

**This PDF file contains the appendixes to
U.S. Geological Survey
Water-Resources Investigations Report 99-4045**

**Relations of Surface-Water Quality to Streamflow in the Raritan River Basin,
New Jersey, Water Years 1976-93**



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<<http://nj.usgs.gov/>>**

RELATIONS OF SURFACE-WATER QUALITY TO STREAMFLOW IN THE RARITAN RIVER BASIN, NEW JERSEY, WATER YEARS 1976-93

By Debra E. Buxton, Kathryn Hunchak-Kariouk, and R. Edward Hickman

U.S. Geological Survey

Water-Resources Investigations Report 99-4045

APPENDIXES

Prepared in cooperation with the

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

West Trenton, New Jersey

1999



Description of Appendixes

Appendixes 1-18 illustrate the relations of surface-water quality to streamflow by constituent for each station with three graphs. The first graph shows the relation of concentration to streamflow. Plots of concentration to streamflow indicate how instream constituent concentrations vary with streamflow, but do not indicate the relative contributions of constant and intermittent sources. Data for stations on streams that drain developed areas show greater scatter, especially for inorganic constituents such as sodium, chloride, and hardness. Relations between concentration and streamflow were developed by using (1) all measurements, (2) only measurements collected during the growing season, and (3) only measurements collected during the nongrowing season. Growing-season measurements are shown with open symbols, and nongrowing-season measurements are shown with shaded symbols. Different symbols are used to show uncensored and censored values. For each group of measurements, the number of observations and values of slope and intercept are listed, and a regression line is shown when the slope of concentration to streamflow is different from zero at the 0.05 significance level. A seasonal dependency is indicated when the relations of concentration to streamflow for the growing- and nongrowing-season measurements are different. The 75th and 25th percentiles of the flow duration also are indicated.

The second graph shows the relation of load to streamflow. The regression slope of load to streamflow indicates the relative contributions of constant and intermittent sources to the instream load. The steeper the slope, the greater the contribution during increased streamflow from storm runoff (intermittent sources). Relations between load and streamflow were developed using all measurements. Different symbols are used to show uncensored and censored values. The number of observations and values of slope and intercept are shown, and a regression line is drawn when the slope is different from zero at the 0.05 significance level. A smoothed relation between load and streamflow is shown when there are 10 or more observations. The 75th and 25th percentiles of the flow duration also are indicated. The relations of load to streamflow for dissolved oxygen at saturation and fecal coliform bacteria are not shown because loads are not calculated for these constituents.

The third graph shows the trends in concentrations during high and low flows. Trends in constituent concentrations during high and low flows can indicate changes over time in the contributions from intermittent and constant sources, respectively. Positive trends during high flows indicate an increase in the storm runoff contributions over time, whereas negative trends indicate a decrease in the storm runoff contributions. Positive trends during low flows indicate an increase in the contributions from point sources and ground water over time, whereas negative trends indicate a decrease in the contributions from point sources and ground water. Measurements during low flows are shown with open symbols, and measurements during high flows are shown with shaded symbols. Different symbols are used to show uncensored and censored values. The numbers of observations and water years during which at least one measurement was made are shown for each group of measurements. Trends are indicated by regression lines and slope values when the seasonal Kendall tau value is significant.

Navigation Tips

1. Start at page 5 of the PDF file. This page lists the appendixes and the constituents they describe.

Appendixes—Relation concentration and load trends in concentra

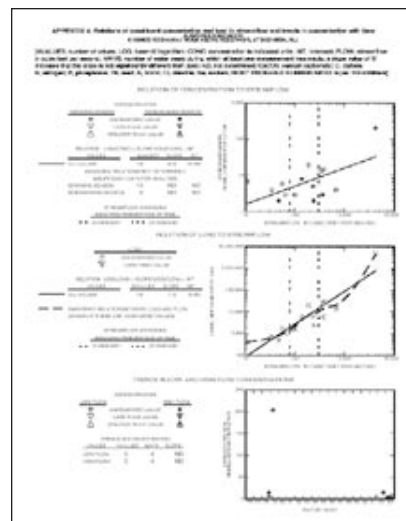
Appendix 1 ----- Alkalinity
Appendix 2 ----- Hardness
Appendix 3 ----- Total organic carbon
Appendix 4 ----- Suspended sediment
Appendix 5 ----- Dissolved solids

2. Move the cursor to the name of the desired constituent and click the mouse button to jump to the selected appendix. A list of stations will appear.

Appendix 1 - Alkalinity

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Midd
01396535	SB Raritan River at Arch
01396588	Spruce Run near Glen G
01396660	Mulhockaway Creek at V
01397000	SB Raritan River at Stanto
01397400	SB Raritan River at Three

3. At the station list, select the desired station, move the cursor to the station, and click the mouse button to jump to the data.



Appendixes—Relations of constituent concentration and load to streamflow and trends in concentration with time

Appendix 1	-----	Alkalinity
Appendix 2	-----	Hardness
Appendix 3	-----	Total organic carbon
Appendix 4	-----	Suspended sediment
Appendix 5	-----	Dissolved solids
Appendix 6	-----	Dissolved sodium
Appendix 7	-----	Dissolved chloride
Appendix 8	-----	Dissolved oxygen
Appendix 9	-----	Fraction of dissolved oxygen at saturation
Appendix 10	-----	Total phosphorus
Appendix 11	-----	Total nitrogen
Appendix 12	-----	Total nitrate plus nitrite
Appendix 13	-----	Total nitrite
Appendix 14	-----	Total ammonia plus organic nitrogen
Appendix 15	-----	Total ammonia
Appendix 16	-----	Total boron
Appendix 17	-----	Total lead
Appendix 18	-----	Fecal coliform bacteria

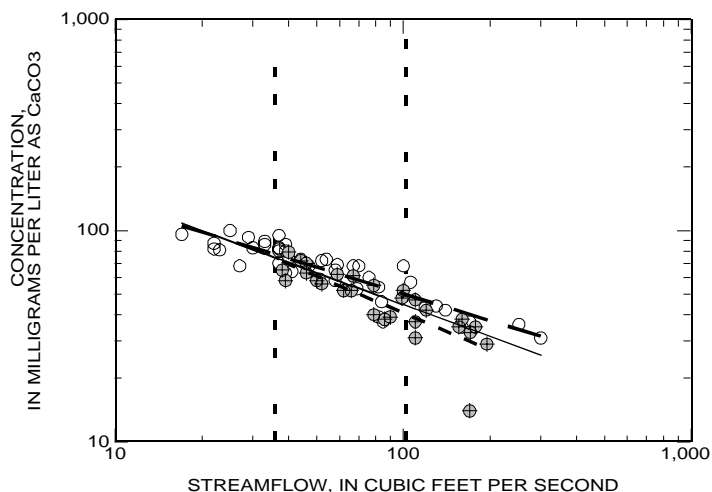
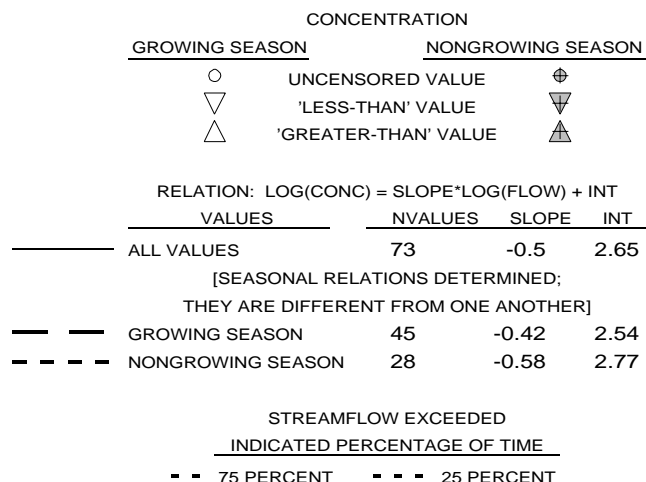
Appendix 1 - Alkalinity

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

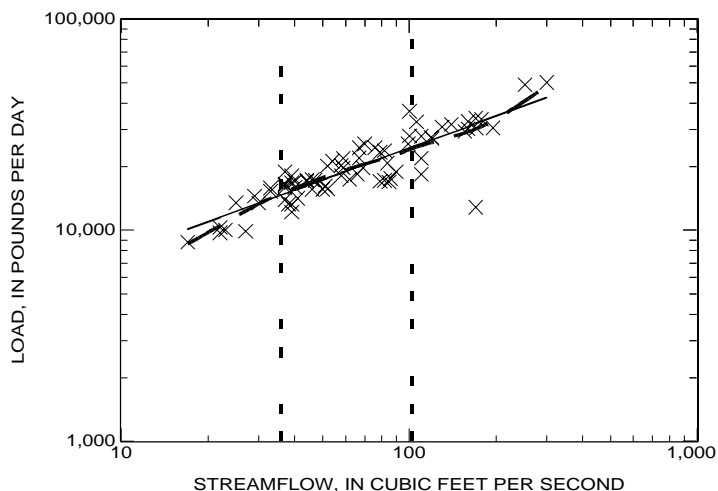
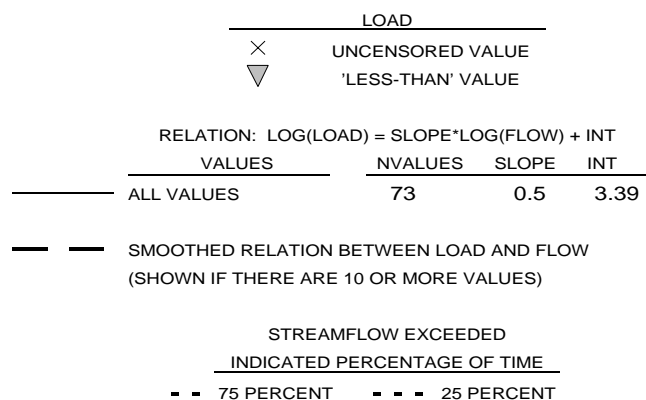
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
 ALKALINITY
 01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

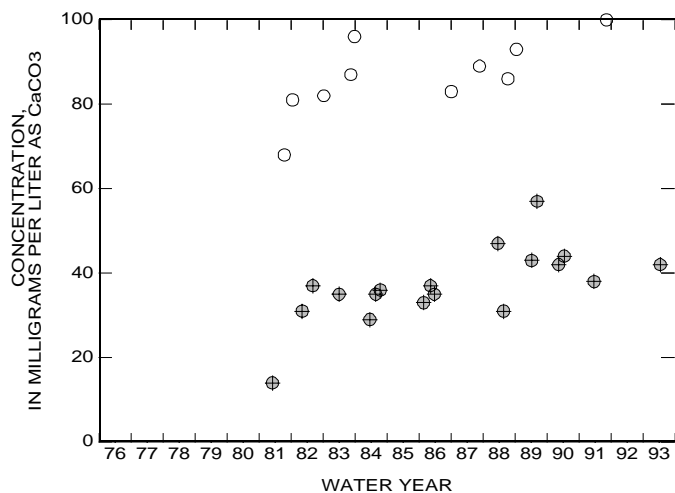
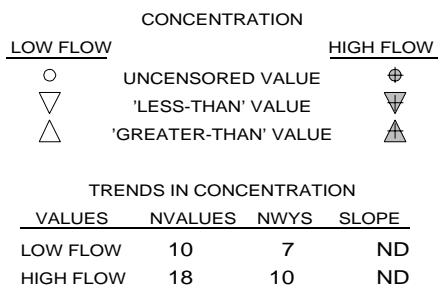
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

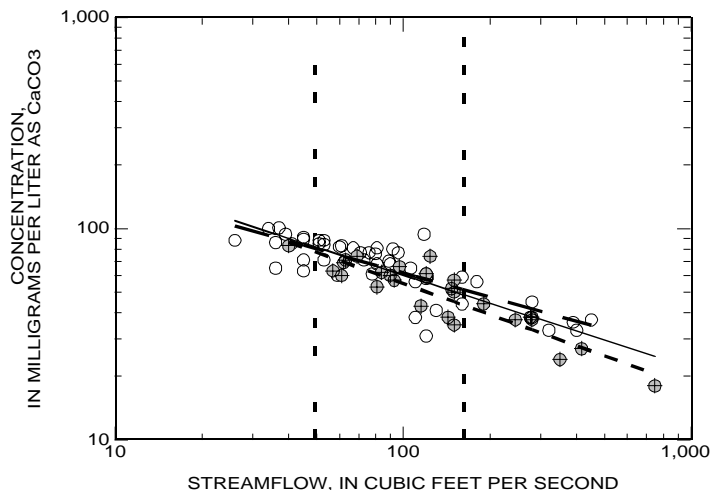
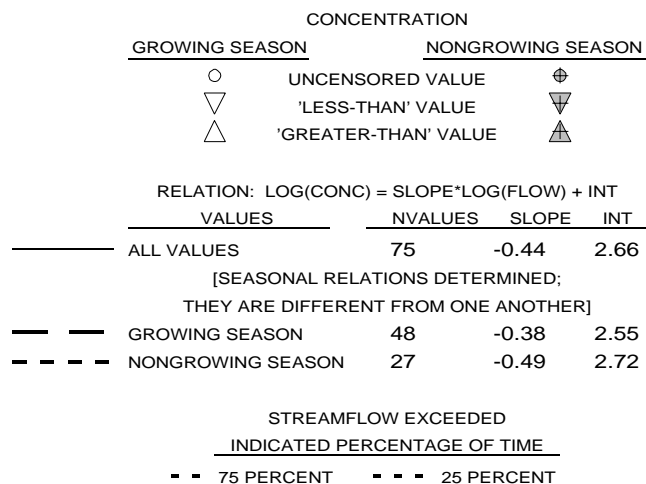


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

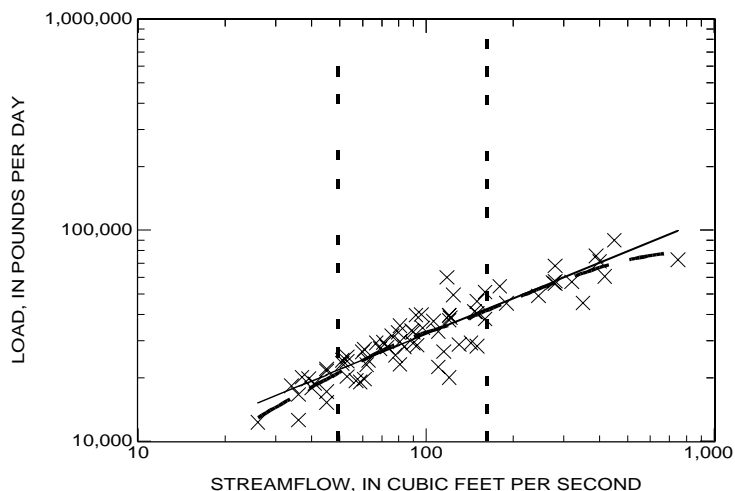
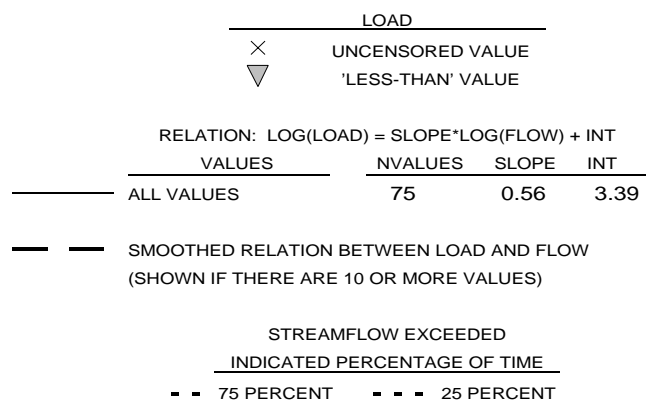
ALKALINITY
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

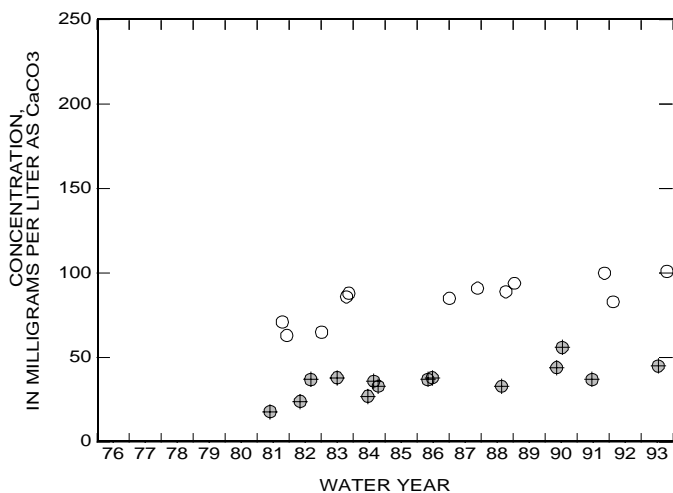
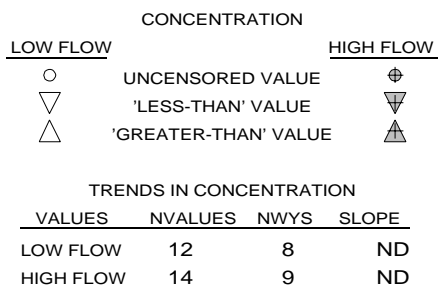
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

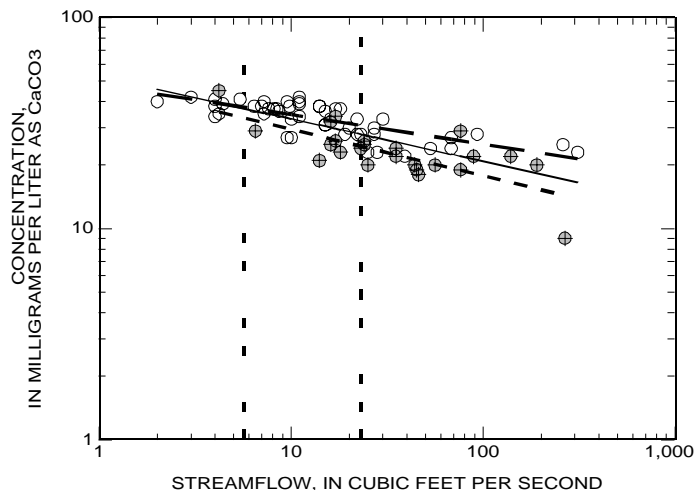
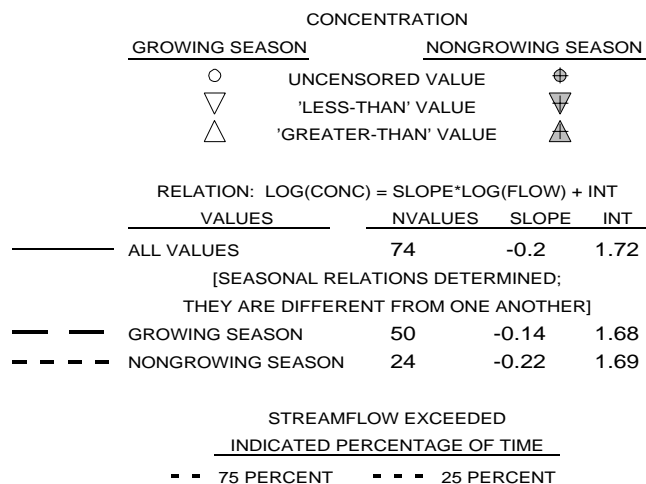


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

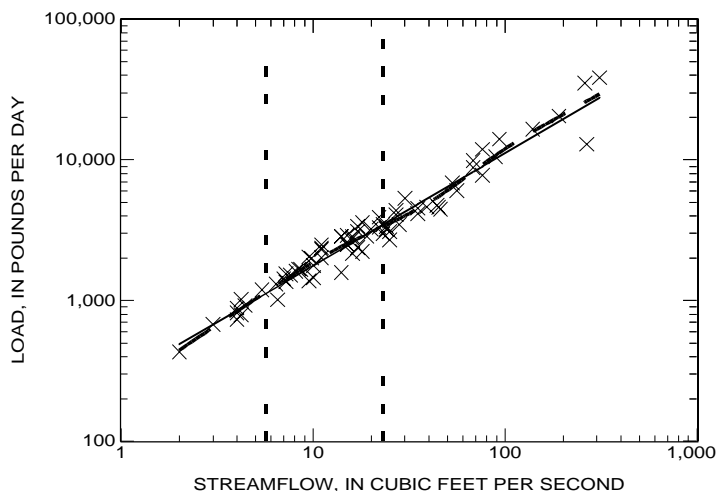
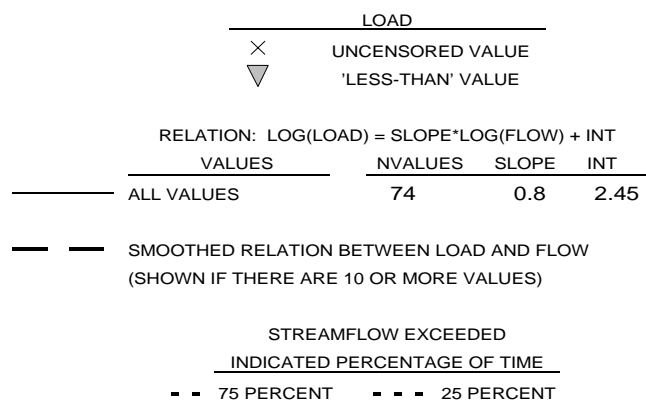
ALKALINITY
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

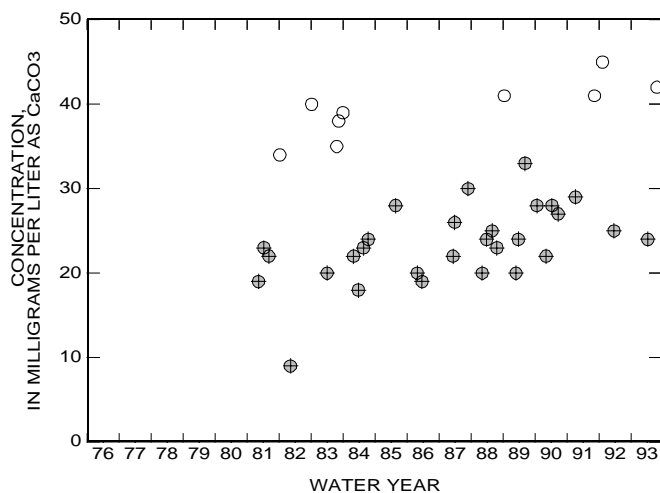
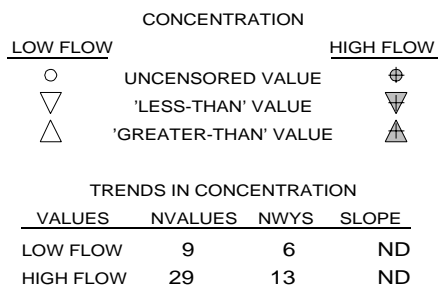
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

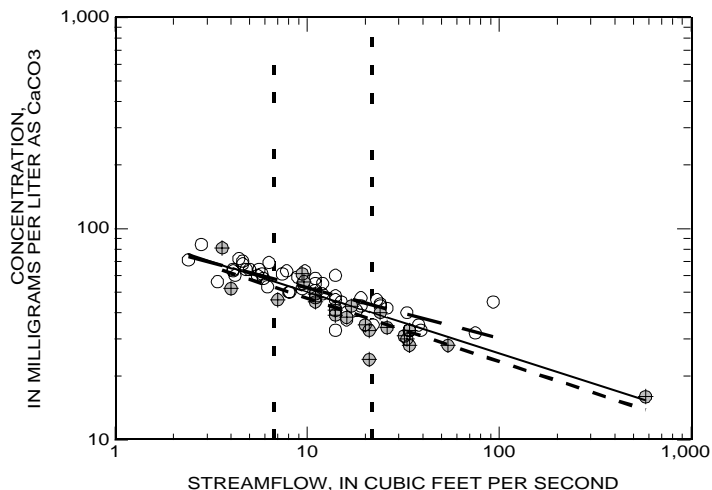
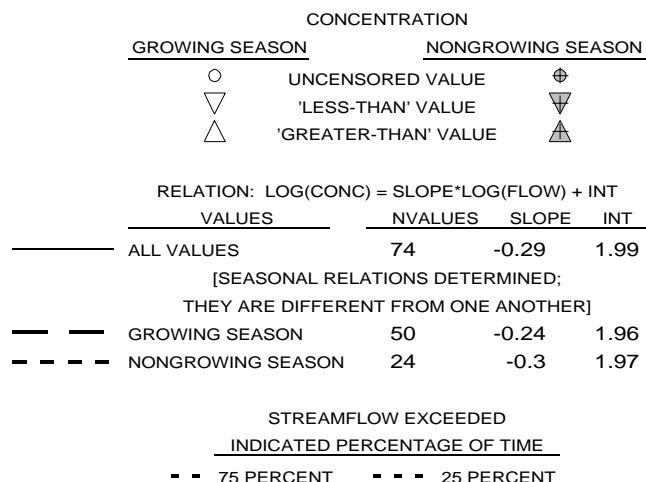


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

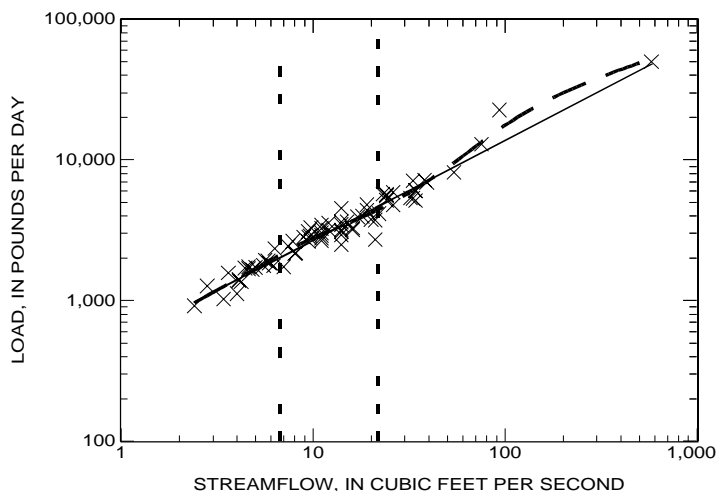
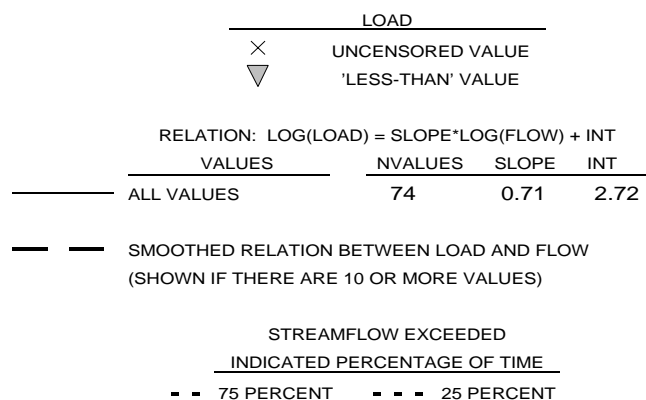
ALKALINITY
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

