ENCLOSURE 1

BASELINE ADULT FISH MONITORING PROGRAM

1. Objectives and Scope

The objective of this 18-month study (March 1977-September 1978) is to obtain baseline information on the adult fish populations in the vicinity of Watts Bar Nuclear Plant which is located in the tailwater of Watts Bar Dam. The program is designed to provide general population data on species composition, relative abundance, reproductive characteristics, and movements of dominant species in the affected area. A creel survey will provide additional information on the sport fish pressure and harvest in the area.

It is anticipated that these data will verify the condition of the fisheries resources as discussed in the TVA Watts Bar Final Environmental Impact Statement. At present, no operational monitoring of thermal effects on fish populations is planned; however, this decision will be reviewed upon completion of the baseline monitoring program.

2. Description of Sampling Area

The plant is located on the right bank of Chickamauga Reservoir (TRM 528) approximately two miles downstream from Watts Bar Dam. Two stations will be established. Station A is located at the plant site and will lie between TRM 527.4 and 528.4. The bottom substrate along the right bank of this station consists of washed sand with scattered stumps and constitutes a shallow to deep overbank area. The left bank substrate varies from mainly rock riprap in the upper reaches of the station to rock and coarse sand in lower portion.

Station B, located downstream of the plant, will extend from TRM 524.2 to TRM 524.9. The lower portion of the right bank consists of a sandy bottom with scattered stumps, and the water depth is shallow. The upper section of shoreline consists of a rocky bluff and deep water. The left bank has a washed sandy bottom with numerous tree stumps in the shallow areas and drops off quickly to a depth of approximately 12 m.

3. Methods and Procedure

Five fish sampling methods will be used to obtain data on adult fish populations (i.e., gill and hoop netting, electrofishing, shoreline seining, and creel survey). Rotenone samples will not be taken because suitable coves do not exist near the plant site.

a. Gill Netting

Experimental gill nets will be used to assess the spatial and temporal distributions of fish populations at the two sampling stations. The nets will be 37.9 m. long by 2.4 m. deep and consist of five mesh-size panels. The mesh sizes will be 1.27 cm., 2.54 cm., 3.18 cm., 5.08 cm., and 6.55 cm. in consecutive order.

Gill nets will be set perpendicular to shore in pairs approximately 100 m. apart with the mesh sizes running in opposite directions. A pair will be set on each bank at both stations A and B and will be fished for a total of four nights every two months of the study period. The mesh size order of the nets will be reversed each time they are reset (once each 24-hour period). Information on the number of each species caught in each mesh size will be obtained. Length-weight and gonadal maturity stage of selected species (sauger, channel and blue catfish, white bass,

white crappie, carp, and largemouth bass) will be recorded. Gonadal condition will be designated as immature, mature, ripe, or spent.

b. Hoop Nets

A maximum of four hoop nets per station (two on each bank) will be fished up to four nights on a bimonthly basis. The nets will have a mouth diameter of 1.19 m., length of 4.75 m., and a mesh size of .05 m. with seven hoops and two throats. The number of each species collected at each bank will be recorded. Also, lengths, weights, and maturity stage of selected species will be taken, as described above for gill netting.

c. Electrofishing

A boat-mounted electrofishing unit will also be used in determining the distribution of adult fish populations in the study area. Samples will be collected on both left and right banks of each station. Five, three-minute samples will be taken on each bank. Samples will always be taken in an upstream direction to maintain a relatively consistent amount of shoreline fished. Sampling will be conducted one day each month, and all fish collected will be identified to species and enumerated. Length-weight and maturity data on the selected species will also be collected.

d. Shoreline Seining

Six to twelve seine hauls will be taken once each month. A 10.9 m. x 1.8 m. bag seine or a 3.6 m. x 1.2 m. minnow seine will be used. Hauls will be made in overbank areas and the mouths of streams located between TRM 524 and TRM 529. Fish will be identified to species and enumerated.

e. Sport Harvest of Fish

Primary creel information will be gathered by a full-time creel survey conducted by the Tennessee Wildlife Resources Agency on Chickamauga Reservoir. This information will be supplemented by a TVA creel clerk who will interview fishermen in the power plant area one day each week. These two sources of information will be combined to describe the sport fishery pressure and harvest in the Watts Bar Nuclear Plant area.

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ENCLOSURE 2

Biological Environmental Review
Watts Bar Nuclear Plant

PREOPERATIONAL AQUATIC BIOTA (NONFISH) DATA

Tennessee Valley Authority
Watts Bar Nuclear Plant, Units 1 and 2

INTRODUCTION

The ENVIRONMENTAL INFORMATION report for the Watts Bar Nuclear Plant dated November 18, 1976, in Section C, included a summary of the Aquatic Biota (nonfish) data available at the time the report was published. The specific data included in the report were identified on page C-1, along with the identification of additional samples that had been collected but which were still in various stages of processing in the laboratory. The status of the outstanding data, as identified on page C-1, was a subject of the NRC-EPA-TVA techanical staff discussion during the February 22, 1977, Watts Bar Nuclear Plant site visit. NRC staff requested they receive copies of this outstanding data as soon as it became available for use in the environmental review. Because of the volume of data involved and the uncertainty of its schedule of availability, it was mutually agreed between NRC and TVA technical staff that the data could be provided to NRC and EPA technical staffs by separate letter outside the framework of responses to the NRC formal environmental review questions.

Section A

The phytoplankton data for 1976, as identified in the Environmental Information, page C-1, is currently in process and is therefore not included in this report. These results will be transmitted after the data becomes available.

AQUATIC BIOTA (NONFISH) DATA

WATTS BAR NUCLEAR PLANT

Phytoplankton

1975

In 1975 the fewest number of chrysophyte taxa, 1, was identified at TRM 529.9 in the winter. The greatest number of taxa, 10, was collected in the summer at TRM 496.5. The number of taxa at each station varied and did not display a pattern of occurrence from TRM 496.5 to the upstream stations. Melosira spp., Synedra spp., Stephanodiscus spp., and Navicula spp. occurred frequently at all stations throughout the year. Melosira spp. dominated the Chrysophyta at most stations during the year. Total numbers displayed a general increase upstream from TRM 496.5. The highest numbers of Chrysophyta occurred in the spring and lowest in the fall.

The maximum number of chlorophyte taxa, 29, in 1975 were identified at TRM 532.1 during the summer while the minimum number, 5, occurred at the same station in the winter. Scenedesmus spp., Chlamydomonas spp. and Dictyosphaerium spp. were found often at all stations during the year. Scenedesmus spp. frequently dominated the Chlorophyta at many stations. The Chlorophyta reached peak abundance in the summer and were at a minimum in the winter.

The number of cyanophyte taxa peaked at 9 during the summer at TRM 532.1. The fewest number of taxa, 1, occurred in the winter at stations TRM 518.0, 527.4, 529.9, and 532.1. The most common genera encountered were Anacystis spp., Dactylococcopsis spp., and Oscillatoria spp., with Anacystisspp. and Dactylococcopsis frequently dominating the Cyanophyta. The number of cyanophytes was lowest in the fall and highest in the summer.

Note: The phytoplankton data for 1976 are still in process. Results will be forwarded as soon as the data become available.

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 496.5 750 HRS
FEBRUARY 4, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	DINOBRYON	3115	CHLAMYDOMONAS	28035	DACTYLOCOCCOPSI	9345	EUGLENA	15575				CHRYSOPHYTA	74.5
	MELOSIRA	227395	CHLORELLA	3115			TRACHELOMONAS	3115				CHLOROPHYTA	17.0
	NAVICULA	6230	CRUCIGENIA	12460								CYANOPHYTA	2.8
	STEPHANODISCUS	9345	DICTYOSPHAERIUM	12460								EUGLENOPHYTA	5.7
	TOTAL	246085	TOTAL	56070	TOTAL	9345	TOTAL	18690			330190		
	DOMINANT-MELOSIRA		DOMINANT-CHLAMYDOMONAS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
1.0	CYMBELLA	3115	CHLORELLA	3115	DACTYLOCOCCOPSI	9345	EUGLENA	9345				CHRYSOPHYTA	56.8
	MELOSIRA	102795	GOLENKINIA	3115			TRACHELOMONAS	3115				CHLOROPHYTA	33.8
	STEPHANODISCUS	24920	PANDORINA	40495								CYANOPHYTA	4.1
			SCENEDESMUS	31150								EUGLENOPHYTA	5.4
	TOTAL	130830	TOTAL	77875	TOTAL	9345	TOTAL	12460			230510		
	DOMINANT-MELOSIRA		DOMINANT-PANDORINA		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
3.0	MELOSIRA	249200	CHLAMYDOMONAS	12460	ANACYSTIS	31150	EUGLENA	6230	GLENODINIUM	3115		CHRYSOPHYTA	77.8
	STEPHANODISCUS	34265	SCENEDESMUS	18690	DACTYLOCOCCOPSI	6230	TRACHELOMONAS	3115				CHLOROPHYTA	8.5
												CYANOPHYTA	10.3
												EUGLENOPHYTA	2.6
												PYRROPHYTA	0.9
	TOTAL	283465	TOTAL	31150	TOTAL	37380	TOTAL	9345	TOTAL	3115	364455		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA		DOMINANT-GLENODINIUM				
5.0	MELOSIRA	386260	CHLAMYDOMONAS	9345	DACTYLOCOCCOPSI	6230	EUGLENA	18690				CHRYSOPHYTA	87.5
	STEPHANODISCUS	49840	CHLORELLA	3115								CHLOROPHYTA	7.5
			SCENEDESMUS	24920								CYANOPHYTA	1.2
												EUGLENOPHYTA	3.7
	TOTAL	436100	TOTAL	37380	TOTAL	6230	TOTAL	18690					
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA				498400		
AV. NO/L		274120		50619		15575		14796		779			
											355889	CHRYSOPHYTA	77.0
												CHLOROPHYTA	14.2
												CYANOPHYTA	4.4
												EUGLENOPHYTA	4.2
												PYRROPHYTA	0.2

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 506.6 815 HRS
FEBRUARY 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	DINOBRYON	13148	CHLAMYDOMONAS	6574	ANABAENA	32870	EUGLENA	19722				CHRYSOPHYTA	23.4
	MELOSIRA	26296	CHODATELLA	3287	DACTYLOCOCCOPSI	23009	TRACHELOMONAS	6574				CHLOROPHYTA	37.5
	SURIRELLA	3287	DICTYOSPHAERIUM	19722								CYANOPHYTA	26.6
	SYNEDRA	6574	GOLENKINIA	3287								EUGLENOPHYTA	12.5
			SCENEDESMUS	13148									
			ULOTHRIX	32870									
	TOTAL	49305	TOTAL	78888	TOTAL	55879	TOTAL	26296			210368		
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-ANABAENA		DOMINANT-EUGLENA						
1.0	DINOBRYON	9861	CHLAMYDOMONAS	16435	DACTYLOCOCCOPSI	32870			GYMNODINIUM	6574		CHRYSOPHYTA	42.7
	MELOSIRA	105184	DICTYOSPHAERIUM	9861								CHLOROPHYTA	42.7
			GOLENKINIA	3287								CYANOPHYTA	12.2
			MICRACTINIUM	13148								PYRROPHYTA	2.4
			OOCYSTIS	13148									
			SCENEDESMUS	46018									
			ULOTHRIX	13148									
	TOTAL	115045	TOTAL	115045	TOTAL	32870			TOTAL	6574	269534		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS				DOMINANT-GYMNODINIUM				
3.0	MELOSIRA	46018	DICTYOSPHAERIUM	9861	DACTYLOCOCCOPSI	13148			GYMNODINIUM	6574		CHRYSOPHYTA	30.0
	SYNEDRA	3287	GOLENKINIA	3287								CHLOROPHYTA	58.0
			MICRACTINIUM	13148								CYANOPHYTA	8.0
			SCENEDESMUS	59166								PYRROPHYTA	4.0
			ULOTHRIX	9861									
	TOTAL	49305	TOTAL	95323	TOTAL	13148			TOTAL	6574	164350		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS				DOMINANT-GYMNODINIUM				
5.0	MELOSIRA	105184	CHLAMYDOMONAS	26296	DACTYLOCOCCOPSI	42731	EUGLENA	16435				CHRYSOPHYTA	34.7
	STEPHANODISCUS	6574	CHLORELLA	3287								CHLOROPHYTA	46.9
			DICTYOSPHAERIUM	69027								CYANOPHYTA	13.3
			SCENEDESMUS	29583								EUGLENOPHYTA	5.1
			ULOTHRIX	19722									
			SCHROEDERIA	3287									
	TOTAL	111758	TOTAL	151202	TOTAL	42731	TOTAL	16435			322126		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
AV. NO/L		81353		110115		36157		10683		3287	241595	CHRYSOPHYTA	31.7
												CHLOROPHYTA	45.6
												CYANOPHYTA	15.0
												EUGLENOPHYTA	4.4
												PYRROPHYTA	1.4

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 518.0 850 HRS
FEBRUARY 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	98610	CHLAMYDOMONAS	6574	DACTYLOCOCCOPSI	23009	EUGLENA	16435				CHRYSOPHYTA	54.4
	SYNEDRA	3287	DICTYOSPHAERIUM	9861								CHLOROPHYTA	24.6
			SCENEDESMUS	13148								CYANOPHYTA	12.3
			ULOTHRIX	16435								EUGLENOPHYTA	8.8
	TOTAL	101897	TOTAL	46018	TOTAL	23009	TOTAL	16435			187359		
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
1.0	MELOSIRA	105184	CHLAMYDOMONAS	23009	DACTYLOCOCCOPSI	9861	EUGLENA	23009	GYMNODINIUM	3287		CHRYSOPHYTA	50.7
	STEPHANODISCUS	6574	CHODATELLA	3287			TRACHELOMONAS	3287				CHLOROPHYTA	33.3
	SYNEDRA	13148	DICTYOSPHAERIUM	9861								CYANOPHYTA	4.0
			MICRACTINIUM	13148								EUGLENOPHYTA	10.7
			SCENEDESMUS	23009								PYRROPHYTA	1.3
			ULOTHRIX	9861									
	TOTAL	124906	TOTAL	82175	TOTAL	9861	TOTAL	26296	TOTAL	3287	246525		
	DOMINANT-MELOSIRA		DOMINANT-CHLAMYDOMONAS SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM				
3.0	DINOBRYON	9861	CHLAMYDOMONAS	16435	DACTYLOCOCCOPSI	23009	EUGLENA	32870	GYMNODINIUM	6574		CHRYSOPHYTA	32.2
	MELOSIRA	46018	DICTYOSPHAERIUM	23009			TRACHELOMONAS	3287				CHLOROPHYTA	33.9
	SYNEDRA	6574	SCENEDESMUS	6574								CYANOPHYTA	11.9
			ULOTHRIX	19722								EUGLENOPHYTA	18.6
												PYRROPHYTA	3.4
	TOTAL	62453	TOTAL	65740	TOTAL	23009	TOTAL	36157	TOTAL	6574	193933		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM				
5.0	ASTERIONELLA	26296	CHLAMYDOMONAS	3287	DACTYLOCOCCOPSI	16435	EUGLENA	19722				CHRYSOPHYTA	53.2
	MELOSIRA	78888	CHODATELLA	3287			TRACHELOMONAS	16435				CHLOROPHYTA	21.0
	STEPHANODISCUS	3287	KIRCHNERIELLA	3287								CYANOPHYTA	8.1
			SCENEDESMUS	19722								EUGLENOPHYTA	17.7
			ULOTHRIX	13148									
	TOTAL	108471	TOTAL	42731	TOTAL	16435	TOTAL	36157			203794		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
AV. NO/L		99432		59166		18079		28761		2465	207903	CHRYSOPHYTA	47.8
												CHLOROPHYTA	28.5
												CYANOPHYTA	8.7
												EUGLENOPHYTA	13.8
												PYRROPHYTA	1.2

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 527.4 920 HRS
FEBRUARY 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	69027	ULOTHRIX	16435	DACTYLOCOCCOPSI	29583	EUGLENA	6574					
	NAVICULA	3287					TRACHELOMONAS	6574				CHRYSOPHYTA	56.1
	STEPHANODISCUS	3287										CHLOROPHYTA	12.2
												CYANOPHYTA	22.0
	TOTAL	75601	TOTAL	16435	TOTAL	29583	TOTAL	13148				EUGLENOPHYTA	9.8
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA TRACHELOMONAS				134767		
1.0	DINOBRYON	9861	CHLAMYDOMONAS	16435	DACTYLOCOCCOPSI	19722	EUGLENA	29583	GYMNODINIUM	6574			
	MELOSIRA	124906	SCENEDESMUS	6574			TRACHELOMONAS	13148				CHRYSOPHYTA	59.4
												CHLOROPHYTA	10.1
												CYANOPHYTA	8.7
												EUGLENOPHYTA	18.8
												PYRROPHYTA	2.9
	TOTAL	134767	TOTAL	23009	TOTAL	19722	TOTAL	42731	TOTAL	6574			
	DOMINANT-MELOSIRA		DOMINANT-CHLAMYDOMONAS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM		226803		
3.0	MELOSIRA	256386	CHLAMYDOMONAS	36157	DACTYLOCOCCOPSI	75601	EUGLENA	32870					
	SYNEDRA	3287	DICTYOSPHAERIUM	29583			TRACHELOMONAS	3287				CHRYSOPHYTA	53.7
			OOCYSTIS	6574								CHLOROPHYTA	23.1
			ULOTHRIX	39444								CYANOPHYTA	15.6
												EUGLENOPHYTA	7.5
	TOTAL	259673	TOTAL	111758	TOTAL	75601	TOTAL	36157					
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA				483189		
5.0	MELOSIRA	216942	CHLAMYDOMONAS	23009	DACTYLOCOCCOPSI	26296	EUGLENA	36157	GYMNODINIUM	3287			
	STEPHANODISCUS	13148	CHLORELLA	9861			TRACHELOMONAS	9861				CHRYSOPHYTA	51.1
	SYNEDRA	3287	DICTYOSPHAERIUM	52592								CHLOROPHYTA	32.4
			KIRCHNERIELLA	9861								CYANOPHYTA	6.8
			SCENEDESMUS	13148								EUGLENOPHYTA	10.1
			ULOTHRIX	39444								PYRROPHYTA	0.7
	TOTAL	233377	TOTAL	147915	TOTAL	26296	TOTAL	46018	TOTAL	3287			
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM		456893		
AV. NO/L		175855		74779		37801		34514		2465	325413		
												CHRYSOPHYTA	54.0
												CHLOROPHYTA	23.0
												CYANOPHYTA	11.6
												EUGLENOPHYTA	10.6
												PYRROPHYTA	0.8

