bluegill            | 33.2                     | 14.5                         | 26.3                      | 24.1                        | 0.1                        | 0.3                     | 0.1                       |
| Longear sunfish     | 0.1                      | 0.1                          | 0.2                       | .                           | .                          | .                       | .                         |
| Redear sunfish      | 18.3                     | 3.7                          | 5.3                       | 7.3                         | 1.0                        | 0.2                     | 0.8                       |
| Hybrid sunfish      | 0.1                      | 0.1                          | 0.1                       | .                           | .                          | .                       | .                         |
| Smallmouth bass     | 3.6                      | 0.5                          | 2.1                       | .                           | 0.1                        | .                       | .                         |
| Spotted bass        | 4.3                      | 3.5                          | 8.8                       | 0.9                         | 1.3                        | 0.2                     | 0.5                       |
| Largemouth bass     | 7.7                      | 1.0                          | 2.1                       | 3.5                         | 0.1                        | 0.4                     | .                         |
| White crappie       | 0.1                      | 0.1                          | .                         | .                           | 0.2                        | .                       | .                         |
| Black crappie       | 0.5                      | 0.2                          | 0.1                       | 0.5                         | .                          | 0.2                     | .                         |
| Yellow perch        | 0.2                      | 0.3                          | 0.1                       | 1.9                         | .                          | .                       | .                         |
| Logperch            | 4.5                      | .                            | 1.7                       | 0.1                         | .                          | .                       | .                         |
| Sauger              | 0.1                      | .                            | .                         | 0.1                         | 0.5                        | 0.2                     | 0.2                       |
| Walleye             | .                        | .                            | .                         | .                           | .                          | .                       | 1.5                       |
| Freshwater drum     | 0.5                      | 0.3                          | 0.7                       | 0.5                         | 0.5                        | 0.9                     | 0.2                       |
| Brook silverside    | 1.9                      | .                            | 17.3                      | .                           | .                          | .                       | .                         |
| Total               | 123.9                    | 45.3                         | 80.0                      | 54.5                        | 15.5                       | 13.5                    | 8.9                       |
| Number of samples   | 15                       | 15                           | 15                        | 15                          | 10                         | 10                      | 10                        |
| Number collected    | 1858                     | 680                          | 1200                      | 818                         | 155                        | 135                     | 89                        |
| Species collected   | 37                       | 25                           | 23                        | 20                          | 16                         | 16                      | 15                        |



Table 9. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Douglas, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Gizzard shad         | 8.9                          | 16.5                      | 6.2                        | 19.8                    |
| Threadfin shad       | .                            | .                         | 6.4                        | .                       |
| Common carp          | 0.2                          | 0.4                       | 0.6                        | 0.4                     |
| Spotfin shiner       | 11.1                         | 3.3                       | .                          | .                       |
| River carpsucker     | .                            | .                         | 2.0                        | 0.1                     |
| Quillback carpsucker | .                            | .                         | 3.1                        | 0.2                     |
| Northern hogsucker   | 0.1                          | 0.3                       | .                          | .                       |
| Smallmouth buffalo   | .                            | .                         | 0.3                        | 0.3                     |
| Shorthead redhorse   | 0.3                          | .                         | .                          | 0.3                     |
| River redhorse       | .                            | 0.1                       | .                          | .                       |
| Black redhorse       | 0.1                          | .                         | .                          | .                       |
| Blue catfish         | .                            | .                         | .                          | 0.1                     |
| Channel catfish      | 0.1                          | 0.1                       | 0.4                        | 0.4                     |
| Flathead catfish     | 0.7                          | 0.1                       | 0.2                        | .                       |
| White bass           | 0.3                          | 0.1                       | 3.2                        | 6.2                     |
| Striped bass         | .                            | .                         | 0.1                        | .                       |
| Warmouth             | 0.1                          | 0.3                       | .                          | .                       |
| Redbreast sunfish    | 0.1                          | .                         | .                          | .                       |
| Green sunfish        | 0.1                          | 0.3                       | .                          | .                       |
| Bluegill             | 10.4                         | 14.5                      | .                          | 0.7                     |
| Smallmouth bass      | .                            | .                         | .                          | 0.1                     |
| Largemouth bass      | 31.0                         | 11.7                      | 1.5                        | 0.7                     |
| White crappie        | 0.7                          | 0.7                       | 0.3                        | 0.6                     |
| Black crappie        | 0.9                          | 0.7                       | .                          | 2.3                     |
| Hybrid crappie       | 0.1                          | .                         | .                          | .                       |
| Logperch             | 40.1                         | 6.8                       | .                          | .                       |
| Sauger               | .                            | .                         | 0.7                        | 0.1                     |
| Walleye              | .                            | .                         | .                          | 0.1                     |
| Freshwater drum      | 0.1                          | .                         | 1.5                        | 0.1                     |
| Total                | 105.5                        | 55.7                      | 26.5                       | 32.5                    |
| Number of samples    | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 1582                         | 835                       | 265                        | 325                     |
| Species collected    | 19                           | 15                        | 14                         | 17                      |

Table 10. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Fontana, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name         | Electrofishing<br>Transition<br>Little<br>Tennessee | Electrofishing<br>Transition<br>Tuckasegee | Electrofishing<br>Forebay | Gill Netting<br>Transition<br>Little<br>Tennessee | Gill Netting<br>Transition<br>Tuckasegee | Gill Netting<br>Forebay |
|---------------------|-----------------------------------------------------|--------------------------------------------|---------------------------|---------------------------------------------------|------------------------------------------|-------------------------|
| Gizzard shad        | 0.5                                                 | 0.1                                        | 0.3                       | 1.8                                               | 0.7                                      | 0.3                     |
| Threadfin shad      | 0.8                                                 | .                                          | .                         | .                                                 | .                                        | .                       |
| Rainbow trout       | .                                                   | .                                          | .                         | 0.1                                               | .                                        | 0.4                     |
| Common carp         | .                                                   | .                                          | .                         | 1.0                                               | 0.6                                      | 0.3                     |
| Golden shiner       | .                                                   | .                                          | 0.1                       | .                                                 | .                                        | .                       |
| Whitetail shiner    | .                                                   | .                                          | 22.3                      | .                                                 | .                                        | .                       |
| Silver shiner       | 0.1                                                 | .                                          | .                         | .                                                 | .                                        | .                       |
| Northern hog sucker | 0.1                                                 | .                                          | .                         | .                                                 | .                                        | .                       |
| Silver redhorse     | .                                                   | .                                          | .                         | 0.2                                               | 0.2                                      | .                       |
| River redhorse      | 0.6                                                 | .                                          | .                         | 0.5                                               | 0.8                                      | 0.2                     |
| Golden redhorse     | 0.1                                                 | .                                          | .                         | 0.3                                               | .                                        | .                       |
| Sicklefin redhorse  | .                                                   | .                                          | .                         | .                                                 | .                                        | 0.1                     |
| Channel catfish     | 0.1                                                 | 0.1                                        | 0.3                       | 0.7                                               | 0.3                                      | 0.4                     |
| Flathead catfish    | 0.9                                                 | 1.0                                        | 1.3                       | 0.5                                               | 0.5                                      | 0.7                     |
| White bass          | .                                                   | .                                          | .                         | 0.8                                               | 5.6                                      | 0.4                     |
| Green sunfish       | 10.7                                                | 16.0                                       | 11.0                      | .                                                 | .                                        | .                       |
| Bluegill            | 14.3                                                | 6.7                                        | 5.7                       | .                                                 | .                                        | .                       |
| Smallmouth bass     | 4.3                                                 | 4.9                                        | 5.5                       | 0.9                                               | 2.3                                      | 3.4                     |
| Largemouth bass     | 1.8                                                 | 1.1                                        | 0.9                       | 1.3                                               | 0.3                                      | 0.4                     |
| Black crappie       | 0.1                                                 | .                                          | .                         | 0.8                                               | 0.4                                      | 0.2                     |
| Tangerine darter    | 0.8                                                 | 0.1                                        | 0.2                       | .                                                 | .                                        | .                       |
| Walleye             | .                                                   | .                                          | .                         | 5.8                                               | 4.7                                      | 4.7                     |
| Total               | 35.2                                                | 30.0                                       | 47.5                      | 14.7                                              | 16.4                                     | 11.5                    |
| Number of samples   | 15                                                  | 15                                         | 15                        | 10                                                | 10                                       | 10                      |
| Number collected    | 528                                                 | 450                                        | 713                       | 147                                               | 164                                      | 115                     |
| Species collected   | 14                                                  | 8                                          | 10                        | 13                                                | 11                                       | 12                      |