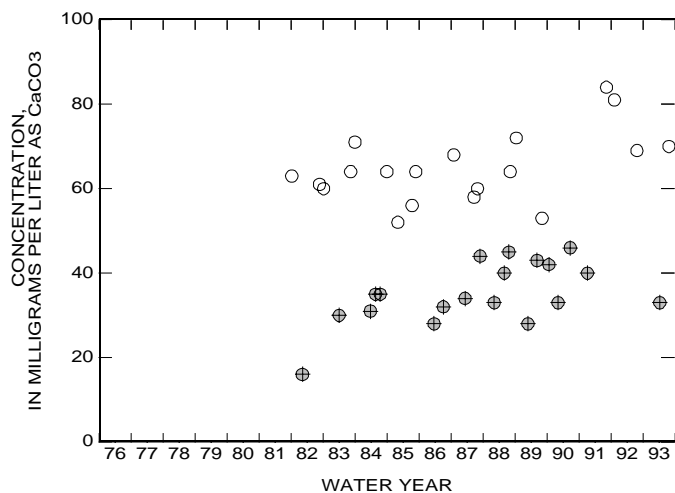
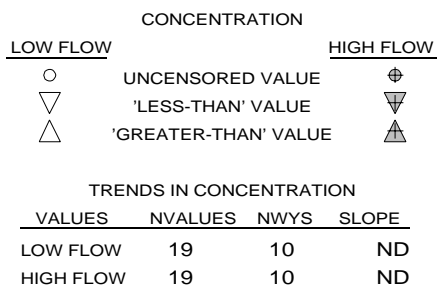
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



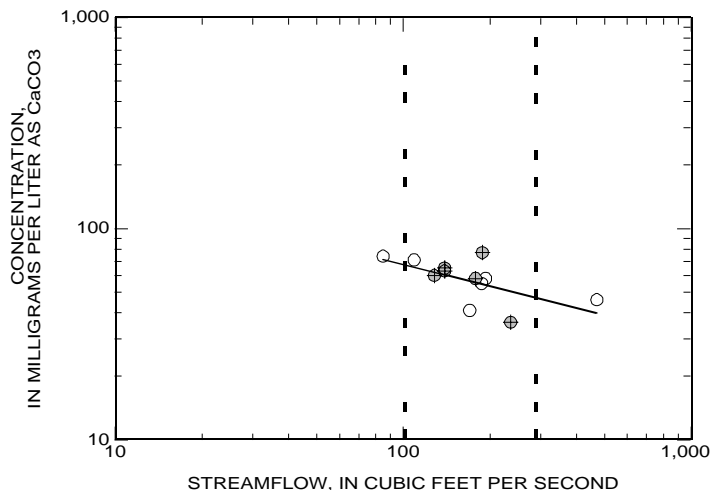
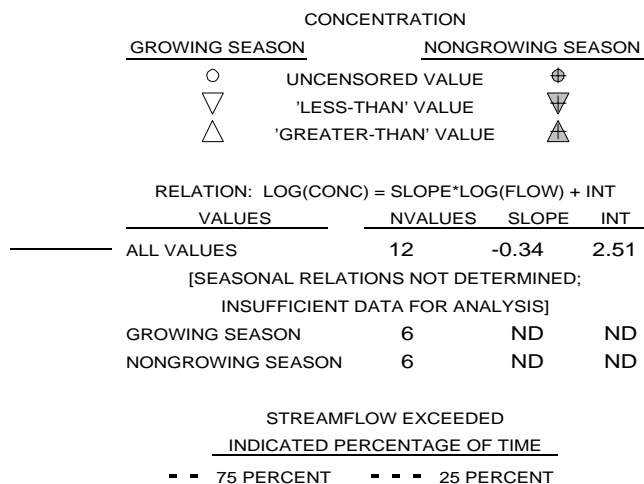
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



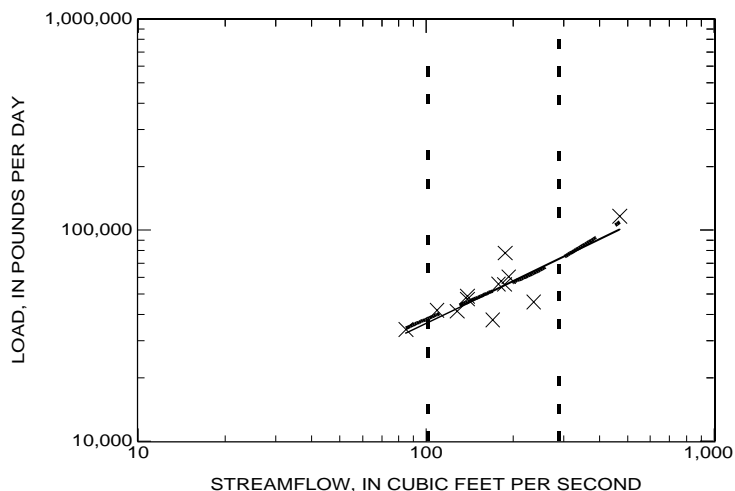
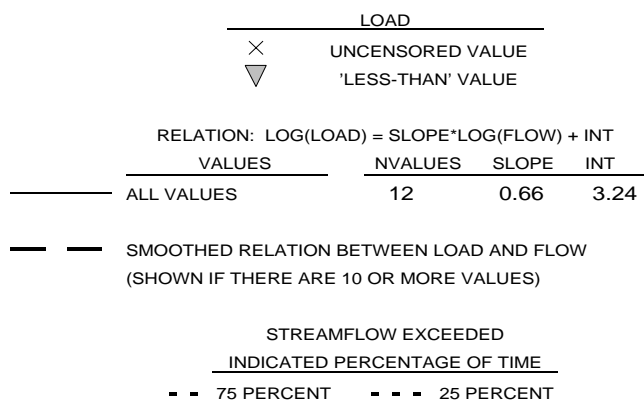
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
ALKALINITY
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

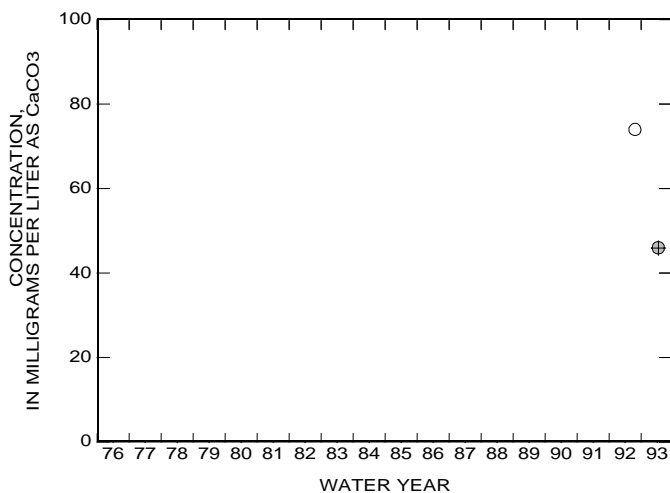
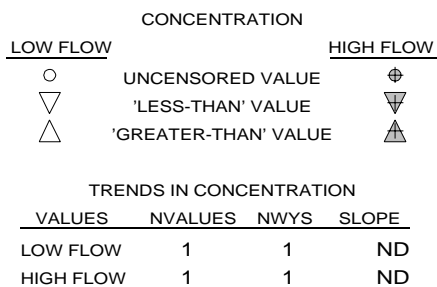
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



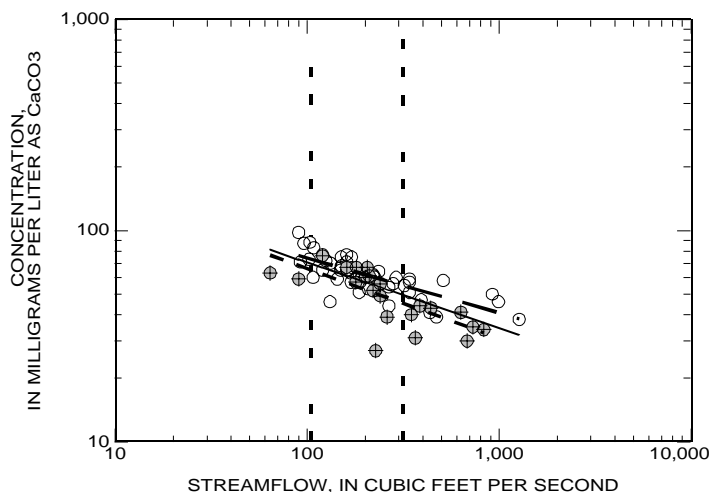
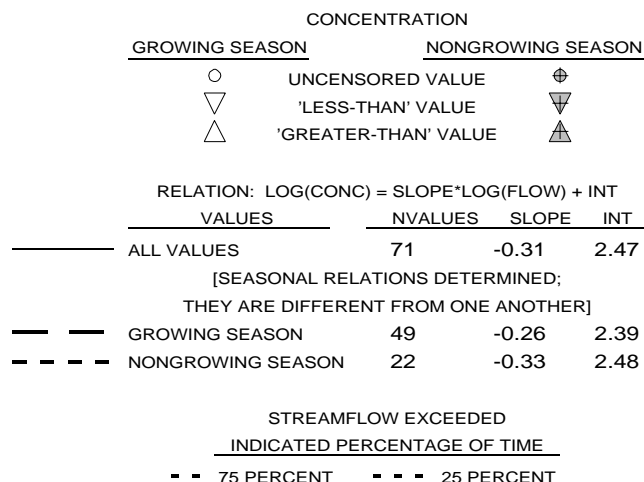
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



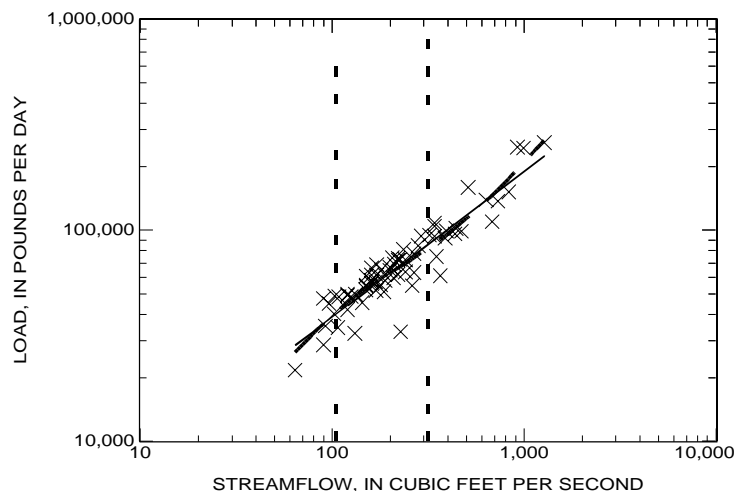
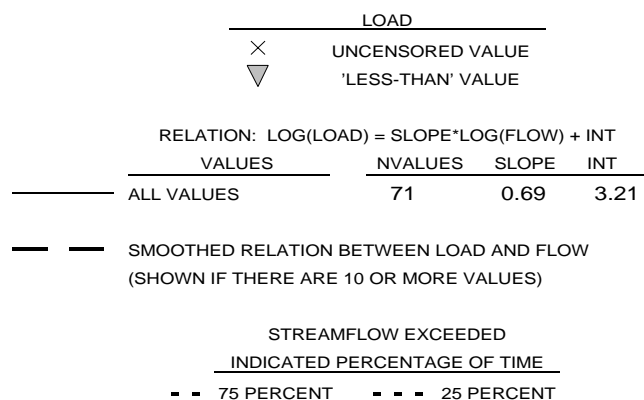
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
ALKALINITY
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

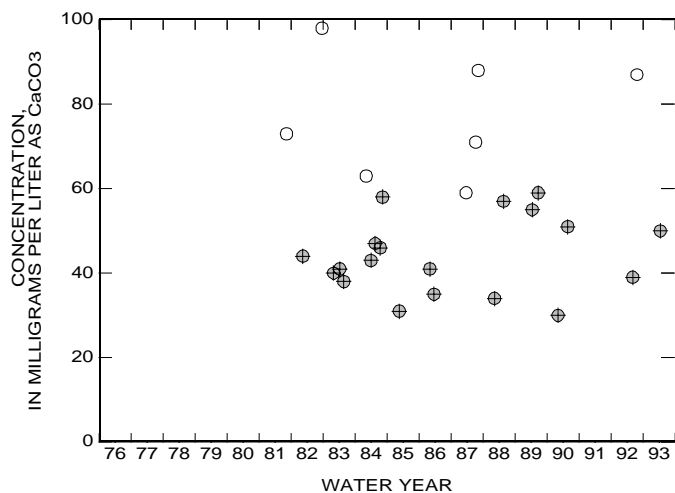
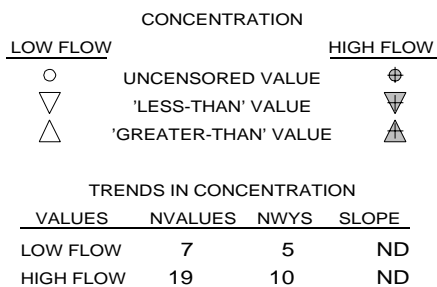
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



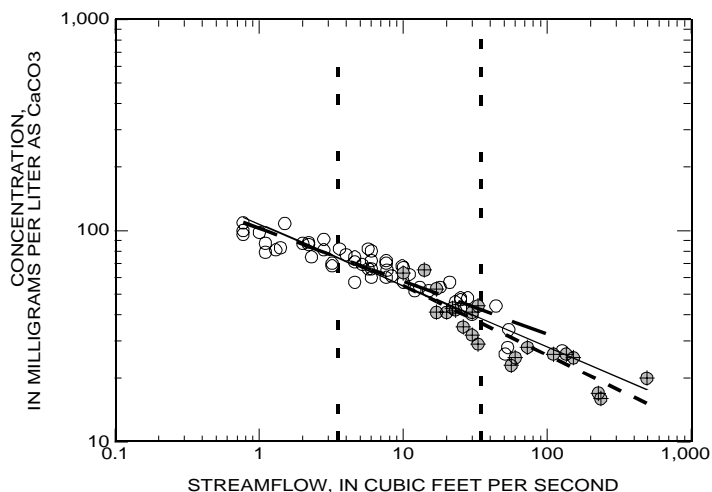
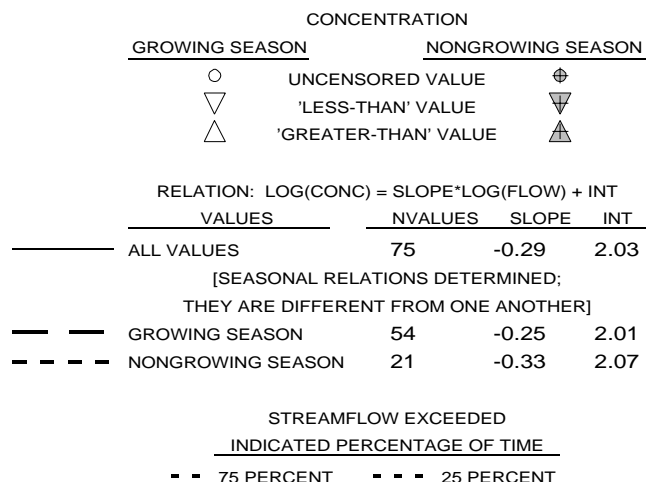
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



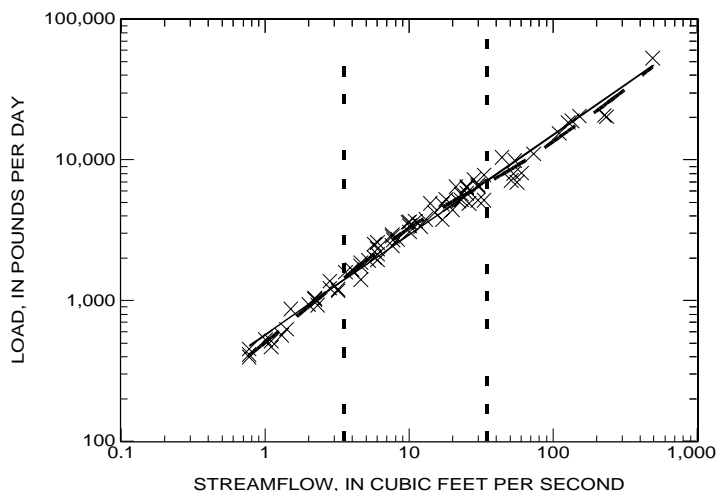
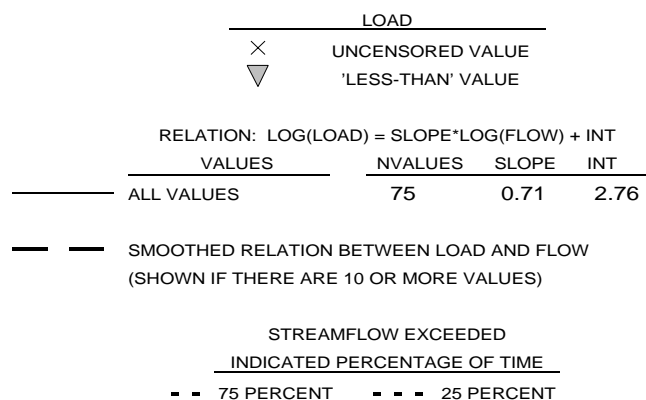
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
ALKALINITY
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

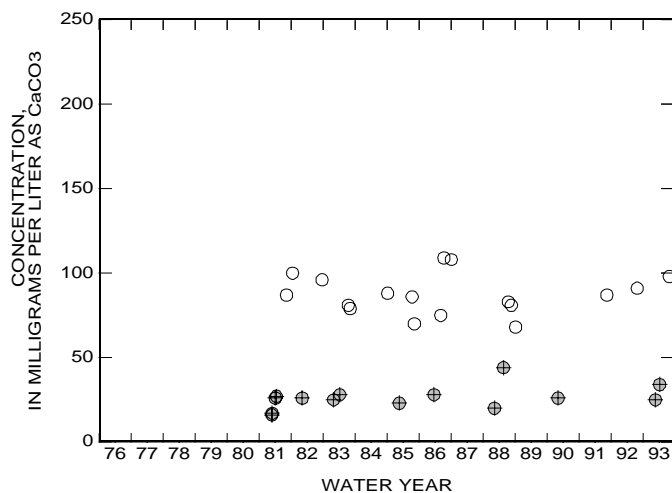
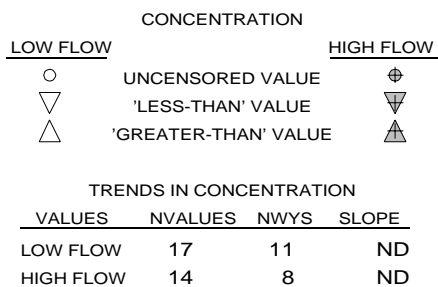
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



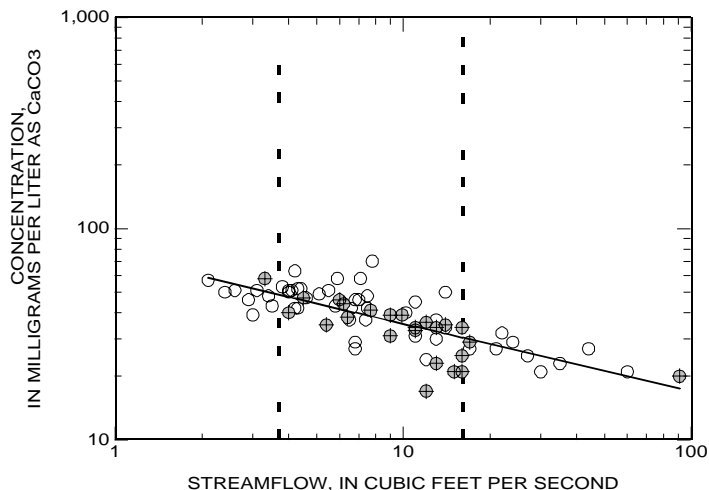
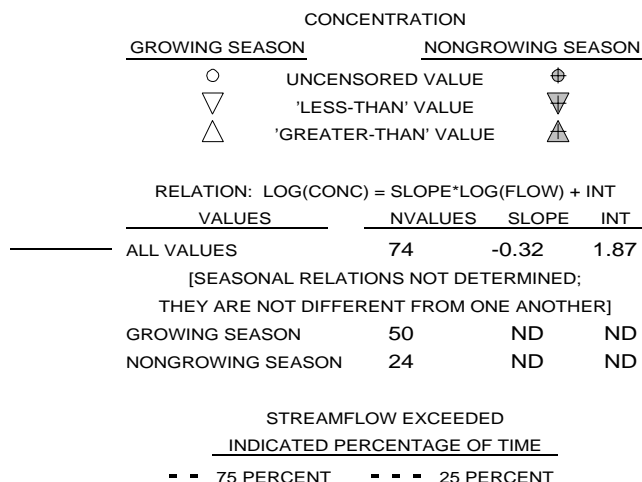
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



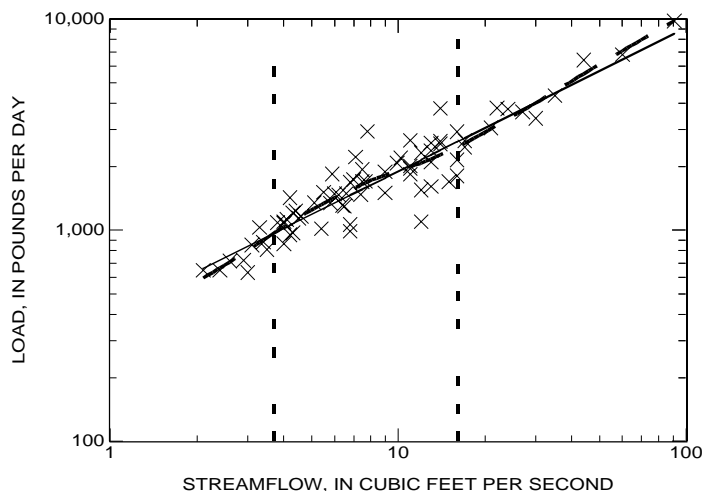
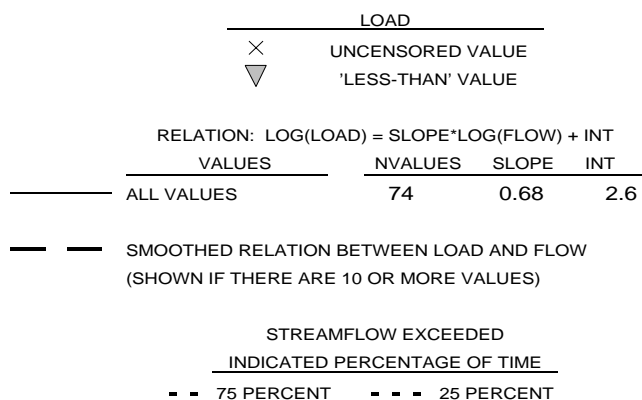
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
 ALKALINITY
 01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

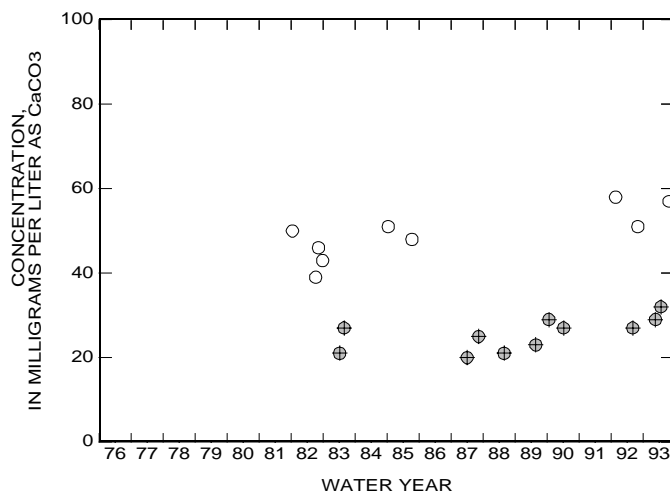
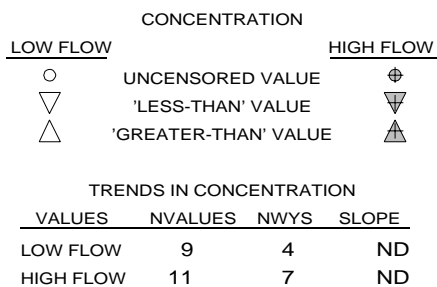
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



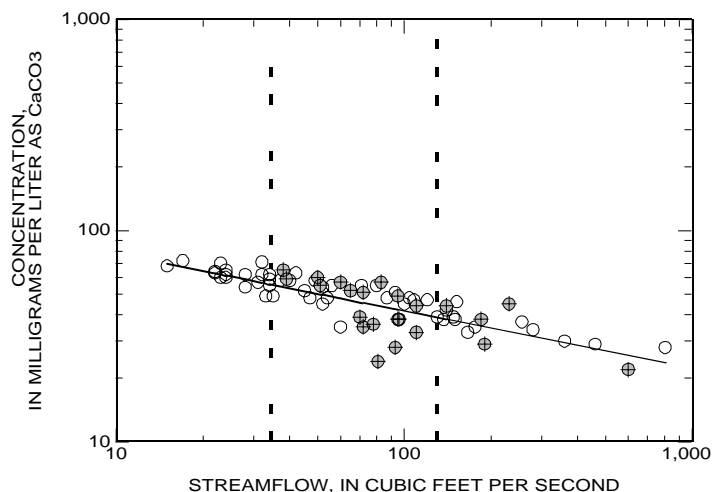
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

ALKALINITY
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

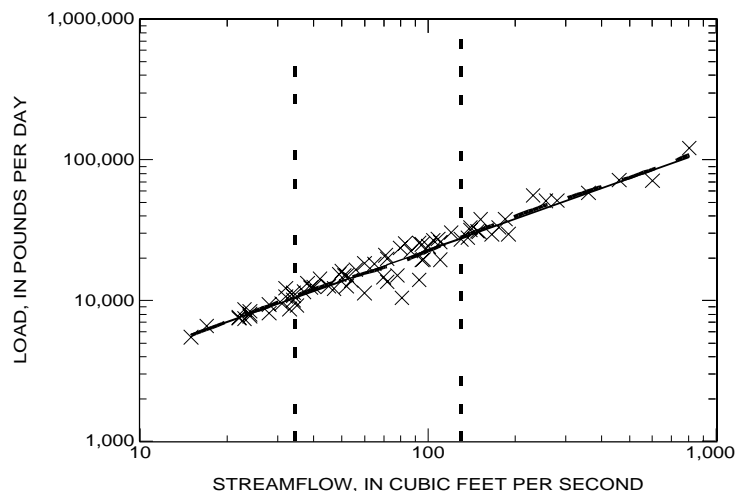
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	74	-0.27	2.16	
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	51	ND	ND	
NONGROWING SEASON	23	ND	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



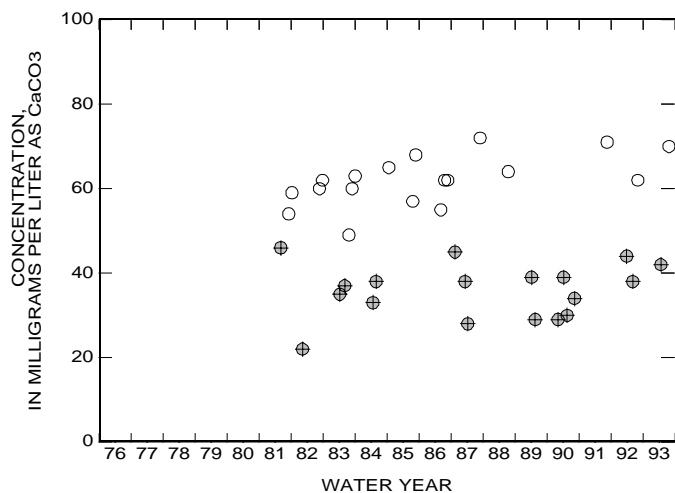
RELATION OF LOAD TO STREAMFLOW

LOAD				
×	UNCENSORED VALUE			
▽	'LESS-THAN' VALUE			
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	74	0.73	2.9	
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)				
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	18	10	ND	
HIGH FLOW	18	9	ND	