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 4 — TENNESSEE RIVER MILE 528.0 — 935 HRS
FEBRUARY 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	164350	ANKISTRODESMUS	6574	DACTYLOCOCCOPSI	23009	EUGLENA	36157				CHRYSOPHYTA	51.9
	NAVICULA	6574	CHLAMYDOMONAS	39444								CHLOROPHYTA	31.1
	STEPHANODISCUS	6574	CHODATELLA	3287								CYANOPHYTA	6.6
	SYNEDRA	3287	DICTYOSPHAERIUM	13148								EUGLENOPHYTA	10.4
			KIRCHNERIELLA	6574									
			MICRACTINIUM	13148									
			TETRADESMUS	13148									
			ULOTHRIX	13148									
	TOTAL	180785	TOTAL	108471	TOTAL	23009	TOTAL	36157			348422		
	DOMINANT-MELOSIRA		DOMINANT-CHLAMYDOMONAS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
1.0	MELOSIRA	88749	CHLAMYDOMONAS	19722	DACTYLOCOCCOPSI	42731	EUGLENA	23009				CHRYSOPHYTA	40.8
	STEPHANODISCUS	3287	KIRCHNERIELLA	6574			TRACHELOMONAS	19722				CHLOROPHYTA	22.5
	ACHNANTHES	3287	SCENEDESMUS	13148								CYANOPHYTA	18.3
			ULOTHRIX	13148								EUGLENOPHYTA	18.3
	TOTAL	95323	TOTAL	52592	TOTAL	42731	TOTAL	42731			233377		
	DOMINANT-MELOSIRA		DOMINANT-CHLAMYDOMONAS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
3.0	MELOSIRA	161063	CHLAMYDOMONAS	16435	DACTYLOCOCCOPSI	36157	EUGLENA	16435				CHRYSOPHYTA	56.3
			DICTYOSPHAERIUM	26296			TRACHELOMONAS	6574				CHLOROPHYTA	23.0
			KIRCHNERIELLA	9861								CYANOPHYTA	12.6
			ULOTHRIX	13148								EUGLENOPHYTA	8.0
	TOTAL	161063	TOTAL	65740	TOTAL	36157	TOTAL	23009			285969		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
5.0	MELOSIRA	197220	CHLAMYDOMONAS	3287	DACTYLOCOCCOPSI	26296	EUGLENA	29583				CHRYSOPHYTA	60.6
	SYNEDRA	9861	DICTYOSPHAERIUM	23009	MERISMOPEDIA	13148						CHLOROPHYTA	19.2
			MICRACTINIUM	6574								CYANOPHYTA	11.5
			SCENEDESMUS	13148								EUGLENOPHYTA	8.7
			ULOTHRIX	19722									
	TOTAL	207081	TOTAL	65740	TOTAL	39444	TOTAL	29583			341848		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
AV. NO/L		161063		73136		35335		32870			302404	CHRYSOPHYTA	53.3
												CHLOROPHYTA	24.2
												CYANOPHYTA	11.7
												EUGLENOPHYTA	10.9
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 5 TENNESSEE RIVER MILE 529.9 945 HRS
FEBRUARY 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION
0.0	MELOSIRA	151202	CHLAMYDOMONAS	19722	DACTYLOCOCCOPSI	26296	EUGLENA	36157	GYMNODINIUM	3287		
			CHLORELLA	3287			TRACHELOMONAS	13148				CHRYSOPHYTA 51.7
			CHODATELLA	6574								CHLOROPHYTA 21.3
			KIRCHNERIELLA	6574								CYANOPHYTA 9.0
			SCENEDESMUS	13148								EUGLENOPHYTA 16.9
			ULOTHRIX	13148								PYRROPHYTA 1.1
	TOTAL	151202	TOTAL	62453	TOTAL	26296	TOTAL	49305	TOTAL	3287	292543	
	DOMINANT-MELOSIRA		DOMINANT-CHLAMYDOMONAS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM			
1.0	MELOSIRA	200507	CHLAMYDOMONAS	3287	DACTYLOCOCCOPSI	19722	EUGLENA	36157				
			CHLORELLA	3287			TRACHELOMONAS	3287				CHRYSOPHYTA 68.5
			OOCYSTIS	13148								CHLOROPHYTA 11.2
			SCENEDESMUS	13148								CYANOPHYTA 6.7
												EUGLENOPHYTA 13.5
	TOTAL	200507	TOTAL	32870	TOTAL	19722	TOTAL	39444			292543	
	DOMINANT-MELOSIRA		DOMINANT-OOCYSTIS SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA					
3.0	MELOSIRA	193933	ANKISTRODESMUS	6574	DACTYLOCOCCOPSI	9861	EUGLENA	32870	GYMNODINIUM	3287		
			CHLAMYDOMONAS	6574			TRACHELOMONAS	23009				CHRYSOPHYTA 53.2
			CHLORELLA	16435								CHLOROPHYTA 27.9
			CHODATELLA	6574								CYANOPHYTA 2.7
			DICTYOSPHAERIUM	19722								EUGLENOPHYTA 15.3
			SCENEDESMUS	26296								PYRROPHYTA 0.9
			ULOTHRIX	19722								
	TOTAL	193933	TOTAL	101897	TOTAL	9861	TOTAL	55879	TOTAL	3287	364857	
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM			
5.0	MELOSIRA	144628	CHODATELLA	3287	DACTYLOCOCCOPSI	26296	EUGLENA	19722				
			SCENEDESMUS	19722			TRACHELOMONAS	9861				CHRYSOPHYTA 58.7
			ULOTHRIX	23009								CHLOROPHYTA 18.7
												CYANOPHYTA 10.7
												EUGLENOPHYTA 12.0
	TOTAL	144628	TOTAL	46018	TOTAL	26296	TOTAL	29583				
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA				246525	
AV. NO/L		172568		60810		20544		43553		1644		
											299117	CHRYSOPHYTA 57.7
												CHLOROPHYTA 20.3
												CYANOPHYTA 6.9
												EUGLENOPHYTA 14.6
												PYRROPHYTA 0.5

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 532.1 1030 HRS
FEBRUARY 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	DINOBRYON	6574	OOCYSTIS	13148	DACTYLOCOCCOPSI	9861	EUGLENA	6574	GLENODINIUM	6574		CHRYSOPHYTA	56.8
	MELOSIRA	72314	ULOTHRIX	23009			TRACHELOMONAS	3287				CHLOROPHYTA	25.0
	STEPHANODISCUS	3287										CYANOPHYTA	6.8
												EUGLENOPHYTA	6.8
												PYRROPHYTA	4.5
	TOTAL	82175	TOTAL	36157	TOTAL	9861	TOTAL	9861	TOTAL	6574	144628		
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA		DOMINANT-GLENODINIUM				
1.0	MELOSIRA	105184	ULOTHRIX	13148	DACTYLOCOCCOPSI	13148	EUGLENA	23009				CHRYSOPHYTA	69.4
	STEPHANODISCUS	3287										CHLOROPHYTA	8.2
	SYNEDRA	3287										CYANOPHYTA	8.2
												EUGLENOPHYTA	14.3
	TOTAL	111758	TOTAL	13148	TOTAL	13148	TOTAL	23009			161063		
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
3.0	COCCONEIS	3287	CHLAMYDOMONAS	6574	DACTYLOCOCCOPSI	29583	EUGLENA	39444					
	DINOBRYON	6574	CHLORELLA	3287			TRACHELOMONAS	3287				CHRYSOPHYTA	49.7
	MELOSIRA	98610	DICTYOSPHAERIUM	13148								CHLOROPHYTA	22.4
	SYNEDRA	13148	ULOTHRIX	32870								CYANOPHYTA	11.8
												EUGLENOPHYTA	17.1
	TOTAL	121619	TOTAL	55879	TOTAL	29583	TOTAL	42731			249812		
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
5.0	MELOSIRA	111758	ULOTHRIX	23009			EUGLENA	23009					
	STEPHANODISCUS	13148										CHRYSOPHYTA	73.1
												CHLOROPHYTA	13.5
	TOTAL	124906	TOTAL	23009			TOTAL	23009				EUGLENOPHYTA	13.5
	DOMINANT-MELOSIRA		DOMINANT-ULOTHRIX				DOMINANT-EUGLENA						
AV. NO/L		110115		32048		13148		24653		1644	170924		
											181607	CHRYSOPHYTA	60.6
												CHLOROPHYTA	17.6
												CYANOPHYTA	7.2
												EUGLENOPHYTA	13.6
												PYRROPHYTA	0.9

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 496.5 830 HRS
MAY 20, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
1.0	DINOBRYON	6574	CHLORELLA	3287	DACTYLOCOCCOPSI	9861	TRACHELOMONAS	3287				CHRYSOPHYTA	73.0
	FRAGILARIA	32870	CHODATELLA	3287	OSCILLATORIA	3287						CHLOROPHYTA	24.1
	MELOSIRA	262960	DICTYOSPHAERIUM	65740								CYANOPHYTA	2.3
	NAVICULA	3287	KIRCHNERIELLA	19722								EUGLENOPHYTA	0.6
	STEPHANODISCUS	3287	SCENEDESMUS	46018									
	SYNEDRA	108471											
	TOTAL	417449	TOTAL	138054	TOTAL	13148	TOTAL	3287			571938		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-TRACHELOMONAS						
3.0	ASTERIONELLA	6574	CHODATELLA	3287	ANACYSTIS	55879						CHRYSOPHYTA	66.9
	CYMBELLA	3287	MICRACTINIUM	13148	DACTYLOCOCCOPSI	29583						CHLOROPHYTA	13.1
	DINOBRYON	3287	SCENEDESMUS	39444								CYANOPHYTA	20.0
	MELOSIRA	210368											
	STEPHANODISCUS	3287											
	SYNEDRA	59166											
	TOTAL	285969	TOTAL	55879	TOTAL	85462					427310		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
5.0	ASTERIONELLA	13148	CHLAMYDOMONAS	6574	DACTYLOCOCCOPSI	19722						CHRYSOPHYTA	77.8
	CYMBELLA	3287	GOLENKINIA	3287								CHLOROPHYTA	16.2
	DINOBRYON	3287	SCENEDESMUS	32870								CYANOPHYTA	6.1
	MELOSIRA	190646	TETRAEDRON	3287									
	SYNEDRA	42731	ACANTHOSPHAERA	6574									
	TOTAL	253099	TOTAL	52592	TOTAL	19722					325413		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS								
AV. NO/L		318839		82175		39444		1096			441554	CHRYSOPHYTA	72.2
												CHLOROPHYTA	18.6
												CYANOPHYTA	8.9
												EUGLENOPHYTA	0.2
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 506.6 900 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	CHAETOCEROS	9345	CHLAMYDOMONAS	3115	ANACYSTIS	174440						CHRYSOPHYTA	58.1
	DINOBRYON	6230	SCENEDESMUS	34265	DACTYLOCOCCOPSI	3115						CHLOROPHYTA	5.7
	MELOSIRA	364455			MERISMOPEDIA	49840						CYANOPHYTA	36.2
					OSCILLATORIA	9345							
	TOTAL	380030	TOTAL	37380	TOTAL	236740					654150		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
1.0	MELOSIRA	249200	CHLAMYDOMONAS	3115	ANACYSTIS	3115						CHRYSOPHYTA	87.1
	STEPHANODISCUS	3115	SCENEDESMUS	18690	DACTYLOCOCCOPSI	6230						CHLOROPHYTA	8.6
			TREUBARIA	3115	OSCILLATORIA	3115						CYANOPHYTA	4.3
	TOTAL	252315	TOTAL	24920	TOTAL	12460					289695		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS								
3.0	DINOBRYON	3115	CHODATELLA	3115								CHRYSOPHYTA	96.4
	MELOSIRA	327075	SCENEDESMUS	6230								CHLOROPHYTA	3.6
			FRANCEIA	3115									
	TOTAL	330190	TOTAL	12460							342650		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS										
5.0	MELOSIRA	211820	CHODATELLA	3115								CHRYSOPHYTA	68.6
	STEPHANODISCUS	3115	CRUCIGENIA	9345								CHLOROPHYTA	31.4
	SYNEDRA	3115	OOCYSTIS	6230									
			SCENEDESMUS	68530									
			QUADRIGULA	12460									
	TOTAL	218050	TOTAL	99680							317730		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS										
AV. NO/L		295146		43610		62300					401056	CHRYSOPHYTA	73.6
												CHLOROPHYTA	10.9
												CYANOPHYTA	15.5
												EUGLENOPHYTA	0.0
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 518.0 930 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	732025	CHLAMYDOMONAS	3115	ANACYSTIS	190015						CHRYSOPHYTA	73.8
	STEPHANODISCUS	6230	CHLORELLA	6230	DACTYLOCOCCOPSI	12460						CHLOROPHYTA	6.2
	SYNEDRA	9345	CHODATELLA	3115								CYANOPHYTA	20.0
			SCENEDESMUS	49840									
	TOTAL	747600	TOTAL	62300	TOTAL	202475					1012375		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
1.0	ASTERIONELLA	18690	CHLORELLA	3115	DACTYLOCOCCOPSI	12460						CHRYSOPHYTA	92.7
	MELOSIRA	816130	CHODATELLA	3115	OSCILLATORIA	9345						CHLOROPHYTA	5.0
	STEPHANODISCUS	15575	SCENEDESMUS	34265								CYANOPHYTA	2.3
	SYNEDRA	18690	CLOSTERIOPSIS	6230									
	TOTAL	869085	TOTAL	46725	TOTAL	21805					937615		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS								
3.0	ASTERIONELLA	31150	CHODATELLA	6230	ANACYSTIS	224280						CHRYSOPHYTA	65.5
	GYROSIGMA	3115	KIRCHNERIELLA	12460	DACTYLOCOCCOPSI	21805						CHLOROPHYTA	4.5
	MELOSIRA	498400	SCENEDESMUS	18690								CYANOPHYTA	29.9
	SYNEDRA	6230											
	TOTAL	538895	TOTAL	37380	TOTAL	246085					822360		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
5.0	DINOBRYON	3115	CHLAMYDOMONAS	3115	ANACYSTIS	59185						CHRYSOPHYTA	71.5
	MELOSIRA	763175	CHLORELLA	6230	DACTYLOCOCCOPSI	15575						CHLOROPHYTA	11.3
	RHIOCOSPHENIA	3115	CHODATELLA	6230	APHANOTHECE	115255						CYANOPHYTA	17.2
	SYNEDRA	18690	OOCYSTIS	3115									
			SCENEDESMUS	74760									
			TETRASTRUM	12460									
			BOTRYOCOCCUS	18690									
	TOTAL	788095	TOTAL	124600	TOTAL	190015					1102710		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-APHANOTHECE								
AV. NO/L		735919		67751		165095					968765	CHRYSOPHYTA	76.0
												CHLOROPHYTA	7.0
												CYANOPHYTA	17.0
												EUGLENOPHYTA	0.0
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 527.4 1000 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	ASTERIONELLA	28035	COELASTRUM	12460	ANACYSTIS	214935						CHRYSOPHYTA	80.3
	MELOSIRA	1554385	GOLENKINIA	3115	DACTYLOCOCCOPSI	28035						CHLOROPHYTA	7.5
	STEPHANODISCUS	6230	OOCYSTIS	15575								CYANOPHYTA	12.2
	SYNEDRA	15575	SCENEDESMUS	112140									
			TETRAEDRON	3115									
			SCHROEDERIA	3115									
	TOTAL	1604225	TOTAL	149520	TOTAL	242970					1996715		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
1.0	ASTERIONELLA	40495	CHLAMYDOMONAS	3115	ANACYSTIS	274120						CHRYSOPHYTA	71.6
	MELOSIRA	1541925	CHODATELLA	12460	DACTYLOCOCCOPSI	15575						CHLOROPHYTA	15.5
	NAVICULA	3115	OOCYSTIS	6230	OSCILLATORIA	3115						CYANOPHYTA	12.9
	STEPHANODISCUS	6230	PROTOCOCCUS	199360									
	SYNEDRA	31150	SCENEDESMUS	121485									
			SCHROEDERIA	3115									
			QUADRIGULA	6230									
	TOTAL	1622915	TOTAL	351995	TOTAL	292810					2267720		
	DOMINANT-MELOSIRA		DOMINANT-PROTOCOCCUS		DOMINANT-ANACYSTIS								
3.0	ASTERIONELLA	12460	CHLAMYDOMONAS	3115	DACTYLOCOCCOPSI	24920						CHRYSOPHYTA	90.0
	DINOBRYON	3115	CHLORELLA	3115	OSCILLATORIA	6230						CHLOROPHYTA	7.8
	MELOSIRA	1214850	CHODATELLA	3115								CYANOPHYTA	2.2
	STEPHANODISCUS	3115	COELASTRUM	37380									
	SYNEDRA	31150	GOLENKINIA	3115									
			SCENEDESMUS	56070									
			THEUBARIA	3115									
	TOTAL	1264690	TOTAL	109025	TOTAL	31150					1404865		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS								
5.0	MELOSIRA	1208620	CHLAMYDOMONAS	6230	ANACYSTIS	280350	EUGLENA	3115				CHRYSOPHYTA	71.6
	SYNEDRA	28035	CHLORELLA	9345	DACTYLOLOCCOPSI	21805						CHLOROPHYTA	11.0
	ASTERIONELLA	24920	CHODATELLA	3115	OSCILLATORIA	3115						CYANOPHYTA	17.3
			OOCYSTIS	6230								EUGLENOPHYTA	0.2
			SCENEDESMUS	168210									
	TOTAL	1261575	TOTAL	193130	TOTAL	305270	TOTAL	3115			1763090		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA						
AV. NO/L		1438351		200918		218050		779			1858098	CHRYSOPHYTA	77.4
												CHLOROPHYTA	10.8
												CYANOPHYTA	11.7
												EUGLENOPHYTA	0.0
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 528.0 1010 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	ASTERIONELLA	46725	CHLAMYDOMONAS	3115	ANACYSTIS	289695						CHRYSOPHYTA	69.4
	DINOBRYON	3115	CHLORELLA	6230	DACTYLOCOCCOPSI	24920						CHLOROPHYTA	11.4
	MELOSIRA	1074675	CHODATELLA	3115	OSCILLATORIA	9345						CYANOPHYTA	19.2
	STEPHANODISCUS	3115	COELASTRUM	24920									
	SYNEDRA	34265	GOLENKINIA	6230									
	TABELLARIA	9345	MICRACTINIUM	6230									
			OOCYSTIS	3115									
			SCENEDESMUS	124600									
			TETRAEDRON	3115									
			QUADRIGULA	12460									
	TOTAL	1171240	TOTAL	193130	TOTAL	323960					1688330		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
1.0	ASTERIONELLA	15575	CHODATELLA	6230	ANACYSTIS	252315						CHRYSOPHYTA	75.0
	MELOSIRA	1591765	COELASTRUM	24920	DACTYLOCOCCOPSI	34265						CHLOROPHYTA	10.9
	NAVICULA	3115	GOLENKINIA	12460	MERISMOPEDIA	24920						CYANOPHYTA	14.1
	STEPHANODISCUS	6230	PEDIASTRUM	49840	OSCILLATORIA	6230							
	SYNEDRA	71645	SCENEDESMUS	146405									
			TREUBARIA	3115									
			SCHROEDERIA	3115									
	TOTAL	1688330	TOTAL	246085	TOTAL	317730					2252145		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
3.0	MELOSIRA	1136975	CHLAMYDOMONAS	12460	ANACYSTIS	501515						CHRYSOPHYTA	58.1
	SYNEDRA	52955	CHLORELLA	3115	DACTYLOCOCCOPSI	40495						CHLOROPHYTA	13.4
			CHODATELLA	9345	MERISMOPEDIA	37380						CYANOPHYTA	28.6
			COELASTRUM	43610	OSCILLATORIA	6230							
			OOCYSTIS	3115									
			SCENEDESMUS	193130									
			TETRAEDRON	3115									
			SCHROEDERIA	6230									
	TOTAL	1189930	TOTAL	274120	TOTAL	585620					2049670		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
5.0	MELOSIRA	1292725	CHLAMYDOMONAS	9345	ANACYSTIS	635460	TRACHELOMONAS	3115				CHRYSOPHYTA	60.6
	STEPHANODISCUS	3115	CHODATELLA	3115	DACTYLOCOCCOPSI	34265						CHLOROPHYTA	8.7
	SYNEDRA	43610	COELASTRUM	65415	OSCILLATORIA	3115						CYANOPHYTA	30.5
			CRUCIGENIA	12460								EUGLENOPHYTA	0.1
			GOLENKINIA	9345									
			OOCYSTIS	3115									
			SCENEDESMUS	87220									
			CLOSTERIOPSIS	3115									
	TOTAL	1339450	TOTAL	193130	TOTAL	672840	TOTAL	3115			2208535		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 528.0 1010 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA NO./L	TOTAL PHYTOPLANKTON (NO./L)
AV. NO/L		1347238		226616		475038		779		2049670