Table 11. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Fort Loudoun, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Inflow | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|--------------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Chestnut lamprey     | 0.1                      | .                            | .                         | .                          | .                       |
| Spotted gar          | 0.3                      | 0.1                          | .                         | .                          | .                       |
| Skipjack herring     | .                        | .                            | 0.1                       | 1.4                        | 14.8                    |
| Gizzard shad         | 18.5                     | 41.2                         | 115.3                     | 2.3                        | 4.1                     |
| Threadfin shad       | 8.9                      | 0.3                          | 2447.1                    | .                          | 0.1                     |
| Hybrid shad          | .                        | .                            | 0.3                       | .                          | .                       |
| Common carp          | 3.4                      | 5.5                          | 3.6                       | 1.3                        | 1.3                     |
| Golden shiner        | .                        | 0.1                          | .                         | .                          | .                       |
| Emerald shiner       | 0.3                      | 1.0                          | .                         | .                          | .                       |
| Spotfin shiner       | 1.9                      | 1.7                          | 1.4                       | .                          | .                       |
| Bullhead minnow      | .                        | 0.1                          | .                         | .                          | .                       |
| River carpsucker     | 0.3                      | .                            | .                         | .                          | .                       |
| Quillback carpsucker | .                        | .                            | .                         | .                          | 0.1                     |
| Northern hogsucker   | 0.1                      | .                            | 0.3                       | .                          | .                       |
| Smallmouth buffalo   | 0.4                      | 1.6                          | 0.7                       | 0.2                        | 0.8                     |
| Black buffalo        | 0.1                      | 0.1                          | 0.1                       | 0.2                        | 0.1                     |
| Spotted sucker       | .                        | 0.1                          | .                         | .                          | .                       |
| Silver redhorse      | 0.3                      | .                            | .                         | .                          | .                       |
| River redhorse       | 0.1                      | .                            | .                         | .                          | .                       |
| Black redhorse       | 0.1                      | .                            | .                         | .                          | .                       |
| Golden redhorse      | 1.1                      | .                            | .                         | .                          | .                       |
| Blue catfish         | 0.1                      | .                            | .                         | 0.8                        | 0.6                     |
| Channel catfish      | 0.6                      | 0.3                          | 0.1                       | 0.9                        | 0.8                     |
| Flathead catfish     | 0.1                      | .                            | .                         | 0.8                        | 0.8                     |
| White bass           | 0.1                      | 0.1                          | 0.5                       | 1.3                        | 4.0                     |
| Yellow bass          | 0.1                      | 0.1                          | 0.1                       | 0.6                        | 0.8                     |
| Striped bass         | .                        | .                            | 0.1                       | .                          | 0.1                     |
| Warmouth             | .                        | 0.3                          | .                         | .                          | 0.1                     |
| Redbreast sunfish    | 0.4                      | 0.3                          | 0.4                       | .                          | .                       |
| Green sunfish        | 0.2                      | 0.2                          | 0.1                       | .                          | .                       |
| Bluegill             | 0.6                      | 15.3                         | 23.7                      | 0.4                        | 0.9                     |
| Redear sunfish       | 0.1                      | 0.1                          | 0.1                       | .                          | 0.1                     |
| Hybrid sunfish       | .                        | 0.1                          | .                         | .                          | .                       |
| Smallmouth bass      | 0.1                      | 0.9                          | 1.2                       | .                          | 0.4                     |
| Spotted bass         | 1.1                      | .                            | .                         | .                          | .                       |
| Largemouth bass      | 0.8                      | 3.3                          | 8.1                       | .                          | .                       |
| White crappie        | .                        | 0.2                          | .                         | 0.1                        | .                       |
| Yellow perch         | 0.1                      | 0.1                          | 0.3                       | .                          | .                       |
| Logperch             | 1.9                      | 0.7                          | 2.7                       | .                          | .                       |
| Sauger               | .                        | .                            | .                         | 0.3                        | 0.4                     |
| Freshwater drum      | .                        | 0.4                          | 0.3                       | 1.2                        | 0.9                     |
| Brook silverside     | .                        | 0.2                          | 0.1                       | .                          | .                       |
| Total                | 42.0                     | 74.4                         | 2606.7                    | 11.8                       | 31.2                    |
| Number of samples    | 15                       | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 630                      | 1116                         | 39101                     | 118                        | 312                     |
| Species collected    | 29                       | 27                           | 23                        | 14                         | 19                      |

Table 12. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Fort Patrick Henry, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Forebay | Gill Netting<br>Forebay | Common name     | Electrofishing<br>Forebay | Gill Netting<br>Forebay |
|----------------------|---------------------------|-------------------------|-----------------|---------------------------|-------------------------|
|                      |                           |                         |                 |                           |                         |
| Alewife              | 0.1                       | 0.4                     | Channel catfish | 0.3                       | 10                      |
| Gizzard shad         | 19.9                      | 8.8                     | Channel catfish | 0.3                       | 10                      |
| Common carp          | 3.9                       | 3.0                     | Channel catfish | 0.3                       | 10                      |
| Spotfin shiner       | 23.4                      | .                       | Channel catfish | 0.3                       | 10                      |
| White sucker         | 0.3                       | 0.8                     | Channel catfish | 0.3                       | 10                      |
| Northern hogsucker   | 0.3                       | .                       | Channel catfish | 0.3                       | 10                      |
| Blue catfish         | 2.2                       | 0.3                     | Channel catfish | 0.3                       | 10                      |
| Yellow bullhead      | 0.1                       | 0.1                     | Channel catfish | 0.3                       | 10                      |
| Channel catfish      | 1.0                       | 0.7                     | Channel catfish | 0.3                       | 10                      |
| Striped bass         | 0.1                       | .                       | Channel catfish | 0.3                       | 10                      |
| Striped x white bass | 0.1                       | .                       | Channel catfish | 0.3                       | 10                      |
| Rock bass            | 0.1                       | 0.4                     | Channel catfish | 0.3                       | 10                      |
| Warmouth             | 0.9                       | .                       | Channel catfish | 0.3                       | 10                      |
| Green sunfish        | 0.8                       | .                       | Channel catfish | 0.3                       | 10                      |
| Bluegill             | 13.7                      | 0.1                     | Channel catfish | 0.3                       | 10                      |
| Longear sunfish      | 1.2                       | .                       | Channel catfish | 0.3                       | 10                      |
| Hybrid sunfish       | 0.2                       | .                       | Channel catfish | 0.3                       | 10                      |
| Smallmouth bass      | 3.2                       | 0.1                     | Channel catfish | 0.3                       | 10                      |
| Largemouth bass      | 4.6                       | .                       | Channel catfish | 0.3                       | 10                      |
| White crappie        | 0.1                       | .                       | Channel catfish | 0.3                       | 10                      |
| Black crappie        | 0.1                       | .                       | Channel catfish | 0.3                       | 10                      |
| Total                | 72.5                      | 14.7                    | Channel catfish | 0.3                       | 10                      |
| Number of samples    | 15                        | 10                      | Channel catfish | 0.3                       | 10                      |
| Number collected     | 1088                      | 147                     | Channel catfish | 0.3                       | 10                      |
| Species collected    | 18                        | 10                      | Channel catfish | 0.3                       | 10                      |

Table 13. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Guntersville, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name        | Electrofishing | Electrofishing | Electrofishing | Gill Netting | Gill Netting |
|--------------------|----------------|----------------|----------------|--------------|--------------|
|                    | Inflow         | Transition     | Forebay        | Transition   | Forebay      |
| Spotted gar        | 0.6            | 1.3            | 1.0            | 0.4          | .            |
| Longnose gar       | 3.5            | .              | .              | 0.1          | .            |
| Bowfin             | 0.1            | .              | .              | .            | .            |
| Skipjack herring   | 0.1            | 0.3            | .              | 1.4          | 2.3          |
| Gizzard shad       | 9.5            | 40.1           | 8.3            | 5.2          | 7.9          |
| Threadfin shad     | .              | .              | 1.7            | 0.1          | 2.0          |
| Mooneye            | .              | .              | .              | 0.1          | .            |
| Common carp        | 0.3            | 0.6            | 0.3            | .            | .            |
| Golden shiner      | .              | 0.3            | .              | 0.1          | .            |
| Emerald shiner     | 2.1            | 12.7           | .              | .            | .            |
| Spotfin shiner     | 0.5            | .              | 0.9            | .            | .            |
| Steelcolor shiner  | 0.2            | .              | .              | .            | .            |
| Smallmouth buffalo | 0.6            | 0.1            | .              | .            | .            |
| Bigmouth buffalo   | 0.1            | .              | .              | .            | .            |
| Black buffalo      | 0.1            | .              | .              | .            | .            |
| Spotted sucker     | 0.1            | .              | 0.6            | .            | .            |
| Golden redborse    | 0.7            | .              | .              | .            | .            |
| Blue catfish       | 2.6            | .              | .              | 0.2          | 0.3          |
| Channel catfish    | 3.4            | 0.1            | 0.2            | 1.8          | 0.5          |
| Flathead catfish   | .              | .              | 1.1            | .            | .            |
| White bass         | 0.2            | .              | 0.1            | 0.1          | .            |
| Yellow bass        | 1.3            | 0.1            | 0.1            | 8.1          | 1.6          |
| Striped bass       | .              | .              | .              | .            | 0.1          |
| Warmouth           | 0.1            | .              | .              | .            | .            |
| Redbreast sunfish  | 0.5            | 0.3            | 0.7            | .            | .            |
| Bluegill           | 7.8            | 7.7            | 20.9           | 0.4          | 0.1          |
| Longear sunfish    | 0.3            | 0.2            | 1.4            | .            | .            |
| Redear sunfish     | 3.3            | 0.9            | 1.4            | 1.1          | .            |
| Hybrid sunfish     | .              | 0.1            | .              | .            | .            |
| Smallmouth bass    | 0.3            | .              | 0.1            | .            | .            |
| Spotted bass       | 1.2            | 0.1            | 3.5            | 0.2          | 0.1          |
| Largemouth bass    | 1.1            | 2.1            | 1.4            | 0.1          | .            |
| Yellow perch       | .              | 0.2            | .              | .            | .            |
| Logperch           | 0.8            | 0.7            | 2.9            | .            | .            |
| Dusky darter       | .              | .              | 0.1            | .            | .            |
| Sauger             | 0.3            | 0.1            | 0.1            | 0.1          | 0.2          |
| Freshwater drum    | 0.6            | 0.5            | 0.3            | 0.1          | 0.6          |
| Brook silverside   | 2.3            | .              | .              | .            | .            |
| Total              | 44.4           | 68.5           | 47.1           | 19.6         | 15.7         |
| Number of samples  | 15             | 15             | 15             | 10           | 10           |
| Number collected   | 666            | 1027           | 707            | 196          | 157          |
| Species collected  | 30             | 20             | 21             | 17           | 11           |