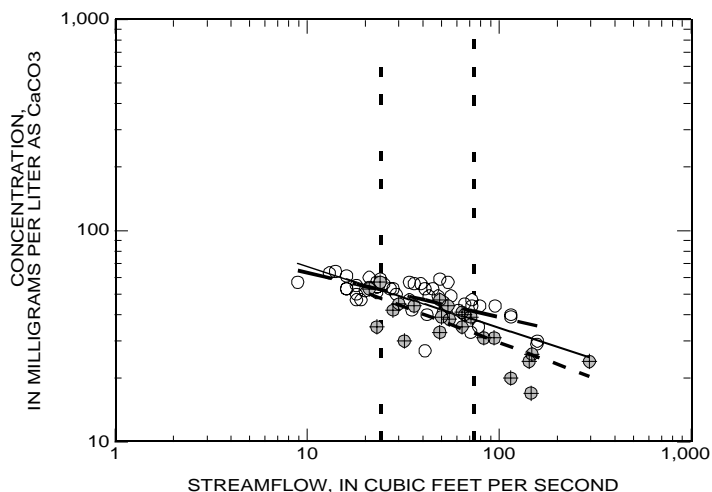
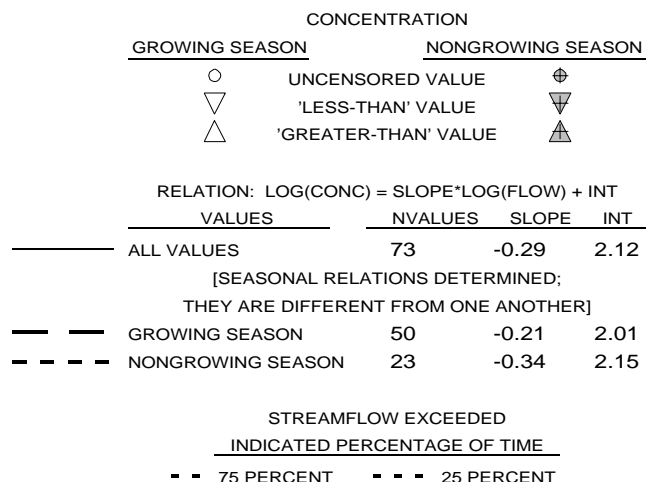


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

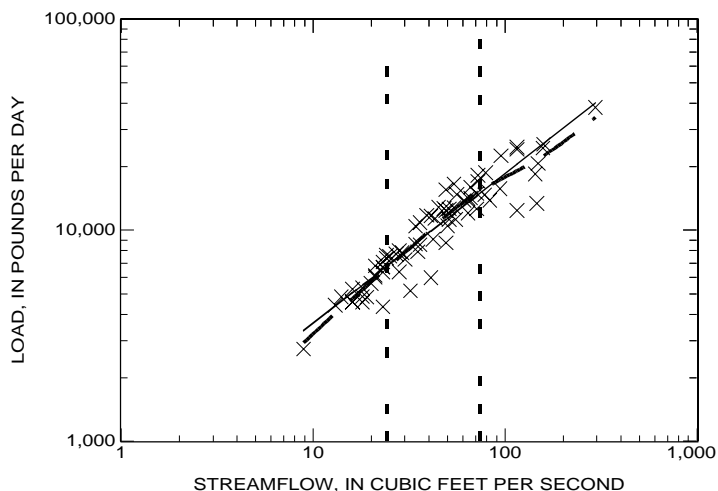
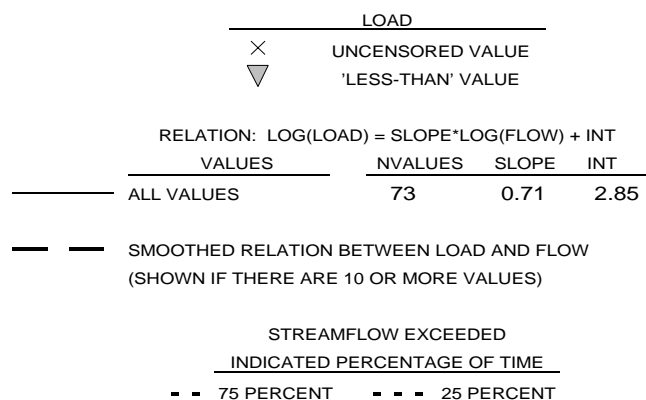
ALKALINITY
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

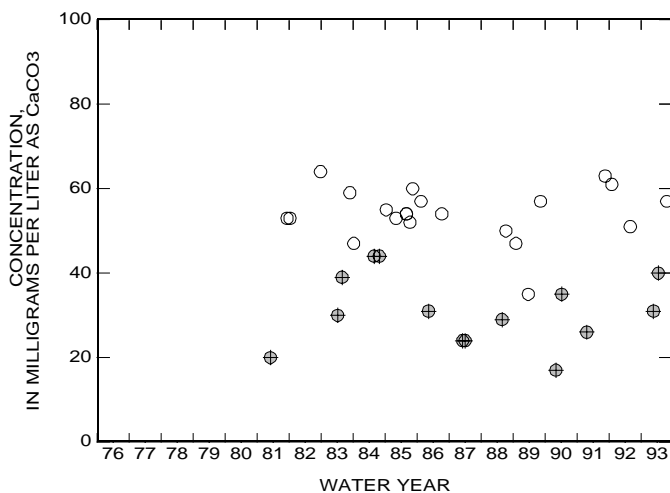
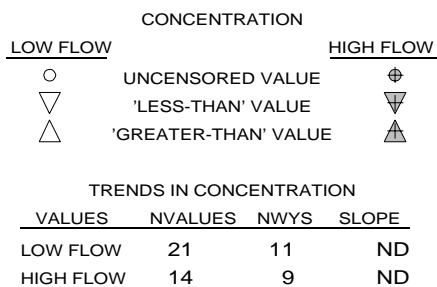
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



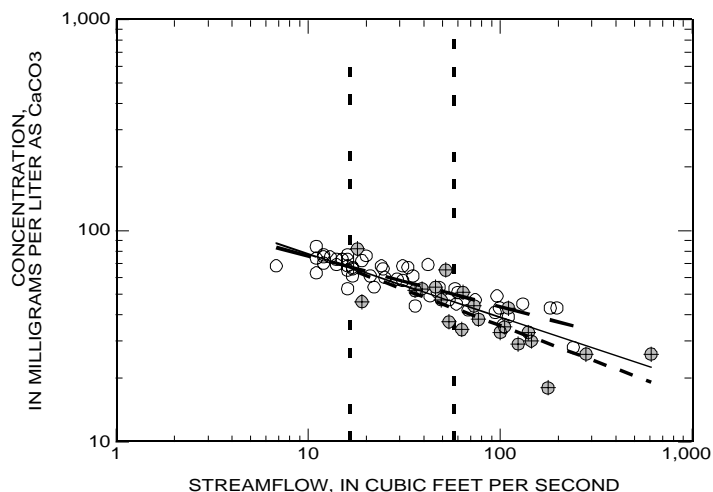
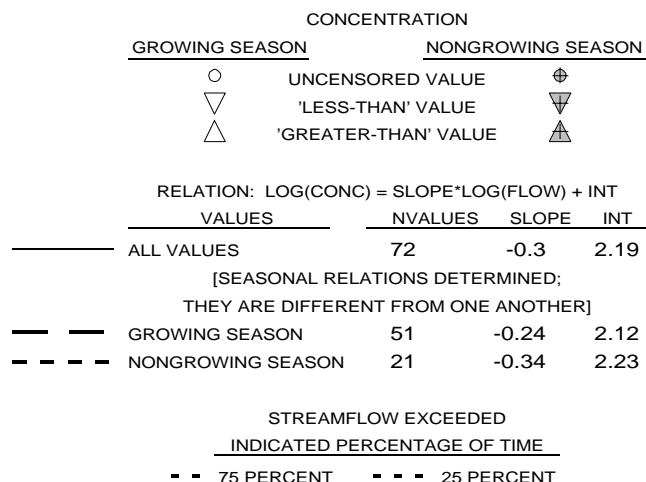
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



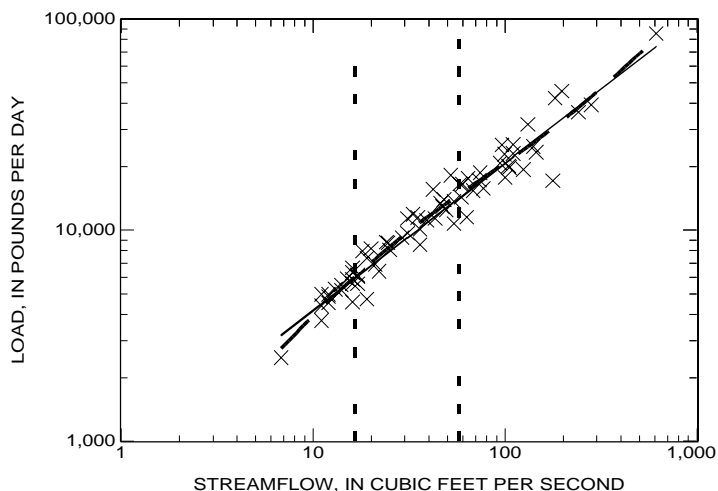
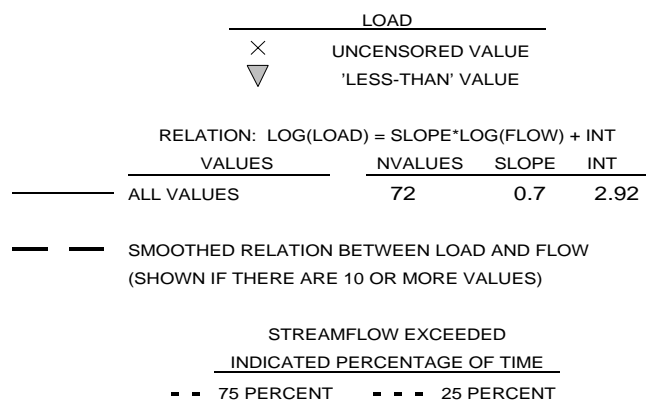
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
ALKALINITY
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

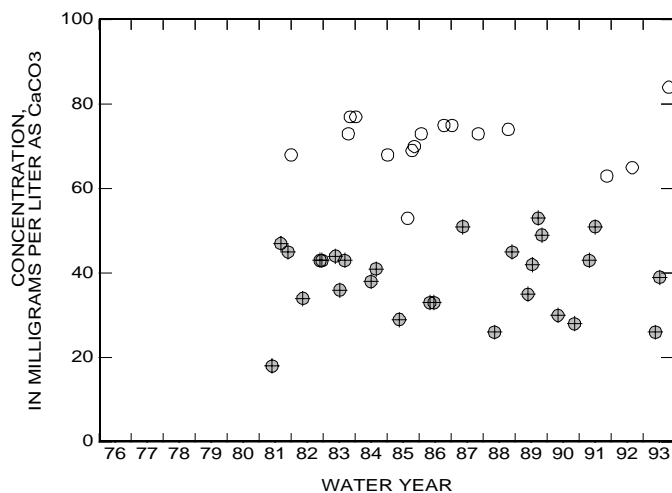
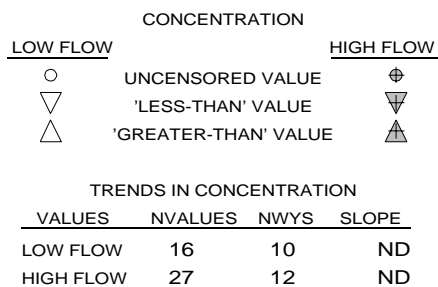
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

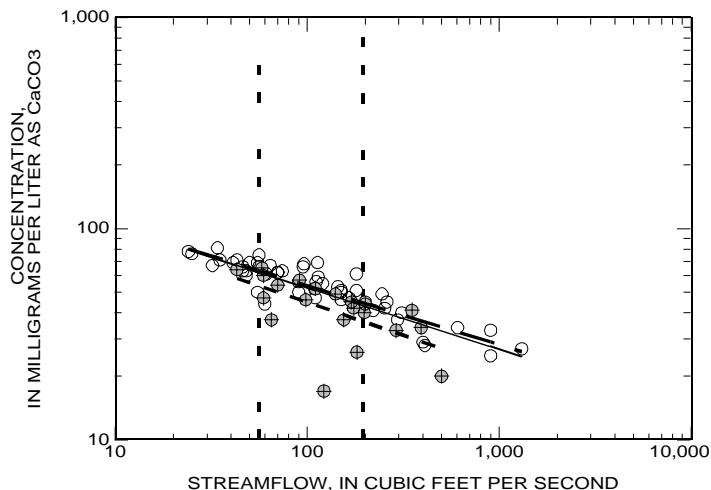
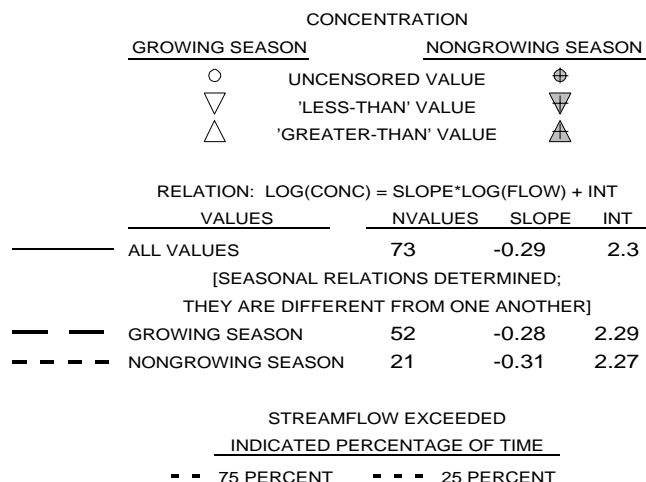


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

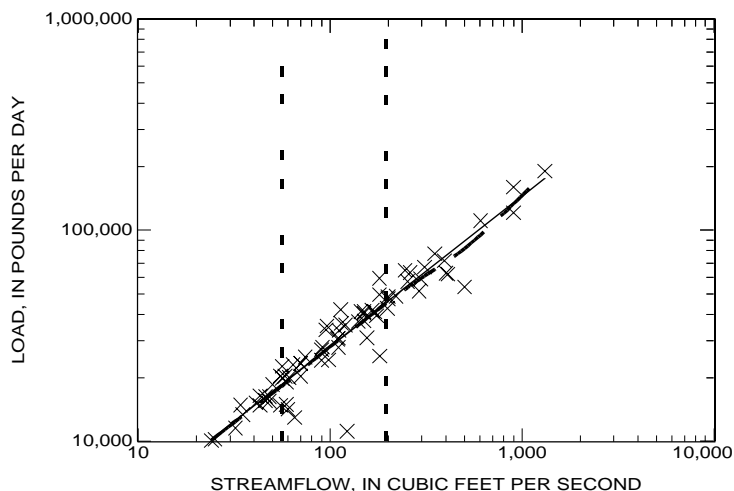
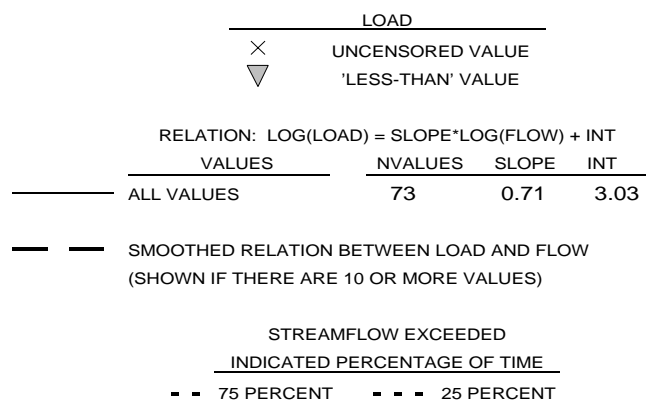
ALKALINITY
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

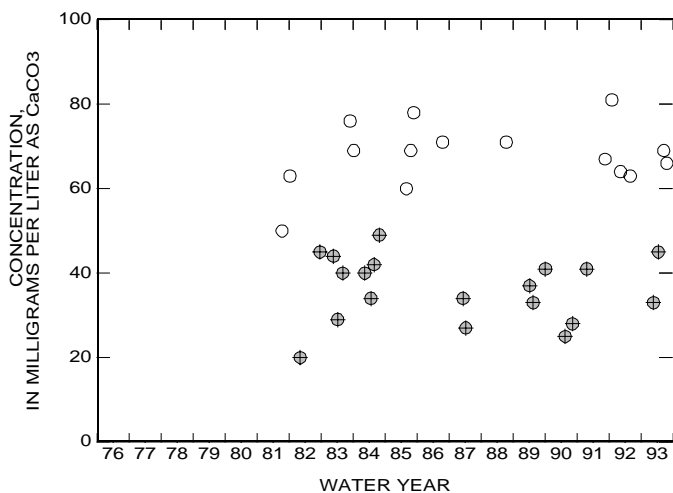
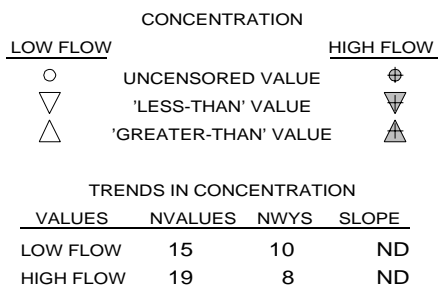
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

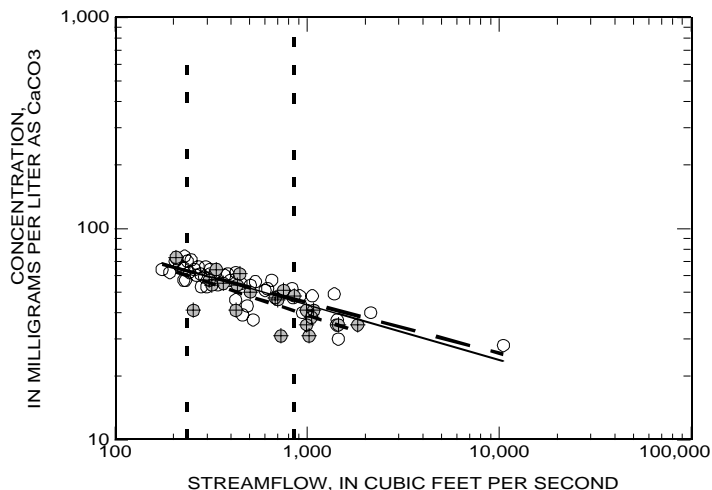
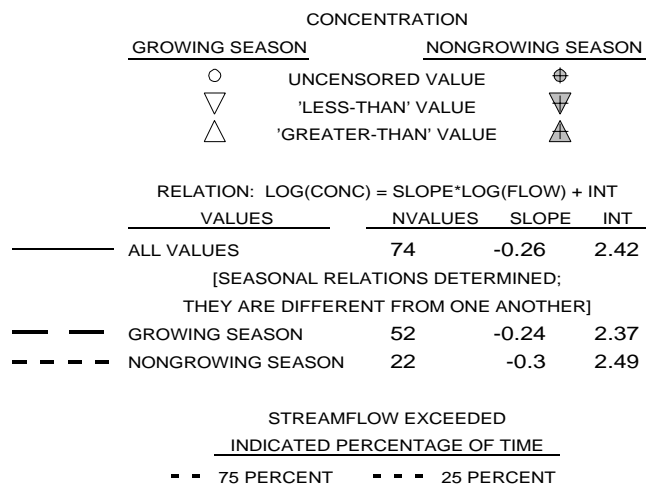


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

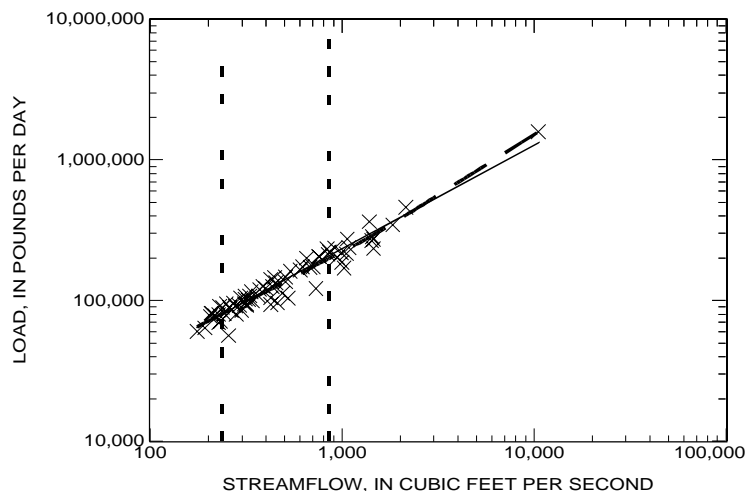
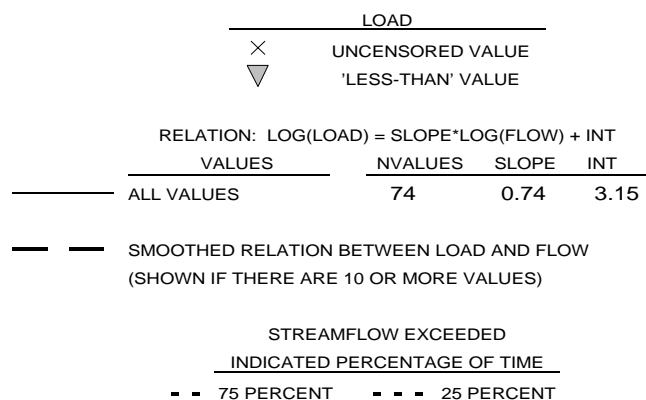
ALKALINITY
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

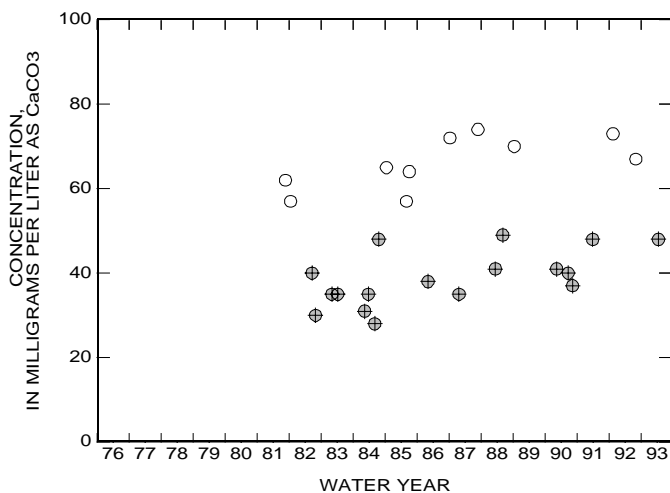
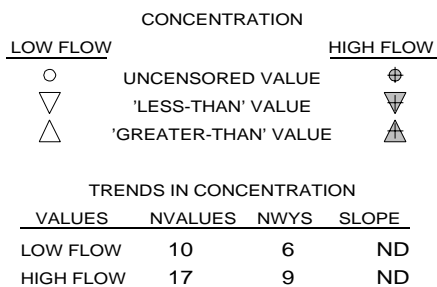
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



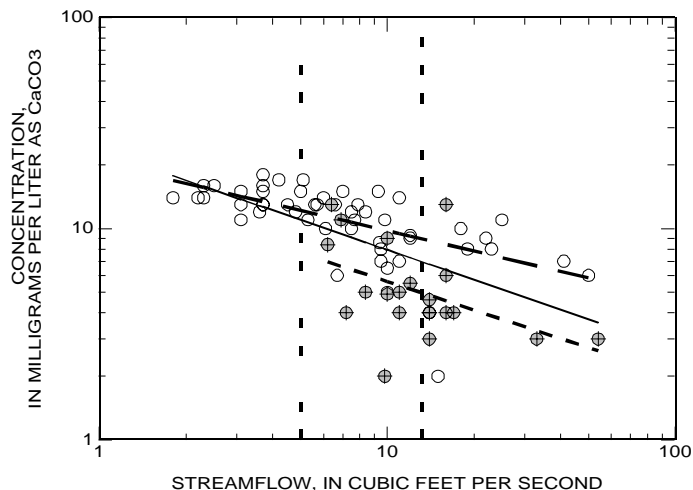
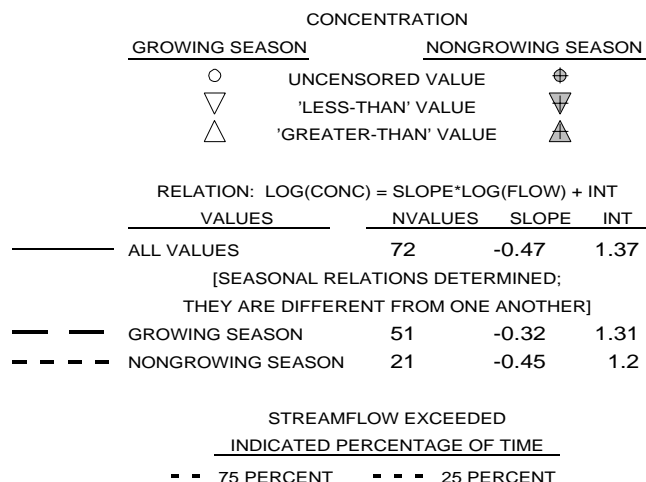
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



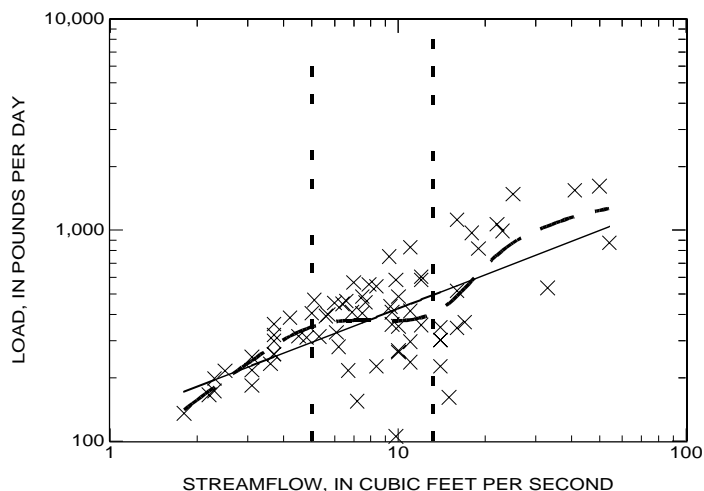
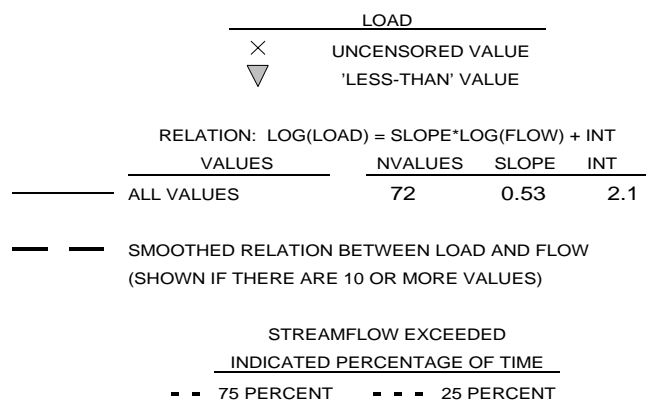
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
ALKALINITY
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