PERCENT COMPOSITION	
CHRYSOPHYTA	65.7
CHLOROPHYTA	11.1
CYANOPHYTA	23.2
EUGLENOPHYTA	0.0
PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 529.9 1020 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	ASTERIONELLA	6230	CHLAMYDOMONAS	3115	ANACYSTIS	542010	TRACHELOMONAS	6230	GYMNODINIUM	3115		CHRYSOPHYTA	54.0
	MELOSIRA	925155	CHLORELLA	3115	DACTYLOCOCCOPSI	68530						CHLOROPHYTA	10.3
	SYNEDRA	18690	CHODATELLA	21805	OSCILLATORIA	9345						CYANOPHYTA	35.2
			SCENEDESMUS	149520								EUGLENOPHYTA	0.4
			TETRAEDRON	3115								PYRROPHYTA	0.2
	TOTAL	950075	TOTAL	180670	TOTAL	619885	TOTAL	6230	TOTAL	3115	1759975		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-GYMNODINIUM				
1.0	ASTERIONELLA	15575	ANKISTRODESMUS	3115	ANACYSTIS	432985						CHRYSOPHYTA	73.3
	MELOSIRA	1859655	CHLORELLA	3115	DACTYLOCOCCOPSI	68530						CHLOROPHYTA	6.5
	STEPHANODISCUS	6230	CHODATELLA	18690	MERISMOPEDIA	24920						CYANOPHYTA	20.2
	SYNEDRA	28035	GOLENKINIA	3115									
			OOCYSTIS	15575									
			SCENEDESMUS	105910									
			TETRAEDRON	3115									
			TETRASTRUM	12460									
			TREUBARIA	3115									
	TOTAL	1909495	TOTAL	168210	TOTAL	526435					2604140		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
3.0	ASTERIONELLA	56070	CHLAMYDOMONAS	3115	ANACYSTIS	105910	TRACHELOMONAS	3115				CHRYSOPHYTA	74.2
	GOMPHONEMA	3115	CHLORELLA	3115	DACTYLOCOCCOPSI	21805						CHLOROPHYTA	16.7
	MELOSIRA	974995	CHODATELLA	12460								CYANOPHYTA	8.9
	STEPHANODISCUS	9345	COELASTRUM	43610								EUGLENOPHYTA	0.2
	SYNEDRA	21805	GOLENKINIA	3115									
			KIRCHNERIELLA	12460									
			SCENEDESMUS	161980									
	TOTAL	1065330	TOTAL	239855	TOTAL	127715	TOTAL	3115			1436015		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
5.0	ASTERIONELLA	24920	CHLAMYDOMONAS	3115	ANACYSTIS	255430						CHRYSOPHYTA	71.4
	DINORRYON	3115	CHLORELLA	6230	DACTYLOCOCCOPSI	12460						CHLOROPHYTA	6.2
	MELOSIRA	816130	CHODATELLA	3115	OSCILLATORIA	3115						CYANOPHYTA	22.4
	SYNEDRA	18690	OOCYSTIS	6230									
			SCENEDESMUS	56070									
	TOTAL	862855	TOTAL	74760	TOTAL	271005					1208620		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
AV. NO/L		1196939		165874		386260		2336		779	1752188	CHRYSOPHYTA	68.3
												CHLOROPHYTA	9.5
												CYANOPHYTA	22.0
												EUGLENOPHYTA	0.1
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 532.1 1100 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	ASTERIONELLA	31150	CHLORELLA	3115	ANACYSTIS	74760	EUGLENA	34265	GYMNODINIUM	3115		CHRYSOPHYTA	80.8
	MELOSIRA	981225	CHLOROCOCCUM	43610	DACTYLOCOCCOPSI	9345	TRACHELOMONAS	3115				CHLOROPHYTA	9.6
	STEPHANODISCUS	9345	CHODATELLA	9345								CYANOPHYTA	6.5
	SYNEDRA	24920	OOCYSTIS	37380								EUGLENOPHYTA	2.9
			SCENEDESMUS	24920								PYRROPHYTA	0.2
			SCHROEDERIA	3115									
			FRANCEIA	3115									
	TOTAL	1046640	TOTAL	124600	TOTAL	84105	TOTAL	37380	TOTAL	3115	1295840		
	DOMINANT-MELOSIRA		DOMINANT-CHLOROCOCCUM		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA		DOMINANT-GYMNODINIUM				
1.0	ASTERIONELLA	49840	CHLAMYDOMONAS	9345	ANACYSTIS	34265	EUGLENA	24920				CHRYSOPHYTA	78.9
	MELOSIRA	1059100	CHLORELLA	3115	DACTYLOCOCCOPSI	6230	TRACHELOMONAS	3115				CHLOROPHYTA	15.9
	SYNEDRA	34265	CHODATELLA	3115	OSCILLATORIA	6230						CYANOPHYTA	3.2
			COELASTRUM	109025								EUGLENOPHYTA	1.9
			GOLENKINIA	6230									
			OOCYSTIS	6230									
			PEDIASTRUM	12460									
			SCENEDESMUS	68530									
			SCHROEDERIA	9345									
			FRANCEIA	3115									
	TOTAL	1143205	TOTAL	230510	TOTAL	46725	TOTAL	28035			1448475		
	DOMINANT-MELOSIRA		DOMINANT-COELASTRUM		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA						
3.0	ASTERIONELLA	112140	CHLAMYDOMONAS	3115	ANABAENA	3115	EUGLENA	3115				CHRYSOPHYTA	82.6
	MELOSIRA	1186815	OOCYSTIS	80990	ANACYSTIS	77875	TRACHELOMONAS	3115				CHLOROPHYTA	10.0
	STEPHANODISCUS	3115	SCENEDESMUS	68530	DACTYLOCOCCOPSI	34265						CYANOPHYTA	7.0
	SYNEDRA	59185	SCHROEDERIA	12460								EUGLENOPHYTA	0.4
	TOTAL	1361255	TOTAL	165095	TOTAL	115255	TOTAL	6230			1647835		
	DOMINANT-MELOSIRA		DOMINANT-OOCYSTIS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA TRACHELOMONAS						
5.0	ASTERIONELLA	96565	CHODATELLA	6230	ANABAENA	3115	EUGLENA	56070				CHRYSOPHYTA	76.4
	MELOSIRA	1778665	COELASTRUM	31150	ANACYSTIS	62300	PHACUS	3115				CHLOROPHYTA	16.5
	SYNEDRA	99680	CRUCIGENIA	12460	DACTYLOCOCCOPSI	34265	TRACHELOMONAS	3115				CYANOPHYTA	4.7
	TABELLARIA	31150	OOCYSTIS	59185	MERISMOPEDIA	24920						EUGLENOPHYTA	2.4
			PEDIASTRUM	24920									
			SCENEDESMUS	143290									
			TREUBARIA	3115									
			SCHROEDERIA	15575									
			BOTRYOCOCCUS	137060									
	TOTAL	2006060	TOTAL	432985	TOTAL	124600	TOTAL	62300			2625945		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA						

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 532.1 1100 HRS
MAY 21, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA NO./L	TOTAL PHYTOPLANKTON (NO./L)
AV. NO/L		1389290		238298		92671		33486	779	1754524

PERCENT COMPOSITION	
CHRYSOPHYTA	79.2
CHLOROPHYTA	13.6
CYANOPHYTA	5.3
EUGLENOPHYTA	1.9
PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 1 TENNESSEE RIVER MILE 496.5 825 HRS
AUGUST 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	DINOBRYON	15575	ANKISTRODESMUS	12460	ANABAENA	6230	EUGLENA	21805	GLENODINIUM	6230		CHRYSOPHYTA	21.4
	FRAGILARIA	6230	CHLAMYDOMONAS	28035	CHROOCOCCUS	12460						CHLOROPHYTA	52.4
	MELOSIRA	121485	CHLORELLA	28035	DACTYLOCOCCOPSI	21805						CYANOPHYTA	23.5
	NAVICULA	3115	CHODATELLA	6230	MERISMOPEDIA	62300						EUGLENOPHYTA	2.1
	STEPHANODISCUS	12460	COELASTRUM	24920	OSCILLATORIA	140175						PYRROPHYTA	0.6
	SYNEDRA	52955	CRUCIGENIA	74760									
	ACHNANTHES	9345	DICTYOSPHAERIUM	12460									
			GOLENKINIA	18690									
			MICRACTINIUM	12460									
			OOCYSTIS	12460									
			PANDORINA	56070									
			PEDIASTRUM	96565									
			SCENEDESMUS	143290									
			TREUBARIA	6230									
			ACANTHOSPHAERA	6230									
			PTEROMONAS	3115									
	TOTAL	221165	TOTAL	542010	TOTAL	242970	TOTAL	21805	TOTAL	6230	1034180		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-OSCILLATORIA		DOMINANT-EUGLENA		DOMINANT-GLENODINIUM				
1.0	COCCONEIS	3115	CHLAMYDOMONAS	9345	ANABAENA	3115	EUGLENA	6230				CHRYSOPHYTA	28.1
	CYMBELLA	3115	CHLORELLA	15575	ANACYSTIS	152635	TRACHELOMONAS	6230				CHLOROPHYTA	36.7
	DINOBRYON	15575	CHODATELLA	6230	CHROOCOCCUS	6230						CYANOPHYTA	34.3
	FRAGILARIA	12460	COELASTRUM	105910	DACTYLOCOCCOPSI	6230						EUGLENOPHYTA	0.9
	MELOSIRA	171325	DICTYOSPHAERIUM	99680	MERISMOPEDIA	205590							
	NAVICULA	9345	GOLENKINIA	15575	OSCILLATORIA	127715							
	NITZSCHIA	3115	KIRCHNERIELLA	24920									
	STEPHANODISCUS	46725	MICRACTINIUM	12460									
	SYNEDRA	140175	PEDIASTRUM	40495									
	ACHNANTHES	6230	SCENEDESMUS	174440									
			STAURASTRUM	6230									
			TETRAEDRON	12460									
			TREUBARIA	6230									
			PTEROMONAS	3115									
			CLOSTERIOPSIS	3115									
	TOTAL	411180	TOTAL	535780	TOTAL	501515	TOTAL	12460			1460935		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-MERISMOPEDIA		DOMINANT-EUGLENA TRACHELOMONAS						

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 496.5 825 HRS
AUGUST 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
3.0	FRAGILARIA	6230	CHLAMYDOMONAS	21805	ANABAENA	9345	EUGLENA	15575	GLENODINIUM	6230			
	MELOSIRA	186900	CHLORELLA	6230	ANACYSTIS	137060	TRACHELOMONAS	6230				CHRYSOPHYTA	24.3
	NAVICULA	6230	CHODATELLA	6230	CHROOCOCCUS	15575						CHLOROPHYTA	36.5
	STEPHANODISCUS	21805	COELASTRUM	80990	DACTYLOCOCCOPSI	9345						CYANOPHYTA	32.9
	SYNEDRA	115255	CRUCIGENIA	12460	MERISMOPEDIA	124600						EUGLENOPHYTA	1.8
	ACHNANTHES	6230	DICTYOSPHAERIUM	6230	OSCILLATORIA	102795						PYRROPHYTA	0.5
			GOLENKINIA	12460									
			GONIUM	12460									
			KIRCHNERIELLA	6230									
			MICRACTINIUM	9345									
			PANDORINA	46725									
			PEDIASTRUM	34265									
			SCENEDESMUS	149520									
			STAURASTRUM	3115									
			TETRAEDRON	9345									
			TREUBARIA	6230									
			GLOEOACTINIUM	6230									
			PTEROMONAS	9345									
			CLOSTERIOPSIS	3115									
	TOTAL	342650	TOTAL	442330	TOTAL	398720	TOTAL	21805	TOTAL	6230	1211735		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA		DOMINANT-GLENODINIUM				
5.0	COCCONEIS	3115	CHLAMYDOMONAS	9345	ANABAENA	3115	EUGLENA	9345	GLENODINIUM	3115			
	CYMBELLA	6230	CHLORELLA	9345	ANACYSTIS	448560	TRACHELOMONAS	6230				CHRYSOPHYTA	23.4
	MELOSIRA	196245	CHODATELLA	6230	CHROOCOCCUS	12460						CHLOROPHYTA	32.1
	NAVICULA	6230	COELASTRUM	80990	DACTYLOCOCCOPSI	3115						CYANOPHYTA	43.1
	STEPHANODISCUS	21805	KIRCHNERIELLA	12460	MERISMOPEDIA	3115						EUGLENOPHYTA	1.2
	SYNEDRA	56070	PANDORINA	71645	OSCILLATORIA	80990						PYRROPHYTA	0.2
	ACHNANTHES	9345	SCENEDESMUS	105910									
			TETRAEDRON	3115									
			TREUBARIA	3115									
			ACANTHOSPHAERA	3115									
			PTEROMONAS	3115									
			SCHROEDERIA	3115									
			CLADOPHORA	99680									
	TOTAL	299060	TOTAL	411180	TOTAL	551355	TOTAL	15575	TOTAL	3115	1280265		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA		DOMINANT-GLENODINIUM				
AV. NO/L		314509		442825		423640		17911		3894	1246779		
												CHRYSOPHYTA	25.5
												CHLOROPHYTA	38.7
												CYANOPHYTA	34.0
												EUGLENOPHYTA	1.4
												PYRROPHYTA	0.3

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 1 TENNESSEE RIVER MILE 506.6 835 HRS
AUGUST 6, 1975

DEPTH	CHRYSOPHYTA		CHLOROPHYTA		CYANOPHYTA		EUGLENOPHYTA		PYRROPHYTA		TOTAL PHYTOPLANKTON		
METERS)	GENUS	NO./L	GENUS	NO./L	GENUS	NO./L	GENUS	NO./L	GENUS	NO./L	(NO./L)	PERCENT COMPOSITION	
0.0	FRAGILARIA	39444	CHLAMYDOMONAS	13148	ANACYSTIS	42731	TRACHELOMONAS	9861	PERIDINIUM	3287		CHRYSOPHYTA	20.5
	MELOSIRA	49305	CHLORELLA	9861	DACTYLOCOCCOPSI	16435						CHLOROPHYTA	56.8
	SYNEDRA	95323	CHODATELLA	6574	MERISMOPEDIA	131480						CYANOPHYTA	21.2
			COELASTRUM	52592								EUGLENOPHYTA	1.1
			DICTYOSPHAERIUM	13148								PYRROPHYTA	0.4
			EUDORINA	210368									
			KIRCHNERIELLA	3287									
			PANDORINA	59166									
			PEDIASTRUM	52592									
			SCENEDESMUS	52592									
			STAURASTRUM	3287									
			TETRAEDRON	19722									
			TREUBARIA	6574									
			EUASTRUM	3287									
			PTEROMONAS	3287									
	TOTAL	184072	TOTAL	509485	TOTAL	190646	TOTAL	9861	TOTAL	3287	897351		
	DOMINANT-SYNEDRA		DOMINANT-EUDORINA		DOMINANT-MERISMOPEDIA		DOMINANT-TRACHELOMONAS		DOMINANT-PERIDINIUM				
1.0	COCCONEIS	3287	CHLAMYDOMONAS	3287	ANACYSTIS	187359	TRACHELOMONAS	9861				CHRYSOPHYTA	28.8
	FRAGILARIA	13148	CHLORELLA	16435	DACTYLOCOCCOPSI	6574						CHLOROPHYTA	46.6
	MELOSIRA	144428	CHODATELLA	13148	OSCILLATORIA	9861						CYANOPHYTA	23.5
	NAVICULA	3287	COELASTRUM	78888								EUGLENOPHYTA	1.1
	SYNEDRA	85462	DICTYOSPHAERIUM	29583									
			KIRCHNERIELLA	32870									
			PEDIASTRUM	105184									
			SCENEDESMUS	46018									
			STAURASTRUM	6574									
			TETRAEDRON	19722									
			TETRASTRUM	13148									
			FRANCEIA	3287									
			BOTRYOCOCCUS	32870									
			PTEROMONAS	3287									
	TOTAL	249812	TOTAL	404301	TOTAL	203794	TOTAL	9861			867768		
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 506.6 835 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
3.0	MELOSIRA	134767	CHLAMYDOMONAS	3287	ANABAENA	49305	TRACHELOMONAS	3287				CHRYSOPHYTA	22.0
	SYNEDRA	49305	CHLORELLA	16435	ANACYSTIS	282682						CHLOROPHYTA	30.6
			COELASTRUM	26296	MERISMOPEDIA	55479						CYANOPHYTA	47.1
			DICTYOSPHAERIUM	26296	OSCILLATORIA	6574						EUGLENOPHYTA	0.4
			KIRCHNERIELLA	6574									
			OOCYSTIS	13148									
			SCENEDESMUS	92036									
			TETRAEDRON	13148									
			EUASTRUM	6574									
			FRANCEIA	3287									
			SCHROEDERIA	49305									
	TOTAL	184072	TOTAL	256385	TOTAL	394440	TOTAL	3287			838185		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
5.0	MELOSIRA	69027	CHLAMYDOMONAS	6574	ANABAENA	19722	TRACHELOMONAS	3287				CHRYSOPHYTA	18.0
	NAVICULA	3287	CHLORELLA	6574	ANACYSTIS	46018						CHLOROPHYTA	69.3
	SYNEDRA	39444	CHODATELLA	9861	OSCILLATORIA	9861						CYANOPHYTA	12.2
			CRUCIGENIA	52592								EUGLENOPHYTA	0.5
			DICTYOSPHAERIUM	19722									
			GOLENKINIA	6574									
			KIRCHNERIELLA	3287									
			MICRACTINIUM	13148									
			OOCYSTIS	6574									
			PEDIASTRUM	193933									
			SCENEDESMUS	65740									
			TETRAEDRON	23009									
			THEURARIA	6574									
			EUASTRUM	6574									
			SCHROEDERIA	9861									
	TOTAL	111758	TOTAL	430597	TOTAL	75601	TOTAL	3287			621243		
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
AV. NO/L		142429		400192		216120		6574		822	806137	CHRYSOPHYTA	22.6
												CHLOROPHYTA	49.6
												CYANOPHYTA	26.8
												EUGLENOPHYTA	0.8
												PYRROPHYTA	0.1

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 516.0 900 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	23004	CHLORELLA	6574	ANACYSTIS	246525			GYMNODINIUM	3287		CHRYSOPHYTA	7.9
	SYNEDRA	46018	COELASTRUM	26296	CHROOCOCCUS	6574						CHLOROPHYTA	44.9
			DICTYOSPHAERIUM	13148	DACTYLOCOCCOPSI	13148						CYANOPHYTA	42.9
			EUDORINA	210368	MERISMOPEDIA	19722						PYRROPHYTA	0.4
			GOLENKINIA	9861	OSCILLATORIA	36157							
			OOCYSTIS	13148	EUCAPSIS	52592							
			PANDORINA	26296									
			SCENEDESMUS	75601									
			TETRAEDRON	23004									
			ROTHYOCOCCUS	13148									
			SCHROEDERIA	9861									
	TOTAL	69022	TOTAL	427310	TOTAL	374718			TOTAL	3287	874342		
	DOMINANT=SYNEDRA		DOMINANT=EUDORINA		DOMINANT=ANACYSTIS				DOMINANT=GYMNODINIUM				
1.0	MELOSIRA	75601	CHODATELLA	3287	ANACYSTIS	378005	TRACHELOMONAS	3287				CHRYSOPHYTA	12.7
	SYNEDRA	59166	COELASTRUM	88749	CHROOCOCCUS	13148						CHLOROPHYTA	42.9
			CRUCIGENIA	19722	DACTYLOCOCCOPSI	9861						CYANOPHYTA	44.1
			DICTYOSPHAERIUM	46018	MERISMOPEDIA	65740						EUGLENOPHYTA	0.3
			GOLENKINIA	16435									
			KIRCHNERIELLA	3287									
			MICRACTINIUM	52592									
			OOCYSTIS	26296									
			PEDIASTRUM	52592									
			SCENEDESMUS	92036									
			TREUBARIA	32870									
			SCHROEDERIA	13148									
			PTEROMONAS	6574									
	TOTAL	134767	TOTAL	453606	TOTAL	466754	TOTAL	3287			1058414		
	DOMINANT=MELOSIRA		DOMINANT=SCENEDESMUS		DOMINANT=ANACYSTIS		DOMINANT=TRACHELOMONAS						
3.0	FRAGILARIA	9861	CHLORELLA	6574	ANACYSTIS	243238	TRACHELOMONAS	3287				CHRYSOPHYTA	17.1
	SYNEDRA	69022	DICTYOSPHAERIUM	16435	DACTYLOCOCCOPSI	6574						CHLOROPHYTA	25.0
			GOLENKINIA	6574	OSCILLATORIA	13148						CYANOPHYTA	57.1
			KIRCHNERIELLA	9861								EUGLENOPHYTA	0.7
			SCENEDESMUS	39444									
			TREUBARIA	16435									
			ROTHYOCOCCUS	13148									
			PTEROMONAS	3287									
			SCHROEDERIA	3287									
	TOTAL	78883	TOTAL	115045	TOTAL	262960	TOTAL	3287			460180		
	DOMINANT=SYNEDRA		DOMINANT=SCENEDESMUS		DOMINANT=ANACYSTIS		DOMINANT=TRACHELOMONAS						