Table 14. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Hiwassee, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name         | Electrofishing |         | Gill Netting |         |
|---------------------|----------------|---------|--------------|---------|
|                     | Transition     | Forebay | Transition   | Forebay |
| Gizzard shad        | 0.1            | 0.1     | 2.3          | 1.9     |
| Threadfin shad      | .              | 0.1     | .            | .       |
| Hybrid shad         | .              | 0.1     | 0.1          | .       |
| Rainbow trout       | 0.1            | 0.1     | .            | 0.1     |
| Common carp         | 0.1            | 0.9     | 0.6          | 0.2     |
| Whitetail shiner    | .              | 0.2     | .            | .       |
| Northern hog sucker | 0.2            | .       | .            | .       |
| Silver redhorse     | 0.1            | 0.1     | 1.0          | 1.2     |
| Shorthead redhorse  | 0.1            | .       | .            | 0.1     |
| River redhorse      | 0.1            | 0.1     | .            | 0.2     |
| Black redhorse      | 0.1            | 0.1     | .            | 0.2     |
| Golden redhorse     | .              | 0.1     | 0.2          | .       |
| Sicklefin redhorse  | 0.1            | 0.1     | .            | 0.8     |
| Channel catfish     | 0.1            | 0.1     | 0.1          | 0.4     |
| Flathead catfish    | 0.5            | 0.3     | 0.7          | 0.5     |
| White bass          | .              | 0.1     | 3.7          | 2.3     |
| Redbreast sunfish   | .              | 0.4     | .            | .       |
| Green sunfish       | 2.1            | 16.2    | 0.1          | .       |
| Bluegill            | 27.6           | 14.9    | .            | 0.2     |
| Smallmouth bass     | 3.5            | 1.7     | 3.5          | 4.2     |
| Spotted bass        | 2.2            | 1.1     | 0.1          | 1.5     |
| Largemouth bass     | 1.2            | 1.4     | 1.1          | 0.5     |
| Black crappie       | 0.3            | 0.7     | 0.3          | 0.9     |
| Yellow perch        | 0.1            | 0.1     | .            | 0.5     |
| Walleye             | 0.1            | 0.1     | 1.1          | 2.5     |
| Total               | 38.3           | 38.1    | 14.9         | 18.2    |
| Number of samples   | 15             | 15      | 10           | 10      |
| Number collected    | 574            | 572     | 149          | 182     |
| Species collected   | 14             | 15      | 14           | 18      |

Table 15. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Kentucky, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name             | Electrofishing<br>Inflow | Electrofishing<br>Transition | Electrofishing<br>Forebay | Electrofishing<br>Embayment | Gill Netting<br>Transition | Gill Netting<br>Forebay | Gill Netting<br>Embayment |
|-------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|----------------------------|-------------------------|---------------------------|
| Chestnut lamprey        | 0.1                      | 0.1                          | 0.1                       | .                           | 0.1                        | .                       | .                         |
| Longnose gar            | .                        | .                            | 0.1                       | .                           | .                          | .                       | .                         |
| Bowfin                  | 0.5                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Skipjack herring        | 4.6                      | 28.1                         | 0.2                       | 3.9                         | 5.0                        | 7.3                     | 1.3                       |
| Gizzard shad            | 463.9                    | 166.1                        | 741.8                     | 114.3                       | 10.1                       | 38.8                    | 6.5                       |
| Threadfin shad          | 181.4                    | 1997.5                       | 43.1                      | 56.4                        | 1.1                        | .                       | 0.2                       |
| Goldeye                 | .                        | .                            | .                         | .                           | .                          | 0.2                     | .                         |
| Chain pickerel          | .                        | 0.1                          | .                         | .                           | 0.1                        | .                       | .                         |
| Common carp             | 0.9                      | 0.5                          | 3.7                       | 0.5                         | 0.6                        | 0.8                     | 0.1                       |
| Golden shiner           | .                        | 0.2                          | .                         | .                           | 0.7                        | .                       | .                         |
| Emerald shiner          | .                        | 1.5                          | 3.9                       | 0.3                         | .                          | .                       | .                         |
| Spotfin shiner          | 0.1                      | 0.3                          | .                         | .                           | .                          | .                       | .                         |
| Steelcolor shiner       | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Bullhead minnow         | 0.7                      | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Grass carp              | .                        | .                            | 0.3                       | .                           | .                          | 0.2                     | .                         |
| Bighead carp            | .                        | .                            | .                         | .                           | .                          | 0.1                     | .                         |
| River carpsucker        | 0.1                      | .                            | 0.1                       | .                           | .                          | 1.3                     | .                         |
| Quillback carpsucker    | .                        | .                            | .                         | .                           | .                          | 0.4                     | .                         |
| Smallmouth buffalo      | 0.7                      | .                            | 0.2                       | 0.1                         | 0.4                        | 1.8                     | .                         |
| Bigmouth buffalo        | 0.1                      | .                            | .                         | .                           | .                          | 0.5                     | .                         |
| Black buffalo           | .                        | .                            | .                         | .                           | .                          | 0.3                     | .                         |
| Spotted sucker          | 0.3                      | 3.2                          | 3.1                       | 0.3                         | 2.4                        | 1.0                     | 0.2                       |
| Shorthead redhorse      | 0.1                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Black redhorse          | 0.5                      | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Golden redhorse         | 0.2                      | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Blue catfish            | .                        | .                            | .                         | .                           | 0.1                        | 0.1                     | 2.2                       |
| Yellow bullhead         | .                        | .                            | .                         | .                           | 0.3                        | .                       | .                         |
| Channel catfish         | 2.2                      | 1.0                          | 0.7                       | 0.4                         | 0.6                        | 1.4                     | 2.2                       |
| Flathead catfish        | 0.3                      | .                            | 0.7                       | .                           | .                          | 0.4                     | .                         |
| American eel            | 0.1                      | .                            | 0.1                       | .                           | .                          | .                       | .                         |
| Blackstripe topminnow   | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Mosquitofish            | .                        | 0.6                          | .                         | .                           | .                          | .                       | .                         |
| White bass              | 36.1                     | 0.1                          | 0.5                       | 0.4                         | 0.5                        | 0.6                     | .                         |
| Yellow bass             | 9.0                      | 0.6                          | 4.1                       | 3.2                         | 3.4                        | 3.4                     | 4.0                       |
| Striped bass            | 0.1                      | .                            | 0.1                       | .                           | 0.1                        | .                       | .                         |
| Striped x white bass    | 0.3                      | .                            | .                         | .                           | .                          | 0.1                     | .                         |
| Warmouth                | .                        | 0.3                          | 0.1                       | .                           | .                          | .                       | .                         |
| Green sunfish           | .                        | 0.1                          | 0.1                       | .                           | .                          | .                       | .                         |
| Bluegill                | 11.6                     | 11.7                         | 13.7                      | 7.1                         | 0.4                        | 0.2                     | .                         |
| Longear sunfish         | 4.3                      | 16.1                         | 7.9                       | 0.5                         | 0.1                        | 0.1                     | .                         |
| Redear sunfish          | 2.6                      | 2.0                          | 1.3                       | 0.5                         | 2.8                        | 0.6                     | .                         |
| Hybrid sunfish          | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Smallmouth bass         | 1.8                      | 0.6                          | 1.6                       | .                           | .                          | .                       | .                         |
| Spotted bass            | 0.4                      | 0.1                          | 0.1                       | 0.3                         | 0.8                        | 0.2                     | .                         |
| Largemouth bass         | 7.9                      | 3.2                          | 5.1                       | 0.9                         | 0.4                        | 0.3                     | 0.1                       |
| White crappie           | 0.3                      | 0.6                          | 0.1                       | 0.1                         | 0.1                        | 0.3                     | 1.0                       |
| Black crappie           | 0.3                      | 0.4                          | 1.0                       | .                           | .                          | 0.3                     | .                         |
| Yellow perch            | .                        | 0.3                          | 0.2                       | 2.3                         | 0.2                        | .                       | .                         |
| Logperch                | 1.4                      | 1.3                          | 0.1                       | 0.1                         | .                          | .                       | .                         |
| Sauger                  | 0.4                      | 0.3                          | .                         | 0.1                         | 3.7                        | 0.8                     | 0.1                       |
| Hybrid walleye x sauger | .                        | .                            | .                         | .                           | 0.1                        | .                       | .                         |
| Freshwater drum         | 0.7                      | 1.1                          | 1.5                       | 2.8                         | 0.6                        | 0.5                     | 3.4                       |
| Striped mullet          | 0.1                      | .                            | .                         | .                           | 0.1                        | .                       | .                         |
| Brook silverside        | 0.1                      | .                            | 0.3                       | .                           | .                          | .                       | .                         |
| Inland silverside       | .                        | 0.8                          | 0.1                       | .                           | .                          | .                       | .                         |
| Total                   | 733.9                    | 2239.1                       | 836.0                     | 194.7                       | 34.8                       | 62.0                    | 21.3                      |
| Number of samples       | 15                       | 15                           | 15                        | 15                          | 10                         | 10                      | 10                        |
| Number collected        | 11009                    | 33587                        | 12540                     | 2920                        | 348                        | 620                     | 213                       |
| Species collected       | 35                       | 35                           | 32                        | 20                          | 26                         | 27                      | 12                        |

Table 16. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Little Bear Creek, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name         | Electrofishing |         | Gill Netting |
|---------------------|----------------|---------|--------------|
|                     | Forebay        | Forebay | Forebay      |
| Gizzard shad        | 0.1            | 5.2     |              |
| Central stoneroller | 0.1            |         |              |
| Common carp         | 0.1            | 0.6     |              |
| Rosefin shiner      | 0.2            |         |              |
| Whitetail shiner    | 4.0            |         |              |
| Striped shiner      | 8.7            |         |              |
| Bluntnose minnow    | 8.1            |         |              |
| Northern hogsucker  | 0.1            |         |              |
| Spotted sucker      | 0.3            | 3.7     |              |
| Black redhorse      | 0.1            | 0.1     |              |
| Golden redhorse     | 0.1            | 0.6     |              |
| Channel catfish     | 0.3            | 1.9     |              |
| Flathead catfish    | 0.4            | 0.2     |              |
| White bass          |                | 0.3     |              |
| Green sunfish       | 2.8            |         |              |
| Bluegill            | 85.7           | 0.2     |              |
| Longear sunfish     | 8.9            |         |              |
| Redear sunfish      | 2.3            | 0.2     |              |
| Smallmouth bass     | 1.6            | 0.7     |              |
| Spotted bass        | 0.7            | 0.4     |              |
| Largemouth bass     | 1.7            | 2.1     |              |
| White crappie       |                | 0.1     |              |
| Logperch            | 3.5            |         |              |
| Total               | 129.9          | 16.3    |              |
| Number of samples   | 15             | 10      |              |
| Number collected    | 1948           | 163     |              |
| Species collected   | 21             | 14      |              |