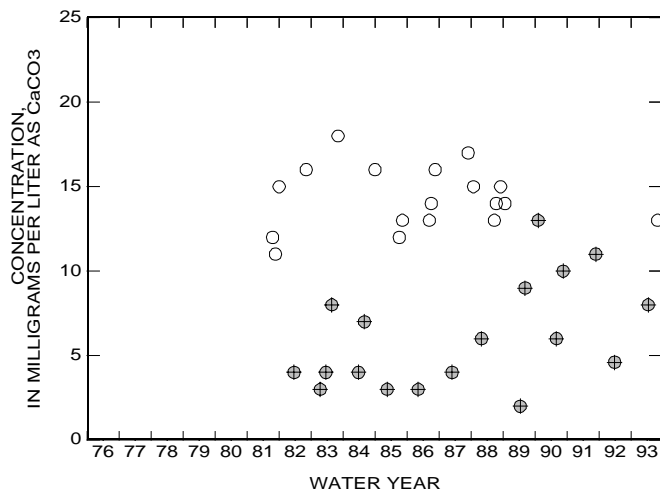
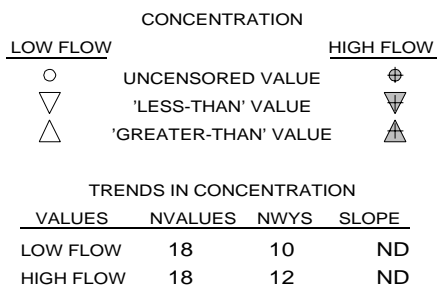
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



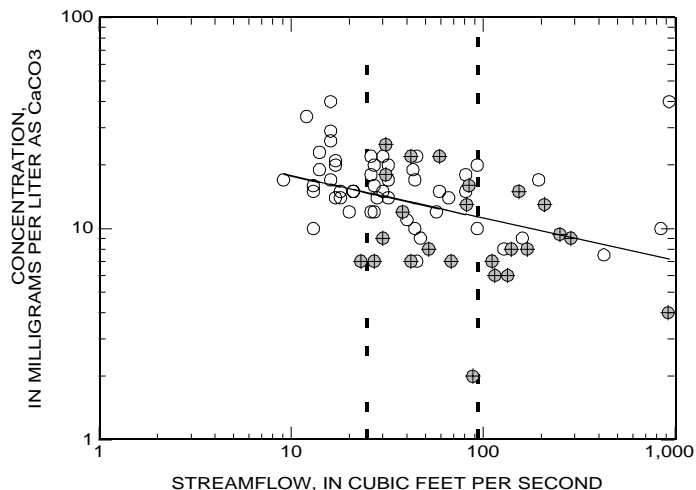
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

ALKALINITY
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

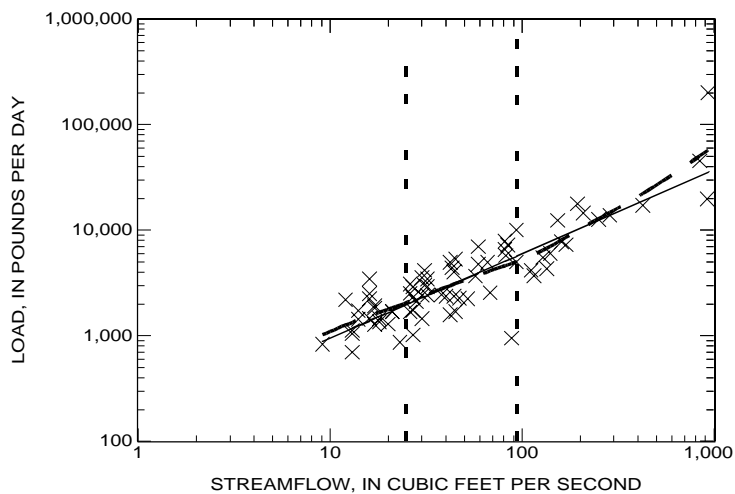
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	75	-0.2	1.45	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	51	0	ND	
NONGROWING SEASON	24	0	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



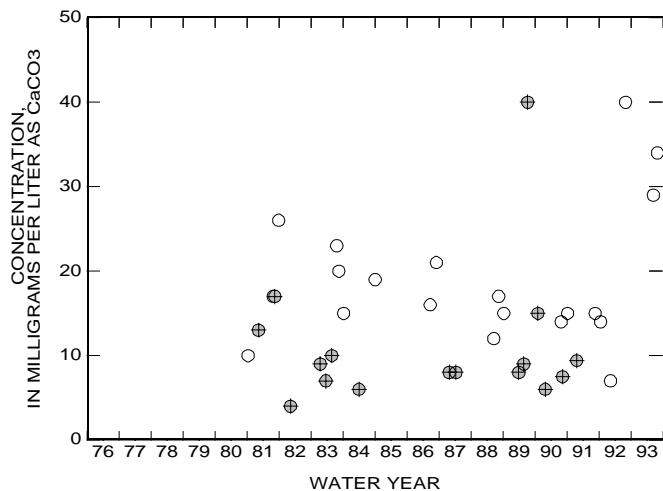
RELATION OF LOAD TO STREAMFLOW

LOAD				
×	UNCENSORED VALUE			
▽	'LESS-THAN' VALUE			
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	75	0.8	2.18	
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)				
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

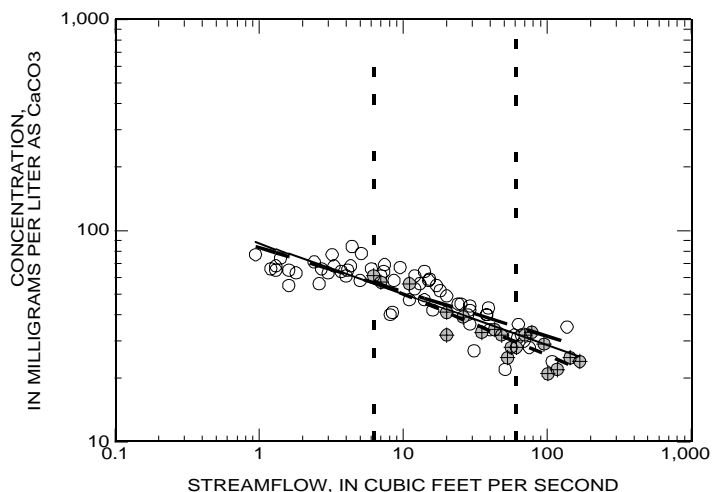
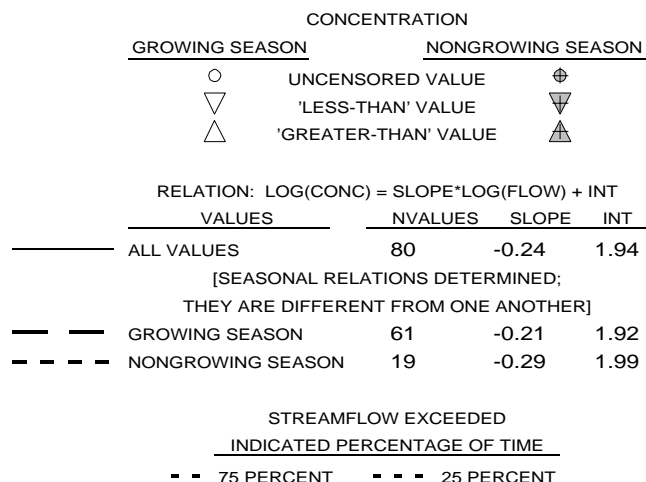
CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	20	10	ND	
HIGH FLOW	16	8	ND	



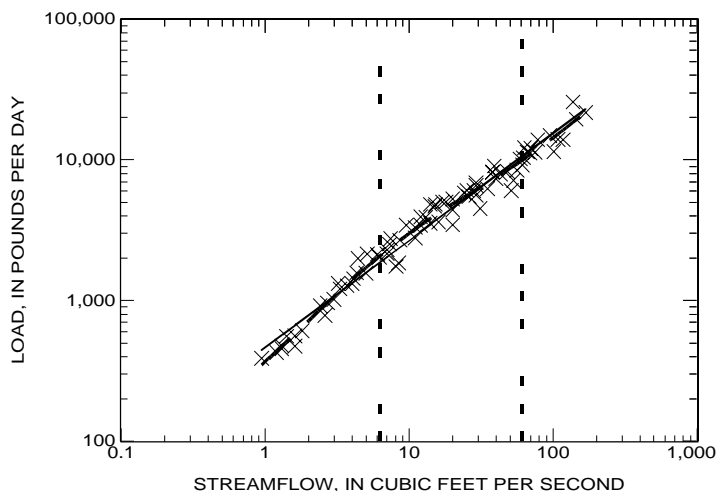
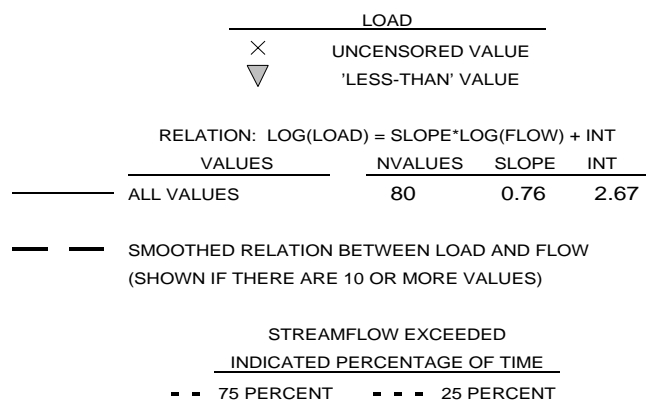
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
 ALKALINITY
 01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

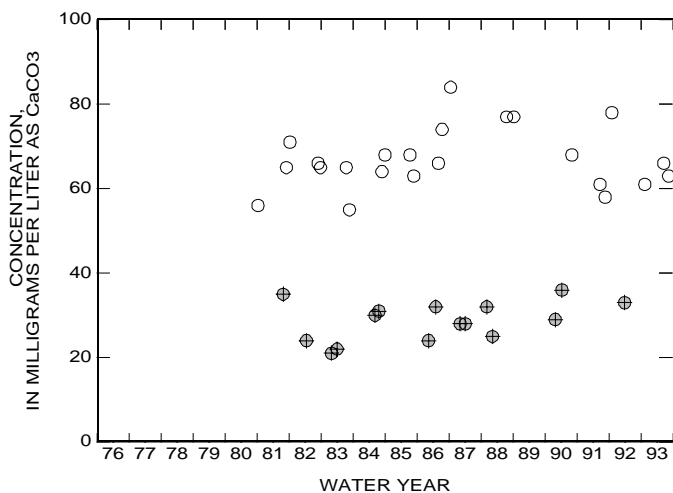
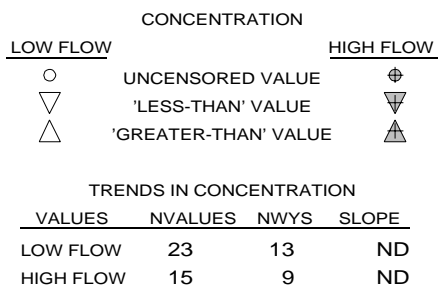
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



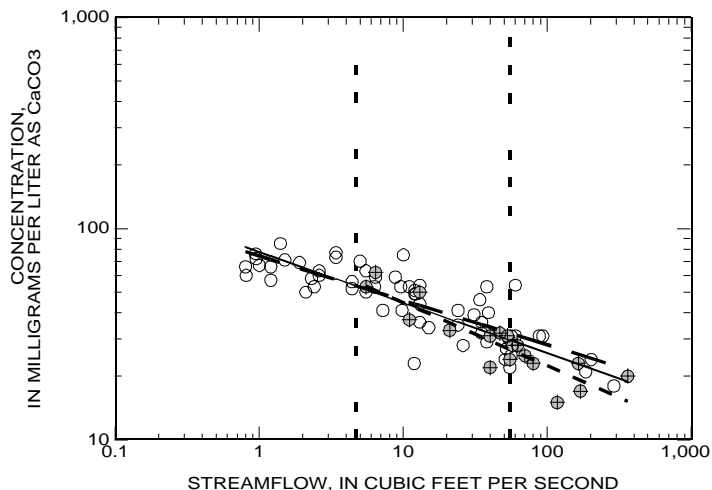
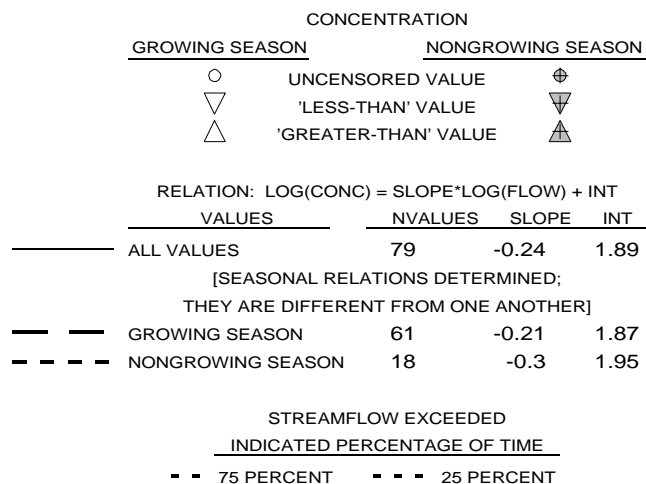
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



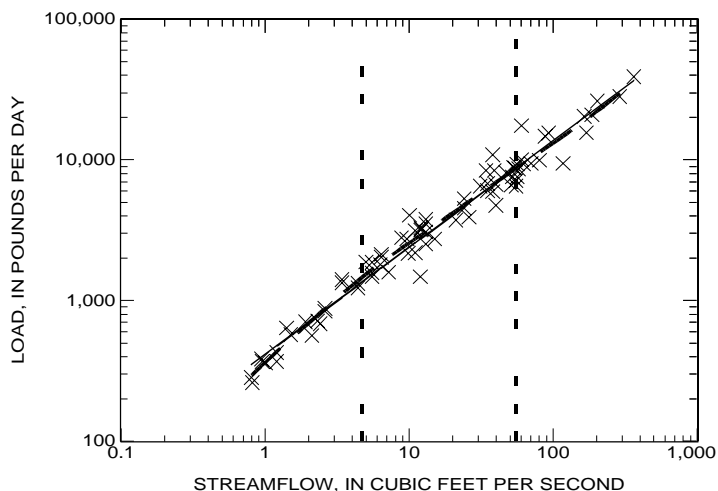
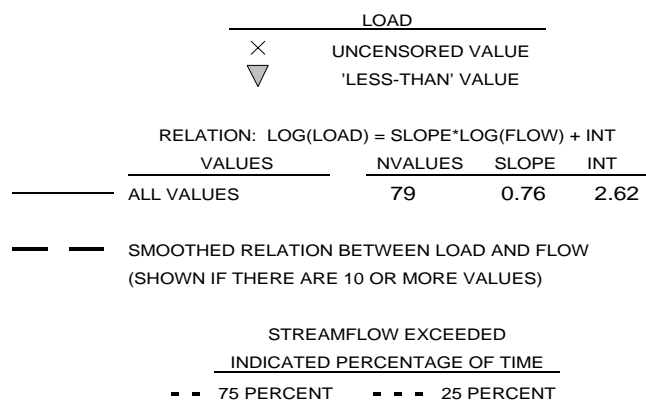
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
ALKALINITY
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

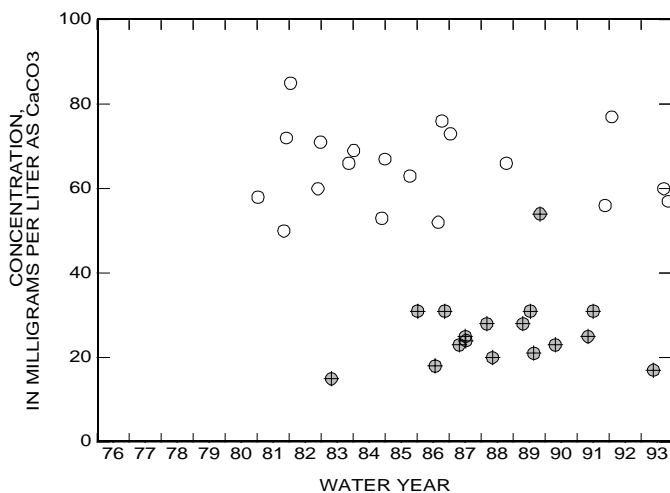
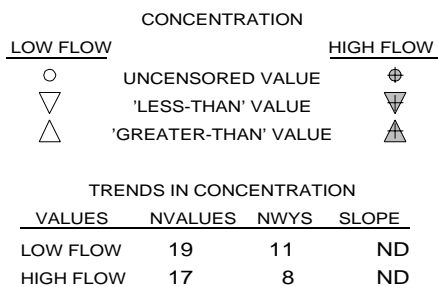
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



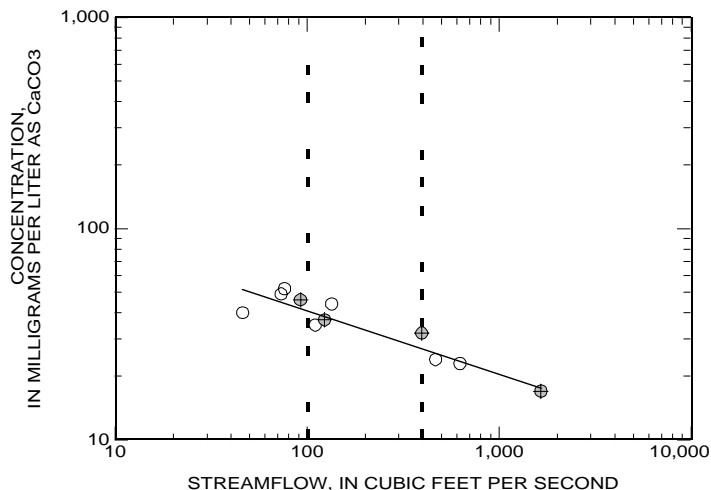
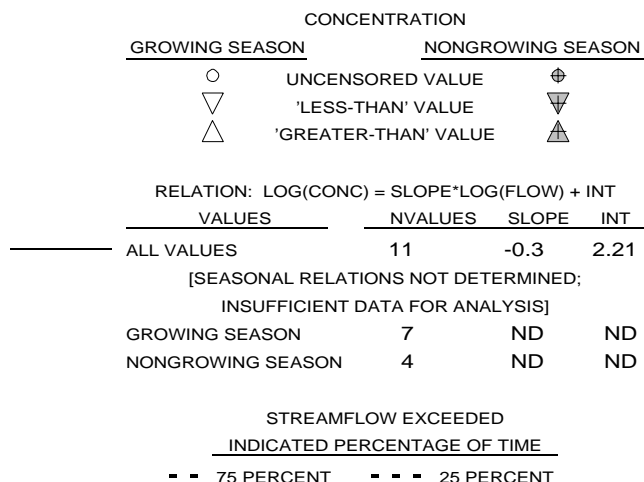
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



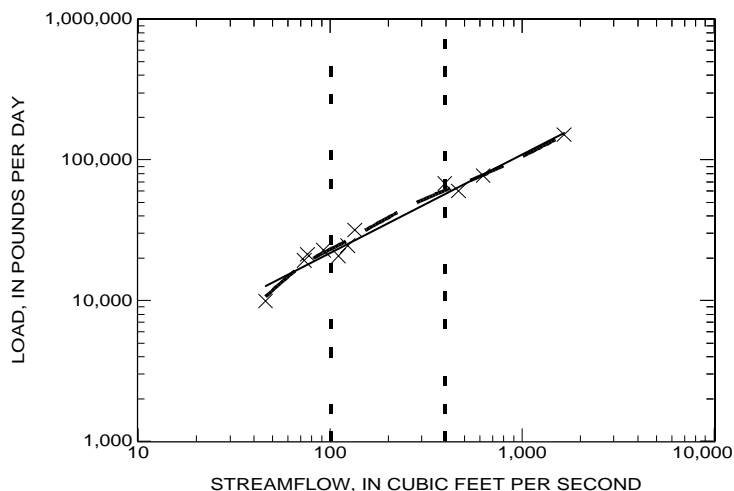
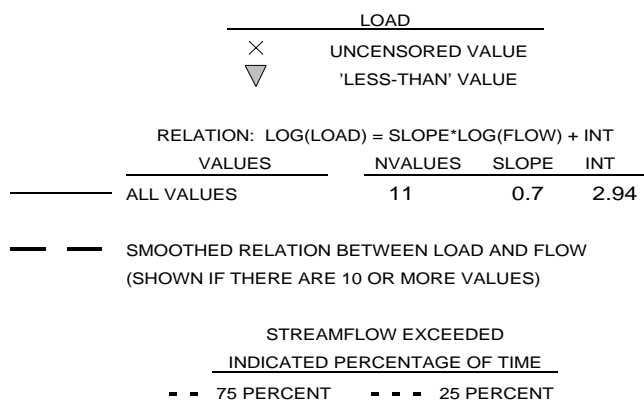
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time
 ALKALINITY
 01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

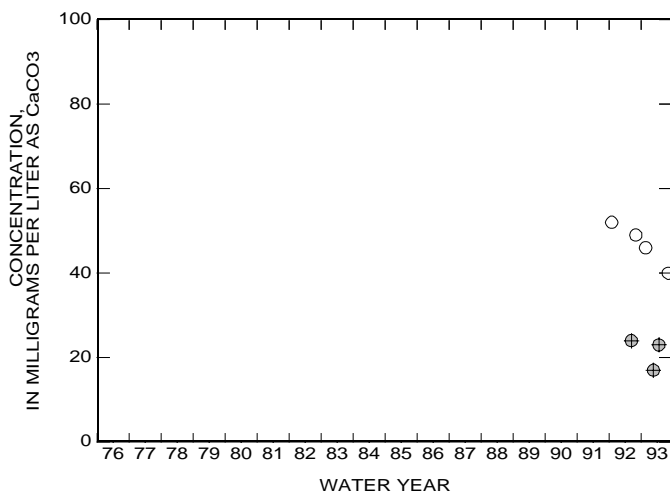
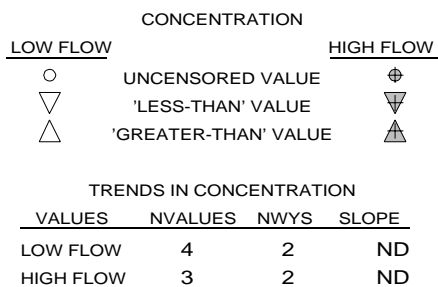
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

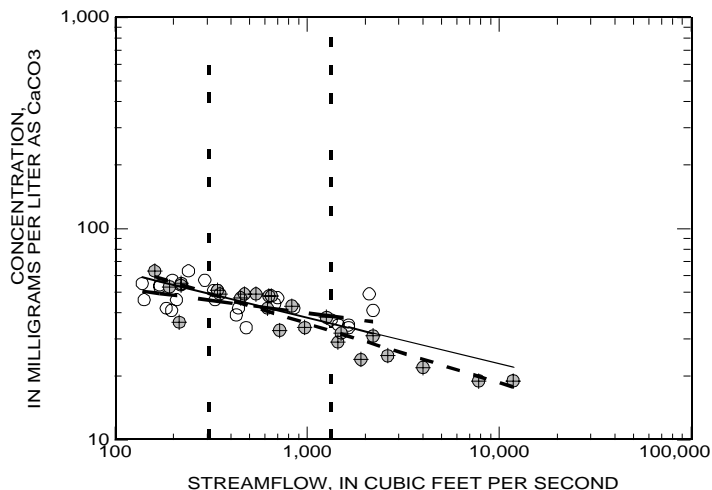
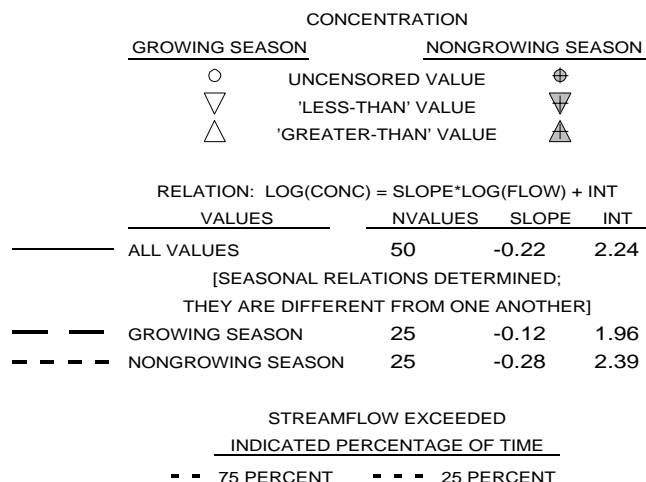


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

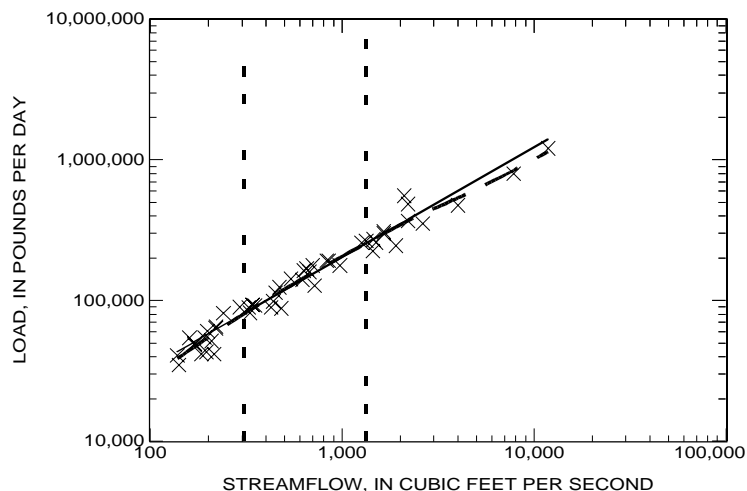
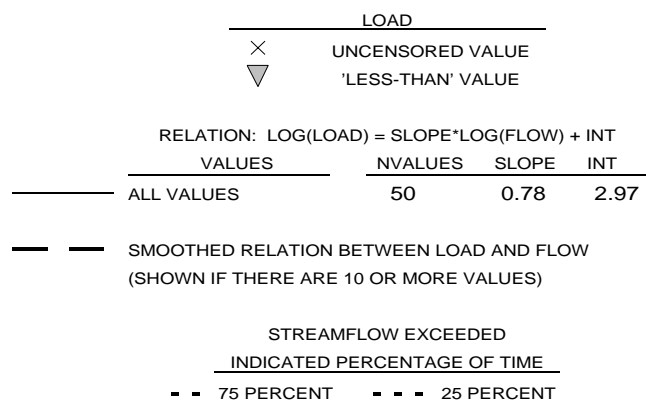
ALKALINITY
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

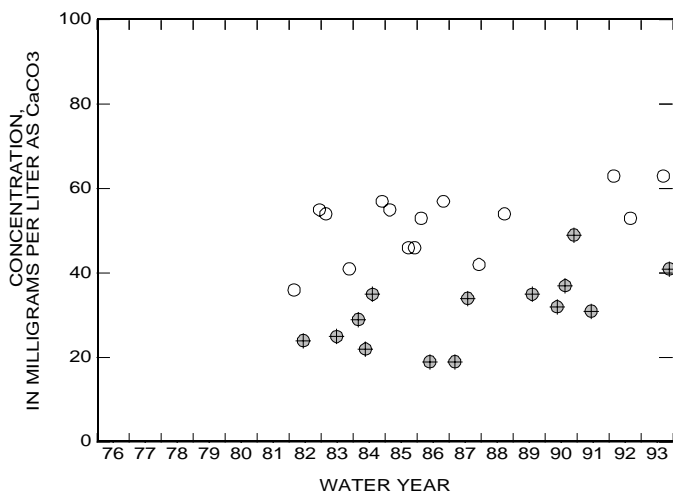
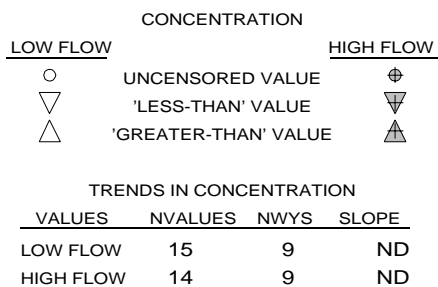
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