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 518.0 900 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
5.0	FRAGILARIA	26296	CHLORELLA	19722	ANABAENA	62453	TRACHELOMONAS	9861				CHRYSOPHYTA	16.3
	MELOSIRA	78888	CHODATELLA	3287	ANACYSTIS	144620						CHLOROPHYTA	39.7
	SYNEDRA	29583	CRUCIGENIA	13148	DACTYLOCOCCOPSI	3287						CYANOPHYTA	42.8
	ACHNANTHES	3287	DICTYOSPHAERIUM	19722	MERISMOPEDIA	92036						EUGLENOPHYTA	1.2
			GLOEOCYSTIS	26296	OSCILLATORIA	6574							
			GOLENKINIA	6574	EUCAPSIS	52592							
			KIRCHNERIELLA	13148									
			OOCYSTIS	6574									
			PEDIASTRUM	78888									
			SCENEDESMUS	59166									
			STAURASTRUM	6574									
			TETRAEDRON	19722									
			TREUBARIA	3287									
			FRANCEIA	9861									
			BOTRYOCOCCUS	26296									
			ACANTHOSPHAERA	13148									
			PTEROMONAS	9861									
	TOTAL	138054	TOTAL	335274	TOTAL	361570	TOTAL	9861			844759		
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
AV. NO/L		105184		332809		366501		4199		822	809424	CHRYSOPHYTA	13.0
												CHLOROPHYTA	41.1
												CYANOPHYTA	45.3
												EUGLENOPHYTA	0.5
												PYRROPHYTA	0.1

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 5 TENNESSEE RIVER MILE 527.4 930 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	CYMBELLA	3287	STAURASTRUM	6574	DACTYLOCOCCOPSI	3287			CERATIUM	3287		CHRYSOPHYTA	93.3
	FRAGILARIA	207081			OSCILLATORIA	9861						CHLOROPHYTA	1.9
	MELOSIRA	62453										CYANOPHYTA	3.8
	SYNEDRA	46018										PYRROPHYTA	1.0
	TOTAL	318839	TOTAL	6574	TOTAL	13148			TOTAL	3287	341848		
	DOMINANT-FRAGILARIA		DOMINANT-STAURASTRUM		DOMINANT-OSCILLATORIA				DOMINANT-CERATIUM				
1.0	FRAGILARIA	62453	CHLORELLA	6574	ANACYSTIS	210368	EUGLENA	3287				CHRYSOPHYTA	20.8
	MELOSIRA	72314	COELASTRUM	52592	OSCILLATORIA	3287	TRACHELOMONAS	9861				CHLOROPHYTA	55.6
	SYNEDRA	65740	CRUCIGENIA	13148								CYANOPHYTA	22.2
			DICTYOSPHAERIUM	23009								EUGLENOPHYTA	1.4
			GOLENKINIA	3287									
			KIRCHNERIELLA	6574									
			OOCYSTIS	13148									
			PANDORINA	72314									
			PEDIASTRUM	210368									
			SCENEDESMUS	105184									
			TETRAEDRON	16435									
			FLANATOTHRIX	13148									
	TOTAL	200507	TOTAL	535781	TOTAL	213655	TOTAL	13148			963091		
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
3.0	FRAGILARIA	98610	CHLORELLA	3287	ANAHAENA	32870	EUGLENA	23009	CERATIUM	6574		CHRYSOPHYTA	27.9
	MELOSIRA	124906	KIRCHNERIELLA	55879	ANACYSTIS	246525	TRACHELOMONAS	19722				CHLOROPHYTA	33.3
	SYNEDRA	29583	PANDORINA	13148	OSCILLATORIA	23009						CYANOPHYTA	33.3
			SCENEDESMUS	78888								EUGLENOPHYTA	4.7
			STAURASTRUM	6574								PYRROPHYTA	0.7
			TREUBARIA	19722									
			PLATYDORINA	105184									
			FRANCEIA	13148									
			SCHROEDERIA	6574									
	TOTAL	253099	TOTAL	302404	TOTAL	302404	TOTAL	42731	TOTAL	6574	907212		
	DOMINANT-MELOSIRA		DOMINANT-PLATYDORINA		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA		DOMINANT-CERATIUM				

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 6 TENNESSEE RIVER MILE 527.4 930 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
5.0	MELOSIRA	46018	ACTINASTRUM	16435	ANACYSTIS	161063	TRACHELOMONAS	3287				CHRYSOPHYTA	18.4
	SYNEDRA	52592	CHLORELLA	29583	DACTYLOCOCCOPSI	6574						CHLOROPHYTA	42.9
			COELASTRUM	26296	MERISMOPEDIA	13148						CYANOPHYTA	38.0
			PANDORINA	26296	OSCILLATORIA	23009						EUGLENOPHYTA	0.6
			PEDIASTRUM	52592									
			SCENEDESMUS	59166									
			TETRAEDRON	3287									
			TREUBARIA	3287									
			PTEROMONAS	9861									
			ACANTHOSPHAERA	3287									
	TOTAL	98610	TOTAL	230090	TOTAL	203794	TOTAL	3287			535781		
	DOMINANT-SYNEDRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
AV. NO/L		217764		268712		183250		14792		2465	686983	CHRYSOPHYTA	31.7
												CHLOROPHYTA	39.1
												CYANOPHYTA	26.7
												EUGLENOPHYTA	2.2
												PYRROPHYTA	0.4

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 528.0 940 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	FRAGILARIA	39444	COELASTRUM	52592	ANACYSTIS	226803	EUGLENA	3287	GYMNODINIUM	3287		CHRYSOPHYTA	23.1
	MELOSIRA	115045	EUDORINA	105184	DACTYLOCOCCOPSI	3287	PHACUS	3287				CHLOROPHYTA	44.0
	SYNEDRA	23009	GOLENKINIA	9861	OSCILLATORIA	6574	TRACHELOMONAS	6574				CYANOPHYTA	30.8
			MICRACTINIUM	42731								EUGLENOPHYTA	1.7
			SCENEDESMUS	46018								PYRROPHYTA	0.4
			STAURASTRUM	13148									
			TETRAEDRON	13148									
			TREUBARIA	13148									
			EUASTRUM	9861									
			SCHROEDERIA	32870									
	TOTAL	177498	TOTAL	338561	TOTAL	236664	TOTAL	13148	TOTAL	3287	769158		
	DOMINANT-MELOSIRA		DOMINANT-EUDORINA		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-GYMNODINIUM				
1.0	ASTERIONELLA	42731	CHLAMYDOMONAS	3287	ANABAENA	414162	TRACHELOMONAS	6574	PERIDINIUM	3287		CHRYSOPHYTA	7.7
	FRAGILARIA	16435	CHODATELLA	3287	ANACYSTIS	272821						CHLOROPHYTA	16.5
	SYNEDRA	32870	OOCYSTIS	13148	DACTYLOCOCCOPSI	13148						CYANOPHYTA	74.9
			PANDORINA	26296	MERISMOPEDIA	98610						EUGLENOPHYTA	0.6
			PEDIASTRUM	52592	OSCILLATORIA	42731						PYRROPHYTA	0.3
			SCENEDESMUS	39444	EUCAPSIS	52592							
			TETRAEDRON	26296									
			ROTHYOCOCCUS	19722									
			EUASTRUM	3287									
			ACANTHOSPHAERA	3287									
			SCHROEDERIA	6574									
	TOTAL	92036	TOTAL	197220	TOTAL	894064	TOTAL	6574	TOTAL	3287	1193181		
	DOMINANT-SYNEDRA		DOMINANT-PEDIASTRUM		DOMINANT-ANABAENA		DOMINANT-TRACHELOMONAS		DOMINANT-PERIDINIUM				
3.0	ASTERIONELLA	13148	ANKISTRODESMUS	13148	ANABAENA	101847	TRACHELOMONAS	9861	CERATIUM	13148		CHRYSOPHYTA	15.7
	FRAGILARIA	19722	CHLORELLA	3287	ANACYSTIS	479902			GLENODINIUM	3287		CHLOROPHYTA	39.7
	MELOSIRA	164350	COELASTRUM	118332	DACTYLOCOCCOPSI	19722			GYMNODINIUM	3287		CYANOPHYTA	42.6
	SYNEDRA	36157	DICTYOSPHAERIUM	23009	OSCILLATORIA	29583						EUGLENOPHYTA	0.7
			GOLENKINIA	3287								PYRROPHYTA	1.3
			KIRCHNERIELLA	6574									
			OOCYSTIS	19722									
			PANDORINA	26296									
			PEDIASTRUM	144072									
			SCENEDESMUS	85462									
			STAURASTRUM	6574									
			TETRAEDRON	29583									
			TETRASPORA	26296									
			TETRASTRUM	13148									
			FRANCEIA	3287									
			EUASTRUM	3287									
			SCHROEDERIA	23009									
	TOTAL	233377	TOTAL	588373	TOTAL	631104	TOTAL	9861	TOTAL	19722	1482437		
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-CERATIUM				

DIVISION OF ENVIRONMENTAL PLANNING
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PHYTOPLANKTON ENUMERATION

PAGE 8 TENNESSEE RIVER MILE 526.0 940 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
5.0	FRAGILARIA	151202	CHLAMYDOMONAS	3287	ANABAENA	203794						CHRYSOPHYTA	22.4
	MELOSIRA	230040	CHLORELLA	19722	ANACYSTIS	522633						CHLOROPHYTA	32.3
	SYNEDRA	124906	CHLOROCOCCUM	26296	CHROOCOCCUS	6574						CYANOPHYTA	45.3
			COELASTRUM	105184	DACTYLOCOCCOPSIS	9861							
			CRUCIGENIA	65740	MERISMOPEDIA	147220							
			DICTYOSPHAERIUM	62453	OSCILLATORIA	29583							
			GOLENKINIA	3287	EUCAPSIS	52592							
			MICRACTINIUM	72314									
			PANDORINA	26296									
			PEDIASTRUM	105184									
			SCENEDESMUS	118332									
			STAURASTRUM	13148									
			TETRAEDRON	52592									
			TREUBARIA	32870									
			FRANCEIA	13148									
			PIERONEMA	6574									
			SCHROEDERIA	3287									
	TOTAL	506198	TOTAL	729714	TOTAL	1022257					2258169		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS								
AV. NO/L		252277		463467		696022		7396		6574	1425736	CHRYSOPHYTA	17.7
												CHLOROPHYTA	32.5
												CYANOPHYTA	48.8
												EUGLENOPHYTA	0.5
												PYRROPHYTA	0.5

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 529.9 950 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	FRAGILARIA	23009	CHLORELLA	29583	ANABAENA	26296	EUGLENA	3287				CHRYSOPHYTA	15.6
	MELOSIRA	52592	DICTYOSPHAERIUM	23009	ANACYSTIS	236664	TRACHELOMONAS	3287				CHLOROPHYTA	29.3
	SYNEDRA	9861	KIRCHNERIELLA	3287	DACTYLOCOCCOPSI	3287						CYANOPHYTA	53.9
			OOCYSTIS	6574	OSCILLATORIA	29583						EUGLENOPHYTA	1.2
			SCENEDESMUS	26296									
			TETRAEDRON	9861									
			BOTRYOCOCCUS	69305									
			PTERONONAS	3287									
			SCHROEDERIA	9861									
	TOTAL	85462	TOTAL	161063	TOTAL	295830	TOTAL	6574			548929		
	DOMINANT-MELOSIRA		DOMINANT-BOTRYOCOCCUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA TRACHELOMONAS						
1.0	FRAGILARIA	29583	CHLAMYDOMONAS	6574	ANACYSTIS	39444	TRACHELOMONAS	9861	GLENODINIUM	3287			
	MELOSIRA	164350	CHLORELLA	9861	DACTYLOCOCCOPSI	65740			PERIDINIUM	3287		CHRYSOPHYTA	35.4
	SYNEDRA	32870	COELASTRUM	65740	OSCILLATORIA	42731						CHLOROPHYTA	34.0
			DICTYOSPHAERIUM	23009								CYANOPHYTA	23.1
			KIRCHNERIELLA	3287								EUGLENOPHYTA	1.5
			OOCYSTIS	13148								PYRROPHYTA	1.0
			PANDORINA	26296									
			SCENEDESMUS	46018									
			TETRAEDRON	36157									
			TREUBARIA	3287									
			PTERONONAS	6574									
			SCHROEDERIA	9861									
	TOTAL	226803	TOTAL	249812	TOTAL	147915	TOTAL	9861	TOTAL	6574	640965		
	DOMINANT-MELOSIRA		DOMINANT-COELASTRUM		DOMINANT-DACTYLOCOCCOPS		DOMINANT-TRACHELOMONAS		DOMINANT-GLENODINIUM PERIDINIUM				
												CHRYSOPHYTA	26.0
												CHLOROPHYTA	58.5
												CYANOPHYTA	14.8
												EUGLENOPHYTA	0.4
												PYRROPHYTA	0.4
											910499		

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 529.0 950 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
3.0	FRAGILARIA	59166	CHLAMYDOMONAS	9861	ANABAENA	108471	EUGLENA	3287	CERATIUM	3287		CHRYSOPHYTA	34.9
	MELOSIRA	151202	CHLORELLA	36157	CHROOCOCCUS	13148						CHLOROPHYTA	43.5
	SYNEDRA	26296	CHODATELLA	3287	DACTYLOCOCCOPSI	3287						CYANOPHYTA	21.3
			COELASTRUM	105184	OSCILLATORIA	9861						EUGLENOPHYTA	0.3
			CRUCIGENIA	13148									
			DICTYOSPHAERIUM	13148									
			GOLENKINIA	3287									
			KIRCHNERIELLA	6574									
			MICRACTINIUM	16435									
			OOCYSTIS	46018									
			PEDIASTRUM	170424									
			SCENEDESMUS	59166									
			STAURASTRUM	3287									
			TREUBARIA	3287									
			WOLFFIOCOCCUS	39444									
			FRANCEIA	3287									
	TOTAL	236864	TOTAL	532494	TOTAL	134767	TOTAL	3287	TOTAL	3287	1196607		
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-ANABAENA		DOMINANT-EUGLENA		DOMINANT-CERATIUM				
5.0	FRAGILARIA	45323	CHLORELLA	9861	ANABAENA	134767	TRACHELOMONAS	3287			821750	CHRYSOPHYTA	29.3
	MELOSIRA	262960	CHODATELLA	3287	ANACYSTIS	108471						CHLOROPHYTA	44.4
	SYNEDRA	55879	COELASTRUM	52592	DACTYLOCOCCOPSI	3287						CYANOPHYTA	25.3
			DICTYOSPHAERIUM	65740	OSCILLATORIA	6574						EUGLENOPHYTA	0.7
			GLOEOCYSTIS	26296								PYRROPHYTA	0.3
			GOLENKINIA	6574									
			KIRCHNERIELLA	19722									
			MICRACTINIUM	16435									
			OOCYSTIS	29583									
			PANDORINA	26296									
			PEDIASTRUM	26296									
			SCENEDESMUS	140785									
			STAURASTRUM	6574									
			TETRAEDRON	29583									
			EUASTRUM	13148									
			FRANCEIA	3287									
	TOTAL	414142	TOTAL	516959	TOTAL	253099	TOTAL	3287					
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANABAENA		DOMINANT-TRACHELOMONAS						
AV. NO/L		240773		364857		207903		5752		2465			

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 532.1 1020 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	FRAGILARIA	417449	CHLAMYDOMONAS	46018	ANAHAENA	1212903			PERIDINIUM	9861		CHRYSOPHYTA	13.3
	MELOSIRA	167637	CHLORELLA	49305	ANACYSTIS	943369						CHLOROPHYTA	40.5
	SYNEDRA	78988	CHODATELLA	3287	CHROOCOCCUS	39444						CYANOPHYTA	46.0
			COELASTRUM	437171	OSCILLATORIA	108471						PYRROPHYTA	0.2
			CRUCIGENIA	111758									
			DICTYOSPHAERIUM	124906									
			GOLENKINIA	62453									
			KIRCHNERIELLA	23009									
			MICRACTINIUM	52592									
			OOCYSTIS	262960									
			PANDORINA	75601									
			PEDIASTRUM	253099									
			SCENEDESMUS	105184									
			SPHAEROCYSTIS	29583									
			STAURASTRUM	6574									
			TETRAEDRON	184072									
			TREUBARIA	13148									
			PLATYDORINA	105184									
			FUASTRUM	6574									
			FRANCEIA	3287									
			AGTPYOCOCCUS	52592									
			GLOEOACTINIUM	6574									
			FLAKATOTHRIX	13149									
	TOTAL	663974	TOTAL	2028079	TOTAL	2304187			TOTAL	9861	5006101		
	DOMINANT-FRAGILARIA		DOMINANT-COELASTRUM		DOMINANT-ANAHAENA				DOMINANT-PERIDINIUM				
1.0	FRAGILARIA	614669	CHLAMYDOMONAS	55479	ANAHAENA	124906	TRACHELOMONAS	32870	CERATIUM	6574		CHRYSOPHYTA	32.6
	MELOSIRA	269536	CHLORELLA	16435	ANACYSTIS	470041			PERIDINIUM	3287		CHLOROPHYTA	44.9
	SYNEDRA	246525	COELASTRUM	124193	CHROOCOCCUS	6574						CYANOPHYTA	21.3
			CRUCIGENIA	13148	DACTYLOCOCCOPSI	32870						EUGLENOPHYTA	0.9
			DICTYOSPHAERIUM	581799	MERISMOPEDIA	13148						PYRROPHYTA	0.3
			GOLENKINIA	13148	OSCILLATORIA	92036							
			KIRCHNERIELLA	65740									
			OOCYSTIS	39444									
			PANDORINA	105184									
			PEDIASTRUM	276108									
			SCENEDESMUS	92036									
			STAURASTRUM	3287									
			TETRAEDRON	144628									
			TREUBARIA	6574									
			FUASTRUM	3287									
			FRANCEIA	6574									
			FLAKATOTHRIX	6574									
	TOTAL	1130728	TOTAL	1558034	TOTAL	739575	TOTAL	32870	TOTAL	9861	3471072		
	DOMINANT-FRAGILARIA		DOMINANT-DICTYOSPHAERIU		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-CERATIUM				

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 12 TENNESSEE RIVER MILE 532.1 1020 HRS
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
3.0	FRAGILARIA	719853	CHLAMYDOMONAS	13148	ANABAENA	299117	EUGLENA	13148	CERATIUM	26296		CHRYSOPHYTA	27.2
	MELOSIRA	433884	CHLORELLA	59027	ANACYSTIS	841472	TRACHELOMONAS	13148	GYMNODINIUM	3287		CHLOROPHYTA	44.7
	SYNEDRA	147915	CHODATELLA	16435	CHROOCOCCUS	32870			PERIDINIUM	6574		CYANOPHYTA	26.8
			COELASTRUM	216942	CYLINDROSPERMUM	9861						EUGLENOPHYTA	0.5
			COSMARIUM	6574	FUCAPSIS	32870						PYRROPHYTA	0.8
			CRUCIGENIA	256673	OSCILLATORIA	69027							
			DICTYOSPHAERIUM	361709									
			EUDORINA	210368									
			GOLENKINIA	13148									
			KIRCHNERIELLA	13148									
			MICRACTINIUM	23009									
			OOCYSTIS	115085									
			PANDORINA	121519									
			PEDIASTRUM	210368									
			SCENEDESMUS	131480									
			STAURASTRUM	26296									
			TETRAEDRON	124406									
			TREUBARIA	13148									
			EUASTRUM	13148									
			FRANCEIA	13148									
			POTHYDICOCCUS	92036									
			PLATYDORINA	52592									
			SCHROEDERIA	23009									
			GLOEOACTINIUM	6574									
			PTEROMONAS	32870									
	TOTAL	1301652	TOTAL	2139837	TOTAL	1285217	TOTAL	26296	TOTAL	36287	4789159		
	DOMINANT-FRAGILARIA		DOMINANT-DICTYOSPHAERIU		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA TRACHELOMONAS		DOMINANT-CERATIUM				