Table 17. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Melton Hill, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Inflow | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|--------------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Longnose gar         | .                        | .                            | .                         | 0.1                        | .                       |
| Skipjack herring     | .                        | .                            | .                         | 0.2                        | 5.0                     |
| Gizzard shad         | 5.8                      | 18.9                         | 9356.0                    | 1.9                        | 1.4                     |
| Threadfin shad       | .                        | .                            | 9650.9                    | .                          | .                       |
| Common carp          | 0.9                      | 1.5                          | 0.9                       | 0.1                        | 0.9                     |
| Spotfin shiner       | .                        | 1.5                          | 15.4                      | .                          | .                       |
| Bluntnose minnow     | 0.2                      | 0.2                          | .                         | .                          | .                       |
| Grass carp           | .                        | 0.1                          | .                         | .                          | .                       |
| River carpsucker     | 0.8                      | 0.1                          | .                         | .                          | .                       |
| Quillback carpsucker | 0.1                      | 0.2                          | .                         | 1.6                        | 0.9                     |
| Northern hogsucker   | .                        | 0.2                          | .                         | .                          | .                       |
| Smallmouth buffalo   | 0.3                      | 1.1                          | 0.5                       | 0.1                        | 0.4                     |
| Black buffalo        | .                        | .                            | .                         | .                          | 0.1                     |
| Spotted sucker       | .                        | 0.1                          | .                         | .                          | .                       |
| Silver redhorse      | .                        | .                            | .                         | 0.6                        | 0.4                     |
| Golden redhorse      | 0.3                      | 0.3                          | .                         | .                          | .                       |
| Channel catfish      | .                        | 0.1                          | .                         | 1.5                        | 0.9                     |
| Flathead catfish     | .                        | .                            | .                         | 0.2                        | 0.1                     |
| White bass           | 0.1                      | .                            | 0.1                       | 0.4                        | 5.1                     |
| Yellow bass          | .                        | .                            | 0.1                       | 1.6                        | 3.6                     |
| Striped bass         | .                        | .                            | .                         | .                          | 0.5                     |
| Striped x white bass | .                        | .                            | .                         | .                          | 1.9                     |
| Rock bass            | .                        | .                            | .                         | .                          | 0.2                     |
| Warmouth             | .                        | 0.1                          | 0.1                       | .                          | .                       |
| Redbreast sunfish    | 0.1                      | 0.3                          | .                         | .                          | .                       |
| Green sunfish        | .                        | 0.1                          | 0.5                       | .                          | .                       |
| Bluegill             | 1.1                      | 6.1                          | 9.0                       | 0.1                        | 0.6                     |
| Redear sunfish       | 0.4                      | 0.3                          | 0.5                       | 0.1                        | .                       |
| Smallmouth bass      | .                        | 0.4                          | 1.2                       | .                          | 0.4                     |
| Spotted bass         | .                        | 0.1                          | .                         | 0.1                        | .                       |
| Largemouth bass      | 0.3                      | 4.6                          | 3.9                       | 0.1                        | .                       |
| White crappie        | .                        | 0.1                          | .                         | .                          | .                       |
| Yellow perch         | 0.9                      | 0.6                          | 0.1                       | .                          | .                       |
| Logperch             | 0.5                      | 0.7                          | 0.2                       | .                          | .                       |
| Freshwater drum      | .                        | 0.1                          | 0.1                       | .                          | 0.2                     |
| Brook silverside     | 0.1                      | 11.2                         | 61.6                      | .                          | .                       |
| Total                | 11.7                     | 48.7                         | 19101                     | 8.7                        | 22.6                    |
| Number of samples    | 15                       | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 175                      | 730                          | 286514                    | 87                         | 226                     |
| Species collected    | 15                       | 25                           | 17                        | 15                         | 17                      |

Table 18. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Nickajack, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name        | Electrofishing | Electrofishing | Gill Netting |
|--------------------|----------------|----------------|--------------|
|                    | Inflow         | Forebay        | Forebay      |
| Chestnut lamprey   | 0.2            | 0.2            | .            |
| Spotted gar        | .              | 0.4            | 0.1          |
| Longnose gar       | 0.6            | .              | .            |
| Skipjack herring   | 0.2            | 0.3            | 1.5          |
| Gizzard shad       | 10.2           | 5.7            | 3.1          |
| Threadfin shad     | 0.1            | 5.1            | 0.1          |
| Mooneye            | .              | .              | 0.2          |
| Common carp        | 1.3            | 1.1            | .            |
| Golden shiner      | .              | 0.2            | 0.1          |
| Emerald shiner     | 2.1            | 18.9           | .            |
| Steelcolor shiner  | 0.1            | .              | .            |
| Smallmouth buffalo | 0.1            | 0.1            | 0.3          |
| Bigmouth buffalo   | 0.1            | 0.1            | .            |
| Spotted sucker     | 0.4            | 0.4            | 0.5          |
| Black redhorse     | 0.1            | .              | .            |
| Golden redhorse    | 0.2            | .              | .            |
| Blue catfish       | 0.3            | .              | 0.5          |
| Channel catfish    | 7.4            | 0.1            | 0.7          |
| Flathead catfish   | 0.1            | 0.7            | 0.3          |
| White bass         | 0.5            | 0.1            | 0.1          |
| Yellow bass        | 12.0           | 0.1            | 3.3          |
| Striped bass       | .              | 0.1            | .            |
| Rock bass          | 0.6            | .              | .            |
| Warmouth           | 0.1            | 0.2            | .            |
| Redbreast sunfish  | 0.6            | 5.6            | .            |
| Green sunfish      | .              | 0.1            | .            |
| Bluegill           | 11.9           | 18.9           | 0.2          |
| Longear sunfish    | 0.2            | 0.6            | .            |
| Redear sunfish     | 4.2            | 1.3            | 0.2          |
| Smallmouth bass    | 3.7            | .              | .            |
| Spotted bass       | 6.5            | 2.8            | 0.3          |
| Largemouth bass    | 1.8            | 3.3            | .            |
| White crappie      | .              | .              | 0.1          |
| Black crappie      | 0.3            | .              | .            |
| Yellow perch       | 0.1            | .              | .            |
| Logperch           | 6.7            | 0.8            | .            |
| Dusky darter       | 0.1            | .              | .            |
| Sauger             | 0.1            | .              | .            |
| Freshwater drum    | 1.2            | 0.1            | 0.3          |
| Brook silverside   | .              | 0.1            | .            |
| Total              | 74.1           | 67.3           | 11.9         |
| Number of samples  | 15             | 15             | 10           |
| Number collected   | 1111           | 1010           | 119          |
| Species collected  | 33             | 27             | 18           |



Table 19. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Normandy, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name             | Electrofishing<br>Forebay | Gill Netting<br>Forebay | Common name             | Electrofishing<br>Forebay | Gill Netting<br>Forebay |
|-------------------------|---------------------------|-------------------------|-------------------------|---------------------------|-------------------------|
|                         |                           |                         |                         |                           |                         |
| Longnose gar            | 0.1                       | 0.1                     | Longnose gar            | 0.1                       | 0.1                     |
| Gizzard shad            | 1.5                       | 5.3                     | Gizzard shad            | 1.5                       | 5.3                     |
| Common carp             | 1.1                       | 2.0                     | Common carp             | 1.1                       | 2.0                     |
| Spotfin shiner          | 3.7                       | .                       | Spotfin shiner          | 3.7                       | .                       |
| Striped shiner          | 0.2                       | .                       | Striped shiner          | 0.2                       | .                       |
| Spotted sucker          | 0.4                       | 1.0                     | Spotted sucker          | 0.4                       | 1.0                     |
| Silver redhorse         | 0.1                       | 0.7                     | Silver redhorse         | 0.1                       | 0.7                     |
| River redhorse          | .                         | 0.1                     | River redhorse          | .                         | 0.1                     |
| Black redhorse          | .                         | 0.2                     | Black redhorse          | .                         | 0.2                     |
| Channel catfish         | 0.1                       | 0.8                     | Channel catfish         | 0.1                       | 0.8                     |
| Flathead catfish        | 0.1                       | 0.3                     | Flathead catfish        | 0.1                       | 0.3                     |
| White bass              | .                         | 4.0                     | White bass              | .                         | 4.0                     |
| Rock bass               | 0.1                       | 0.1                     | Rock bass               | 0.1                       | 0.1                     |
| Green sunfish           | 6.0                       | .                       | Green sunfish           | 6.0                       | .                       |
| Bluegill                | 14.1                      | 0.5                     | Bluegill                | 14.1                      | 0.5                     |
| Longear sunfish         | 8.3                       | .                       | Longear sunfish         | 8.3                       | .                       |
| Smallmouth bass         | 3.5                       | 1.0                     | Smallmouth bass         | 3.5                       | 1.0                     |
| Spotted bass            | 0.7                       | 1.1                     | Spotted bass            | 0.7                       | 1.1                     |
| Largemouth bass         | 1.7                       | 0.5                     | Largemouth bass         | 1.7                       | 0.5                     |
| Black crappie           | .                         | 0.8                     | Black crappie           | .                         | 0.8                     |
| Logperch                | 0.3                       | .                       | Logperch                | 0.3                       | .                       |
| Walleye                 | 10.9                      | 1.6                     | Walleye                 | 10.9                      | 1.6                     |
| Hybrid walleye x sauger | 0.1                       | 0.4                     | Hybrid walleye x sauger | 0.1                       | 0.4                     |
| Total                   | 41.8                      | 19.6                    | Total                   | 41.8                      | 19.6                    |
| Number of samples       | 15                        | 10                      | Number of samples       | 15                        | 10                      |
| Number collected        | 627                       | 196                     | Number collected        | 627                       | 196                     |
| Species collected       | 17                        | 18                      | Species collected       | 17                        | 18                      |