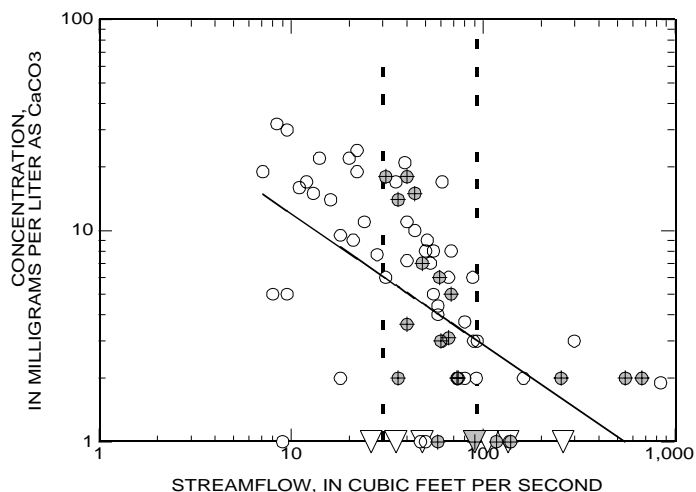
APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

ALKALINITY
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

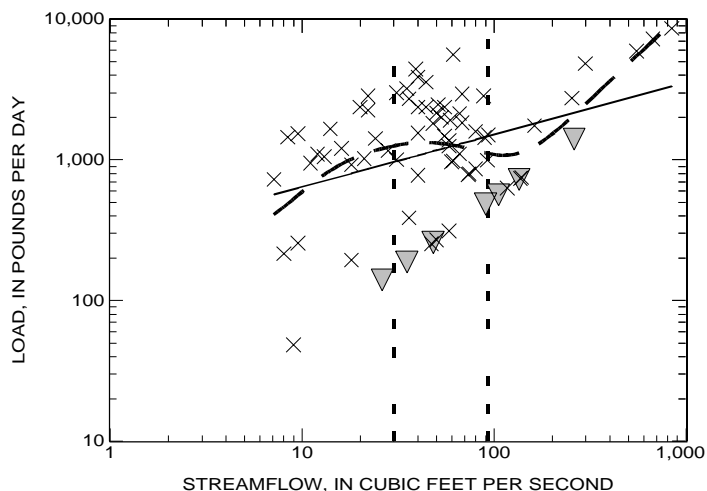
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	74	-0.62	1.7
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	54	ND	ND
NONGROWING SEASON	20	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	---	---	---
---	---	---	---



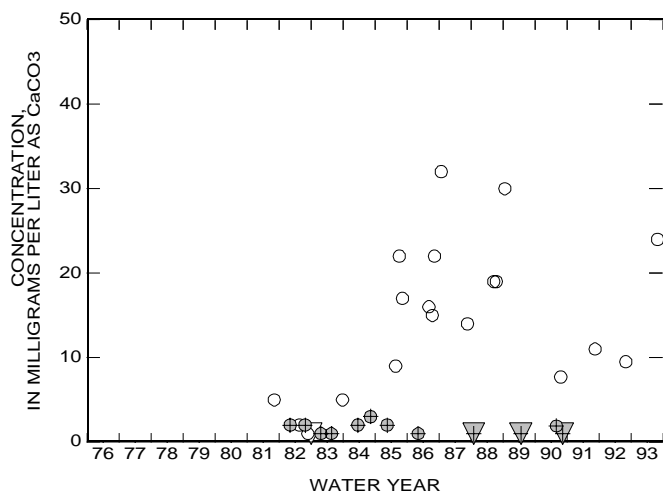
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	74	0.37	2.44
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
---	---	---	---
---	---	---	---
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	---	---	---
---	---	---	---



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	20	12	ND
HIGH FLOW	12	8	ND

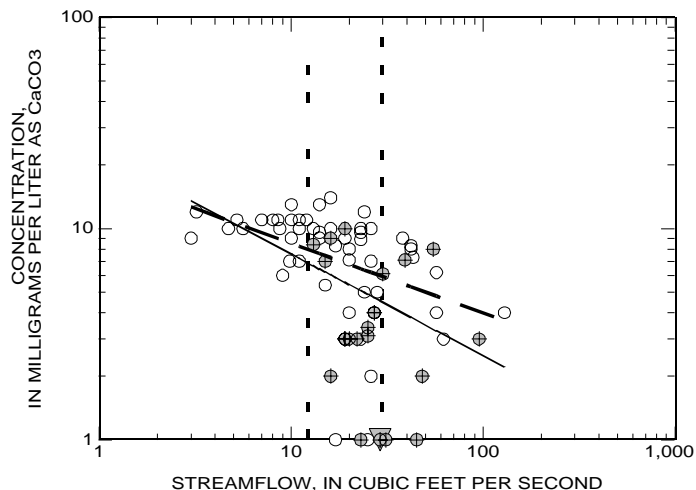
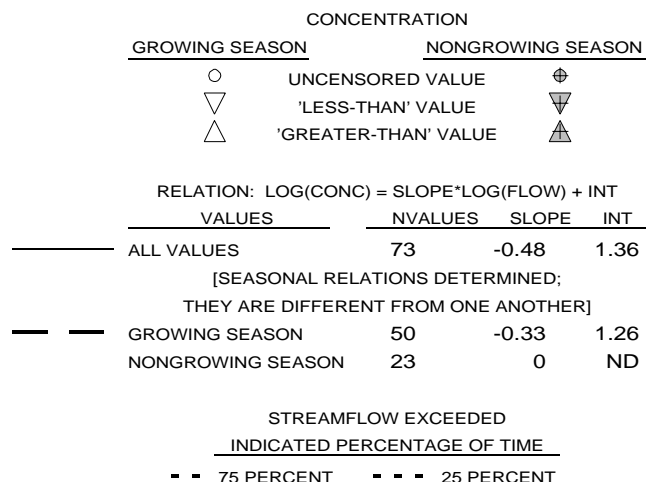


APPENDIX 1. Relations of constituent concentration and load to streamflow and trends in concentration with time

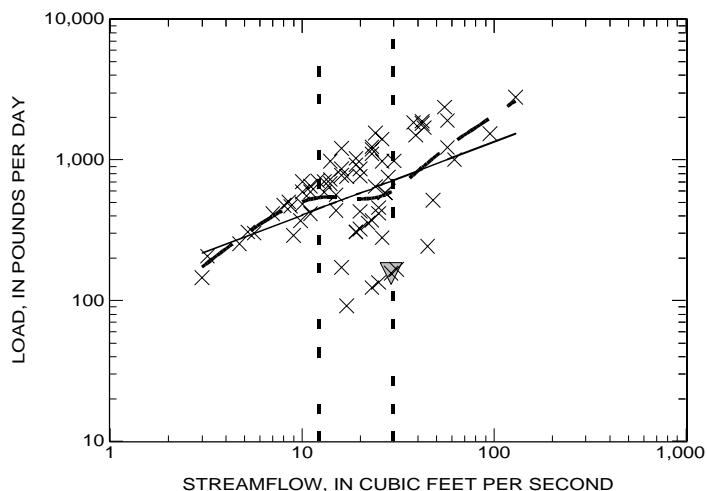
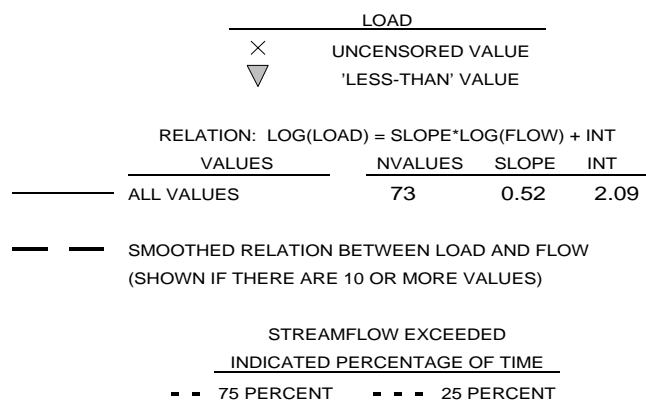
ALKALINITY
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

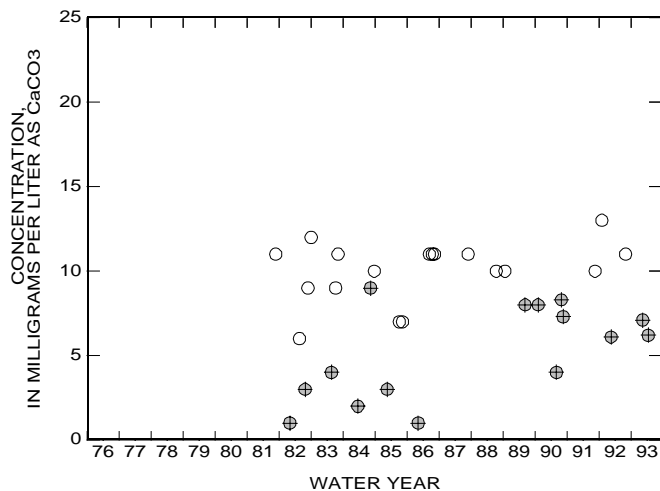
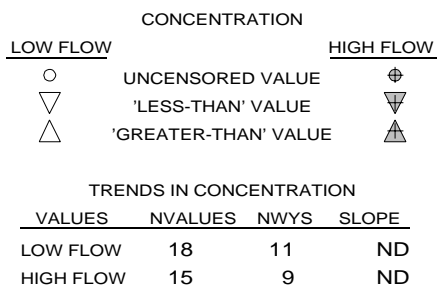
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



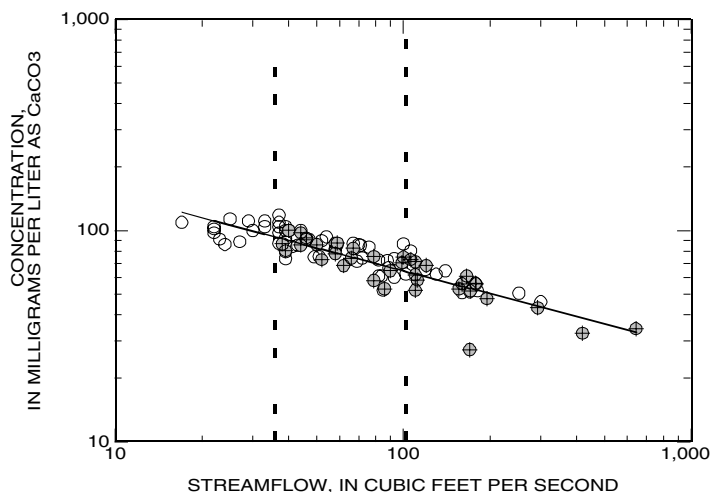
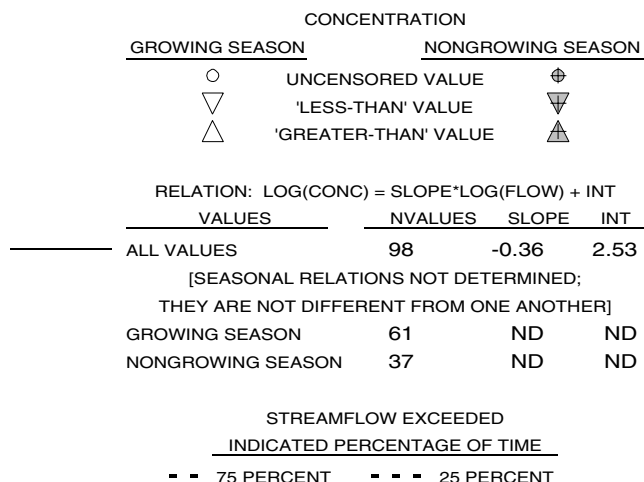
Appendix 2 - Hardness

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

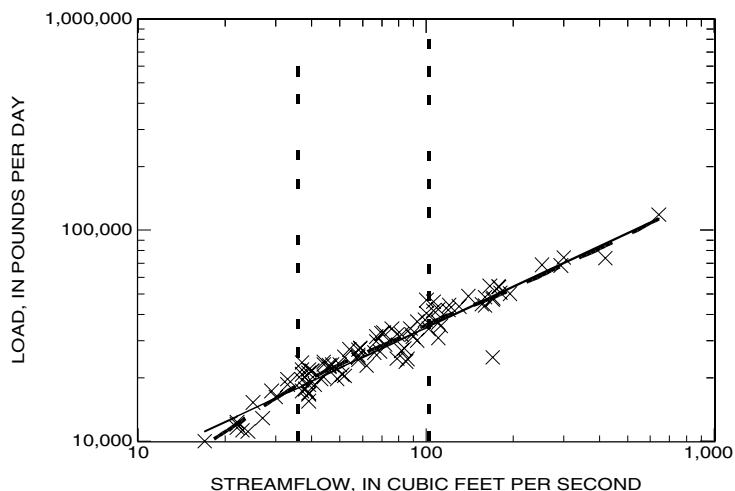
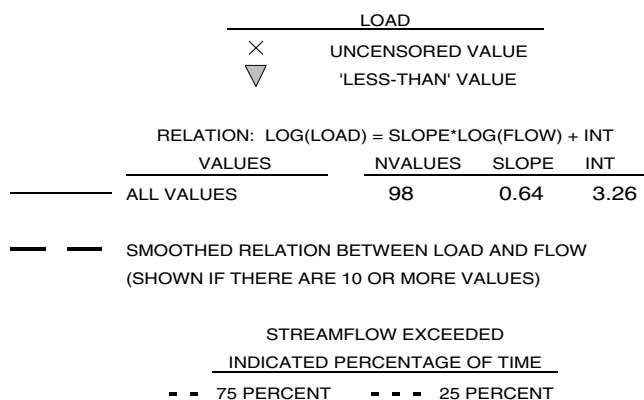
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

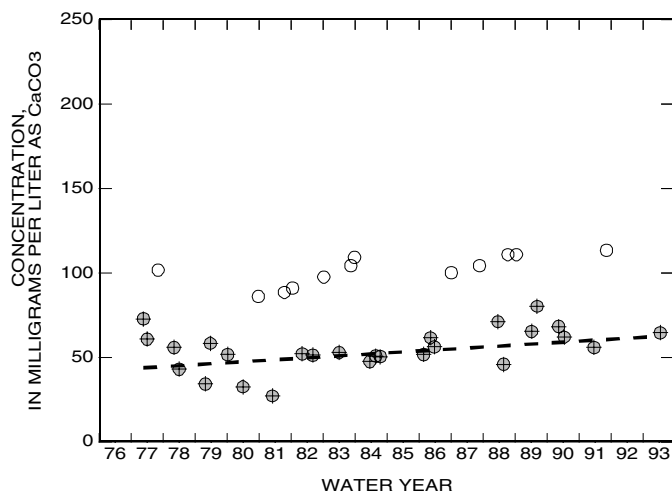
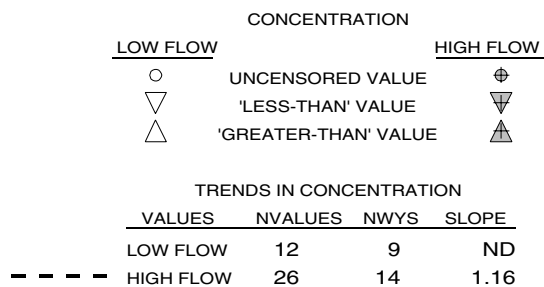
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



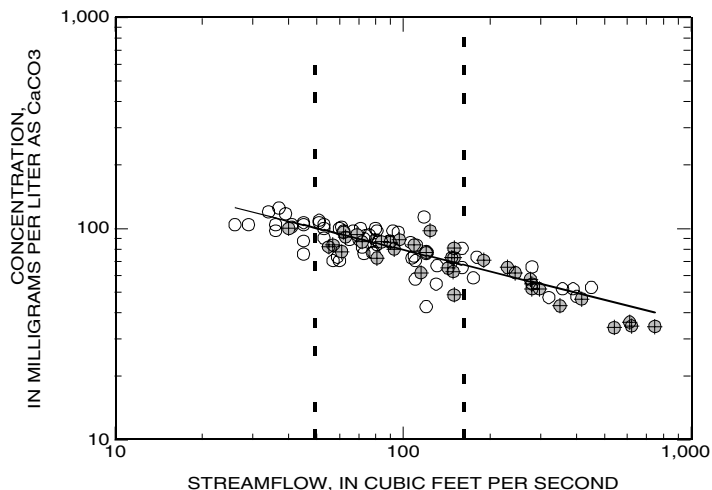
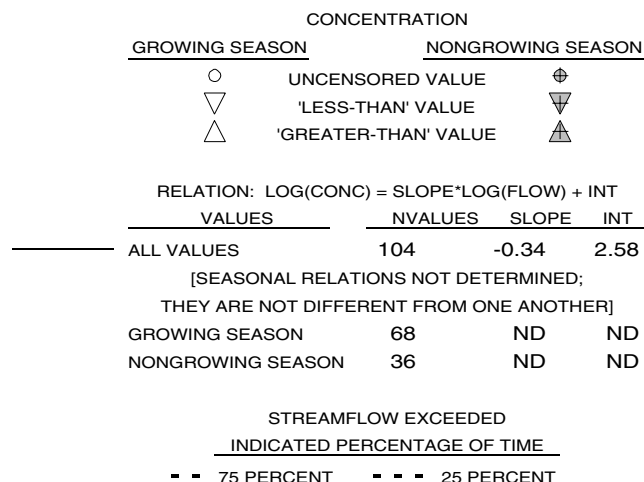
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



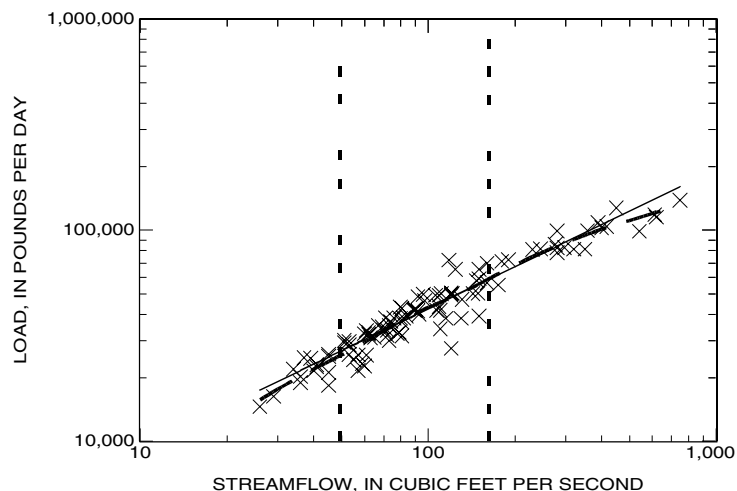
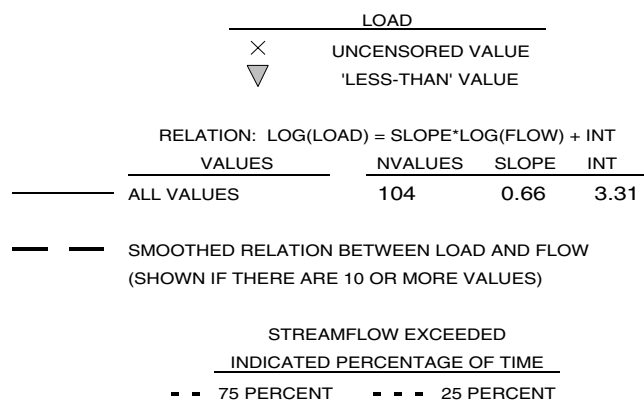
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

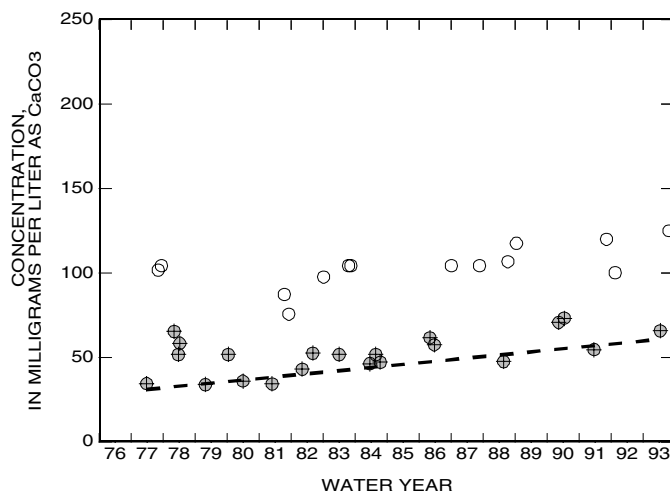
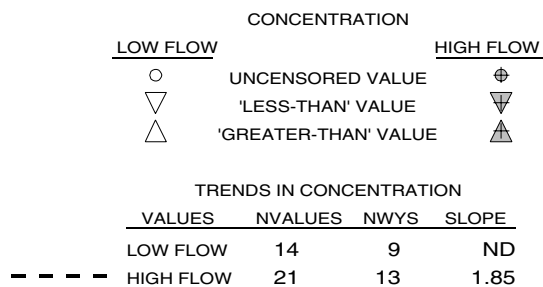
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL HARDNESS
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

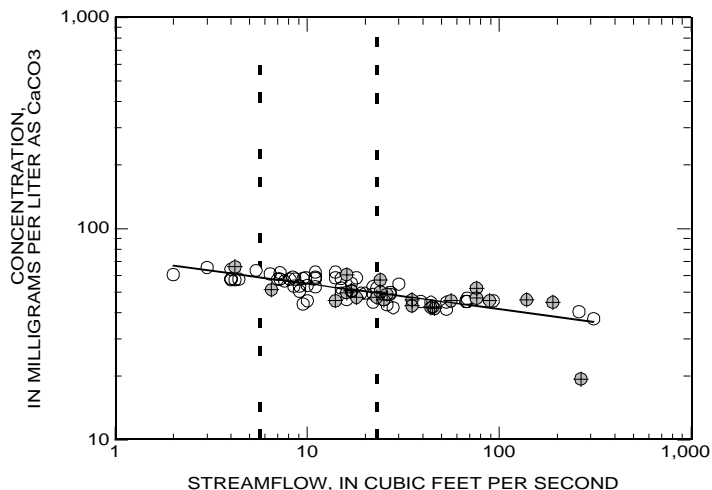
[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	83	-0.12	1.86
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	58	ND	ND
NONGROWING SEASON	25	ND	ND

STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME		75 PERCENT	25 PERCENT
		- - -	- - -

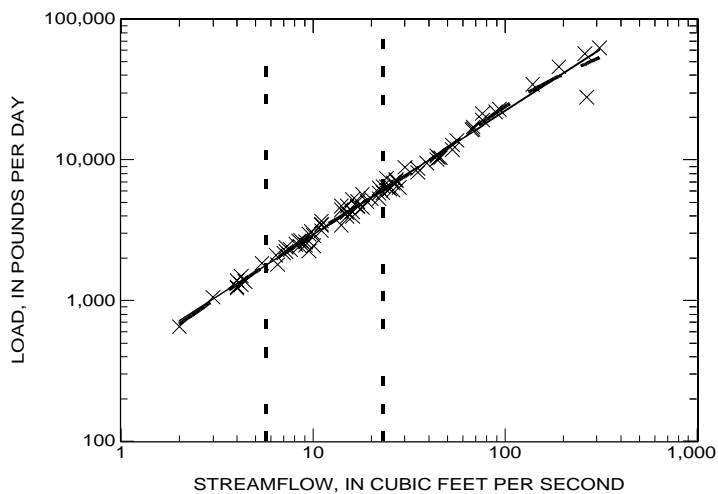


RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		

RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	83	0.88	2.59

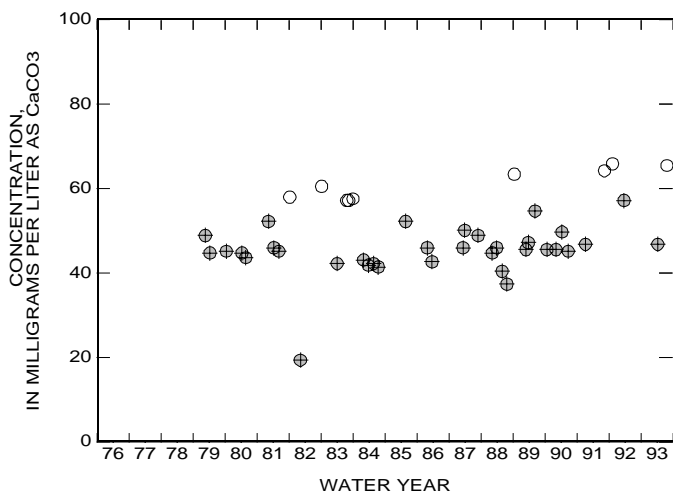
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME		75 PERCENT	25 PERCENT
		- - -	- - -



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

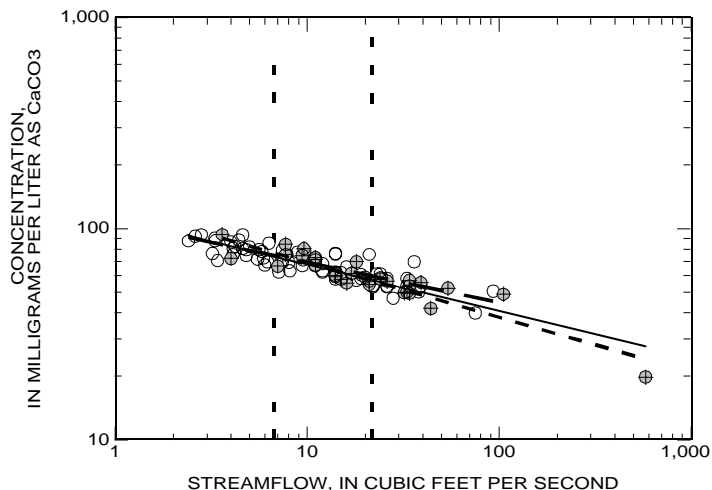
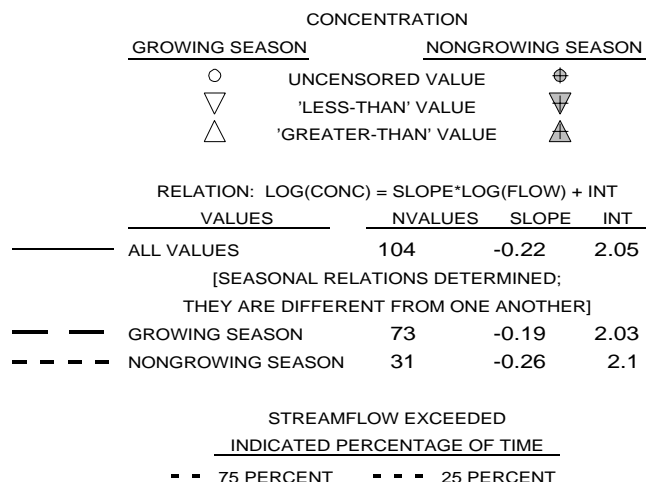
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	9	6	ND
HIGH FLOW	34	15	ND