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 13 TENNESSEE RIVER MILE 532.1 1020 HRS.
AUGUST 6, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRR-P... GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
5.0	ASTERIONELLA	59166	CHLAMYDOMONAS	6574	ANAHAENA	55879	TRACHELOMONAS	26296	CERATIUM	[illegible]		CHRYSOPHYTA	22.3
	FRAGILARIA	539068	CHLORELLA	29583	ANACYSTIS	949963			GYMNODINIUM	[illegible]		CHLOROPHYTA	46.2
	MELOSIRA	197220	CHODATELLA	13148	CHROOCOCCUS	26296			PERIDINIUM	[illegible]		CYANOPHYTA	30.0
	SYNEDRA	108671	CUELASTRUM	193933	GOMPHOSPHAERIA	52592						EUGLENOPHYTA	0.6
			CRUCIGENIA	75501	EUCAPSIS	92036						PYRROPHYTA	0.8
			DICTYOSPHAERIUM	128193	OSCILLATORIA	39444							
			EUDORINA	210368									
			GOLENKINIA	59166									
			KIRCHNERIELLA	39444									
			MICRACTINIUM	42731									
			OOCYSTIS	161063									
			PANDORINA	101897									
			PEDIASTRUM	170924									
			SCENEDESMUS	111758									
			SPHAEROCYSTIS	23009									
			STAURASTRUM	19722									
			TETRAEDRON	174211									
			TREUBARIA	32870									
			FRANCEIA	23009									
			BOTRYOCOCCUS	111758									
			PLATYDORINA	105184									
			EUASTRUM	13148									
			FLAGATOTHRIX	26296									
	TOTAL	903925	TOTAL	1873590	TOTAL	1216140	TOTAL	26296	TOTAL	3.17=	4052871		
	DOMINANT-FRAGILARIA	1000070	DOMINANT-EUDORINA	1899886	DOMINANT-ANACYSTIS	1316292	DOMINANT-TRACHELOMONAS	21366	DOMINANT-CERATIUM	2.17	4329801		
AV. NO/L												CHRYSOPHYTA	23.1
												CHLOROPHYTA	43.9
												CYANOPHYTA	32.0
												EUGLENOPHYTA	0.5
												PYRROPHYTA	0.5

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 496.5 730 HRS
NOVEMBER 4, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	9861	CHLAMYDOMONAS	9861	DACTYLOCOCCOPSI	16435	EUGLENA	3287				CHRYSOPHYTA	32.1
	STEPHANODISCUS	6574	CHODATELLA	6574								CHLOROPHYTA	46.4
	SYNEDRA	13148	PANDORINA	26296								CYANOPHYTA	17.9
												EUGLENOPHYTA	3.6
	TOTAL	29583	TOTAL	42731	TOTAL	16435	TOTAL	3287					
	DOMINANT-SYNEDRA		DOMINANT-PANDORINA		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA				92036		
1.0	MELOSIRA	78888	ANKISTRODESMUS	13148	DACTYLOCOCCOPSI	13148							
	STEPHANODISCUS	3287	CHLAMYDOMONAS	3287	OSCILLATORIA	3287						CHRYSOPHYTA	48.1
			CHLORELLA	6574								CHLOROPHYTA	42.3
			COELASTRUM	36157								CYANOPHYTA	9.6
			EUASTRUM	13148									
	TOTAL	82175	TOTAL	72314	TOTAL	16435							
	DOMINANT-MELOSIRA		DOMINANT-COELASTRUM		DOMINANT-DACTYLOCOCCOPS						170924		
3.0	COCCONEIS	3287	CHLAMYDOMONAS	16435	DACTYLOCOCCOPSI	26296							
	MELOSIRA	16435	CHLORELLA	19722	OSCILLATORIA	3287						CHRYSOPHYTA	25.0
	STEPHANODISCUS	9861	CHODATELLA	6574								CHLOROPHYTA	50.0
			GOLENKINIA	3287								CYANOPHYTA	25.0
			SCENEDESMUS	6574									
			EUASTRUM	6574									
	TOTAL	29583	TOTAL	59166	TOTAL	29583							
	DOMINANT-MELOSIRA		DOMINANT-CHLORELLA		DOMINANT-DACTYLOCOCCOPS						118332		
5.0	COCCONEIS	3287	CHLAMYDOMONAS	13148	DACTYLOCOCCOPSI	9861	TRACHELOMONAS	3287					
	MELOSIRA	39444	PEDIASTRUM	52592								CHRYSOPHYTA	37.7
	NAVICULA	3287	SCENEDESMUS	39444								CHLOROPHYTA	55.7
	STEPHANODISCUS	16435	EUASTRUM	6574								CYANOPHYTA	4.9
	SYNEDRA	13148										EUGLENOPHYTA	1.6
	TOTAL	75601	TOTAL	111758	TOTAL	9861	TOTAL	3287					
	DOMINANT-MELOSIRA		DOMINANT-PEDIASTRUM		DOMINANT-DACTYLOCOCCOPS		DOMINANT-TRACHELOMONAS				200507		
AV. NO/L		54236		71492		18079		1644					
											145450	CHRYSOPHYTA	37.3
												CHLOROPHYTA	49.2
												CYANOPHYTA	12.4
												EUGLENOPHYTA	1.1
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 506.6 750 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	ASTERIONELLA	23009	CHLORELLA	29583	ANAHAENA	9861						CHRYSOPHYTA	45.9
	MELOSIRA	29583	CHODATELLA	3287	DACTYLOCOCCOPSI	6574						CHLOROPHYTA	37.8
	SYNEDRA	3287	SCENEDESMUS	13148	OSCILLATORIA	3287						CYANOPHYTA	16.2
	TOTAL	55879	TOTAL	46018	TOTAL	19722					121619		
	DOMINANT-MELOSIRA		DOMINANT-CHLORELLA		DOMINANT-ANABAENA								
1.0	DINOBRYON	3287	CARTERIA	6574	ANACYSTIS	292543						CHRYSOPHYTA	15.1
	MELOSIRA	59166	CHLAMYDOMONAS	3287	DACTYLOCOCCOPSI	3287						CHLOROPHYTA	19.4
	SYNEDRA	6574	CHLORELLA	3287	OSCILLATORIA	3287						CYANOPHYTA	65.5
			CHODATELLA	3287									
			KIRCHNERIELLA	39444									
			SCENEDESMUS	13148									
			TETRAEDRON	6574									
			TETRASTRUM	13148									
	TOTAL	69027	TOTAL	88749	TOTAL	299117					456893		
	DOMINANT-MELOSIRA		DOMINANT-KIRCHNERIELLA		DOMINANT-ANACYSTIS								
3.0	DINOBRYON	3287	CARTERIA	3287	ANACYSTIS	200507						CHRYSOPHYTA	25.6
	MELOSIRA	92036	CHLAMYDOMONAS	13148	DACTYLOCOCCOPSI	3287						CHLOROPHYTA	19.7
	STEPHANODISCUS	3287	CHLORELLA	3287	OSCILLATORIA	6574						CYANOPHYTA	54.7
			DICTYOSPHAERIUM	46018									
			GOLENKINIA	3287									
			OOCYSTIS	6574									
	TOTAL	98610	TOTAL	75601	TOTAL	210368					384579		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-ANACYSTIS								
5.0	MELOSIRA	3287	CHLAMYDOMONAS	3287	DACTYLOCOCCOPSI	3287						CHRYSOPHYTA	3.6
			CHLORELLA	6574	MERISMOPEDIA	26296						CHLOROPHYTA	64.3
			CRUCIGENIA	9861								CYANOPHYTA	32.1
			GOLENKINIA	6574									
			KIRCHNERIELLA	6574									
			SCENEDESMUS	19722									
			TETRAEDRON	3287									
			PTEROMONAS	3287									
	TOTAL	3287	TOTAL	59166	TOTAL	29583					92036		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-MERISMOPEDIA								
AV. NO/L		56701		67384		139698					263782	CHRYSOPHYTA	21.5
												CHLOROPHYTA	25.5
												CYANOPHYTA	53.0
												EUGLENOPHYTA	0.0
												PYRROPHYTA	0.0

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 518.0 820 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHYTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	95323	CHLORELLA	3287	ANACYSTIS	32870	EUGLENA	3287				CHRYSOPHYTA	19.9
	NAVICULA	3287	KIRCHNERIELLA	23009	GOMPHOSPHAERIA	52592	TRACHELOMONAS	3287				CHLOROPHYTA	18.6
	STEPHANODISCUS	6574	MICRACTINIUM	13148	MERISMOPEDIA	233377						CYANOPHYTA	60.2
			SCENEDESMUS	52592								EUGLENOPHYTA	1.2
			TETRAEDRON	3287									
			SCHROEDERIA	3287									
	TOTAL	105184	TOTAL	98610	TOTAL	318839	TOTAL	6574			529207		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-MERISMOPEDIA		DOMINANT-EUGLENA TRACHELOMONAS						
1.0	MELOSIRA	101897	CHLAMYDOMONAS	6574	ANACYSTIS	26296	TRACHELOMONAS	3287	CERATIUM	3287		CHRYSOPHYTA	42.7
	NAVICULA	3287	CHLORELLA	9861	DACTYLOCOCCOPSI	3287						CHLOROPHYTA	41.5
	STEPHANODISCUS	3287	CHODATELLA	6574	OSCILLATORIA	6574						CYANOPHYTA	13.4
	SYNEDRA	6574	CRUCIGENIA	13148								EUGLENOPHYTA	1.2
			GOLENKINIA	3287								PYRROPHYTA	1.2
			KIRCHNERIELLA	6574									
			MICRACTINIUM	13148									
			SCENEDESMUS	49305									
			TETRAEDRON	3287									
	TOTAL	115045	TOTAL	111758	TOTAL	36157	TOTAL	3287	TOTAL	3287	269534		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-CERATIUM				
3.0	MELOSIRA	59166	CHLORELLA	6574								CHRYSOPHYTA	42.9
	STEPHANODISCUS	9861	CHODATELLA	19722								CHLOROPHYTA	57.1
			DACTYLOCOCCUS	19722									
			KIRCHNERIELLA	13148									
			SCENEDESMUS	32870									
	TOTAL	69027	TOTAL	92036							161063		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS										
5.0	MELOSIRA	105184	CHLAMYDOMONAS	3287	OSCILLATORIA	3287						CHRYSOPHYTA	41.0
	SYNEDRA	6574	CHLORELLA	13148								CHLOROPHYTA	57.8
			DICTYOSPHAERIUM	69027								CYANOPHYTA	1.2
			GOLENKINIA	9861									
			SCENEDESMUS	59166									
			TETRAEDRON	3287									
	TOTAL	111758	TOTAL	157776	TOTAL	3287					272821		
	DOMINANT-MELOSIRA		DOMINANT-DICTYOSPHAERIU		DOMINANT-OSCILLATORIA								
AV. NO/L		100254		115045		89571		2465		822	308156	CHRYSOPHYTA	32.5
												CHLOROPHYTA	37.3
												CYANOPHYTA	29.1
												EUGLENOPHYTA	0.8
												PYRROPHYTA	0.3

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

PAGE 4 TENNESSEE RIVER MILE 527.4 845 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	131480	CHLAMYDOMONAS	13148	ANACYSTIS	26296	PHACUS	3287	PERIDINIUM	3287		CHRYSOPHYTA	44.2
	STEPHANODISCUS	13148	CHLORELLA	3287	DACTYLOCOCCOPSI	3287	TRACHELOMONAS	9861				CHLOROPHYTA	42.3
	SYNEDRA	6574	GOLENKINIA	3287								CYANOPHYTA	8.7
			KIRCHNERIELLA	23009								EUGLENOPHYTA	3.8
			OOCYSTIS	26296								PYRROPHYTA	1.0
			SCENEDESMUS	36157									
			TETRASTRUM	13148									
			ELAKATOTHRIX	26296									
	TOTAL	151202	TOTAL	144628	TOTAL	29583	TOTAL	13148	TOTAL	3287	341848		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-PERIDINIUM				
1.0	MELOSIRA	154489	CHODATELLA	6574	ANACYSTIS	108471	EUGLENA	3287				CHRYSOPHYTA	41.4
	SYNEDRA	3287	GOLENKINIA	6574	DACTYLOCOCCOPSI	9861	TRACHELOMONAS	3287				CHLOROPHYTA	25.9
			KIRCHNERIELLA	23009								CYANOPHYTA	31.0
			PANDORINA	26296								EUGLENOPHYTA	1.7
			SCENEDESMUS	26296									
			TETRAEDRON	3287									
			TREUBARIA	3287									
			FRANCEIA	3287									
	TOTAL	157776	TOTAL	98610	TOTAL	118332	TOTAL	6574			381292		
	DOMINANT-MELOSIRA		DOMINANT-PANDORINA SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-EUGLENA TRACHELOMONAS						
3.0	MELOSIRA	216942	CHLAMYDOMONAS	3287	ANACYSTIS	121619	PHACUS	13148				CHRYSOPHYTA	33.2
	STEPHANODISCUS	3287	CHODATELLA	3287	DACTYLOCOCCOPSI	19722	TRACHELOMONAS	13148				CHLOROPHYTA	42.0
	SYNEDRA	3287	COELASTRUM	36157								CYANOPHYTA	21.0
			CRUCIGENIA	13148								EUGLENOPHYTA	3.9
			DICTYOSPHAERIUM	13148									
			GOLENKINIA	6574									
			KIRCHNERIELLA	39444									
			MICRACTINIUM	13148									
			PANDORINA	26296									
			SCENEDESMUS	108471									
			TETRAEDRON	3287									
			TETRASTRUM	13148									
			TREUBARIA	3287									
	TOTAL	223516	TOTAL	282682	TOTAL	141341	TOTAL	26296			673835		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-PHACUS TRACHELOMONAS						

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 527.4 845 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
5.0	ASTERIONELLA	26296	CARTERIA	6574	DACTYLOCOCCOPSI	19722	EUGLENA	3287				CHRYSOPHYTA	45.2
	MELOSIRA	164350	CHLAMYDOMONAS	9861	OSCILLATORIA	9861	TRACHELOMONAS	3287				CHLOROPHYTA	46.7
	NAVICULA	3287	CHLORELLA	13148								CYANOPHYTA	6.7
	SYNEDRA	6574	COELASTRUM	32870								EUGLENOPHYTA	1.5
			KIRCHNERIELLA	13148									
			SCENEDESMUS	131480									
	TOTAL	206507	TOTAL	207081	TOTAL	29583	TOTAL	6574			443745		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA TRACHELOMONAS						
AVG NO/L		183250		183250		79710		13146		822	460160	CHRYSOPHYTA	39.8
												CHLOROPHYTA	39.8
												CYANOPHYTA	17.3
												EUGLENOPHYTA	2.9
												PYRROPHYTA	0.2

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION

TENNESSEE RIVER MILE 528.0 855 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	138054	CHLAMYDOMONAS	3287	ANACYSTIS	108471	TRACHELOMONAS	6574	CERATIUM	3287		CHRYSOPHYTA	36.7
	NAVICULA	3287	CHLORELLA	6574	DACTYLOCOCCOPSI	26296						CHLOROPHYTA	25.8
	STEPHANODISCUS	3287	COELASTRUM	26296	OSCILLATORIA	3287						CYANOPHYTA	35.0
			KIRCHNERIELLA	26296								EUGLENOPHYTA	1.7
			SCENEDESMUS	39444								PYRROPHYTA	0.8
	TOTAL	144628	TOTAL	101897	TOTAL	138054	TOTAL	6574	TOTAL	3287	394440		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS		DOMINANT-CERATIUM				
1.0	MELOSIRA	151202	CHLAMYDOMONAS	13148	DACTYLOCOCCOPSI	26296	EUGLENA	13148				CHRYSOPHYTA	46.8
	STEPHANODISCUS	9861	CHLORELLA	6574	OSCILLATORIA	9861	TRACHELOMONAS	3287				CHLOROPHYTA	38.7
	SYNEDRA	9861	GOLENKINIA	9861								CYANOPHYTA	9.9
			KIRCHNERIELLA	39444								EUGLENOPHYTA	4.5
			SCENEDESMUS	72314									
	TOTAL	170924	TOTAL	141341	TOTAL	36157	TOTAL	16435			364857		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-EUGLENA						
3.0	MELOSIRA	121619	SCENEDESMUS	16435	OSCILLATORIA	13148			CERATIUM	3287		CHRYSOPHYTA	79.6
	STEPHANODISCUS	13148	TETRAEDRON	3287								CHLOROPHYTA	11.1
	SYNEDRA	6574										CYANOPHYTA	7.4
												PYRROPHYTA	1.9
	TOTAL	141341	TOTAL	19722	TOTAL	13148			TOTAL	3287	177498		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-OSCILLATORIA				DOMINANT-CERATIUM				
5.0	MELOSIRA	115045	CHLAMYDOMONAS	3287	ANACYSTIS	88749	TRACHELOMONAS	19722				CHRYSOPHYTA	24.3
	SYNEDRA	6574	CHLORELLA	13148	DACTYLOCOCCOPSI	29583						CHLOROPHYTA	40.1
			CHODATELLA	3287	MERISMOPEDIA	26296						CYANOPHYTA	31.6
			CRUCIGENIA	13148	OSCILLATORIA	13148						EUGLENOPHYTA	3.9
			DACTYLOCOCCUS	26296									
			DICTYOSPHAERIUM	32870									
			GOLENKINIA	13148									
			KIRCHNERIELLA	19722									
			SCENEDESMUS	72314									
			TETRAEDRON	3287									
	TOTAL	121619	TOTAL	200507	TOTAL	157776	TOTAL	19722			499624		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-ANACYSTIS		DOMINANT-TRACHELOMONAS						
AV. NO/L		144628		115867		86284		10683		1644	359105	CHRYSOPHYTA	40.3
												CHLOROPHYTA	32.3
												CYANOPHYTA	24.0
												EUGLENOPHYTA	3.0
												PYRROPHYTA	0.5

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 529.9 900 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	ASTERIONELLA	16435	CHLORELLA	26296	DACTYLOCOCCOPSI	19722	TRACHELOMONAS	16435	CERATIUM	3287		CHRYSOPHYTA	39.0
	MELOSIRA	151202	CHODATELLA	6574	OSCILLATORIA	3287						CHLOROPHYTA	52.1
	STEPHANODISCUS	3287	COELASTRUM	36157								CYANOPHYTA	4.8
	SYNEDRA	16435	DACTYLOCOCCUS	32870								EUGLENOPHYTA	3.4
			DICTYOSPHAERIUM	13148								PYRROPHYTA	0.7
			KIRCHNERIELLA	6574									
			MICRACTINIUM	6574									
			PANDORINA	26296									
			PEDIASTRUM	13148									
			SCENEDESMUS	78888									
			TETRAEDRON	3287									
	TOTAL	187359	TOTAL	249812	TOTAL	23009	TOTAL	16435	TOTAL	3287	479902		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS		DOMINANT-TRACHELOMONAS		DOMINANT-CERATIUM				
1.0	MELOSIRA	164350	CHLAMYDOMONAS	13148	DACTYLOCOCCOPSI	19722	TRACHELOMONAS	13148				CHRYSOPHYTA	45.0
	SYNEDRA	13148	CHLORELLA	9861	OSCILLATORIA	3287						CHLOROPHYTA	45.8
			CHODATELLA	3287								CYANOPHYTA	5.8
			COELASTRUM	23009								EUGLENOPHYTA	3.3
			DACTYLOCOCCUS	32870									
			DICTYOSPHAERIUM	32870									
			GOLENKINIA	3287									
			KIRCHNERIELLA	3287									
			PANDORINA	26296									
			SCENEDESMUS	26296									
			TETRAEDRON	3287									
			SCHROEDERIA	3287									
	TOTAL	177498	TOTAL	180785	TOTAL	23009	TOTAL	13148			394440		
	DOMINANT-MELOSIRA		DOMINANT-DACTYLOCOCCUS DICTYOSPHAERIU		DOMINANT-DACTYLOCOCCOPS		DOMINANT-TRACHELOMONAS						
3.0	MELOSIRA	151202	CHLAMYDOMONAS	9861	DACTYLOCOCCOPSI	13148						CHRYSOPHYTA	55.3
	STEPHANODISCUS	6574	CHLORELLA	13148	OSCILLATORIA	6574						CHLOROPHYTA	38.3
	SYNEDRA	13148	PANDORINA	26296								CYANOPHYTA	6.4
			SCENEDESMUS	65740									
			TETRAEDRON	3287									
	TOTAL	170924	TOTAL	118332	TOTAL	19722					308978		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-DACTYLOCOCCOPS								