Table 20. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Norris, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing Transition |      | Electrofishing Transition |      | Electrofishing Forebay |      | Gill Netting Transition |      | Gill Netting Transition |  | Gill Netting Forebay |  |
|----------------------|---------------------------|------|---------------------------|------|------------------------|------|-------------------------|------|-------------------------|--|----------------------|--|
|                      | Clinch                    |      | Powell                    |      |                        |      | Clinch                  |      | Powell                  |  |                      |  |
| Longnose gar         | 0.1                       | 0.1  | 0.1                       | 0.1  |                        |      | 0.2                     | 0.3  |                         |  |                      |  |
| Gizzard shad         | 3.0                       | 0.7  | 0.7                       | 0.7  | 0.6                    | 0.6  | 2.7                     | 3.9  | 2.6                     |  |                      |  |
| Common carp          | 0.1                       | 0.3  | 0.3                       | 0.3  | 0.1                    | 0.1  | 1.2                     | 0.7  | 0.4                     |  |                      |  |
| Popeye shiner        |                           | 0.1  | 0.1                       | 0.1  |                        |      |                         |      |                         |  |                      |  |
| Spotfin shiner       | 3.2                       | 4.1  | 4.1                       | 4.1  | 1.5                    | 1.5  |                         |      |                         |  |                      |  |
| Steelcolor shiner    | 0.6                       |      |                           |      |                        |      |                         |      |                         |  |                      |  |
| Bluntnose minnow     |                           | 0.1  | 0.1                       | 0.1  |                        |      |                         |      |                         |  |                      |  |
| River carpsucker     |                           |      |                           |      |                        |      |                         | 0.1  |                         |  |                      |  |
| Quillback carpsucker |                           |      |                           |      |                        |      | 2.7                     | 0.6  |                         |  |                      |  |
| Northern hogsucker   | 0.1                       | 0.1  | 0.1                       | 0.1  |                        |      |                         |      |                         |  |                      |  |
| Silver redhorse      |                           |      |                           |      |                        |      |                         | 1.2  |                         |  |                      |  |
| Shorthead redhorse   | 0.1                       | 0.2  | 0.2                       | 0.2  |                        |      | 0.1                     | 0.1  | 0.2                     |  |                      |  |
| River redhorse       | 0.1                       | 0.1  | 0.1                       | 0.1  | 0.1                    | 0.1  |                         |      |                         |  |                      |  |
| Black redhorse       | 1.1                       | 1.9  | 1.9                       | 1.9  |                        |      |                         | 0.5  |                         |  |                      |  |
| Golden redhorse      | 0.3                       | 0.2  | 0.2                       | 0.2  | 0.1                    | 0.1  | 0.5                     | 2.0  | 0.1                     |  |                      |  |
| Channel catfish      |                           | 0.1  | 0.1                       | 0.1  |                        |      | 1.0                     | 0.3  |                         |  |                      |  |
| Flathead catfish     | 0.2                       | 0.1  | 0.1                       | 0.1  |                        |      |                         | 0.5  |                         |  |                      |  |
| White bass           |                           |      |                           |      |                        |      | 1.2                     | 0.2  | 0.1                     |  |                      |  |
| Striped bass         | 0.1                       |      |                           |      |                        |      | 0.2                     | 0.4  | 0.3                     |  |                      |  |
| Rock bass            | 0.1                       |      |                           |      | 0.5                    | 0.5  |                         |      | 0.8                     |  |                      |  |
| Bluegill             | 12.1                      | 10.9 | 10.9                      | 10.9 | 29.4                   | 29.4 | 0.1                     |      |                         |  |                      |  |
| Longear sunfish      | 0.3                       |      |                           |      |                        |      |                         |      |                         |  |                      |  |
| Smallmouth bass      | 4.7                       | 1.7  | 1.7                       | 1.7  | 1.5                    | 1.5  | 0.1                     | 0.1  | 0.7                     |  |                      |  |
| Spotted bass         | 1.1                       | 1.5  | 1.5                       | 1.5  | 1.5                    | 1.5  | 0.1                     | 0.5  | 0.2                     |  |                      |  |
| Largemouth bass      | 1.5                       | 1.3  | 1.3                       | 1.3  | 0.5                    | 0.5  |                         |      |                         |  |                      |  |
| White crappie        |                           |      |                           |      |                        |      | 0.2                     | 0.5  |                         |  |                      |  |
| Black crappie        | 0.2                       | 0.3  | 0.3                       | 0.3  |                        |      | 0.3                     | 1.3  |                         |  |                      |  |
| Logperch             | 1.9                       | 4.9  | 4.9                       | 4.9  | 1.1                    | 1.1  |                         |      |                         |  |                      |  |
| Sauger               |                           |      |                           |      |                        |      | 0.1                     | 0.2  |                         |  |                      |  |
| Walleye              | 0.1                       | 0.1  | 0.1                       | 0.1  | 0.1                    | 0.1  | 2.3                     | 2.1  | 5.3                     |  |                      |  |
| Freshwater drum      | 0.1                       | 0.1  | 0.1                       | 0.1  |                        |      | 0.1                     | 0.5  | 0.6                     |  |                      |  |
| Brook silverside     | 0.5                       | 1.0  | 1.0                       | 1.0  | 0.1                    | 0.1  |                         |      |                         |  |                      |  |
| Total                | 31.4                      | 29.7 | 29.7                      | 29.7 | 36.9                   | 36.9 | 13.1                    | 16.0 | 11.3                    |  |                      |  |
| Number of samples    | 15                        | 15   | 15                        | 15   | 15                     | 15   | 10                      | 10   | 10                      |  |                      |  |
| Number collected     | 471                       | 446  | 446                       | 446  | 554                    | 554  | 131                     | 160  | 113                     |  |                      |  |
| Species collected    | 23                        | 22   | 22                        | 22   | 13                     | 13   | 17                      | 20   | 11                      |  |                      |  |

Table 21. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Nottely, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Gizzard shad         | 0.1                          | 0.1                       | 4.3                        | 2.1                     |
| Hybrid shad          | 0.3                          | .                         | 3.1                        | .                       |
| Goldfish             | .                            | 0.2                       | .                          | .                       |
| Common carp          | 2.1                          | 1.6                       | 2.6                        | 1.8                     |
| Northern hogsucker   | 0.2                          | 0.1                       | .                          | .                       |
| White catfish        | .                            | .                         | 0.4                        | 0.1                     |
| Yellow bullhead      | .                            | .                         | .                          | 0.2                     |
| Brown bullhead       | 0.1                          | 0.1                       | 0.3                        | .                       |
| Channel catfish      | 0.1                          | 0.3                       | 0.8                        | 0.9                     |
| Snail bullhead       | .                            | .                         | .                          | 0.2                     |
| Flathead catfish     | 0.1                          | 0.2                       | 0.8                        | 0.4                     |
| White bass           | .                            | 0.1                       | 2.5                        | 3.2                     |
| Striped bass         | .                            | .                         | 0.4                        | 3.0                     |
| Striped x white bass | .                            | .                         | .                          | 0.3                     |
| Warmouth             | 2.3                          | .                         | 0.2                        | .                       |
| Redbreast sunfish    | 0.8                          | 0.1                       | .                          | .                       |
| Green sunfish        | 6.9                          | 0.7                       | .                          | .                       |
| Bluegill             | 45.1                         | 27.7                      | .                          | .                       |
| Hybrid sunfish       | 0.5                          | 0.1                       | .                          | .                       |
| Smallmouth bass      | 1.2                          | 0.3                       | .                          | 2.8                     |
| Spotted bass         | 15.9                         | 3.9                       | 1.2                        | 3.3                     |
| Largemouth bass      | 1.1                          | 0.7                       | 0.4                        | 0.3                     |
| Black crappie        | 3.1                          | 0.9                       | 5.9                        | 0.3                     |
| Yellow perch         | 0.5                          | 0.3                       | .                          | .                       |
| Walleye              | .                            | .                         | 1.5                        | 0.7                     |
| Total                | 80.4                         | 37.3                      | 24.4                       | 19.6                    |
| Number of samples    | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 1206                         | 559                       | 244                        | 196                     |
| Species collected    | 17                           | 17                        | 14                         | 15                      |

Table 22. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Parksville - ocoee no 1, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name        | Transition             |                      |
|--------------------|------------------------|----------------------|
|                    | Electrofishing Forebay | Gill Netting Forebay |
| Gizzard shad       | 0.4                    | .                    |
| Hybrid shad        | 0.3                    | .                    |
| Rainbow trout      | 0.1                    | .                    |
| Common carp        | 0.1                    | .                    |
| Northern hogsucker | 0.1                    | .                    |
| Channel catfish    | .                      | 1.0                  |
| Flathead catfish   | .                      | 0.1                  |
| Wormmouth          | 0.3                    | .                    |
| Green sunfish      | 0.3                    | .                    |
| Bluegill           | 20.6                   | .                    |
| Longear sunfish    | 0.3                    | .                    |
| Redear sunfish     | 0.3                    | .                    |
| Largemouth bass    | 3.5                    | 2.2                  |
| White crappie      | .                      | 0.1                  |
| Black crappie      | .                      | 0.1                  |
| Yellow perch       | 1.3                    | 1.7                  |
| Sauger             | .                      | 0.1                  |
| Brook silverside   | 78.5                   | .                    |
| Total              | 106.0                  | 5.3                  |
| Number of samples  | 15                     | 10                   |
| Number collected   | 1590                   | 53                   |
| Species collected  | 13                     | 7                    |