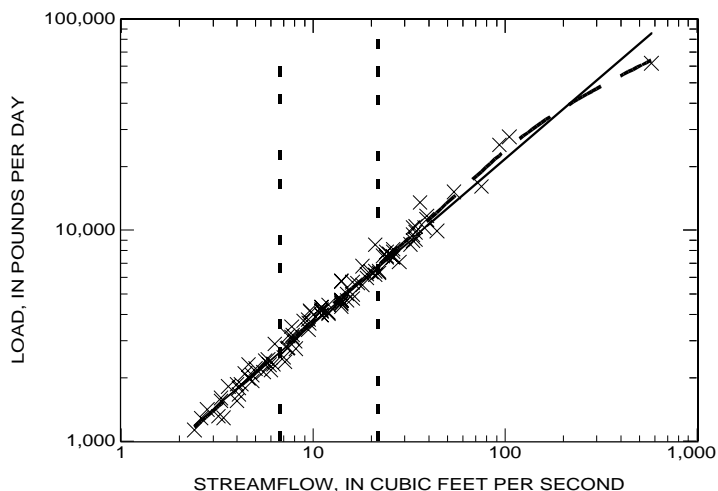
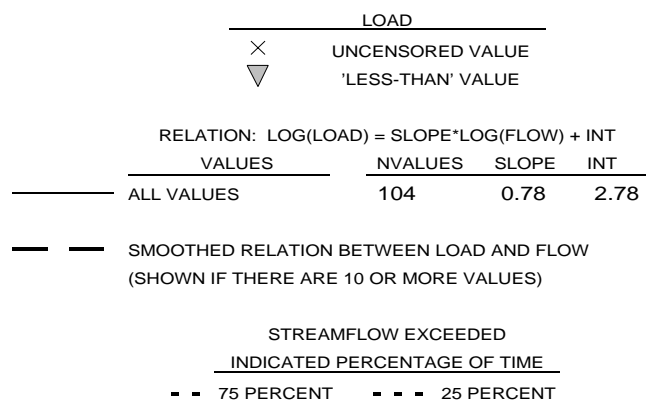
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

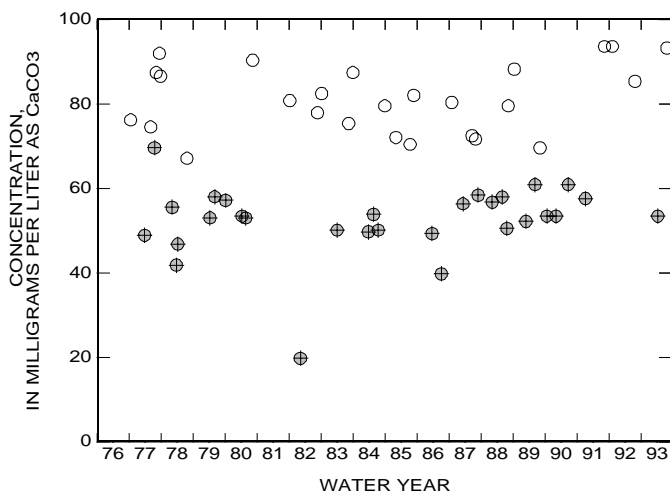
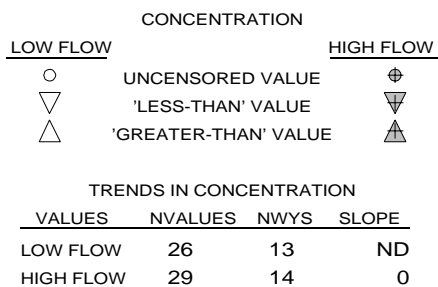
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



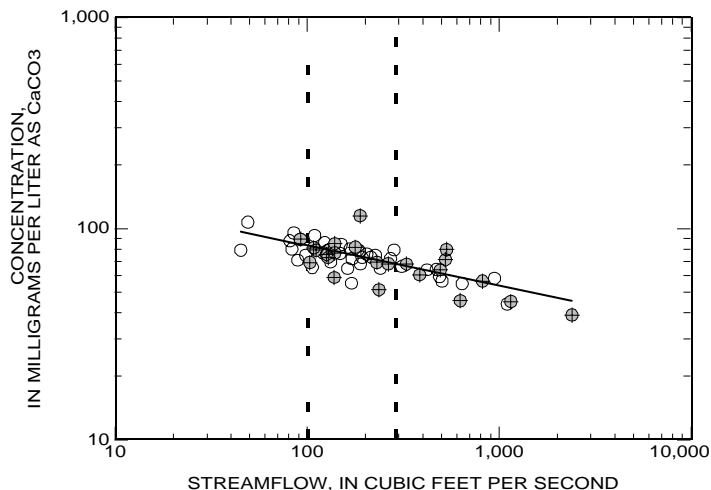
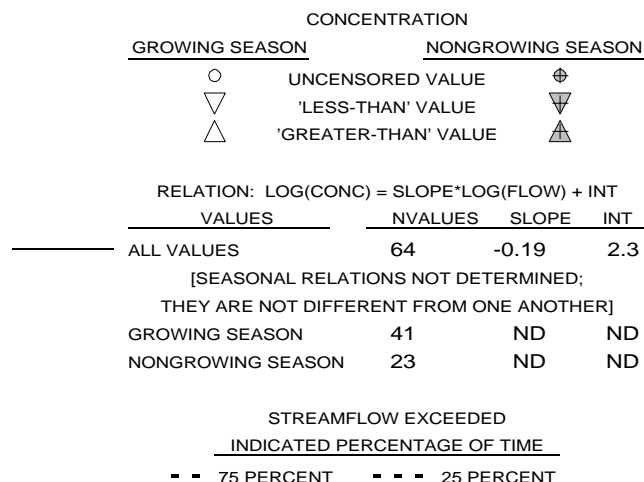
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



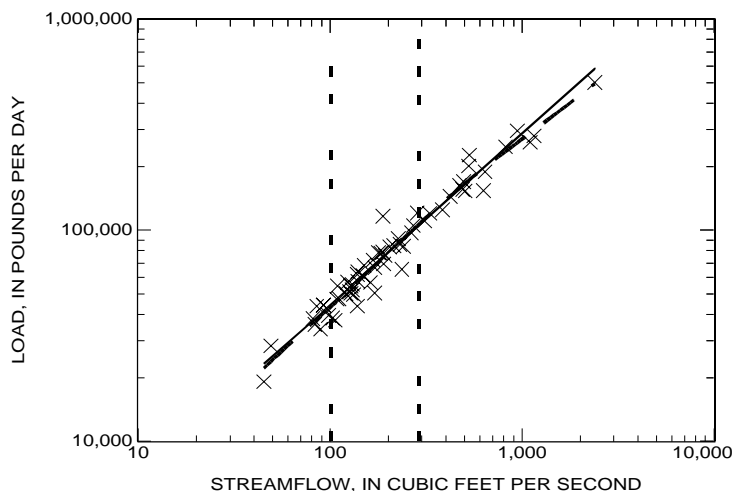
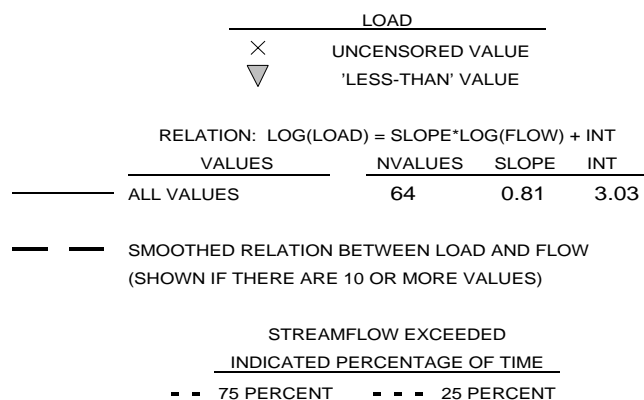
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

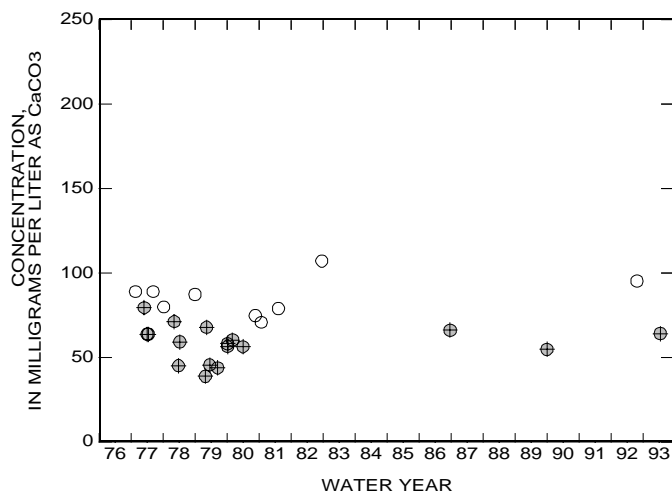
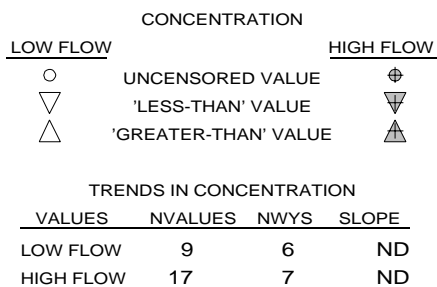
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



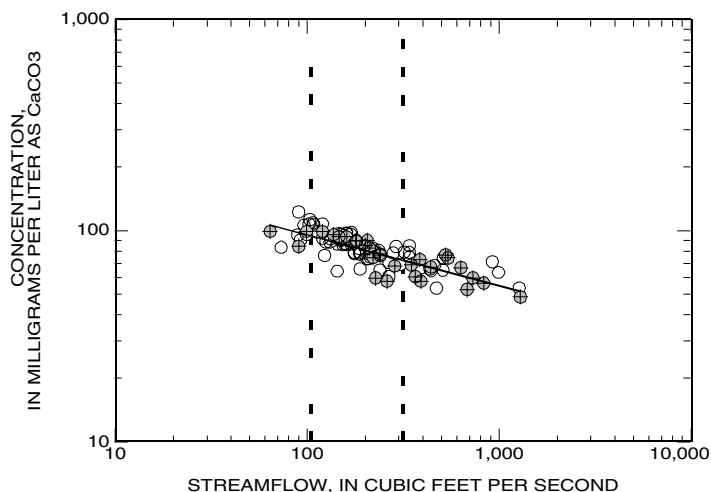
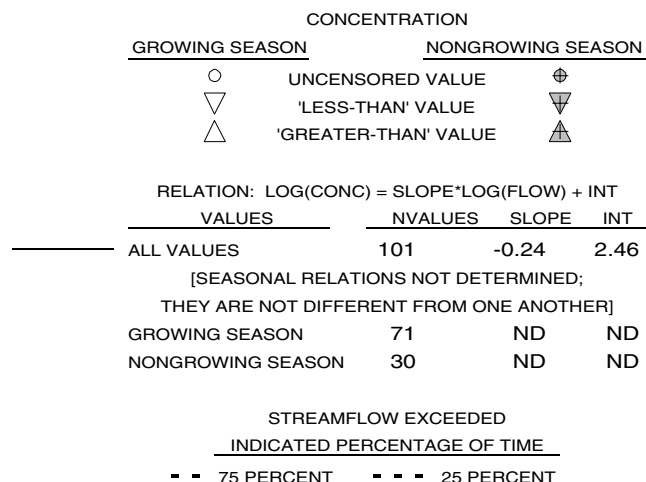
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



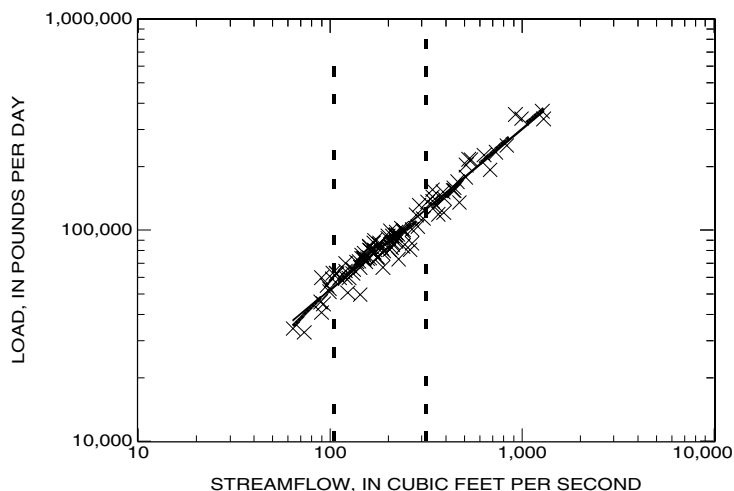
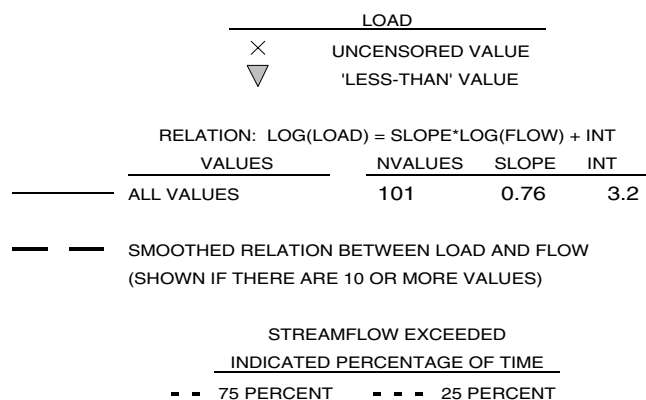
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

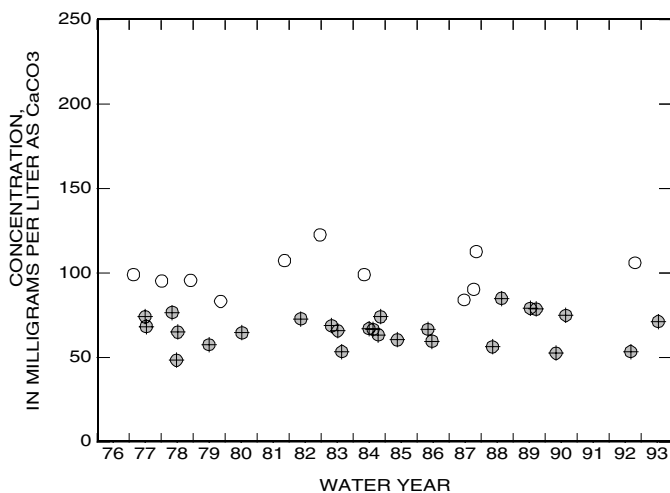
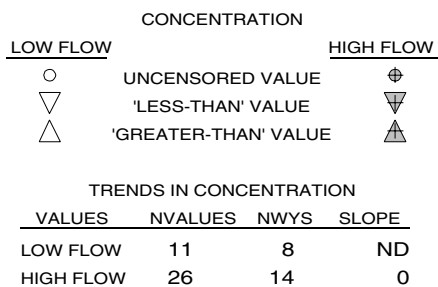
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



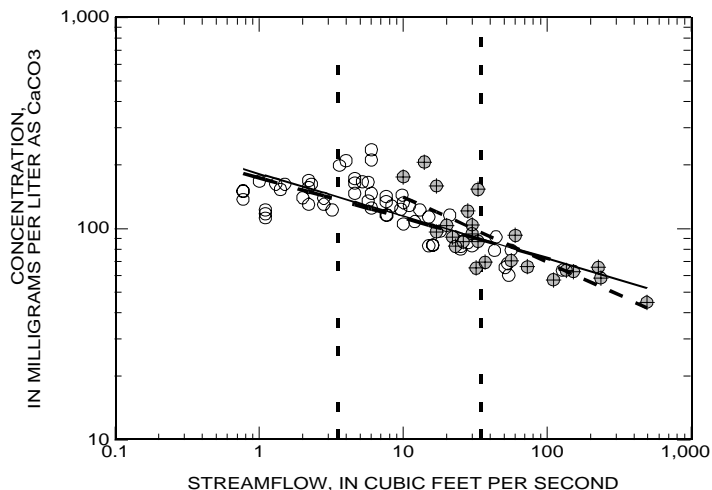
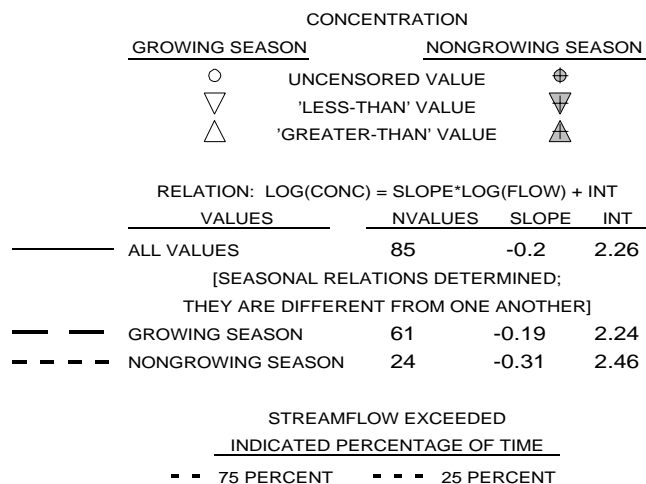
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



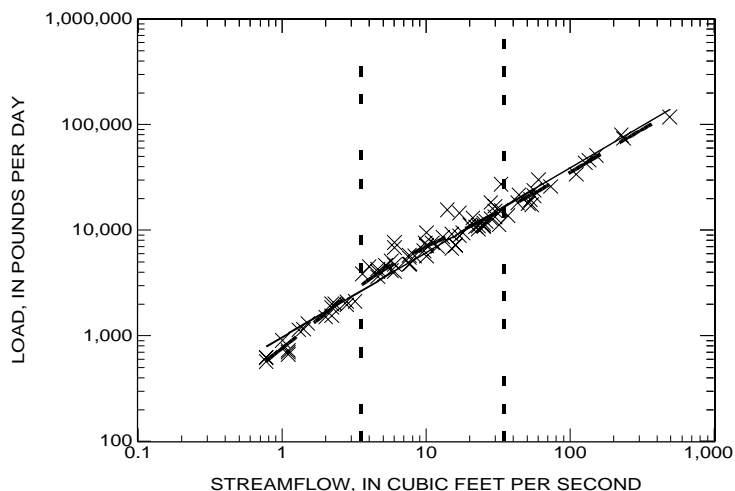
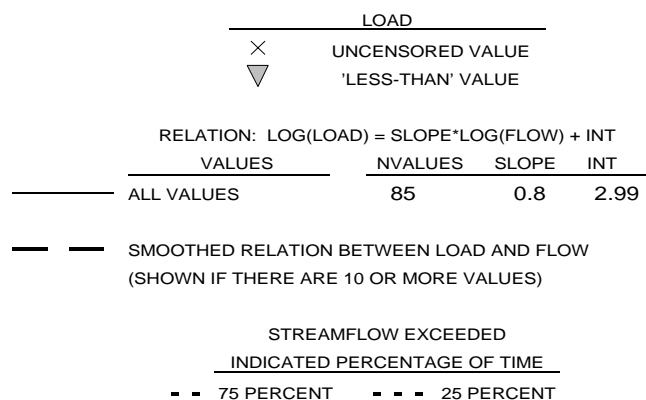
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

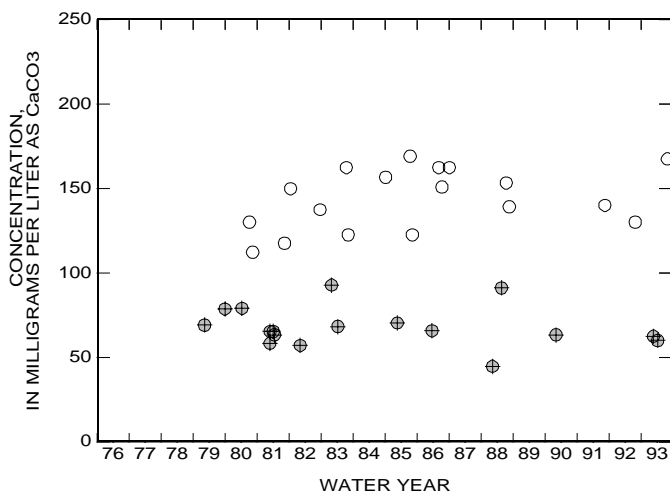
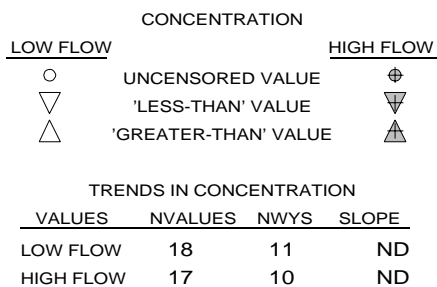
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



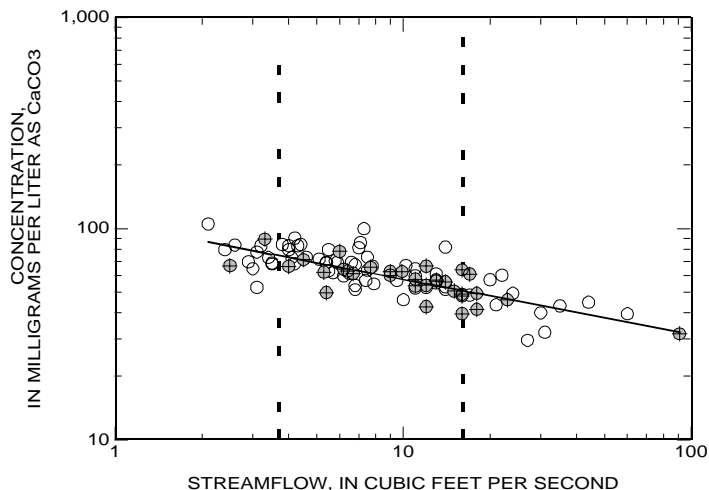
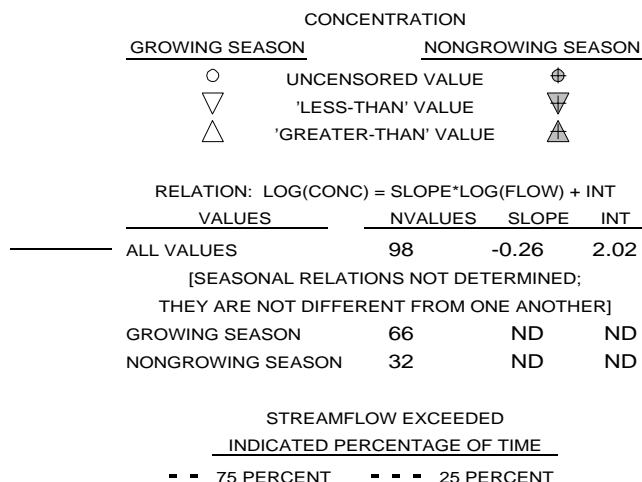
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



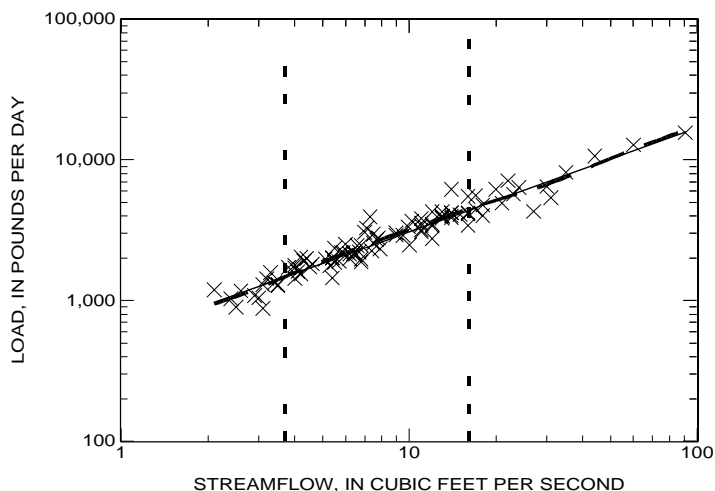
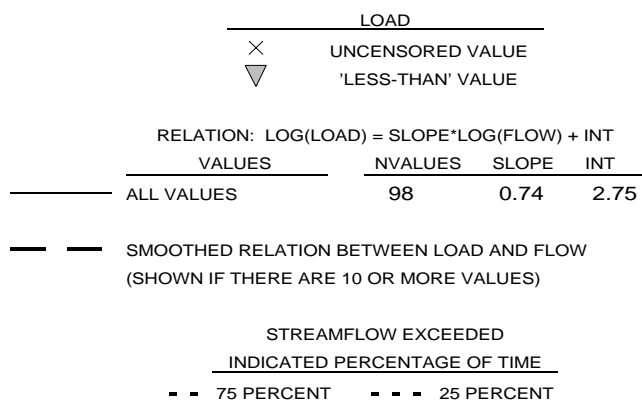
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

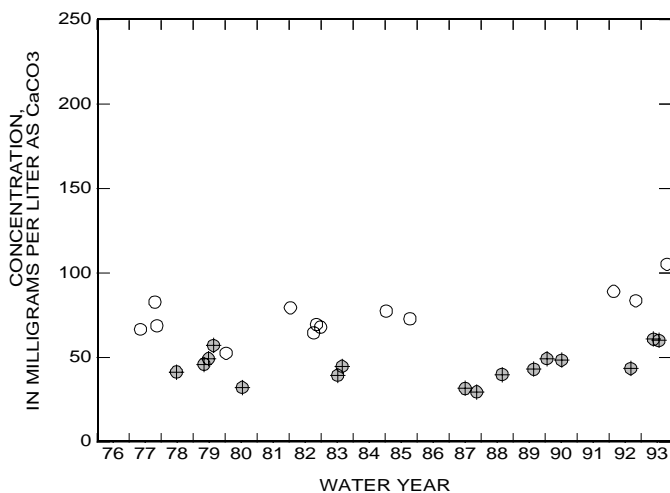
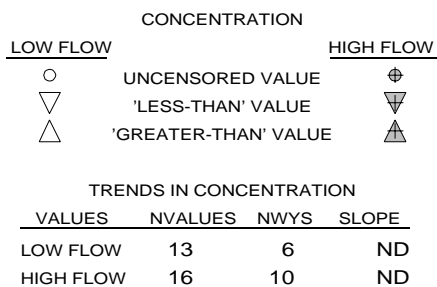
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



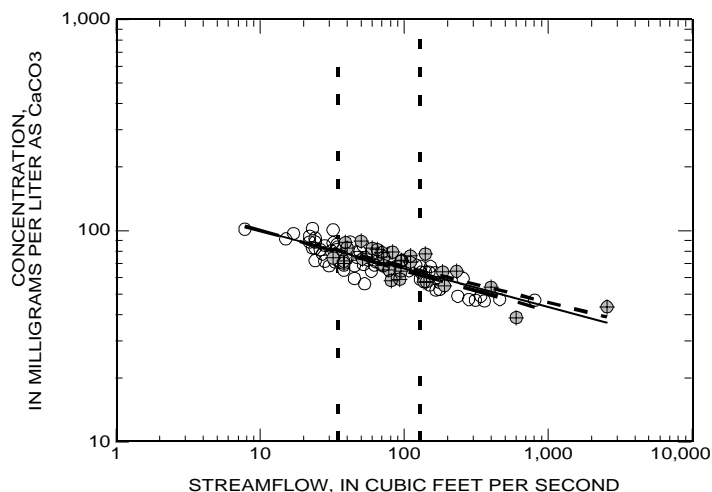
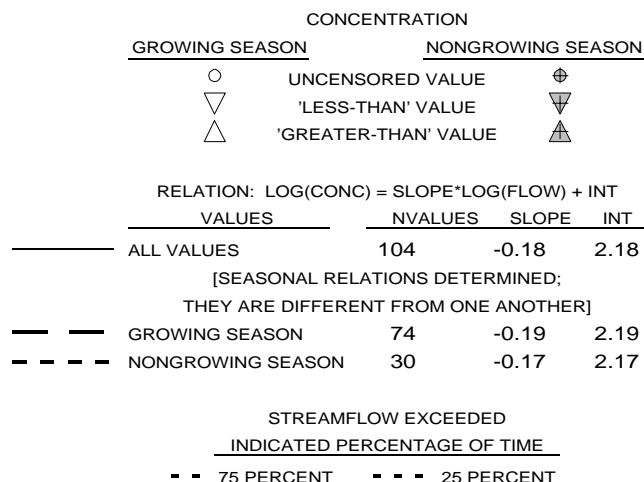
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