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 529.9 900 HRS
NOVEMBER 5, 1977

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
5.0	MELOSIRA	167637	CHLAMYDOMONAS	3287	DACTYLOCOCCOPSI	13148	EUGLENA	6574	CERATIUM	6574		CHRYSOPHYTA	47.1
	STEPHANODISCUS	3287	CHLORELLA	3287	OSCILLATORIA	16435	PHACUS	3287	PERIDINIUM	3287		CHLOROPHYTA	37.2
	SYNEDRA	16435	CHODATELLA	3287			TRACHELOMONAS	13148				CYANOPHYTA	7.4
			COELASTRUM	19722								EUGLENOPHYTA	5.8
			CRUCIGENIA	13148								PYRROPHYTA	2.5
			DICTYOSPHAERIUM	13148									
			PANDORINA	26296									
			SCENEDESMUS	65740									
	TOTAL	187359	TOTAL	147915	TOTAL	29583	TOTAL	23009	TOTAL	9861	397727		
	DOMINANT-MELOSIRA		DOMINANT-SCENEDESMUS		DOMINANT-OSCILLATORIA		DOMINANT-TRACHELOMONAS		DOMINANT-CERATIUM				
AV. NO/L		180785		174211		23831		13148		3287	395262	CHRYSOPHYTA	45.7
												CHLOROPHYTA	44.1
												CYANOPHYTA	6.0
												EUGLENOPHYTA	3.3
												PYRROPHYTA	0.8

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 532.1 935 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA GENUS	NO./L	TOTAL PHYTOPLANKTON (NO./L)	PERCENT COMPOSITION	
0.0	MELOSIRA	42731	CHLAMYDOMONAS	6574	DACTYLOCOCCOPSI	16435						CHRYSOPHYTA	27.1
			GOLENKINIA	6574	GOMPHOSPHAERIA	52592						CHLOROPHYTA	29.2
			SCENEDESMUS	26296								CYANOPHYTA	43.8
			TREUBARIA	3287									
			PTEROMONAS	3287									
	TOTAL DOMINANT-MELOSIRA	42731	TOTAL DOMINANT-SCENEDESMUS	46018	TOTAL DOMINANT-GOMPHOSPHAERIA	69027					157776		
1.0	MELOSIRA	111758	CARTERIA	6574	ANACYSTIS	55879	TRACHELOMONAS	13148	GYMNODINIUM	3287		CHRYSOPHYTA	18.0
	SYNEDRA	13148	CHLAMYDOMONAS	23009	DACTYLOCOCCOPSI	23009						CHLOROPHYTA	66.8
			CHLORELLA	62453	OSCILLATORIA	9861						CYANOPHYTA	12.8
			CHODATELLA	6574								EUGLENOPHYTA	1.9
			CRUCIGENIA	52592								PYRROPHYTA	0.5
			DACTYLOCOCCUS	13148									
			DICTYOSPHAERIUM	13148									
			KIRCHNERIELLA	3287									
			PANDORINA	26296									
			PEDIASTRUM	52592									
			SCENEDESMUS	190646									
			TETRAEDRON	3287									
			ARTHRODESMUS	3287									
			ELAKATOTHRIX	6574									
	TOTAL DOMINANT-MELOSIRA	124906	TOTAL DOMINANT-SCENEDESMUS	463467	TOTAL DOMINANT-ANACYSTIS	88749	TOTAL DOMINANT-TRACHELOMONAS	13148	TOTAL DOMINANT-GYKNODINIUM	3287	693557		
3.0	MELOSIRA	111758	CHLAMYDOMONAS	6574	DACTYLOCOCCOPSI	32870	TRACHELOMONAS	13148				CHRYSOPHYTA	57.6
	NAVICULA	6574	CHLORELLA	9861	OSCILLATORIA	6574						CHLOROPHYTA	18.2
	STEPHANODISCUS	3287	SCENEDESMUS	13148								CYANOPHYTA	18.2
	SYNEDRA	3287	EUASTRUM	6574								EUGLENOPHYTA	6.1
			ARTHRODESMUS	3287									
	TOTAL DOMINANT-MELOSIRA	124906	TOTAL DOMINANT-SCENEDESMUS	39444	TOTAL DOMINANT-DACTYLOCOCCOPS	39444	TOTAL DOMINANT-TRACHELOMONAS	13148			216942		
5.0	MELOSIRA	216942	CHLAMYDOMONAS	26296	ANACYSTIS	78888	EUGLENA	19722	CERATIUM	9861		CHRYSOPHYTA	34.2
	SYNEDRA	9861	CHLORELLA	19722	DACTYLOCOCCOPSI	19722	PHACUS	3287				CHLOROPHYTA	40.6
			DICTYOSPHAERIUM	39444	OSCILLATORIA	19722	TRACHELOMONAS	16435				CYANOPHYTA	17.8
			KIRCHNERIELLA	32870								EUGLENOPHYTA	5.9
			PEDIASTRUM	19722								PYRROPHYTA	1.5
			SCENEDESMUS	124906									
			TREUBARIA	3287									
			ARTHRODESMUS	3287									
	TOTAL DOMINANT-MELOSIRA	226803	TOTAL DOMINANT-SCENEDESMUS	269534	TOTAL DOMINANT-ANACYSTIS	118332	TOTAL DOMINANT-EUGLENA	39444	TOTAL DOMINANT-CERATIUM	9861	663974		

DIVISION OF ENVIRONMENTAL PLANNING
WATER QUALITY AND ECOLOGY BRANCH
PHYTOPLANKTON ENUMERATION
TENNESSEE RIVER MILE 532.1 935 HRS
NOVEMBER 5, 1975

DEPTH (METERS)	CHRYSOPHYTA GENUS	NO./L	CHLOROPHYTA GENUS	NO./L	CYANOPHYTA GENUS	NO./L	EUGLENOPHYTA GENUS	NO./L	PYRROPHTA NO./L	TOTAL PHYTOPLANKTON (NO./L)
AV. NO/L		129837		204616		78888		16435	3287	433062

PERCENT COMPOSITION

CHRYSOPHYTA	30.0
CHLOROPHYTA	47.2
CYANOPHYTA	18.2
EUGLENOPHYTA	3.8
PYRROPHYTA	0.8

Section B

This section contains chlorophyll data for 1976, as identified in the Environmental Information, page C-1.

AQUATIC BIOTA (NONFISH) DATA

WATTS BAR NUCLEAR PLANT

Chlorophyll a

1976

The chlorophyll a concentrations in 1976 ranged from a low of 0.19 mg chl a/m^2 at TRM 506.6 in the spring to 53.13 mg chl a/m^2 at TRM 532.1 in the summer. The concentrations of chlorophyll a exhibited a general increase upstream from TRM 496.5.

Watts Bar Nuclear Plant
Chlorophyll a Concentration in mg Chl a/M^2

TRM	1976 Winter	Spring	Summer	Fall
496.5	16.41	-	-	-
506.6	26.60	0.19	-	15.77
518.0	28.29	5.08	12.67	20.32
527.4	33.17	19.60	28.67	27.86
528.0	33.71	22.34	22.85	26.52
529.9	34.72	15.29	19.63	30.36
532.1	35.34	41.95	53.13	31.72

Section C

This section contains productivity data for 1976, as identified in the Environmental Information, page C-1.

AQUATIC BIOTA (NONFISH) DATA

WATTS BAR NUCLEAR PLANT

Primary Productivity

1976

Primary productivity expressed in mg C/m^2/day for 1976 had a maximum of 1184.36 mg C/m^2/day at TRM 532.1 in the summer and a minimum of 79.83 mg C/m^2/day at TRM 496.5 in the winter. Productivity displayed a general increase upstream from TRM 496.5 during all surveys except in the winter.

Watts Bar Nuclear Plant
Primary Productivity Expressed mg C/day/M^2

TRM	1976 Winter	Spring	Summer	Fall
496.5	79.83	199.34	431.55	85.59
506.6	240.58	84.56	459.33	125.84
518.0	260.23	104.92	647.40	223.82
527.4	230.93	296.87	833.94	314.98
528.0	238.38	317.51	760.77	295.66
529.9	216.75	233.91	610.79	340.03
532.1	141.13	372.11	1184.36	389.62
Total Solar Radiation (Langleys/Day)	306.82	537.12	452.46	302.95
Secchi Disc Visibility (M)	1.0	1.3	1.6	1.5
Water Temp. @ 1 Meter (^{o}C)	6.39	19.06	25.33	13.61

SECTION D

This section contains periphyton data for 1974, 1975, and 1976, and Autotriphic Index for 1975 and 1976, as identified in the ENVIRONMENTAL INFORMATION, page C-1. The autotrophic index slides for 1974 and the periphyton slides for the summer of 1975 were destroyed in the laboratory and the results will not be available.

AQUATIC BIOTA (NONFISH) DATA

WATTS BAR NUCLEAR PLANT

Periphyton

Autotrophic Indices (AI) obtained during June of 1975 TRM 529.9 show optimal autotrophic growth which was significantly different from only the growth at TRM 496.5. During August of 1975 the autotrophic growth is greatest at TRM 527.4 followed by good growth at TRM 529.9. TRM 527.4, 529.9, 528.0, and 506.6 are not significantly different during August. Healthy autotrophic growth of the periphyton community is shown during the summer of 1975 through the studied reach of the river.

The AI values obtained from the May 1976 samples indicate that optimal autotrophic growth occurred at TRM 518.0. This value was significantly different from only the value obtained at TRM 528.0. The AI values from August 1976 did not display significant differences between stations. Optimal autotrophic growth in August was obtained at TRM 529.9. Autotrophic growth along this portion of the river in 1976 did not demonstrate the presence of stress conditions which could have caused unusually high AI values.

The Chrysophyta comprised the greatest number of genera of any single group of periphyton in all sampling periods from 1974 to 1976. The most genera identified for a single period, 15, were obtained from spring 1974 samples. The fewest, 11, occurred in summer 1976. Achnanthos sp., Cymbella sp., Gomphonema sp., Melosira, and Navicula sp. were most numerous of the Chrysophyta.

The Chlorophyta had the second highest number of genera in all sampling periods with most, 9, occurring, in spring 1976. Scenedesmus sp. and Stigeoclonium sp. were the most numerous of the Chlorophyta.

The most genera of Cyanophyta, 4, were found on slides collected in the spring and summer of 1976. Oscillatoria sp. and Merismopedia sp. were the most frequently encountered genera of Cyanophytes.

The numbers of periphyton per CM^2 were generally higher in the spring than in the fall.

Note: The autotrophic index slides for 1974 and the periphyton slides for the summer of 1975 were destroyed in the laboratory and the results will not be available.

Watts Bar Periphyton Autotrophic Index
June 1975

Analysis of Variance

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Value
Among Locations	5	28,808.76	5,761.75	$F = 4.08^{**}$
Within Locations	30	42,356.56	1,411.89	$F_{95} = 2.53$ $F_{99} = 3.70$

** Highly Significant

The F-Value for testing the null hypothesis of station differences is highly significant (1% level). This is evidence that there are real differences among station means.

RANKING THE MEANS

TRM	529.9	527.4	528.0	506.6	518.0	496.5
Autotrophic Index	147.39	159.07	166.84	190.94	195.18	225.18

Any two means underscored by the same line are not significantly different. Any two means not underscored by the same line are significantly different by using Duncan's Multiple Range Test.

Watts Bar Periphyton Autotrophic Index
August 1975

Analysis of Variance

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F-Value
Among Locations	5	155,301.88	31,060.38	F = 8.62**
Within Locations	38	136,857.97	3,601.53	F_{95} = 2.47 F_{99} = 3.55

** Highly Significant

The F-Value for testing the null hypothesis of station differences is highly significant (1% level). This is evidence that there are real differences among station means.

RANKING THE MEANS

TRM	527.4	529.9	528.0	506.6	496.5	518.0
Autotrophic Index	163.54	167.38	194.22	204.15	278.10	316.52

Any two means underscored by the same line are not significantly different. Any two means not underscored by the same line are significantly different by using Duncan's Multiple Range Test.

Periphyton Autotrophic Index From the Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
1976

Analysis of Variance

Date	Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value
May	Among locations	4	1,221.69	305.42	F = 2.95 *
	Within locations	35	3,614.07	103.26	
					F0.05 = 2.63
August	Among locations	3	2,288.81	762.94	1.76 ns
	Within locations	24	10,386.77	432.78	
					F0.05 = 3.01

*Significant
ns: Nonsignificant

May — Ranking the Means[a/]

TRM	518.0	506.6	529.9	527.4	528.0
Autotrophic Index	93.78	95.11	101.21	104.72	108.239

August

TRM	529.9	527.4		506.6	518.0
Autotrophic Index	99.13	116.15		116.92	121.39

a/ Means underscored are not significantly different as determined using Duncan's New Multiple Range Test.

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1974

	TRM					
Chrysophyta	496.5	506.6	518.0	527.4	528.0	529.9
Achnanthes sp.		4,239.7	1,347.5	82.2	262.9	1,758.3
Bacillaria sp.		164.3		65.7		
Cocconeis sp.		197.2	7,789.2	246.5	19,752.2	723.0
Cyclotella sp.				32.9		
Cymbella sp.		15,890.6	8,791.6	9,629.7		27,640.1
Diatoma sp.				65.7		279.4
Fragilaria sp.		246.5	394.4	164.3	1,216.0	1,843.5
Gomphonema sp.		10,648.5	10,056.9	5,213.4	3,483.7	8,923.0
Gryosigma sp.			16.4			
Melosira sp.		16,022.0	24,550.7	13,984.4	14,066.5	17,616.0
Navicula sp.		9,958.3		9,366.7	6,868.9	9,218.8
Pinnularia sp.		32.9		32.9		
Surirella sp.			16.4			
Synedra sp.		2,218.4	2,826.5	1,610.4	72.3	2,464.9
Stephanodiscus sp.						180.8
Chlorophyta						
Cosmarium sp.				65.7		
Draparnelldia sp.		30,811.5	35,330.6			4,108.2
Mougeotia sp.		131.5				
Scenedesmus sp.		131.5	98.6	427.3	591.5	723.0
Stigeoclonium sp.		89,559.0	96,132.2	69,428.8	55,050.0	62,444.8
Cyanophyta						
Dactylococcopsis sp.		115.0	32.9	32.9		
Merismopedia sp.		788.8				
Phormidium sp.		67,374.7	91,202.3	22,134.3	30,400.7	27,114.2

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Summer 1974

	TRM					
Chrysophyta	496.5	506.6	513.9	527.4	528.9	529.9
Achnanthes sp.		1,758.3	755.9	2,826.5	5,833.7	8,364.3
Asterionella sp.				32.9		
Bacillaria sp.		98.6				821.6
Cocconeis sp.		32.9		2,130.3	4,535.5	755.9
Cymbella sp.		1,922.6	5,225.6	4,486.2	6,984.0	7,723.4
Fragilaria sp.		65.7			591.6	345.1
Gomphonema sp.		5,570.7	3,878.2	2,662.1	9,761.1	10,730.7
Melosira sp.		1,676.2	6,343.1	8,282.2	11,207.2	6,836.1
Navicula sp.		8,380.8	5,537.9	10,960.7	7,739.9	
Nitzchia sp.				16.4		
Pinnularia sp.		49.3				
Synedra sp.		1,232.5	887.4	772.3	1,479.0	
Chlorophyta						
Cosmarium sp.		32.9			131.5	230.1
Mougeotia sp.		197.2	312.2			887.4
Pediastrium sp.					131.5	262.9
Scenedesmus sp.		164.3	98.6	657.3	690.2	
Stigeoclonium sp.				8,627.2	20,951.9	29,168.3

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1975

	TRM					
Chrysophyta	496.5	506.6	518.0	527.4	528.0	529.9
Achnanthes sp.		16,661.0	3,297.4	49,764.9	43,847.9	56,541.7
Asterionella sp.		31.1		155.7		
Cocconeis sp.		233.6	31.1	124.6	249.1	77.9
Cymbella sp.		25,536.4	19,526.0	18,218.1	13,017.4	16,629.8
Diatoma sp.		62.3		1,027.7	2,491.4	264.7
Fragilaria sp.					1,027.7	
Gomphonema sp.		93,192.4		75,425.9	72,623.1	113,590.4
Gryosigma sp.		15.6	31.1			15.6
Melosira sp.		14,372.0	8,159.2	25,038.2	40,484.6	10,572.7
Navicula sp.		15,212.9	10,401.4	5,695.6	4,141.9	2,475.8
Nitzschia sp.		140.1	498.3	747.4		264.7
Stephanodiscus sp.						15.6
Synedra sp.		2,070.9	2,366.8	3,456.8	2,379.9	1,354.7
Tabellaria sp.			93.4			
Chlorophyta						
Cosmarium sp.		31.1			62.3	
Oedogonium sp.			218.0	404.8	31.1	218.4
Pediastrum sp.		31.1				
Protococcus sp.		420.4				
Scenedesmus sp.		168,758.5	124.6	249.1		124.6
Stigeoclonium sp.		2,756.1	9,311.5	143,502.3	106,567.9	125,549.0
Cyanophyta						
Lyngbya sp.				70.1		
Merismopedia sp.					1,837.4	249.1
Oscillatoria sp.		124.6	318.5	716.3	101.2	303.6

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1976

	TRM					
Chrysophyta	496.5	506.6	518.0	527.4	528.0	529.9
Achnanthes sp.		5,817.2	6,359.5	690.2	7,822.0	22,480.1
Asterionella sp.					65.7	
Cocconeis sp.		164.3	115.0			
Cymbella sp.		91,415.9	112,039.2	26,144.7	150,524.9	152,283.2
Diatoma sp.		230.1	427.3	32.9	5,636.5	8,495.8
Fragilaria sp.		410.3	755.9	460.1	4,798.4	4,420.4
Gomphonema sp.		22,052.9	23,674.7	6,704.6	20,179.5	35,922.2
Gryosigma sp.			16.4	16.4		
Melosira sp.		56,709.8	59,059.7	10,960.7	52,190.7	43,481.3
Navicula sp.		18,979.9	18,010.4	4,389.0	9,629.7	7,707.0
Nitzschia sp.		410.3	1,232.5	788.8	2,810.0	4,913.4
Pleurosigma sp.			16.4	65.7		
Stephanadiscus sp.		180.8	180.8	82.2	443.7	460.1
Surirella sp.					65.7	
Synedra sp.		13,162.7	11,042.9	1,709.0	10,056.9	14,296.6
Chlorophyta						
Closterium sp.		16.4				
Cosmarium sp.		131.5			16.4	
Mougeotia sp.		624.4	328.7			558.7
Oedogonium sp.			131.5		558.7	
Pediastrum sp.		262.9				131.5
Scenedesmus sp.			131.5	361.5	164.3	624.4
Staurastrum sp.					32.9	
Stigeoclonium sp.		168,601.0	103,313.3	22,463.7	153,367.8	157,821.1
Ulothrix sp.		7,986.4	4,568.3			

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1976

(Continued)

	TRM					
Cyanophyta	496.5	506.6	518.0	527.4	528.0	529.9
Dactylococcopsis sp.			164.3		32.9	
Lyngbya sp.		254.7	73.9		320.4	369.7
Merismopedia sp.		657.3				
Oscillatoria sp.		895.0	760.0	135.6	595.7	932.5
Euglenophyta						
Euglena sp.		82.2				
Pyrrophyta						
Gymnodinium sp.						16.4

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Summer 1976

	TRM				
Chrysophyta	496.5	506.6	518.0	527.4	529.9
Achnanthes sp.		15,430.4	6,753.9	84,366.3	34,821.2
Cocconeis sp.		32.9		394.2	
Cymbella sp.		8,282.2	3,943.9	2,892.2	4,206.8
Diatoma sp.			32.9		
Fragilaria sp.		213.6	328.7	624.4	2,908.6
Gomphonema sp.		27,327.8	10,319.8	16,202.8	39,077.3
Melosira sp.		11,979.5	8,693.0	7,394.8	2,366.3
Navicula sp.		29,776.3	5,998.0	7,066.1	3,812.4
Nitzschia sp.		1,265.3	1,281.8	1,741.9	1,511.8
Stephanodiscus sp.		378.0	164.3		
Synedra sp.		4,206.8	3,401.6	11,272.9	15,890.6
Chlorophyta					
Crucigenia sp.			147.9		
Cosmarium sp.		16.4			16.4
Mougeotia sp.				460.1	246.5
Pediastrum sp.		312.2		131.5	
Scenedesmus sp.		32.9	295.8	525.9	772.3
Stigeoclonium sp.		6,063.7	155,652.0	55,707.4	86,535.4
Tetraedon sp.					16.4

Average Periphyton Enumeration per Slide (cell/cm^2)
in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Summer 1976

(Continued)

	TRM				
Cyanophyta	496.5	506.6	518.0	527.4	529.9
Dactylococcopsis sp.			197.2		
Lyngbya sp.		427.3	193.1	542.3	
Merismopedia sp.		65.7			
Oscillatoria sp.		2,411.5	2,555.3	2,333.5	
Euglenophyta					
Trachelomonas sp.			16.4		

SECTION E

The zooplankton data for 1975 and 1976, as identified in the ENVIRONMENTAL INFORMATION, Page C-1, are included in the following sections with the exception of the winter quarter of 1976. The winter 1976 samples for all stations were destroyed in the laboratory and results will not be available.