Table 23. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Pickwick, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name            | Electrofishing<br>Inflow | Electrofishing<br>Transition | Electrofishing<br>Forebay | Electrofishing<br>Embayment | Gill Netting<br>Transition | Gill Netting<br>Forebay | Gill Netting<br>Embayment |
|------------------------|--------------------------|------------------------------|---------------------------|-----------------------------|----------------------------|-------------------------|---------------------------|
| Chestnut lamprey       | 0.1                      | 0.1                          | 0.4                       | 0.2                         | .                          | .                       | 0.1                       |
| Spotted gar            | .                        | 0.1                          | 0.1                       | 0.1                         | 0.1                        | .                       | .                         |
| Longnose gar           | 0.1                      | .                            | 0.1                       | 0.1                         | .                          | .                       | .                         |
| Skipjack herring       | 3.2                      | 0.1                          | 0.1                       | 0.5                         | 0.3                        | 1.5                     | 0.8                       |
| Gizzard shad           | 30.5                     | 11.4                         | 32.6                      | 60.4                        | 5.6                        | 9.8                     | 17.4                      |
| Threadfin shad         | 53.8                     | 20.9                         | 9.5                       | 76.1                        | 3.1                        | 0.1                     | 7.2                       |
| Hybrid shad            | 0.1                      | .                            | 0.1                       | .                           | .                          | 9.7                     | .                         |
| Mooneye                | 0.1                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Common carp            | 5.6                      | 0.9                          | 2.1                       | 1.5                         | 0.1                        | 0.1                     | 0.3                       |
| Golden shiner          | 0.1                      | 1.7                          | .                         | .                           | .                          | 0.2                     | .                         |
| Emerald shiner         | .                        | 3.2                          | 6.7                       | .                           | .                          | .                       | .                         |
| Spotfin shiner         | 0.9                      | 1.7                          | 2.1                       | 0.3                         | .                          | .                       | .                         |
| Mimic shiner           | .                        | 4.9                          | .                         | .                           | .                          | .                       | .                         |
| Pugnose minnow         | .                        | 3.1                          | .                         | 0.4                         | .                          | .                       | .                         |
| Bullhead minnow        | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| River carpsucker       | .                        | .                            | .                         | .                           | 0.1                        | .                       | .                         |
| Quillback carpsucker   | .                        | .                            | .                         | .                           | .                          | .                       | 0.5                       |
| Blue sucker            | 0.1                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Northern hogsucker     | 0.3                      | .                            | .                         | 0.1                         | .                          | .                       | .                         |
| Smallmouth buffalo     | 2.3                      | 0.1                          | 0.1                       | 0.7                         | 0.1                        | .                       | 0.2                       |
| Bigmouth buffalo       | .                        | .                            | 0.1                       | .                           | .                          | .                       | .                         |
| Black buffalo          | .                        | .                            | .                         | .                           | .                          | 0.2                     | .                         |
| Spotted sucker         | 0.1                      | 3.7                          | 2.6                       | 1.8                         | 0.7                        | 0.6                     | 2.9                       |
| Silver redhorse        | .                        | .                            | .                         | .                           | .                          | .                       | 0.2                       |
| Shorthead redhorse     | 0.7                      | 0.1                          | .                         | 0.2                         | 0.1                        | .                       | .                         |
| River redhorse         | 0.3                      | 0.1                          | .                         | 0.1                         | 0.3                        | .                       | 0.1                       |
| Black redhorse         | 1.2                      | 0.3                          | .                         | 0.2                         | 0.2                        | .                       | .                         |
| Golden redhorse        | 0.2                      | .                            | .                         | 2.4                         | .                          | .                       | 0.5                       |
| Blue catfish           | 1.4                      | 0.1                          | .                         | .                           | 0.5                        | 0.1                     | 1.2                       |
| Black bullhead         | .                        | .                            | .                         | .                           | .                          | .                       | 0.1                       |
| Channel catfish        | 5.4                      | 1.0                          | 0.9                       | 0.5                         | 0.9                        | 1.4                     | 0.6                       |
| Flathead catfish       | 0.1                      | .                            | 0.1                       | .                           | 0.2                        | 0.3                     | 0.3                       |
| Blackspotted topminnow | .                        | .                            | 0.3                       | .                           | .                          | .                       | .                         |
| White bass             | 2.2                      | .                            | .                         | 0.2                         | .                          | 0.3                     | 0.1                       |
| Yellow bass            | 2.5                      | 0.1                          | 0.1                       | 1.2                         | 0.7                        | 3.1                     | 5.7                       |
| Striped x white bass   | 0.2                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Rock bass              | 0.3                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Warmouth               | .                        | 0.1                          | .                         | .                           | .                          | 0.1                     | 0.1                       |
| Green sunfish          | .                        | .                            | 1.0                       | .                           | .                          | .                       | .                         |
| Bluegill               | 16.9                     | 9.5                          | 16.0                      | 10.5                        | 0.2                        | 0.3                     | 0.4                       |
| Longear sunfish        | 3.0                      | 23.7                         | 23.0                      | 11.2                        | .                          | 0.1                     | .                         |
| Redear sunfish         | 1.7                      | 3.7                          | 2.2                       | 1.6                         | 0.5                        | 0.3                     | .                         |
| Hybrid sunfish         | 0.1                      | .                            | .                         | .                           | .                          | .                       | .                         |
| Smallmouth bass        | 3.0                      | 1.3                          | 4.0                       | 1.3                         | 0.3                        | 0.1                     | .                         |
| Spotted bass           | 0.6                      | 0.3                          | 0.4                       | 0.1                         | 0.2                        | 0.1                     | 0.1                       |
| Largemouth bass        | 1.7                      | 2.1                          | 2.9                       | 4.2                         | 0.1                        | 0.1                     | 0.2                       |
| White crappie          | 0.1                      | 0.1                          | 0.2                       | .                           | 0.1                        | .                       | .                         |
| Black crappie          | 0.1                      | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Yellow perch           | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Logperch               | 0.1                      | 1.3                          | 0.5                       | 1.1                         | .                          | .                       | .                         |
| Sauger                 | 0.1                      | 0.1                          | 0.1                       | 0.1                         | 1.0                        | 0.4                     | 1.6                       |
| Freshwater drum        | 5.7                      | .                            | 1.2                       | 0.5                         | 0.6                        | 0.5                     | 1.2                       |
| Striped mullet         | .                        | 0.1                          | .                         | .                           | .                          | .                       | .                         |
| Brook silverside       | 0.2                      | 0.9                          | 0.7                       | 1.5                         | .                          | .                       | .                         |
| Inland silverside      | .                        | 0.1                          | 0.5                       | 0.3                         | .                          | .                       | .                         |
| Total                  | 144.9                    | 97.1                         | 110.7                     | 179.3                       | 16.0                       | 29.4                    | 41.8                      |
| Number of samples      | 15                       | 15                           | 15                        | 15                          | 10                         | 10                      | 10                        |
| Number collected       | 2173                     | 1456                         | 1660                      | 2690                        | 160                        | 294                     | 418                       |
| Species collected      | 38                       | 35                           | 30                        | 30                          | 23                         | 22                      | 23                        |



Table 24. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on South Holston, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing |         | Gill Netting |         |
|----------------------|----------------|---------|--------------|---------|
|                      | Transition     | Forebay | Transition   | Forebay |
| Gizzard shad         | 8.1            | 3.5     | 5.6          | 4.3     |
| Threadfin shad       |                | 0.1     |              |         |
| Goldfish             |                |         |              | 0.2     |
| Common carp          | 1.7            | 1.1     | 2.9          | 1.2     |
| Spotfin shiner       | 20.5           | 78.5    |              |         |
| Bluntnose minnow     | 0.1            | 4.1     |              |         |
| River carpsucker     |                |         | 0.6          |         |
| Quillback carpsucker |                |         | 3.3          | 0.3     |
| Northern hogsucker   | 0.1            | 0.1     |              |         |
| Silver redhorse      |                | 0.1     |              |         |
| Shorthead redhorse   |                |         | 0.3          |         |
| River redhorse       | 0.1            |         | 0.2          |         |
| Black redhorse       | 0.4            |         |              |         |
| Golden redhorse      |                | 0.1     | 0.2          |         |
| Channel catfish      | 0.1            |         | 0.8          | 0.2     |
| Flathead catfish     |                | 0.1     | 0.7          | 0.4     |
| White bass           |                | 0.1     | 4.6          | 2.0     |
| Rock bass            |                | 0.5     |              | 0.4     |
| Warmouth             | 0.1            | 0.2     |              |         |
| Bluegill             | 8.1            | 17.8    | 0.1          | 0.1     |
| Smallmouth bass      | 1.3            | 4.7     | 1.1          | 0.5     |
| Largemouth bass      | 1.1            | 1.0     | 0.7          | 0.1     |
| White crappie        |                |         |              | 0.1     |
| Black crappie        | 0.3            | 0.3     | 1.3          | 1.5     |
| Logperch             | 1.1            |         |              |         |
| Walleye              |                |         | 2.9          | 2.3     |
| Total                | 43.0           | 112.1   | 25.3         | 13.6    |
| Number of samples    | 15             | 15      | 10           | 10      |
| Number collected     | 645            | 1682    | 253          | 136     |
| Species collected    | 14             | 16      | 15           | 14      |

Table 25. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Tellico, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing | Electrofishing | Gill Netting | Gill Netting |
|----------------------|----------------|----------------|--------------|--------------|
|                      | Transition     | Forebay        | Transition   | Forebay      |
| Skipjack herring     | .              | .              | 2.5          | 5.5          |
| Alewife              | .              | .              | 0.1          | 0.6          |
| Gizzard shad         | 2.5            | 2.9            | 4.0          | 3.1          |
| Threadfin shad       | .              | 0.1            | .            | .            |
| Hybrid shad          | 0.1            | 0.2            | 0.4          | 1.0          |
| Mooneye              | .              | .              | .            | 0.1          |
| Common carp          | 2.1            | 1.4            | 1.4          | 0.6          |
| Spotfin shiner       | 5.6            | 22.3           | .            | .            |
| Northern hogsucker   | 0.1            | 0.2            | .            | 0.1          |
| Smallmouth buffalo   | 0.8            | 0.7            | 1.2          | 0.7          |
| Bigmouth buffalo     | .              | 0.1            | .            | .            |
| Black buffalo        | 0.5            | 0.1            | 0.2          | 0.3          |
| Spotted sucker       | 0.4            | 0.1            | 0.1          | .            |
| Golden redhorse      | .              | .              | 0.2          | .            |
| Blue catfish         | .              | .              | 0.1          | 0.1          |
| Channel catfish      | 0.1            | 0.1            | 1.5          | 1.1          |
| Flathead catfish     | .              | 0.3            | .            | 0.1          |
| White bass           | .              | 0.1            | 1.9          | 3.8          |
| Yellow bass          | .              | .              | 1.5          | 2.3          |
| Striped bass         | .              | .              | 0.3          | 0.1          |
| Striped x white bass | .              | .              | 0.1          | .            |
| Warmouth             | 0.2            | 0.1            | .            | .            |
| Redbreast sunfish    | 1.3            | 1.4            | .            | .            |
| Green sunfish        | 0.1            | 0.3            | .            | .            |
| Bluegill             | 12.8           | 26.3           | .            | 0.4          |
| Redear sunfish       | 0.1            | .              | .            | .            |
| Hybrid sunfish       | 0.1            | .              | .            | .            |
| Smallmouth bass      | 1.5            | 2.1            | 0.2          | 0.7          |
| Spotted bass         | 0.8            | 0.1            | .            | .            |
| Largemouth bass      | 0.6            | 2.6            | 0.6          | 0.1          |
| White crappie        | .              | .              | 0.1          | 0.1          |
| Black crappie        | 0.1            | .              | .            | 0.3          |
| Yellow perch         | 0.1            | 0.3            | .            | 0.4          |
| Logperch             | 0.6            | 0.5            | .            | .            |
| Sauger               | .              | .              | .            | 0.2          |
| Walleye              | .              | .              | 1.0          | 0.1          |
| Freshwater drum      | 0.1            | 0.2            | 0.4          | 0.4          |
| Brook silverside     | 9.2            | 10.0           | .            | .            |
| Total                | 39.8           | 72.4           | 17.8         | 22.2         |
| Number of samples    | 15             | 15             | 10           | 10           |
| Number collected     | 597            | 1086           | 178          | 222          |
| Species collected    | 23             | 24             | 20           | 24           |