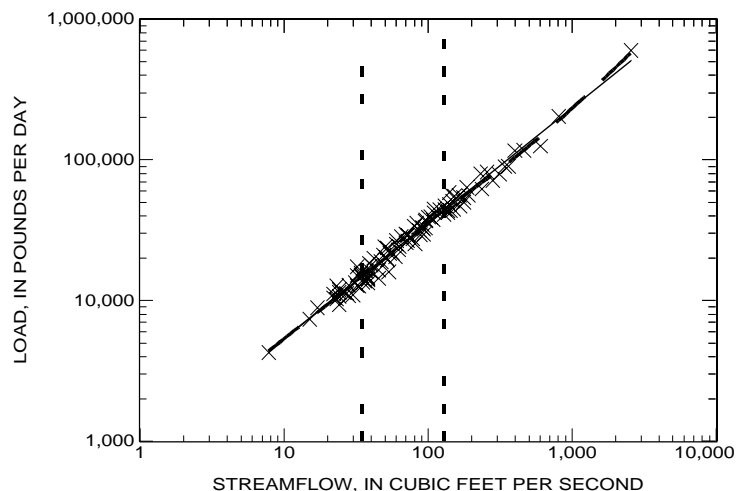
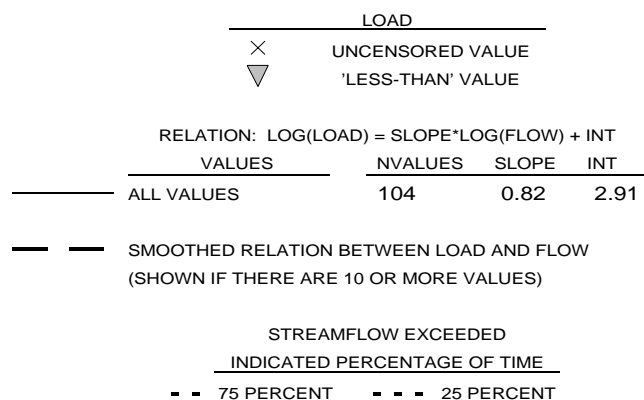
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

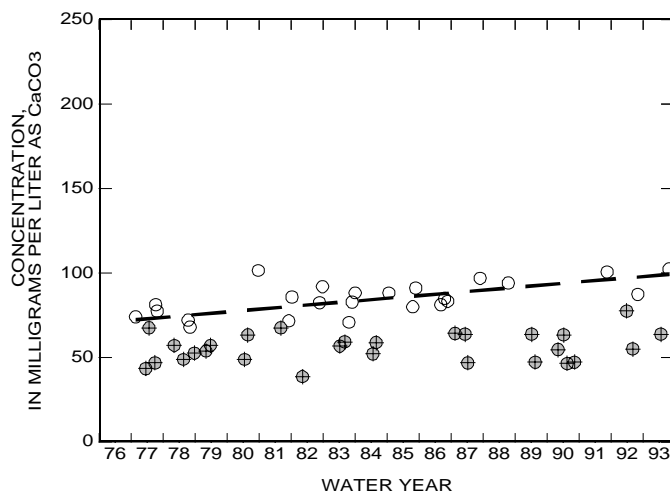
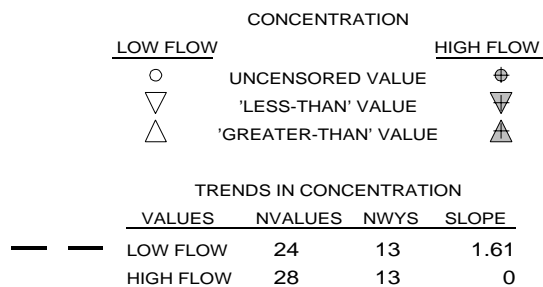
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



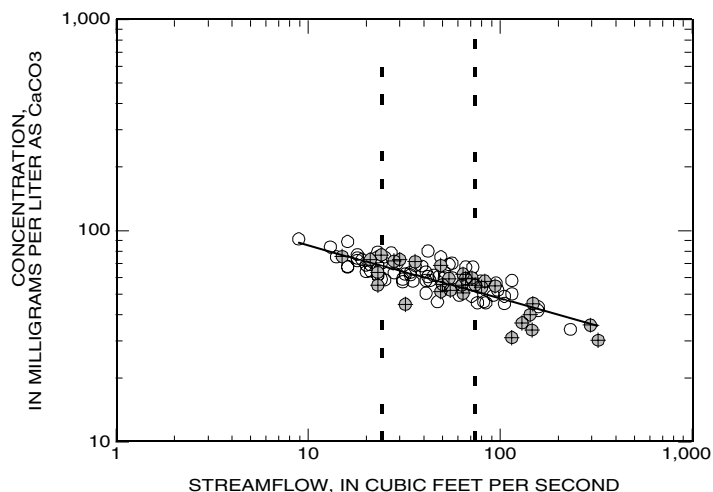
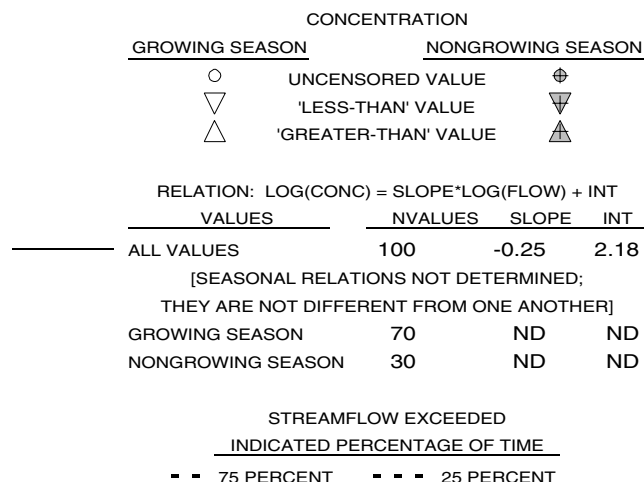
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



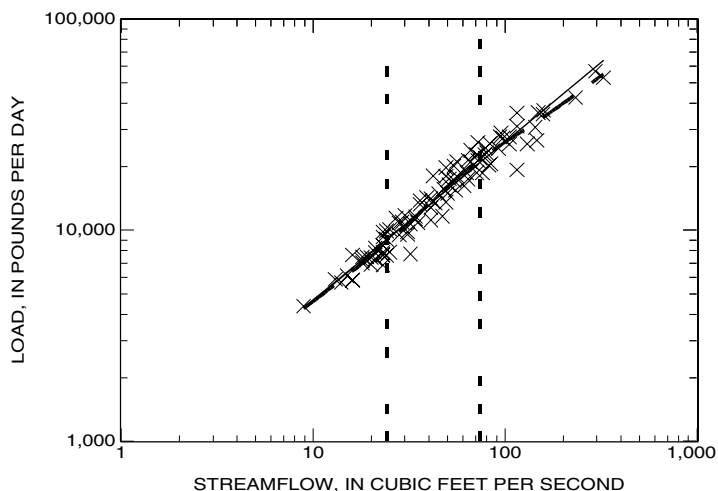
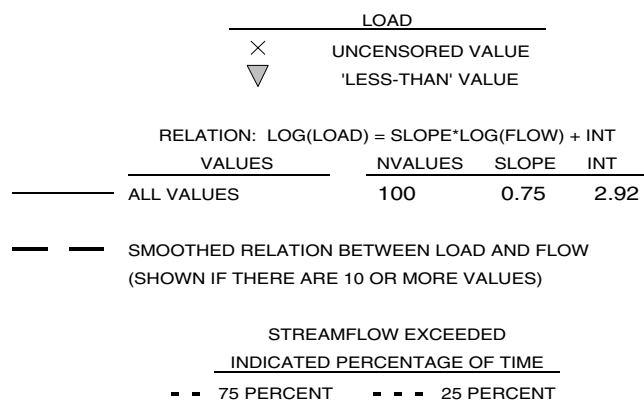
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

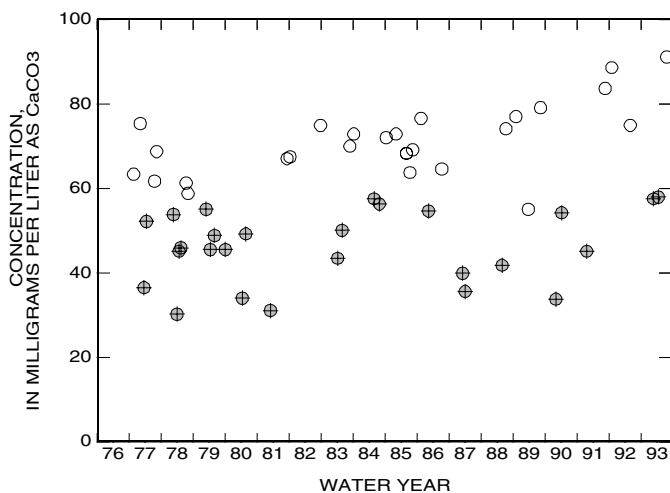
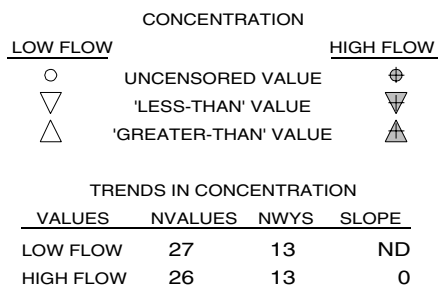
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



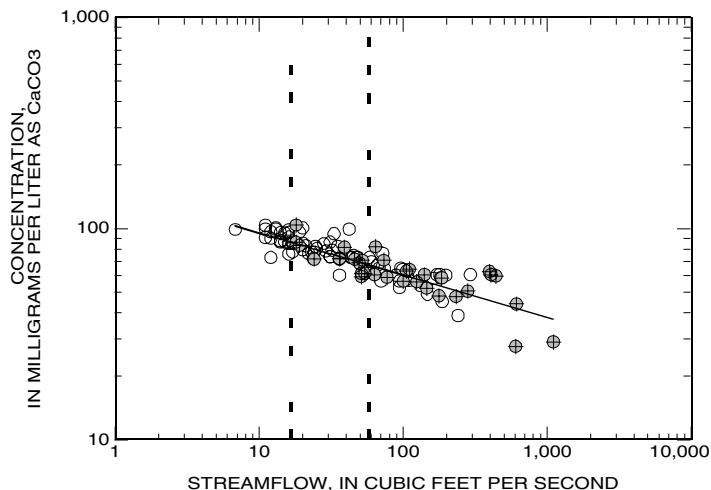
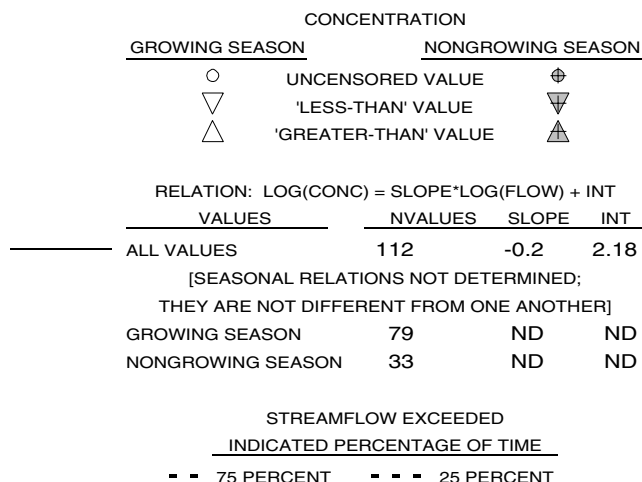
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



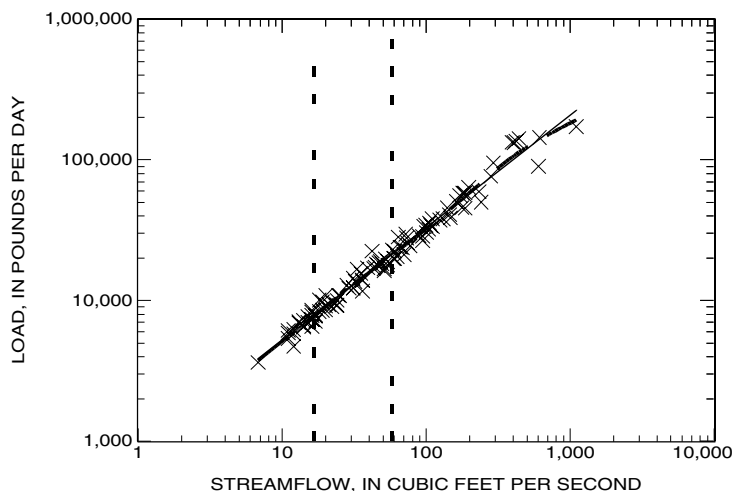
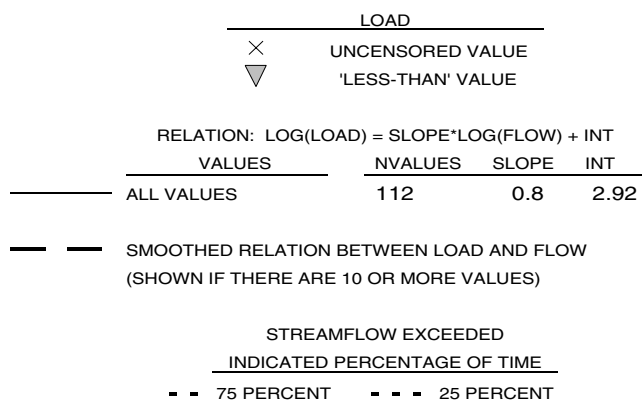
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

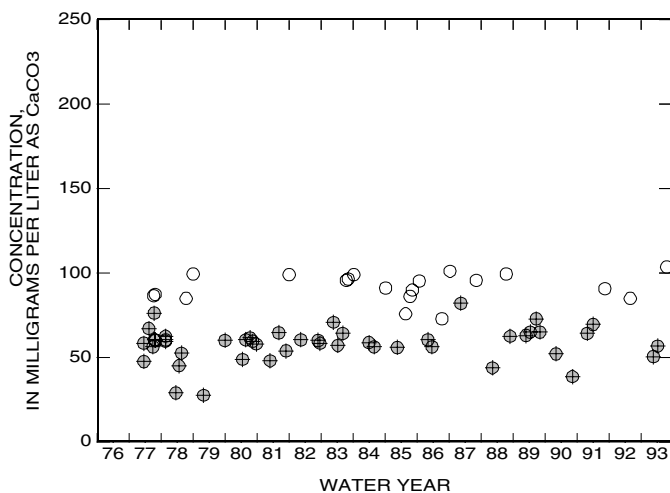
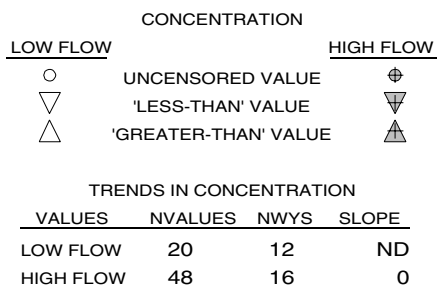
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



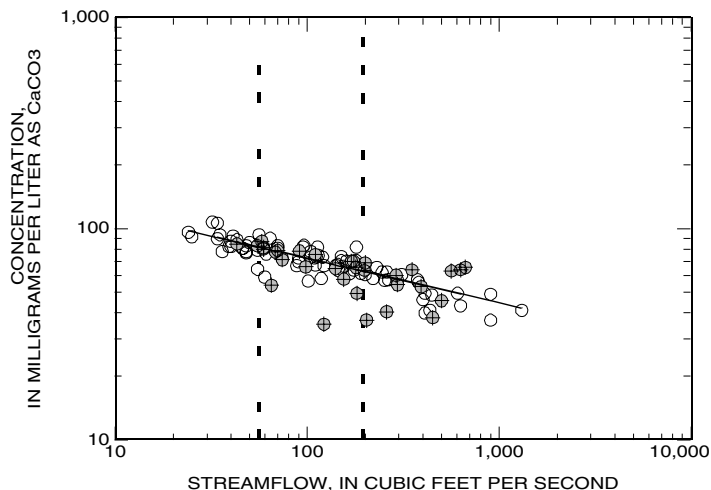
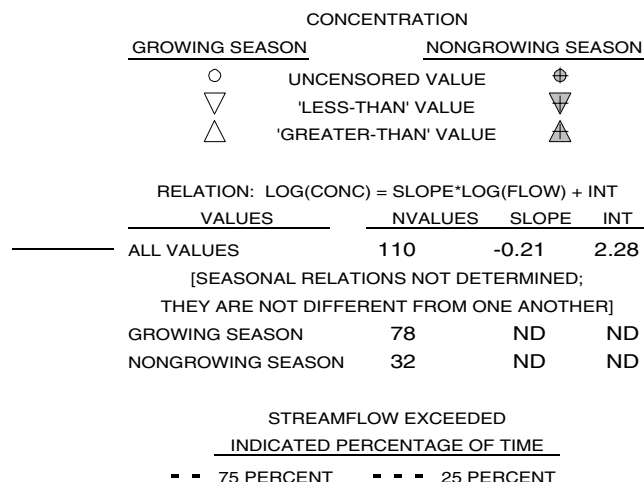
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



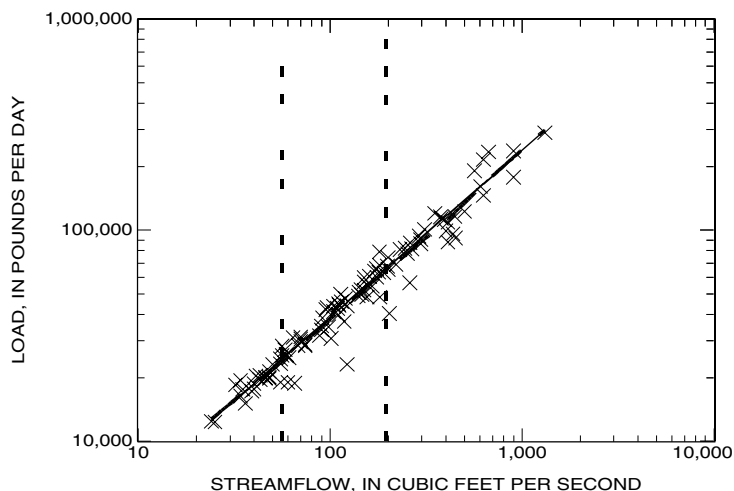
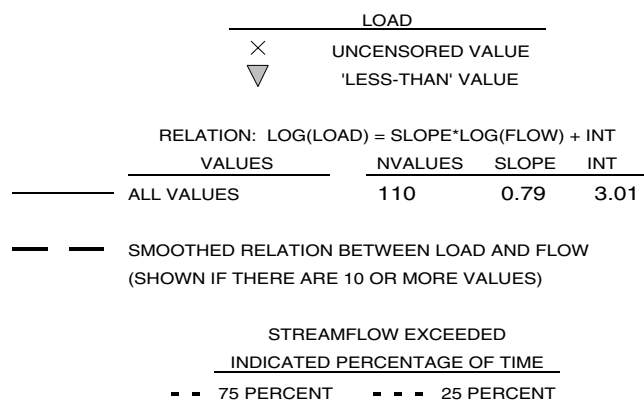
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

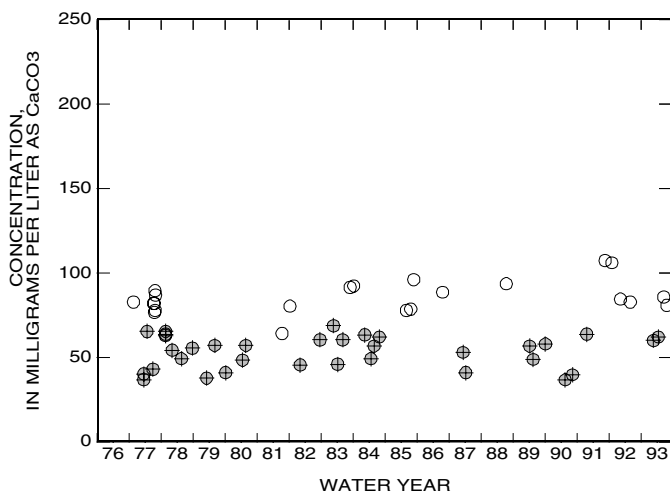
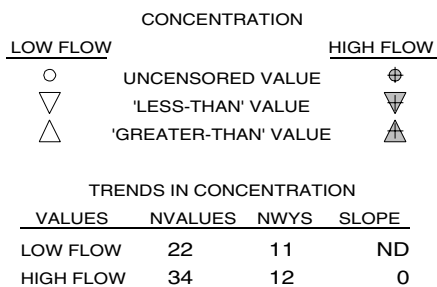
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



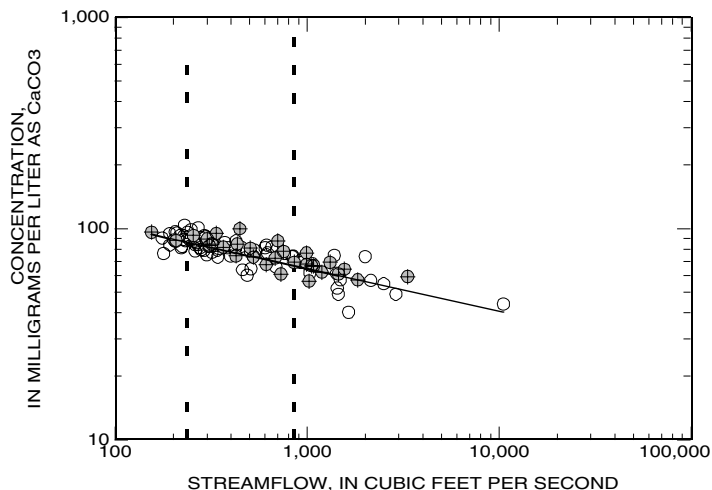
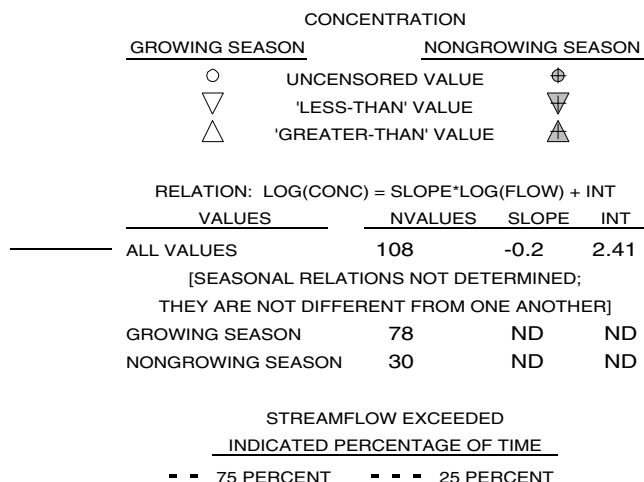
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



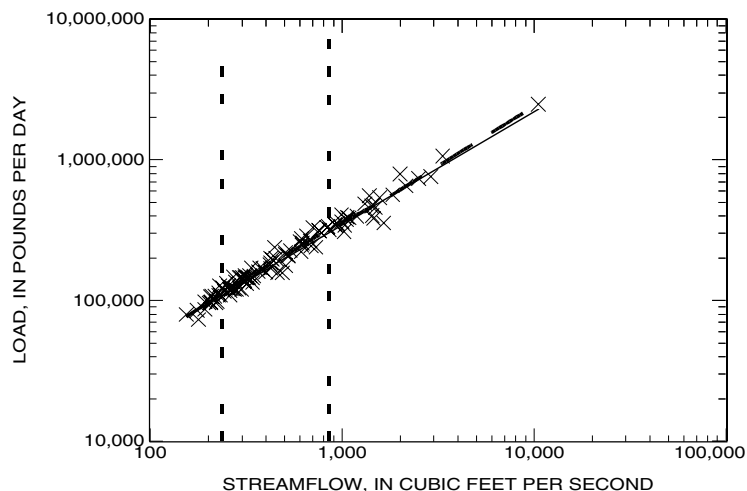
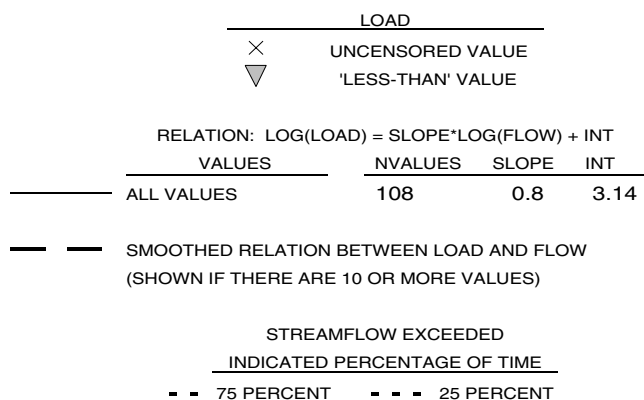
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

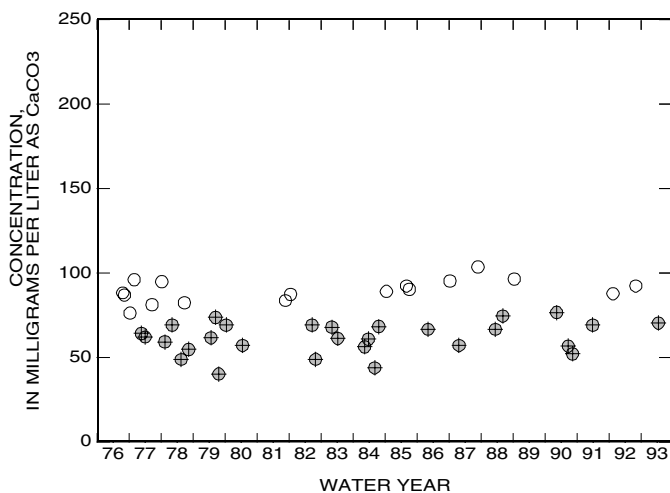
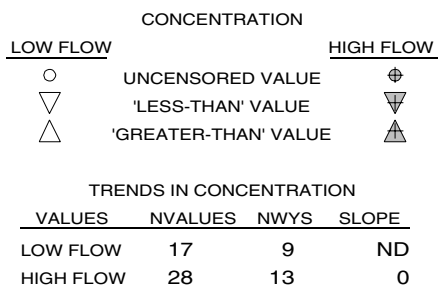
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

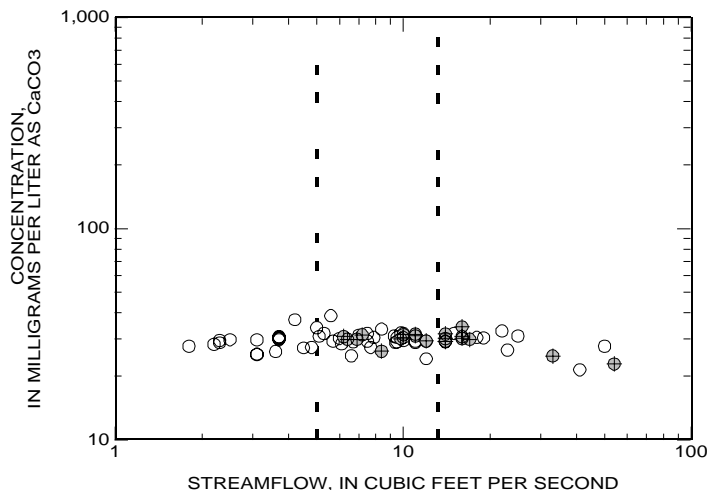
CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	72	0	ND

[SEASONAL RELATIONS NOT DETERMINED;
THEY ARE NOT DIFFERENT FROM ONE ANOTHER]