In addition the aquatic biota (nonfish) monitoring station located at Tennessee River mile 496.5 is a common station for the monitoring programs for both the Watts Bar and the Sequoyah Nuclear Plants. As a result the zooplankton samples collected at this location for 1975 and 1976 are being processed in conjunction with the Sequoyah surveys and will not be available for some time. It is our opinion that the unavailability of this data would not be critical to the present environmental evaluation for the Watts Bar Nuclear Plant. These results will be transmitted after the data becomes available.

AQUATIC BIOTA (NONFISH) DATA

WATTS BAR NUCLEAR PLANT

Zooplankton

1975 and 1976

In 1975 the highest single species concentration of rotifers occurred at TRM 532.1 when Keratella earlinea reached a concentration of 43,881/m^3 and comprised 56.77 percent of the total Rotifera. The highest single species concentration obtained in 1976 occurred when the concentration K. crassa reached a concentration of 86,056/m^3 at TRM 527.4 in the summer.

Bosmina longirostris was the dominant cladoceran in the winter, spring, and fall of 1975 with peak population numbers of 105,628/m^3 at TRM 506.6 and 142,975/m^3 at TRM 528.0 in the spring. During the summer Diaphanosoma leuchtenbergianum dominated the Cladocera at most stations. In 1976 B. longirostris was dominant in the spring and fall with the highest population number 242,722/m^3 occurring at TRM 518.0 in the spring. Diaphanosoma leuchtenbergianum was the most numerous cladoceran in the summer.

The copepod population numbers were dominated by the immature forms; calanoid, cyclopoid, and harpacticoid copepodids, and nauplii in 1973, 1974, 1975, and 1976.

The highest total zooplankton population was obtained at TRM 528.0 in the spring of 1975 with a concentration of 174,701/m^3. Bosmina longirostris comprised 82 percent of that total. The highest total obtained that was not dominated by one species was 168,036/m^2 at TRM 532.1 during the summer.

The lowest total zooplankton number, 5,847/m^3, occurred at TRM 506.6 in the fall. The highest total number of zooplankton for 1976 was 395,293/m^3 at TRM 532.1 in the spring. The lowest total number for that year, 7,848/m^3, occurred at TRM 506.6 in the fall.

The highest number of total taxa of zooplankton for 1975, 48, was collected in the spring while the lowest number, 38, was obtained in the winter. The number of rotifer taxa was highest, 24, in the spring and lowest, 18, in the summer and fall. The number of taxa of Cladocera peaked at 12 in the spring following the low of 7 in the winter. The copepods had the greatest number of taxa, 13, in the fall and the fewest number, 9, in the winter. In 1976 the highest number of taxa obtained was 55 in the fall with the lowest, 46, occurring in the summer samples. Twenty-two taxa of rotifers were collected in each sampling period. The greatest number of Cladoceran taxa, 17, occurred in the fall and fewest, 13, occurred in the summer. The number of copepod taxa peaked at 16 in the fall and was lowest, 11, in the summer.

Note: The zooplankton samples collected at Tennessee River miles 496.5 for 1975 and 1976 are being processed in conjunction with the Sequoyah surveys and are not presently available. The zooplankton samples collected at all stations during the winter quarter of 1976 were destroyed in the laboratory and the results will not be available.

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Winter 1975

Organism	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.	1,085	681	624	971	324	482	385
Brachionus angularis	157	30					23
B. budapestinensis	26	95	33			15	12
B. calyciflorus	54					15	36
B. caudatus	26						
B. urceolaris	54						
Collotheca pelagica	695	386	133	420	440	553	570
Conochilus unicornis	185	212	138	176		95	12
Euchlanis sp.	78	36					
Filinia spp.		36	99	41		32	
Hexarthra mira		36					18
Kellicottia bostoniensis	295	66	66	122		81	122
Keratella cochlearis	321	449	138	623	66	146	986
K. crassa	3,353	1,897	1,604	4,080	1,685	1,195	2,509
K. earlinae	536	291	33	163	66	93	353
K. valga					19	32	23
Monostyla sp.					19		
Ploesoma truncatum	131	106		54	19		
Polyarthra spp.		71	99	82	57	51	18
Rotaria neptunia	108		57		16		
Synchaeta spp.	9,225	6,570	5,772	6,403	2,880	4,802	3,702
Trichocerca spp.						17	
Total Rotifera	16,329	10,962	8,796	13,135	5,591	7,609	8,759
Percent Composition	67.40	71.75	73.43	59.22	50.07	56.02	55.27

Table

Winter 1975 (continued)

Organism	TRM						
Cladocera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Alona quadrangularis	54		589	41		16	
Bosmina longirostris	478	551		1,536	970	1,202	999
Chydorus sp.							12
Daphnia parvula	3	1	3	9	2	35	37
D. retrocurva	1	1	1				
Diaphanosoma leuchtenbergianum						4	
Sida crystallina					1		2
Total Cladocera	536	553	593	1,586	973	1,251	1,050
Percent Composition	2.21	3.62	4.95	7.15	8.71	9.25	6.63
Copepoda							
Calanoida (Immature)	38	43	12	148	104	61	135
Cyclopoida (Immature)	165	201	81	511	286	349	465
Nauplii	6,889	3,280	2,436	6,396	3,830	4,162	5,242
Cyclops bicuspidatus thomasi	134	125	34	254	267	110	148
C. vernalis	80	106	24	94	88	2	30
Diaptomus pallidus	2	2	1	6	22	15	12
D. reighardi		2		8	5	1	5
D. sanguineus						15	1
Mesocyclops edax	55	3	2	42		1	1
Total Copepoda	7,363	3,762	2,590	7,459	4,602	4,716	6,039
Percent Composition	30.39	24.63	21.62	33.63	41.21	34.72	38.10
Total Zooplankton	24,228	15,277	11,979	22,180	11,166	13,582	15,848

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of Watts Bar Nuclear Plant
Spring 1975

Organism	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.		31	43	118	159	28	296
Brachionus angularis		545	1,244	1,678	1,418	774	3,153
B. bidentata							61
B. budapestinensis				85			
B. calyciflorus		438	337				
B. caudatus			56			49	
B. havanaensis			22				
B. quadridentatus		31					
Cephalodella sp.		31	22			49	
Conochiloides sp.		643	1,145	559	684	152	358
Conochilus unicornis		870	2,503	975	676		237
Filinia spp.		50				55	
Hexarthra mira			22	76			
Kellicottia bostoniensis			111	42	104	49	
K. longispina		62					
Keratella cochlearis		272	449	595	481	807	2,620
K. crassa		736	611	940	1,211	1,019	1,072
K. earlinae		3,453	4,714	6,645	5,667	6,780	7,924
Ploesoma hudsoni							
P. truncatum		1,725	934	1,222	2,168	810	831
Polyarthra spp.		50	111	432	312	228	1,183
Synchaeta spp.		173	461	119	157	173	294
Trichocerca spp.		173	315	927	904	358	2,383
Gastropus sp.				34			61
Total Rotifera		9,283	13,134	14,447	13,941	11,331	20,473
Percent Composition		7.93	19.03	12.62	7.98	13.26	14.80

Table

Spring 1975 (continued)

Organism	TRM						
Cladocera	496.5	506.6	518.0	527.4	529.9	528.0	532.1
Bosmina longirostis		105,628	50,165	86,067	55,574	142,975	69,871
Ceriodaphnia sp.		1					
Daphnia		273	1,484	3,424	2,584	3,013	16,529
D. parvula		38	264	951	407	211	1,542
D. pulex				1		2	
D. retrocurva		7	24	451	65	213	1,194
Diaphonsoma leuchtenbergianum		31	56	567	234	262	2,614
Leptodora kindtii		50	35	229	103	325	301
Scapholebris kingi			2				3
Sida crystallina		1		1		2	2
Simocephalus sp.		1					
S. serrulatus		2					1
Total Cladocera		106,032	52,030	91,591	58,967	147,003	92,057
Percent Composition		90.54	75.39	80.08	68.99	84.15	66.53
Copepoda							
Calanoida		23	36	195	261	265	1,252
Cyclopoida		286	704	1,893	2,627	3,630	7,400
Nauplii		939	1,742	4,363	8,873	7,169	13,813
Cyclops bicuspidatus thomasi		284	780	1,280	2,770	1,586	2,209
C. vernalis		204	461	179	525	314	837
Diaptomus pallidus		18	33	42	19	35	142
D. reighardi		4	12	23	12	59	20
D. sanguineus		10	18	9	10		61
Ergasilus sp.		1			1		
Eucyclops agilis							1
Mesocyclops edax		23	61	382	76	159	107
Tropocyclops prasinus		1			1		
Total Copepoda		1,793	3,847	8,366	15,175	13,757	25,842
Percent Composition		1.53	5.57	7.31	17.75	7.87	18.68
Total Zooplankton		117,108	69,011	114,504	85,473	174,701	138,372

Mean Number of Zooplankton Per M^3 in Tennessee River
in The Vicinity of the Watts Bar Nuclear Plant
Summer 1975

Organism	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.				1			160
Brachionus angularis		245	132	471	626	231	586
B. budapestinensis		515	270	1,649	882	462	1,671
B. caudatus			18				
Cephalodella sp.			18	58		46	
Collotheca sp.		141	213	587	548	368	1,033
Conochiloides sp.		132		60	128	92	1,164
Conochilus unicornis		66	157	232	128	47	2,520
Filinia spp.		28	46	118	58		1,115
Gastropus sp.				293	289	139	1,508
Kellicottia bostoniensis		28	57	177	256	278	186
Keratella cochlearis		356	416	3,124	1,597	1,199	13,480
K. crassa		759	1,421	6,480	4,334	3,139	32,904
K. earlinae		3,098	3,276	9,359	8,752	6,228	17,549
Ploesoma truncatum		187	64	1,114	705	323	1,404
Polyarthra spp.		384	447	5,910	70	140	12,033
Synchaeta spp.		498		238			1,695
Trichocerca spp.		505	188	1,978	1,659	738	6,197
Total Rotifera		6,942	6,720	31,745	20,032	12,689	93,695
Percent Composition		36.80	40.01	39.58	37.38	23,04	56.66

Table

Summer 1975 (continued)

Organism	TRM						
Cladocera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Bosmina longirostris		6,600	2,940	4,860	2,125	1,387	3,312
Ceriodaphnia lacustris		66	1	121	118	8	163
Daphnia sp.		346	590	2,942	3,034	1,519	2,809
D. parvula			178	1,470	1,841	2,334	3,518
D. retrocurva		552	1,048	8,596	5,645	6,320	8,823
Diaphanosoma leuchtenbergianum		928	738	12,117	8,391	9,961	27,451
Ilyocryptus spinifer						1	
Leptodora kindtii		61	117	354	416	183	186
Moina micrura				2	4	47	581
Scapholebris kingi					2		
Sida crystallina		39	2		1		
Total Cladocera		8,592	5,612	30,461	21,575	21,759	46,841
Percent Composition		45.54	33.42	37.96	40.25	39.51	27.88
Copepoda							
Calanoida		45	87	410	186	415	265
Cyclopoida		741	671	2,884	3,458	3,749	5,778
Harpacticoida		1		1	2	2	
Nauplii		1,530	2,491	12,674	4,530	13,757	17,062
Canthocamptus robertrokeri					1		
Cyclops vernalis		544	699	1,404	1,968	1,564	927
Diaptomus mississippiensis					18		
D. pallidus		24	117	73	70	61	105
D. reighardi		8	2	63	18	18	26
Ergasilus sp.				2	1	1	2
Mesocyclops edax		400	394	531	1,738	1,064	1,829
Tropocyclops prasinus		38					
Total Copepoda		3,311	4,461	18,042	11,990	20,630	25,993
Percent Composition		17,66	26.56	22.48	22.37	37.46	15.47
Total Zooplankton		18,865	16,792	80,249	53,598	55,078	168,036

Mean Number of Zooplankton Per M^3 in Tennessee River
in The Vicinity of The Watts Bar Nuclear Plant
Fall 1975

Organism	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.		1		174	196	283	1,209
Brachionus budapestinensis				32			
Cephalodella sp.		21	11	23			
Collotheca sp.		108	296	1,077	1,713	3,068	1,203
Conochilus unicornis			10	297	120	217	1,416
Gastropus sp.		8			40		71
Kellicottia bostoniensis			33	64	40	54	212
Keratella cochlearis		7	350	2,126	1,158	2,440	4,600
K. crassa		181	367	972	892	2,228	2,123
K. earlinae		1,745	3,637	14,340	21,453	28,453	43,881
K. valga			31	96		295	425
K. americana				23			
Monostyla sp.		8					
Ploesoma hudsoni		24	42	101	125	412	71
P. truncatum		290	394	3,768	4,704	5,138	6,511
Polyarthra spp.		77	86	1,163	3,104	1,719	1,557
Syncheata spp.		299	690	8,352	7,526	5,463	13,730
Trichocerca spp.		45		160	655	778	212
Total Rotifera		2,814	5,920	32,768	41,726	50,548	77,292
Percent Composition		48.04	51.39	64.70	53.58	55.38	65.49
Cladocera							
Bosmina longirostris		1,026	2,097	5,364	7,182	7,241	10,899
Ceriodaphnia sp.		8	1	23	3	4	1
C. lacustris					1	48	71
C. quadrangula							2
Daphnia sp.		37	72	935	883	2,539	3,397
D. parvula		8	17	215	176	153	495

Table

Fall 1975 (continued)

Organism	TRM						
Cladocera (continued)	496.5	506.6	518.0	527.4	528.0	529.9	532.1
D. retrocurva		2	61	383	303	1,015	708
Diaphanosoma leuchtenbergianum			1	56	232	82	
Leptodora kindtii		3	3	35	35	38	142
Sida crystallina				1			
Simocephalus serrulatus				1			
Total Cladocera		1,084	2,252	7,013	8,815	11,120	15,715
Percent Composition		18.51	19.55	13.85	11.32	12.18	13.32
Copepoda							
Calanoida		30	19	306	343	646	354
Cyclopoida		1,110	1,315	2,746	5,421	10,301	5,804
Harpactiocoida		7					
Nauplii		453	1,181	6,809	11,308	16,414	17,552
Cyclops bicuspidatus thomasi			12	32	8	4	2
C. varicans rubellus							71
C. vernalis		224	629	438	855	1,089	212
Diaptomus pallidus		6	32	25	92	58	19
D. reighardi		7	11	6	19	13	5
Ergasilus sp.		2		4	3	6	4
Encyclops agilis					1		
Mesocyclops edax		98	145	461	355	880	920
Tropocyclops prasinus		22	3	35	117	195	71
Total Copepoda		1,959	3,347	10,862	27,337	29,606	25,014
Percent Composition		33.45	29.06	21.45	35.10	32.44	21.19
Total Zooplankton		5,857	11,519	50,643	77,878	91,274	118,021

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Spring 1976

	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.		66		296	229	609	306
Brachionus angularis		83		55			
B. bidentata		16					
B. budapestinensis						61	
B. caudatus			62				
B. quadridentatus		32					
Collotheca pelagica			75	93			73
Conochiloides sp.		32	136	47	116	223	348
Conochilus unicornis		32	2,180	5,380	4,272	7,727	8,807
Euchlanis sp.				55			
Filinia spp.		32		55			146
Hexarthra mira		32					
Kellicottia bostoniensis		85	75	93	287	152	
Keratella americana							87
K. cochlearis		163	1,276	2,670	4,570	4,148	5,246
K. crassa		3,184	5,694	5,273	3,773	3,998	14,211
K. earlinae		1,790	8,757	9,020	13,924	14,468	18,383
Lecane sp.			75	110			
Ploesoma truncatum		115	508	304	517	284	1,613
Polyarthra spp.		34	508	4,086	5,250	15,809	6,608
Syncheata spp.		34	421	461	399	1,441	886
Trichocerca spp.			62	102	116	183	348
Total Rotifera		8,914	19,829	28,100	33,453	49,103	57,062
Percent Composition		12.81	6.88	22.53	26.74	27.69	14.44

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Spring 1976 (continued)

	TRM						
Cladocera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Alona quadrangularis						1	
Bosmina longirostris		49,168	242,722	56,922	52,488	75,945	224,728
Ceriodaphnia lacustris							1
Chydorus sp.							87
Daphnia sp.		2,947	2,945	5,848	2,965	4,188	7,094
Daphnia ambigua					1	61	1
D. parvula		151	198	258	397	213	393
D. pulex							2
D. retrocurva		272	136	397	569	274	639
Diaphanosoma leuch.		66	285	343	285	497	1,119
Leptodora kindtii		101	470	176	114	375	320
Pleuroxus hamalatus							1
Sida crystallina							1
Simocephalus serrulatus							1
Total Cladocera		52,705	246,756	63,944	56,819	81,554	234,387
Percent Composition		75.72	85.57	51.26	45.42	45.99	59.29
Copepoda							
Calanoida		249	842	921	399	853	3,485
Cyclopoida		1,996	4,697	4,200	4,323	7,393	17,554
Harpacticoida		16			56		
Nauplii		4,317	12,571	25,166	27,906	36,848	80,516
Canthocamptus robertcokeri						1	1
Cyclops bicuspidatus thomasi		694	2,832	1,927	1,491	1,096	1,119
C. vernalis		50	532	313	283	386	712
Diaptomus pallidus		115	165	74	138	23	99
D. reighardi		117	27	28	114	20	100
D. sanguineus		66	12	3	4	5	8
Ergasilus sp.							1
Encyclops agilis						2	2
Mesocyclops edax		364	93	67	114	51	247
Tropocyclops prasinus		1			1		
Total Copepoda		7,815	21,771	32,699	34,829	46,678	103,844
Percent Composition		11.47	7.55	26.21	27.84	26.32	26.27
Total Zooplankton		69,604	288,356	124,743	125,101	177,335	395,293