Table 26. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Tims Ford, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Longnose gar         | .                            | 0.1                       | .                          | 0.4                     |
| Gizzard shad         | 3.3                          | 0.5                       | 2.0                        | 1.4                     |
| Common carp          | 4.0                          | 1.2                       | 0.3                        | 0.5                     |
| Spotfin shiner       | 12.1                         | 9.1                       | .                          | .                       |
| River carpsucker     | .                            | .                         | .                          | 0.1                     |
| Quillback carpsucker | .                            | .                         | 2.6                        | 0.5                     |
| Smallmouth buffalo   | 0.3                          | .                         | 1.6                        | 0.6                     |
| Spotted sucker       | 0.2                          | .                         | .                          | .                       |
| Silver redhorse      | .                            | .                         | 0.1                        | .                       |
| Black redhorse       | 0.1                          | 0.1                       | .                          | 0.4                     |
| Golden redhorse      | 0.4                          | .                         | 0.1                        | .                       |
| Channel catfish      | 0.4                          | 0.1                       | 0.7                        | 0.6                     |
| Flathead catfish     | 0.3                          | 1.2                       | 0.2                        | 0.2                     |
| White bass           | 0.1                          | 0.1                       | 1.4                        | 0.6                     |
| Yellow bass          | .                            | .                         | 4.1                        | 2.3                     |
| Striped bass         | .                            | .                         | 0.9                        | 1.5                     |
| Rock bass            | .                            | 0.1                       | .                          | .                       |
| Warmouth             | .                            | 0.1                       | .                          | .                       |
| Green sunfish        | 6.7                          | 5.4                       | .                          | .                       |
| Bluegill             | 28.5                         | 77.5                      | 0.3                        | 0.1                     |
| Longear sunfish      | .                            | 0.4                       | .                          | .                       |
| Smallmouth bass      | 3.2                          | 5.3                       | 0.2                        | 0.7                     |
| Spotted bass         | .                            | 0.1                       | .                          | .                       |
| Largemouth bass      | 0.9                          | 0.3                       | 0.4                        | .                       |
| Black crappie        | 0.1                          | .                         | .                          | .                       |
| Logperch             | 0.7                          | 2.9                       | .                          | .                       |
| Walleye              | 0.1                          | .                         | 2.1                        | 2.2                     |
| Freshwater drum      | 0.1                          | .                         | 0.1                        | .                       |
| Brook silverside     | 1.5                          | .                         | .                          | .                       |
| Total                | 63.1                         | 104.4                     | 17.1                       | 12.1                    |
| Number of samples    | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 946                          | 1566                      | 171                        | 121                     |
| Species collected    | 19                           | 17                        | 16                         | 15                      |

Table 27. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Watauga, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name        | Electrofishing |         | Gill Netting |         |
|--------------------|----------------|---------|--------------|---------|
|                    | Transition     | Forebay | Transition   | Forebay |
| Gizzard shad       | 1.7            | 0.3     | 1.0          | 2.0     |
| Common carp        | 0.5            | 0.4     | 0.8          | 0.5     |
| Silver shiner      | 1.1            | 0.3     | 1.2          | 1.2     |
| Spotfin shiner     | 3.5            | 2.2     | 2.1          | 1.2     |
| Bluntnose minnow   | 0.5            | 0.6     | 3.9          | 1.2     |
| Northern hogsucker | .              | 0.1     | .            | 1.2     |
| Shorthead redhorse | .              | 0.1     | .            | 1.2     |
| Black redhorse     | 0.1            | 0.1     | 1.2          | 1.2     |
| Golden redhorse    | 0.1            | .       | .            | 1.2     |
| Yellow bullhead    | 0.1            | .       | 1.2          | 1.2     |
| Channel catfish    | .              | 0.1     | .            | 0.2     |
| Flathead catfish   | 4.3            | 0.2     | 0.5          | 0.4     |
| Rock bass          | 0.3            | 5.7     | 0.4          | 0.5     |
| Bluegill           | 28.2           | 25.9    | 0.2          | 0.4     |
| Smallmouth bass    | 2.6            | 2.5     | 2.5          | 0.4     |
| Spotted bass       | 0.5            | .       | 0.4          | 0.4     |
| Largemouth bass    | 2.0            | 0.7     | 0.1          | 0.1     |
| Walleye            | 1.3            | 0.7     | 9.1          | 1.4     |
| Total              | 40.1           | 39.7    | 14.8         | 5.4     |
| Number of samples  | 15             | 15      | 10           | 10      |
| Number collected   | 602            | 596     | 148          | 54      |
| Species collected  | 12             | 14      | 8            | 7       |

Table 28. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Watts Bar, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Inflow<br>Clinch | Electrofishing<br>Inflow<br>Tennessee | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|------------------------------------|---------------------------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Longnose gar         | .                                  | 0.6                                   | .                            | .                         | .                          | .                       |
| Skipjack herring     | 12.1                               | 0.7                                   | 1.1                          | 0.1                       | 5.5                        | 6.5                     |
| Gizzard shad         | 27.1                               | 12.5                                  | 8.3                          | 5.5                       | 0.7                        | 1.5                     |
| Threadfin shad       | 32.9                               | 264.0                                 | 27.9                         | 1.0                       | .                          | .                       |
| Hybrid shad          | .                                  | .                                     | .                            | .                         | .                          | 0.3                     |
| Mooneye              | .                                  | 0.1                                   | .                            | .                         | .                          | .                       |
| Common carp          | 1.5                                | 2.1                                   | 2.1                          | 1.9                       | 0.2                        | .                       |
| Golden shiner        | .                                  | .                                     | 0.1                          | 0.9                       | .                          | .                       |
| Emerald shiner       | 1.2                                | 1.1                                   | 42.6                         | 109.2                     | .                          | .                       |
| Spotfin shiner       | .                                  | 1.3                                   | 13.9                         | 3.8                       | .                          | .                       |
| Steelcolor shiner    | .                                  | 0.5                                   | 4.3                          | 2.3                       | .                          | .                       |
| Striped shiner       | 0.5                                | .                                     | .                            | .                         | .                          | .                       |
| Bluntnose minnow     | 0.5                                | .                                     | 4.6                          | 0.1                       | .                          | .                       |
| Quillback carpsucker | .                                  | .                                     | .                            | .                         | 0.1                        | .                       |
| Northern hogsucker   | 0.3                                | 1.1                                   | .                            | 0.5                       | .                          | .                       |
| Smallmouth buffalo   | 0.1                                | 0.7                                   | 0.1                          | 0.1                       | 0.1                        | .                       |
| Spotted sucker       | 0.4                                | 1.0                                   | 1.3                          | 0.1                       | .                          | .                       |
| Shorthead redhorse   | .                                  | 0.1                                   | .                            | .                         | .                          | .                       |
| Black redhorse       | 2.3                                | 0.9                                   | .                            | .                         | .                          | .                       |
| Golden redhorse      | 1.7                                | 0.7                                   | .                            | .                         | .                          | .                       |
| Blue catfish         | .                                  | 0.1                                   | .                            | .                         | 1.4                        | 0.4                     |
| Channel catfish      | 0.1                                | 0.9                                   | 0.2                          | 0.1                       | 0.6                        | 0.3                     |
| Flathead catfish     | .                                  | .                                     | .                            | 0.2                       | 0.7                        | 0.7                     |
| White bass           | 3.3                                | 2.9                                   | 0.2                          | 0.2                       | 0.8                        | 1.1                     |
| Yellow bass          | 1.4                                | 0.8                                   | .                            | .                         | 2.4                        | 0.8                     |
| Striped bass         | 0.1                                | 0.1                                   | .                            | 0.1                       | 0.3                        | 0.1                     |
| Striped x white bass | .                                  | 0.1                                   | .                            | .                         | .                          | 0.4                     |
| Rock bass            | 0.1                                | .                                     | .                            | .                         | .                          | .                       |
| Warmouth             | 0.1                                | .                                     | 0.1                          | .                         | .                          | .                       |
| Redbreast sunfish    | 0.1                                | 0.1                                   | 0.1                          | 0.5                       | .                          | .                       |
| Green sunfish        | .                                  | 0.2                                   | 0.3                          | 0.3                       | .                          | .                       |
| Bluegill             | 4.3                                | 6.9                                   | 30.5                         | 28.7                      | 0.2                        | 0.3                     |
| Longear sunfish      | .                                  | .                                     | 0.1                          | .                         | .                          | .                       |
| Redear sunfish       | 0.7                                | 0.1                                   | 4.1                          | 3.1                       | .                          | 0.2                     |
| Smallmouth bass      | 0.1                                | 0.5                                   | 4.3                          | 1.8                       | .                          | 0.3                     |
| Spotted bass         | 0.5                                | 1.5                                   | .                            | 0.5                       | .                          | 0.3                     |
| Largemouth bass      | 1.9                                | 3.7                                   | 4.7                          | 3.0                       | 0.1                        | 0.1                     |
| White crappie        | .                                  | 0.8                                   | 0.5                          | .                         | 0.4                        | .                       |
| Black crappie        | .                                  | 0.2                                   | 0.2                          | 0.1                       | .                          | .                       |
| Yellow perch         | 0.9                                | 0.9                                   | 0.2                          | 0.3                       | .                          | .                       |
| Logperch             | 0.4                                | 11.2                                  | 2.1                          | 0.2                       | .                          | .                       |
| Sauger               | .                                  | 0.1                                   | .                            | .                         | 3.5                        | 0.6                     |
| Freshwater drum      | 0.3                                | 0.3                                   | 0.6                          | 0.3                       | 0.5                        | 0.1                     |
| Banded sculpin       | 0.2                                | .                                     | .                            | .                         | .                          | .                       |
| Brook silverside     | 0.5                                | .                                     | 0.2                          | 0.4                       | .                          | .                       |
| Total                | 95.5                               | 318.5                                 | 154.8                        | 165.2                     | 17.5                       | 14.0                    |
| Number of samples    | 15                                 | 15                                    | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 1432                               | 4777                                  | 2322                         | 2478                      | 175                        | 140                     |
| Species collected    | 29                                 | 34                                    | 27                           | 28                        | 16                         | 17                      |



Table 29. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Wheeler, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name          | Electrofishing<br>Inflow | Electrofishing<br>Transition | Electrofishing<br>Forebay | Gill Netting<br>Transition | Gill Netting<br>Forebay |
|----------------------|--------------------------|------------------------------|---------------------------|----------------------------|-------------------------|
| Chestnut lamprey     | 0.2                      | 0.1                          | .                         | .                          | .                       |
| Spotted gar          | 0.5                      | 0.1                          | 0.1                       | .                          | .                       |
| Longnose gar         | 1.3                      | .                            | .                         | .                          | .                       |
| Bowfin               | 0.1                      | .                            | .                         | .                          | .                       |
| Skipjack herring     | 6.3                      | 8.8                          | 1.3                       | 0.3                        | 6.1                     |
| Gizzard shad         | 15.9                     | 13.4                         | 41.0                      | 2.4                        | 3.3                     |
| Threadfin shad       | 2.1                      | 26.7                         | .                         | .                          | 1.5                     |
| Common carp          | 1.4                      | 0.3                          | 0.1                       | .                          | .                       |
| Golden shiner        | .                        | 0.1                          | .                         | 0.1                        | .                       |
| Emerald shiner       | 4.9                      | 5.8                          | 0.6                       | .                          | .                       |
| Ghost shiner         | .                        | 0.1                          | .                         | .                          | .                       |
| Steelcolor shiner    | .                        | .                            | 0.1                       | .                          | .                       |
| River carpsucker     | 0.1                      | .                            | .                         | .                          | .                       |
| Quillback carpsucker | 0.1                      | .                            | .                         | .                          | .                       |
| Northern hogsucker   | .                        | 0.1                          | .                         | .                          | .                       |
| Smallmouth buffalo   | 1.4                      | 0.1                          | 0.1                       | 0.3                        | .                       |
| Bigmouth buffalo     | 0.1                      | 0.1                          | .                         | .                          | .                       |
| Black buffalo        | .                        | .                            | .                         | 0.2                        | .                       |
| Spotted sucker       | 0.2                      | 0.6                          | 2.1                       | 0.1                        | 0.6                     |
| Silver redhorse      | 0.1                      | .                            | .                         | .                          | .                       |
| Shorthead redhorse   | 0.1                      | .                            | .                         | .                          | .                       |
| Black redhorse       | 0.4                      | 0.1                          | 0.1                       | 0.1                        | 0.1                     |
| Golden redhorse      | 1.4                      | .                            | 0.1                       | .                          | .                       |
| Blue catfish         | 0.8                      | 0.3                          | .                         | .                          | 0.1                     |
| Channel catfish      | 2.3                      | 0.7                          | 0.5                       | 0.8                        | 0.7                     |
| Flathead catfish     | .                        | 0.1                          | .                         | 0.3                        | 0.5                     |
| White bass           | 0.8                      | 0.3                          | .                         | 0.1                        | .                       |
| Yellow bass          | 22.1                     | 2.0                          | .                         | 1.0                        | 0.7                     |
| Striped x white bass | .                        | .                            | 0.1                       | 0.2                        | 0.3                     |
| Warmouth             | .                        | 1.3                          | .                         | .                          | 0.3                     |
| Green sunfish        | 0.1                      | 1.1                          | .                         | .                          | .                       |
| Bluegill             | 13.3                     | 25.0                         | 28.5                      | 0.6                        | 0.1                     |
| Longear sunfish      | 0.8                      | 2.5                          | 1.5                       | .                          | .                       |
| Redear sunfish       | 1.7                      | 4.2                          | 3.1                       | 0.4                        | 0.4                     |
| Hybrid sunfish       | .                        | .                            | 0.1                       | .                          | .                       |
| Smallmouth bass      | 0.3                      | 0.8                          | 1.5                       | .                          | 0.2                     |
| Spotted bass         | 5.3                      | 0.3                          | 0.1                       | 0.1                        | 0.2                     |
| Largemouth bass      | 2.1                      | 2.5                          | 3.0                       | 0.1                        | 0.1                     |
| White crappie        | 0.1                      | 0.1                          | .                         | .                          | 0.1                     |
| Black crappie        | 0.5                      | .                            | .                         | .                          | .                       |
| Logperch             | 1.5                      | .                            | 0.3                       | .                          | .                       |
| Sauger               | 0.1                      | 0.3                          | .                         | 0.9                        | 0.8                     |
| Freshwater drum      | 0.9                      | 1.7                          | 1.7                       | 0.3                        | 0.7                     |
| Brook silverside     | .                        | 0.5                          | .                         | .                          | .                       |
| Inland silverside    | .                        | 0.1                          | .                         | .                          | .                       |
| Total                | 89.3                     | 100.2                        | 85.7                      | 8.3                        | 16.8                    |
| Number of samples    | 15                       | 15                           | 15                        | 10                         | 10                      |
| Number collected     | 1340                     | 1503                         | 1286                      | 83                         | 168                     |
| Species collected    | 34                       | 32                           | 21                        | 18                         | 19                      |

Table 30. Species listing and catch per unit effort at the transition during fall electrofishing and gill netting on Wilson, 1994 (electrofishing effort = 300 meters of shoreline and gill netting effort = net-nights).

| Common name        | Electrofishing |         | Electrofishing |         | Gill Netting |
|--------------------|----------------|---------|----------------|---------|--------------|
|                    | Inflow         | Forebay | Forebay        | Forebay | Forebay      |
| Chestnut lamprey   | 0.1            | 0.1     | 0.1            | 0.1     | 0.1          |
| Spotted gar        | 0.1            | 0.1     | 0.1            | 0.1     | 0.1          |
| Longnose gar       |                | 0.1     |                |         |              |
| Bowfin             |                | 0.1     |                |         |              |
| Skipjack herring   | 8.8            | 0.1     | 0.1            | 1.4     |              |
| Gizzard shad       | 12.4           | 36.5    | 31.3           | 1.9     |              |
| Threadfin shad     | 20.7           |         |                | 0.5     |              |
| Hybrid shad        | 0.3            |         |                | 0.1     |              |
| Common carp        | 0.1            | 0.3     |                |         |              |
| Golden shiner      | 0.8            | 0.1     | 0.1            |         |              |
| Emerald shiner     | 0.1            | 4.4     | 0.1            |         |              |
| Spotfin shiner     | 0.1            | 0.6     |                |         |              |
| Smallmouth buffalo |                |         | 0.1            |         |              |
| Bigmouth buffalo   |                | 0.3     | 0.1            |         |              |
| Spotted sucker     | 0.1            | 1.5     | 0.6            | 0.2     |              |
| Black redbreast    | 0.1            | 1.1     | 0.1            |         |              |
| Golden redbreast   | 0.1            | 1.0     | 0.1            |         |              |
| Blue catfish       |                | 0.1     |                | 1.8     |              |
| Channel catfish    | 0.6            | 4.1     | 0.7            | 0.1     |              |
| Flathead catfish   |                | 0.3     | 0.2            | 0.3     |              |
| White bass         |                | 0.3     | 0.8            |         |              |
| Yellow bass        | 0.1            |         |                | 0.4     |              |
| Striped bass       | 0.1            | 0.1     |                |         |              |
| Warmouth           |                | 0.1     |                |         |              |
| Green sunfish      | 0.2            | 0.1     | 0.5            |         |              |
| Bluegill           | 0.1            | 26.9    | 24.5           | 0.2     |              |
| Longear sunfish    | 0.3            | 1.4     | 2.9            |         |              |
| Redear sunfish     | 0.7            | 2.5     | 1.5            | 0.5     |              |
| Smallmouth bass    | 0.3            | 3.3     | 3.3            | 0.3     |              |
| Spotted bass       | 0.3            | 0.1     |                | 1.0     |              |
| Largemouth bass    | 0.1            | 5.9     | 3.5            | 0.5     |              |
| White crappie      | 0.1            | 0.1     |                | 0.1     |              |
| Black crappie      | 0.4            | 0.1     |                |         |              |
| Logperch           |                |         | 0.5            |         |              |
| Sauger             |                |         | 0.1            | 1.1     |              |
| Freshwater drum    | 0.3            | 1.4     | 0.6            | 0.7     |              |
| Brook silverside   | 0.3            |         | 8.1            |         |              |
| Inland silverside  | 0.1            | 0.1     | 0.1            |         |              |
| Total              | 93.1           | 79.9    | 11.3           |         |              |
| Number of samples  | 15             | 15      | 10             |         |              |
| Number collected   | 1396           | 1198    | 113            |         |              |
| Species collected  | 31             | 24      | 19             |         |              |