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Summer 1976

	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.		219	1,895	3,750	2,994	88	5,500
Brachionus angularis		668	1,719	2,315	1,413	604	1,618
B. budapestinensis		400	643	1,435	626	601	1,529
B. caudatus					106		79
Collotheca sp.		1,363	1,770	3,206	828	951	6,187
Conochiloides sp.		2,473	5,363	8,487	11,065	2,588	11,089
Conochilus unicornis		1,030	1,969	7,790	9,703	87	2,102
C. hippocrepis						172	
Filinia spp.		120	69	544			2,028
Gastropus sp.			188	2,565	3,081	518	1,430
Hexarthra intermedia			137	2,787	1,796		13,333
Kellicottia bostoniensis					116		
Keratella cochlearis		3,221	17,736	55,341	58,344	12,007	29,922
K. crassa		10,621	33,067	86,056	66,567	23,381	38,192
K. earlinae		6,743	13,463	25,249	23,970	10,177	18,319
K. valga		54					
Monostyla sp.					116		
Ploesoma truncatum		361	2,487	4,179	2,507	1,379	6,361
Polyarthra spp.		1,288	8,715	27,991	10,708	2,507	29,026
Rotaria sp.				419			
Syncheata spp.		671	2,077	8,228	2,136	694	3,482
Trichocerca spp.		1,857	5,361	15,621	9,336	2,325	4,031
Total Rotifera		31,089	96,659	284,963	205,412	58,079	174,228
Percent Composition		62.7	69.5	82.8	79.6	57.7	79.2

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Summer 1976 (continued)

	TRM						
Cladocera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Bosmina longirostris		6,455	8,531	17,045	10,428	5,598	1,682
Ceriodaphnia lacustris		2	4	3	22	4	
Chydorus sp.		2					
Daphnia sp.			330	251	861	1,988	851
D. parvula		308	1,891	381	212	947	658
D. retrocurva		871	2,954	3,149	3,855	7,671	5,886
Diaphanosoma leuch.		1,889	10,274	12,558	12,159	10,862	10,342
Leptodora kindtii		34	87	21	20	25	2,305
Moina micrura		1	319	615	10	433	910
Scapholebris kingi				2			
Sida crystallina				1			
Simocephalus sp.				265	531		
S. serrulatus			188	283			
Total Cladocera		9,562	24,578	34,574	28,098	27,528	22,634
Percent Composition		19.3	17.7	10.0	10.9	23.4	10.3
Copepoda							
Calanoida		415	1,428	405	1,094	345	801
Cyclopoida		1,137	3,421	2,523	4,248	3,536	2,107
Harpacticoida			1			1	
Nauplii		5,765	10,107	19,918	16,301	5,255	16,208
Cyclops bicuspidatus thomasi						344	
C. vernalis		1,098	2,237	1,714	3,144	3,102	2,009
Diaptomus pallidus		70	106	94	93	73	37
D. reighardi		117	77	9	28	260	382
D. mississippiensis				1	2		
Ergasilus			1			86	2
Mesocyclops edax		361	530		244	1,981	1,603
Total Copepoda		8,963	17,908	24,664	25,154	14,982	23,143
Percent Composition		18.1	12.9	7.2	9.6	14.9	10.5
Total Zooplankton		49,614	139,146	344,201	258,174	100,589	220,011

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Fall 1976

	TRM						
Rotifera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Asplanchna spp.		18	176	321	116	298	729
Brachionus angularis						111	74
B. budapestinensis		11	85	68	116	166	411
B. caudatus					20		
B. calyciflorus			28	34	39	65	116
Cephalodella sp.		11					
Collotheca sp.		83	168	261	271	412	1,160
Conochilus unicornis		18	58		39		192
C. hippocrepis			362			400	
Filinia spp.						29	
Gastropus sp.							32
Hexarthra mira		11					
Kellicottia bostoniensis				34	58	47	
Keratella cochlearis		1,769	3,823	7,487	6,809	9,021	15,476
K. crassa		87	144	234	252	233	286
K. earlinae		2,172	7,980	10,440	10,795	10,611	19,118
K. valga			28	61	78		74
Ploesoma hudsoni			28	27		57	84
P. truncatum		87	144	1,860	135	272	74
Polyarthra spp.		579	3,309	2,550	1,627	3,858	5,142
Synchaeta spp.		482	259	2,002	1,890	2,216	8,133
Trichacerca spp.		40	824	1,653	1,600	1,586	1,266
Total Rotifera		5,368	17,416	27,032	23,845	29,382	51,101
Percent Composition		68.4	82.9	76.4	74.7	73.0	70.1

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Fall 1976 (continued)

	TRM						
Cladocera	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Alona quadrangularis							1
Bosmina longirostris		2,042	2,457	3,492	2,851	3,127	5,016
Ceriodaphnia sp.		1	2	28	39	61	6
C. lacustris						3	
C. quadrangula		1		5	5	8	37
C. reticulata						1	1
Chydorus sp.					39		
Daphnia sp.		2	17	114	78	119	274
D. parvula			1	4	5	7	89
D. retrocurva		1	6	11	26	47	74
Diaphanosoma leuch.				7	26	18	149
Ilyocryptus sp.					19		
Leptodora kindtii			2	5	5	10	87
Leydigia acanthoceroides		1					
L. quadrangularis					1		
Pleuroxus hamalatus							1
Sida crystallina					1		
Total Cladocera		2,047	2,488	3,666	3,095	3,401	5,735
Percent Composition		26.1	11.8	10.4	9.7	8.5	7.9

Mean Number of Zooplankton Per M^3 in Tennessee River
in the Vicinity of the Watts Bar Nuclear Plant
Fall 1976 (continued)

	TRM						
Copepoda	496.5	506.6	518.0	527.4	528.0	529.9	532.1
Calanoida		29	42	128	96	129	328
Cyclopoida		55	174	616	984	1,231	2,389
Harpacticoida		1				1	
Nauplii		284	782	3,777	3,585	5,593	13,160
Canthocamptus robertcokeri			1	1	2	2	3
Cyclops bicuspidatus thomasi		23	38	94	154	311	77
C. varicans rubellus							2
C. vernalis		33	58	41	78	111	22
Diaptomus pallidus		4	2	9	3	13	9
D. reighardi			3	8	7	9	4
Elaphodella bidens coronata		1					
Ergasilus sp.		1	1	2	1		2
Encyclops agilis			1			1	33
Mesocyclops edax		1	5	17	27	23	5
Nitocra lacustris		1					
Tropocyclops prasinus					43	32	18
Total Copepoda		433	1,107	4,693	4,980	7,456	16,052
Percent Composition		5.5	5.3	13.3	15.6	18.5	22.0
Total Zooplankton		7,848	21,011	35,391	31,920	40,239	72,888

Section F

The benthos (other than mussels) data for 1975, as included in the Environmental Information report, were found to be incomplete for that year. Consequently, the data for this section, Benthos (other than mussels), includes the complete data for 1976 as well as that for the years 1973, 1974, and 1976. Because of incompleteness of the 1975 benthic data, the data included in the Environmental Information report should not be used in the environmental review.

AQUATIC BIOTA (NONFISH) DATA

WATTS BAR NUCLEAR PLANT

Benthos (Other than Mussels)

1973, 1974, 1975, and 1976

Artificial substrates placed in 1973 and 1974 were incubated for a 90-day period. However, due to a low rate of recovery in those two years, beginning in February 1975 and continuing to present, the artificial substrates have been incubated for a period of 30 days. Consequently, the data from artificial substrates recovered following different lengths of incubation (i.e., 1973 and 1974 versus 1975 to present) are not directly comparable.

The 90-day baskets were dominated by Chironomidae, Psychomyiidae (Genus A), and Cheumatopsyche sp. The number of organisms per substrate recovered ranged from a low of 1 at TRM 518.0 in the spring 1973 to 416 at TRM 518.0 in the fall 1973.

The 30-day baskets were dominated by Chironomus sp., Stenonema sp., and Cyrenellus sp. The total number of organisms per substrate recovered ranged from a low, 0, at TRM 527.4 in spring 1975 and TRM 518.0 and 528.0 in fall 1976 to a high of 79 at TRM 518.0 in spring 1976.

Note: The artificial benthic substrates for the winter 1974 survey could not be retrieved and, consequently, no data are available. Artificial substrates were not set out during the winter 1976 because of high water conditions.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
90-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1973

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B[a/]	C[a/]	A[a/]	B[a/]	C[a/]	A	B	C[a/]	A	B[a/]	C[a/]	A	B[a/]	C[a/]	A	B[a/]	C[a/]
Annelida																		
Oligochaeta																		
Plesiopora																		
Branchiura sp.	10																	
Arthropoda																		
Crustacea																		
Amphipoda																		
Gammarus sp.																1		
Decapoda							2											
Insecta																		
Diptera																		
Chironomidae	6						23			67			52			139		
Trichoptera	3						4									3		
Bryozoa	10																	
Mollusca																		
Pelecypoda																		
Heterodonta																		
Corbicula sp.	5							1										
Total	34						29	1		67			52			143		

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates, 90-Day Incubation, in the Tennessee River in the Vicinity of the Watts Bar Nuclear Plant
Summer 1973

	TRM 496.5			506.6			518.0			527.4			528.0			529.9		
	A[a]	B[a]	C[a]	A	B[a]	C	A[a]	B[a]	C[a]	A[a]	B[a]	C[a]	A[a]	B[a]	C[a]	A[a]	B[a]	C[a]
Arthropoda																		
Insecta																		
Diptera																		
Chironomidae				25														
Ephemeroptera																		
Stenonema sp.				5														
Trichoptera				76														
Total				106														

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
90-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Fall 1973

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B[a/]	C[a/]	A	B[a/]	C[a/]	A	B[a/]	C[a/]	A	B	C[a/]	A	B[a/]	C[a/]	A	B[a/]	C[a/]
Annelida																		
Hirudinae											1			3			3	
Arthropoda																		
Insecta																		
Diptera																		
Chironomidae				10			2			4	4		11			23		
Chironomus (Xenochironomus) sp.													2					
Procladius sp.	1																	
Ephemeroptera																		
Stenonema sp.	2						4			4	19		15			5		
Trichoptera																		
Cheumatopsyche sp.	2			57			397			238	77		9			8		
Psychomyiidae (Genus A)	13			5			13			23	197		116			257		
Zygoptera											1							
Mollusca																		
Pelecypoda																		
Eulamellibranchia																		
Proptera alata				1														
Heterodonta																		
Corbicula sp.	8			4							6		1					
Total	26			77			416			269	299		157			296		

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
90-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1974

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B[a]	C[a]	A	B[a]	C[a]	A	B[a]	C[a]	A	B[a]	C[a]	A[a]	B[a]	C[a]	A	B	C[a]
Annelida																		
Hirudinea				1														
Arthropoda																		
Crustacea																		
Decapoda										1						1	1	
Insecta																		
Chironomidae	1						14			27						23	28	
Trichoptera				1														
Psychomyiida																		
(Genus A)	1																	
Bryozoa																3	3	
Mollusca																		
Pelcypoda																		
Heterodonta																		
Corbicula sp.	3			—			—			—						—	—	
Total:	5			1			14			28						27	32	

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates, 90-Day Incubation, in the Tennessee River in the Vicinity of the Watts Bar Nuclear Plant
Summer 1974

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A[a]	B[a]	C[a]	A	B	C	A	B	C	A	B	C	A	B	C	A[a]	B[a]	C[a]
Arthropoda																		
Insecta																		
Diptera																		
Chironomidae				7	8	14	4	2	2	12	17	4	14	18	13			
Xenochironomus sp.										1								
Ephemeroptera																		
Stenonema sp.				2		1		1	1	6	5		13		5			
Trichoptera																		
Cheumatopsyche sp.				12	6	29	5	7	9	4	3	2	6	3	1			
Psychomyiidae (Genus A)				2	5	3	4	3		4	7		5	1	6			
Bryozoa				1	1	1	—	—	1	1	1	—	—	—	1			
Total:				24	20	48	13	13	13	18	33	6	38	22	26			

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates, 90-Day Incubation, in the Tennessee River in the Vicinity of the Watts Bar Nuclear Plant
Fall 1974

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A[a]	B[a]	C[a]	A	B[a]	C[a]	A[a]	B[a]	C[a]	A	B	C	A[a]	B[a]	C[a]
Annelida																		
Oligochaeta																		
Plesiopora																		
Limnodrilus claparedianus		6	10															
Arthropoda																		
Insecta																		
Diptera																		
Chaoborus sp.		2	1															
Chironomus (Parachironomus) sp.		1					1						3	9				
C. (Xenochironomus) sp.		1																
Ephemeroptera																		
Stenonema sp.							2						1		3			
Odonata																		
Argia sp.			1															
Trichoptera																		
Cheumatopsyche sp.	1						3							1				
Psychomyiidae (Genus A)			2												1			
Bryozoa	1		1				1						1					
Platyhelminthes																		
Turbellaria																		
Tricladida																		
Cura formanii	2	5	6				—						—	—	—			
Total:	4	16	20				7						4	10	4			

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
30-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Winter 1975

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A	B	C	A	B[a]	C[a]	A	B[a]	C[a]	A	B[a]	C[a]	A	B	C
Annelida																		
Oligochaeta																		
Plesiopora																		
Limnodrilus claparedinus	4		7															
Arthropoda																		
Insecta																		
Diptera																		
Orthocladius sp.	3		2	4			3						3			2		
Ephemeroptera																		
Hexagenia bilineata	1																	
Trichoptera																		
Cheumatopsyche sp.				9		2	1						13			2		
Psychomyiidae (Genus A)						5				4								
Bryozoa	1		1	1		—	1			—			1			1		
Total:	9		10	14		7	5			4			17			5		

a/ No organisms found.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
30-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Spring 1975

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A	B	C	A	B	C	A[b]	B	C	A[a]	B[a]	C	A	B	C
Arthropoda																		
Crustacea																		
Decapoda																		
Orconectes sp.																		2
Insecta																		
Diptera																		
Chironomus (*Parachironomus*) sp.	5		4				13	5	33		23	27			14			19
Ephemeroptera																		
Stenonema sp.									1									
Trichoptera																		
Cheumatopsyche sp.	1		1				5		2			15						
Cyrnellus marginalis	1								1									
Bryozoa	—		—				—	—	—		—	—			—			1
Total:	7		5				18	5	37		23	42			14			22

a/ No organisms found.
b/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
30-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Summer 1975

	TRM																	
	496.5 a/			506.6			518.0			527.4			528.0			529.9 a/		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Arthropoda																		
Crustacea																		
Decapoda																		
Orconectes sp.								1			1				1			
Insecta																		
Diptera																		
Chironomus sp.					1				1			2			1			
Ephemeroptera																		
Stenonema sp.				1	1	2	1	1	2	1		1			1			
Trichoptera																		
Cheumatopsyche sp.				1														
Cyrnellus sp.				10	5	5	8	7	7	31	27	28	3	10	6			
Total:				12	7	7	9	7	10	32	29	29	3	13	6			

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates, 30-Day Incubation, in the Tennessee River in the Vicinity of the Watts Bar Nuclear Plant
Fall 1975

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A[a]	B[a]	C[a]	A	B	C	A	B	C	A[a]	B[a]	C[a]	A[a]	B[a]	C[a]
Annelida																		
Oligochaeta																		
Plesiopora																		
Branchiura sowerbyi	10	8	5				8	15	5									
Limnodrilus claparedianus	6	3	9				10	13	6									
Hirudinea							1											
Arthropoda																		
Crustacea																		
Amphipoda																		
Gammarus sp.											1							
Insecta																		
Diptera																		
Chironomus sp.	2	3	1				5	6	5	8	5	3						
Ephemeroptera																		
Stenonema sp.	1	1	1				3	2	1									
Trichoptera																		
Cheumatopsyche sp.		1					1	2	4									
Cyrnellus sp.	1						1	2										
Mollusca																		
Gastropoda																		
Mesogastropoda																		
Campeloma sp.	1																	
Platyhelminthes																		
Turbellaria																		
Tricladida																		
Cura foremanii	—	—	—				—	1	—	—	—	—						
Total:	21	16	16				29	41	21	8	6	3						

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates, 30-Day Incubation, in the Tennessee River in the Vicinity of the Watts Bar Nuclear Plant
Spring 1976

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Arthropoda																		
Crustacea																		
Amphipoda																		
Crangonyx sp.										4	2	2	1		2		2	1
Decapoda																		
Cambarus sp.															1			
Orconectes sp.																1		
Insecta																		
Diptera																		
Chironomus sp.										2		1	3	1				
Dictrotendipes sp.																1		
Parachironomus		1		1			6	3	1	6	7	5	6	1	6	6	9	4
Ephemeroptera																		
Stenonema sp.							4	1	3				1	1	1	2	1	1
Trichoptera																		
Cheumatopsyche sp.							2	2	1	1	2	3	1					
Cyrnellus sp.										1	1							
Coelenterata																		
Hydrozoa																		
Athecata																		
Hydra americana	11	15	16	6	2	5	67	51	39	4		1						
Platyhelminthes																		
Turbellaria																		
Tricladida																		
Cura foremanii	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	1	—
Total:	11	16	16	7	2	5	79	57	44	19	10	13	12	3	10	10	12	6

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
30-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Summer 1976

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A	B[a]	C[a]	A	B	C	A	B[a]	C[a]	A	B	C[a]	A[a]	B[a]	C[a]
Annelida																		
Oligochaeta																		
Plesiopora																		
Limnodrilus claparedinus	2																	
Arthropoda																		
Crustacea																		
Amphipoda																		
Hyallela azteca			1															
Decapoda																		
Orconectes sp.									1									
Insecta																		
Diptera																		
Dictrotendipes sp.								2	2	1			2	1				
Parachironomus sp.	1						1	2		3			29	25				
Pentaneura sp.	1																	
Ephemeroptera																		
Hexagenia bilineata	1	1	1															
Caenis simulans							2											
Stenonema sp.							4	4	6				1	1				
Trichoptera																		
Hydropsyche sp.							2						2					
Cyrnellus sp.	17		13	18			38	27	26	15			23	38				
Mollusca																		
Pelecypoda																		
Eulamellibranchia																		
Leptodea sp.																		
Heterodonta																		
Corbicula manilensis	1							1										

Aquatic Macroinvertebrates Colonizing Artificial Substrates, 30-Day Incubation, in the Tennessee River in the Vicinity of the Watts Bar Nuclear Plant
Summer 1976 (continued)

	TRM																	
	496.5			506.6			518.0			527.4			528.0			529.9		
	A	B	C	A	B[a]	C[a]	A	B	C	A	B[a]	C[a]	A	B	C[a]	A[a]	B[a]	C[a]
Gastropoda																		
Bassomatophora																		
Physa sp.			1	1														
Platyhelminthes																		
Turbellaria																		
Tricladida																		
Cura formanii	—	—	—	—			—	1	—	—			—	—				
Total:	23	1	16	19			47	37	35	19			57	65				

a/ Substrate missing.

Aquatic Macroinvertebrates Colonizing Artificial Substrates,
30-Day Incubation, in the Tennessee River in the Vicinity
of the Watts Bar Nuclear Plant
Fall 1976

	TRM 496.5			506.6			518.0			527.4			528.0			529.9		
	A[a]	B[a]	C[a]	A	B	C[b]	A	B	C[b]	A	B	C[a]	A	B	C[a]	A[a]	B[a]	C[a]
Arthropoda																		
Insecta																		
Diptera																		
Chironomus tetans							1											
Cricotopus sp.					5		1											
Ephemeroptera																		
Stenonema sp.				1			1			1	1							
Trichoptera																		
Hydropsyche sp.					8			1										
Cyrnellus sp.				1	1		4	3										
Platyhelminthes																		
Turbellaria																		
Tricladida																		
Cura formanii				1	—		1	—		—	—							
Total:				3	14		8	4		1	1							

a/ Substrate missing.
b/ No organisms found.