GROWING SEASON	51	ND	ND
NONGROWING SEASON	21	ND	ND

STREAMFLOW EXCEEDED	
INDICATED PERCENTAGE OF TIME	
- - - 75 PERCENT	- - - 25 PERCENT



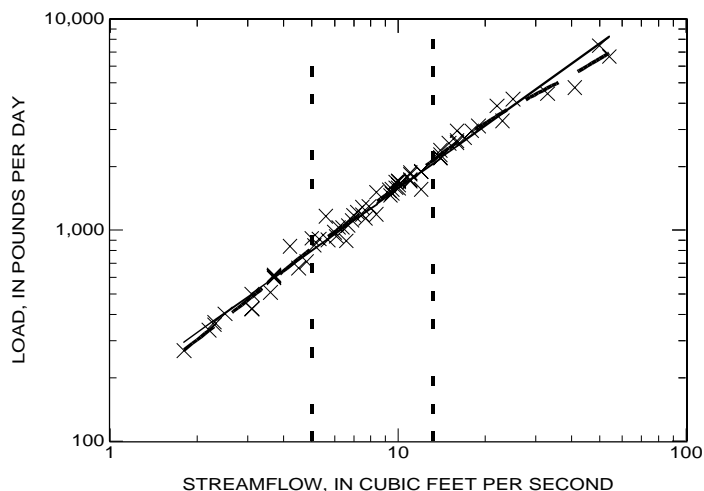
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		

RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	72	0.98	2.22

— — — SMOOTHED RELATION BETWEEN LOAD AND FLOW
(SHOWN IF THERE ARE 10 OR MORE VALUES)

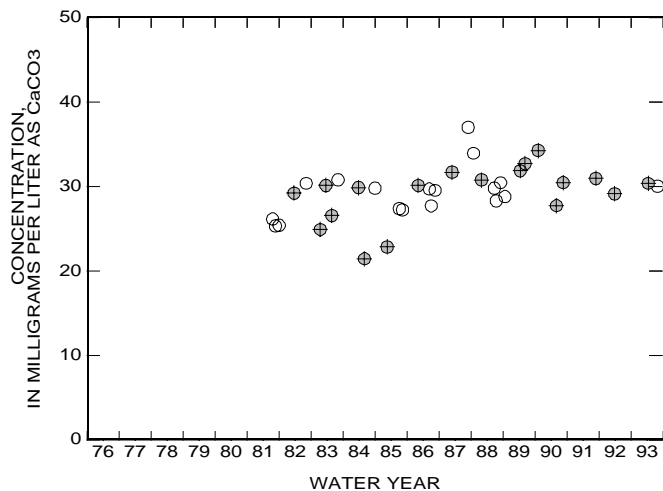
STREAMFLOW EXCEEDED	
INDICATED PERCENTAGE OF TIME	
- - - 75 PERCENT	- - - 25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

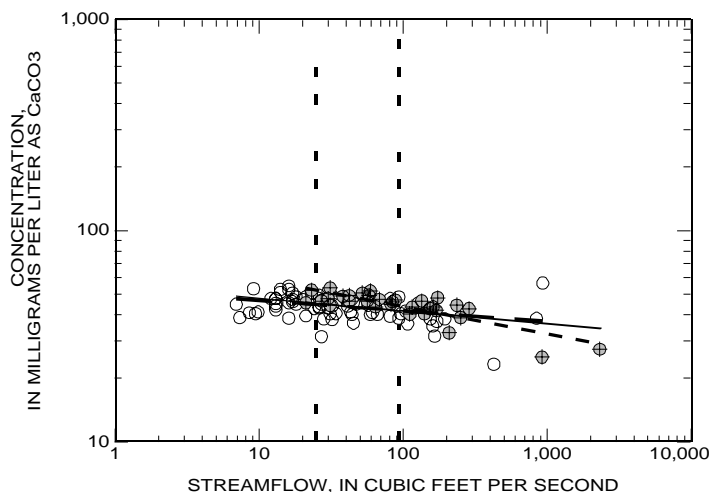
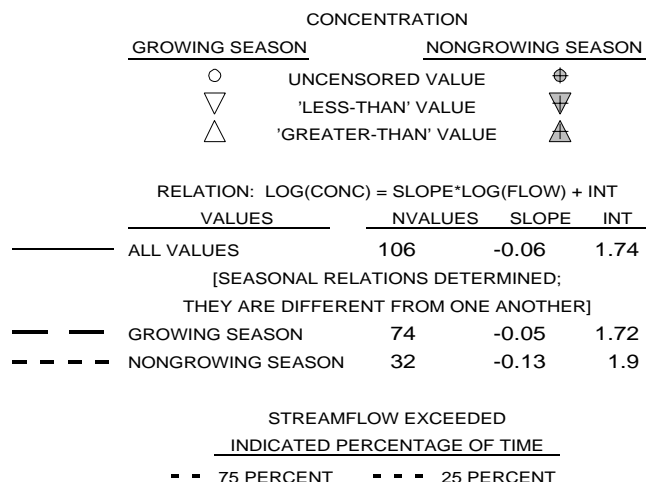
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	18	10	ND
HIGH FLOW	18	12	ND



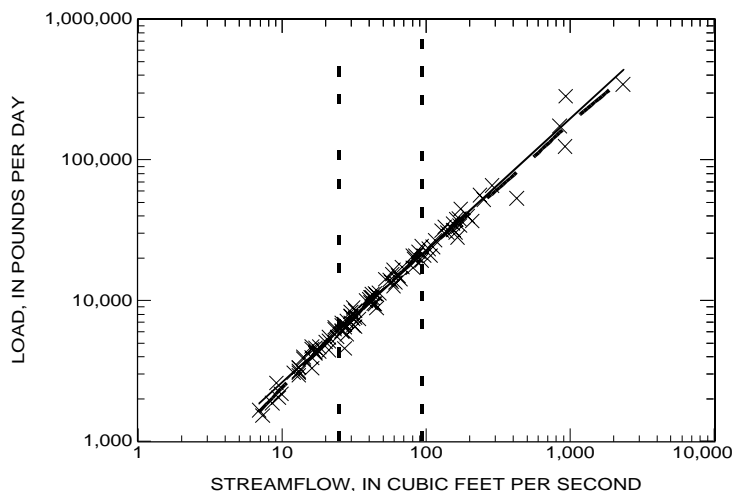
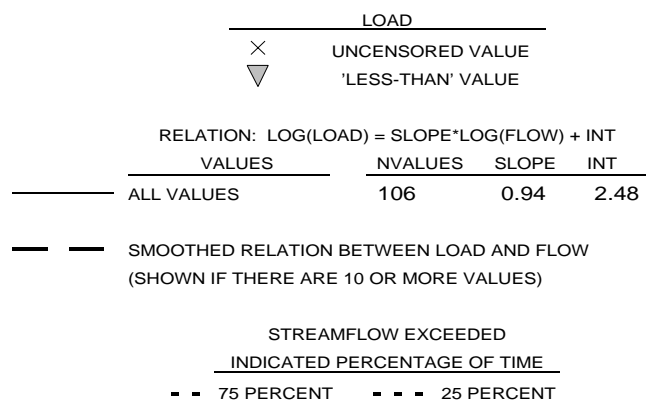
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

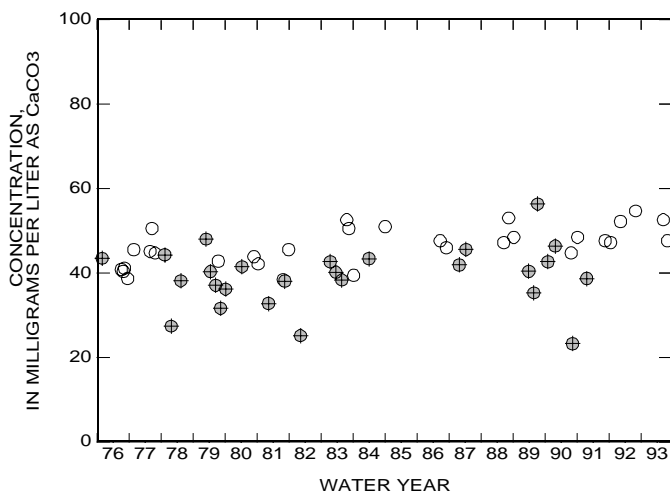
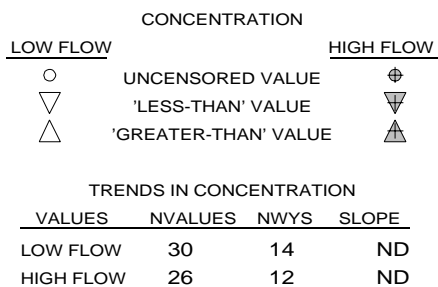
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



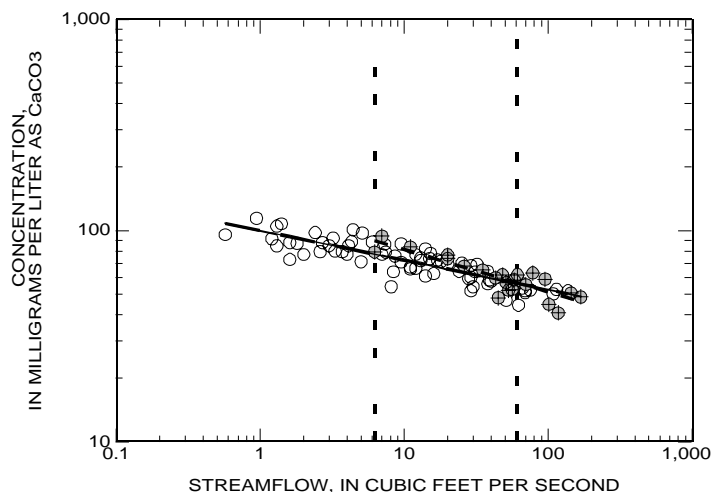
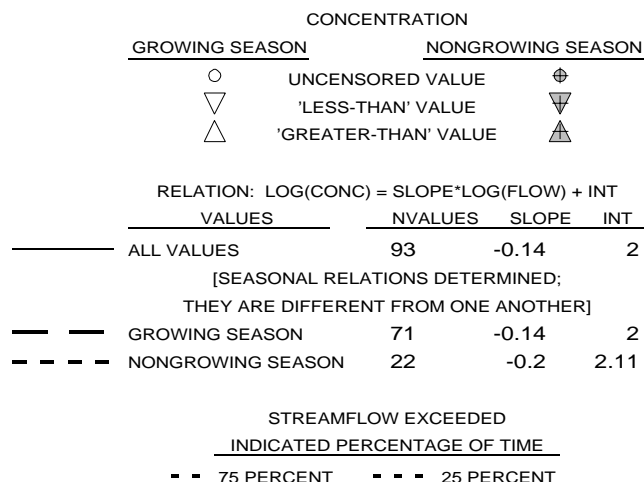
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



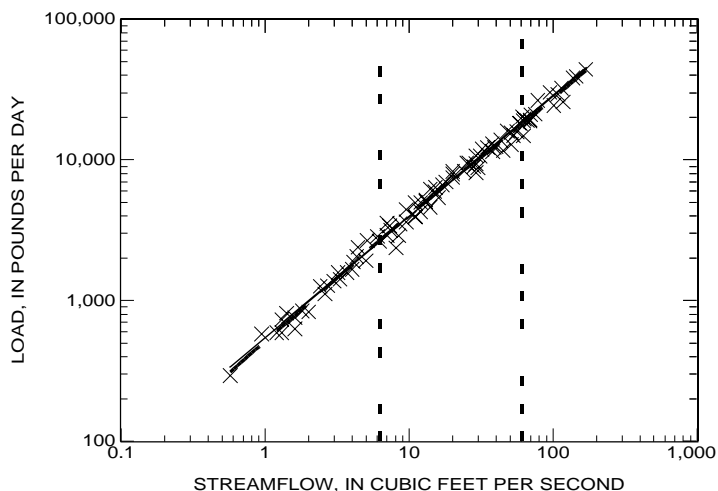
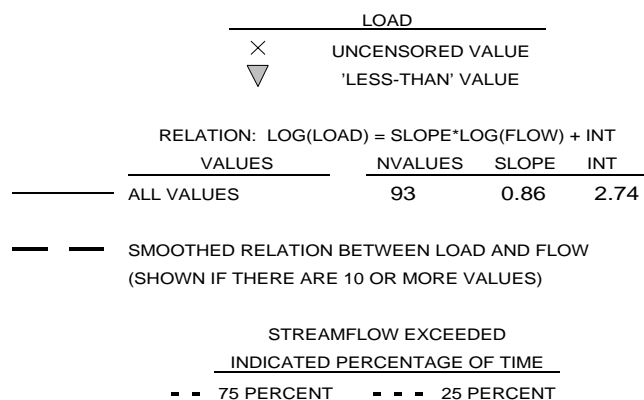
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

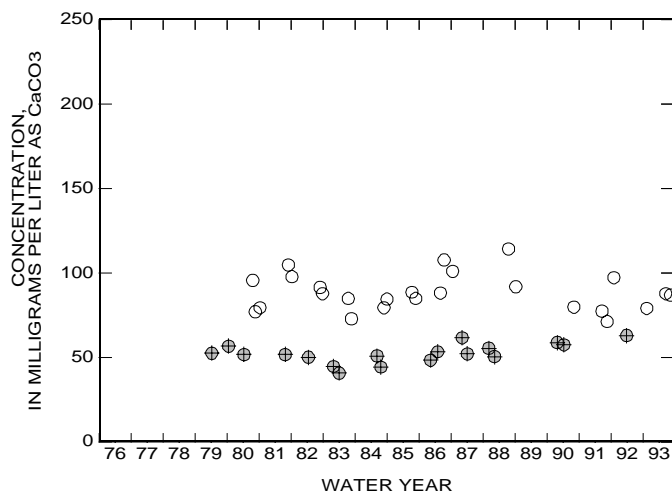
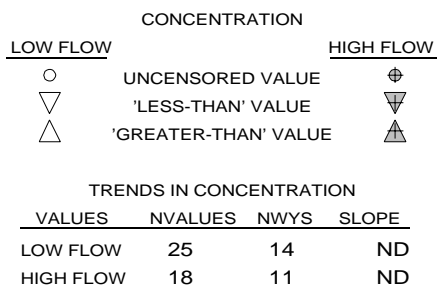
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



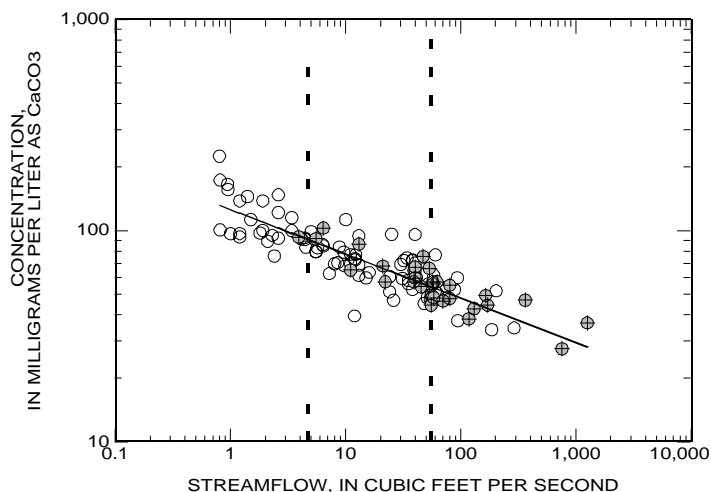
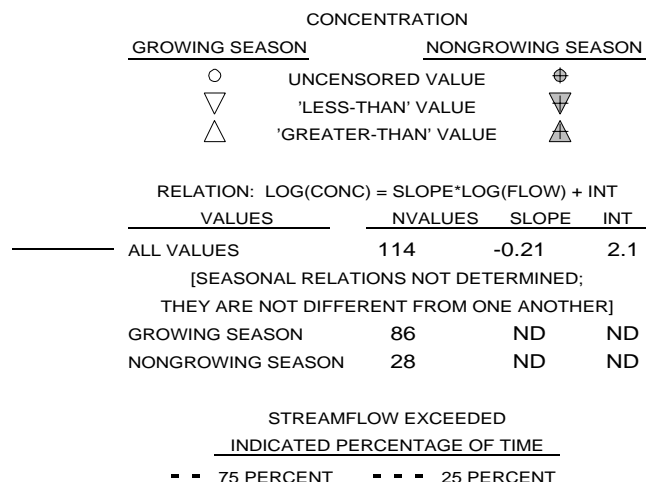
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



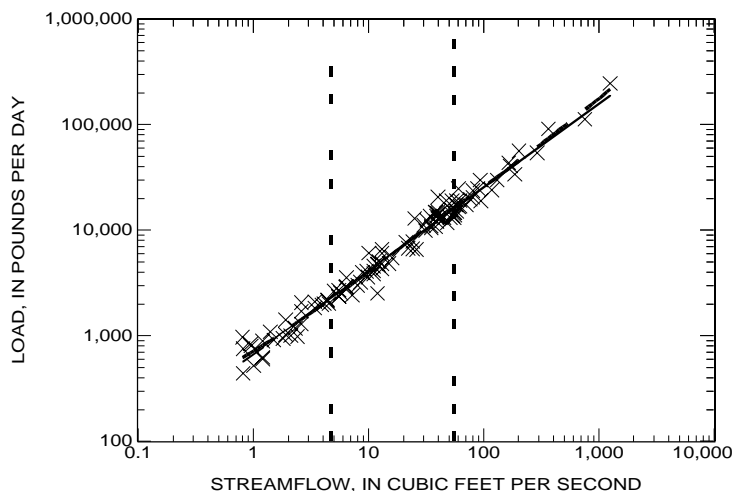
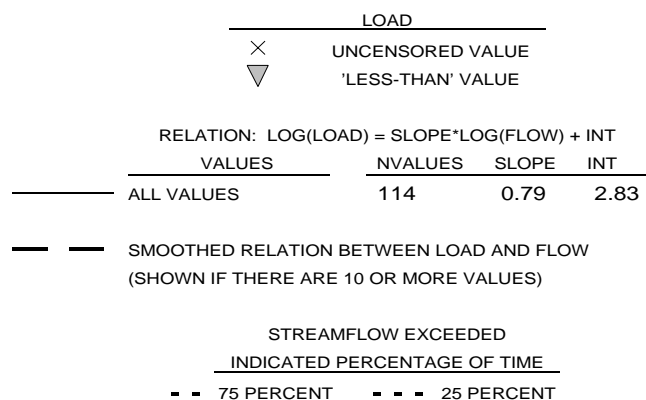
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

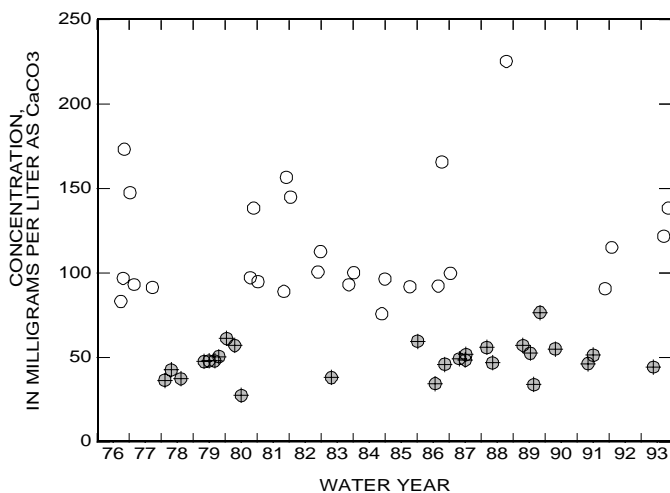
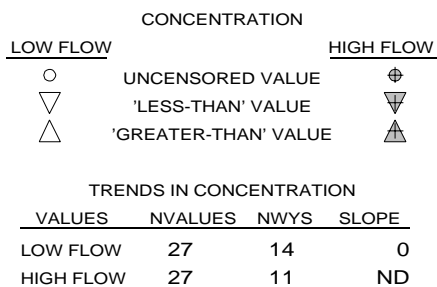
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



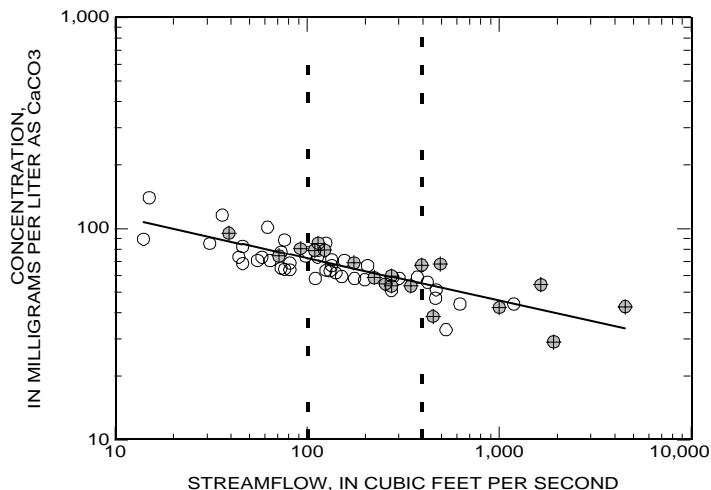
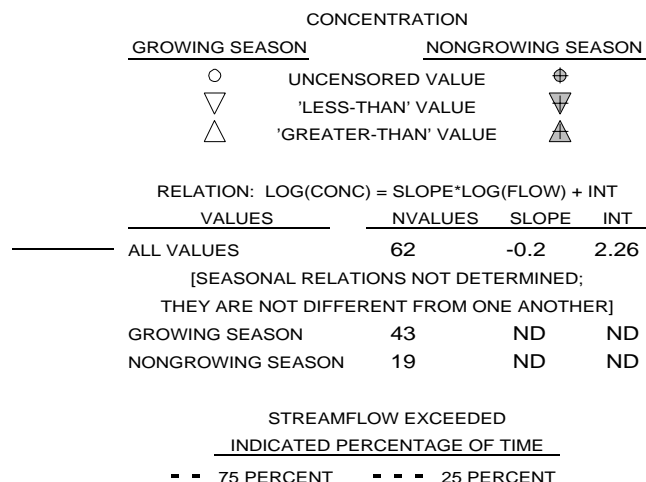
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



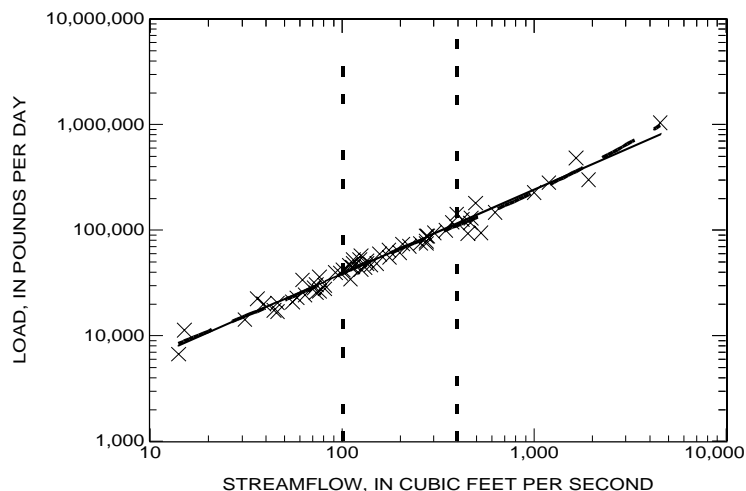
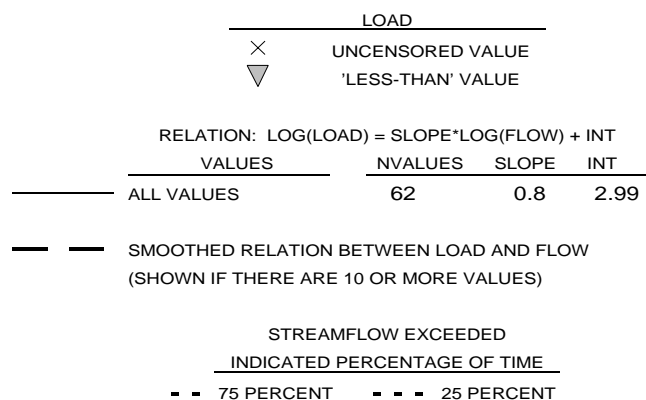
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

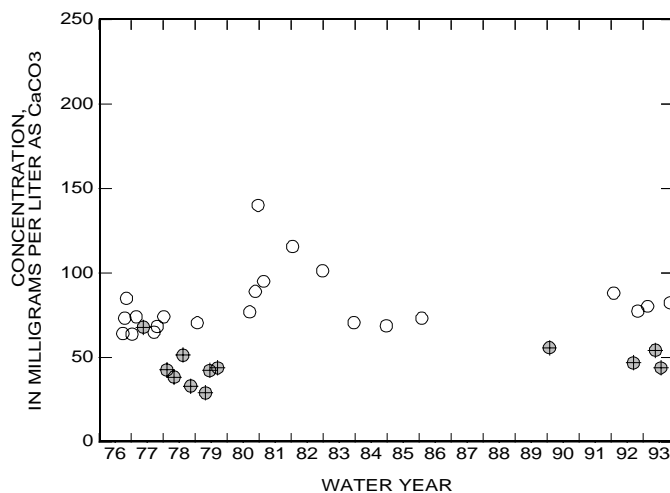
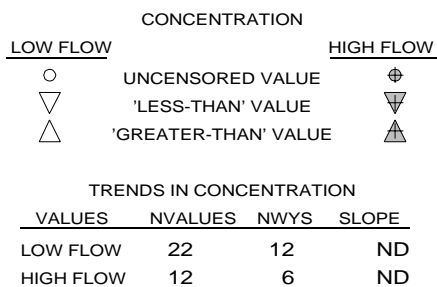
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

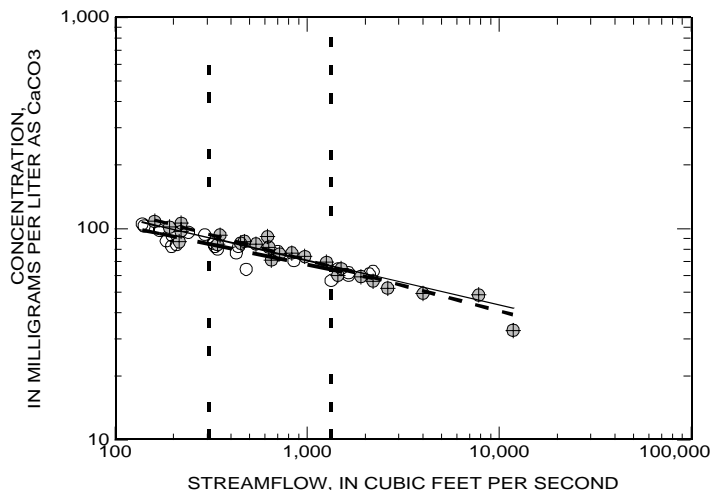
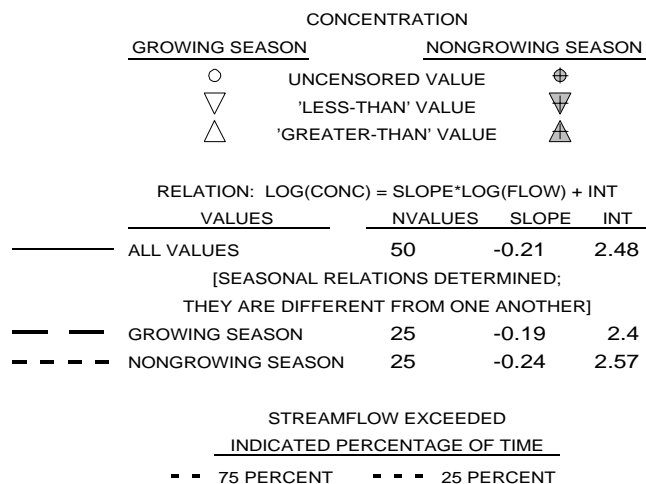


APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time

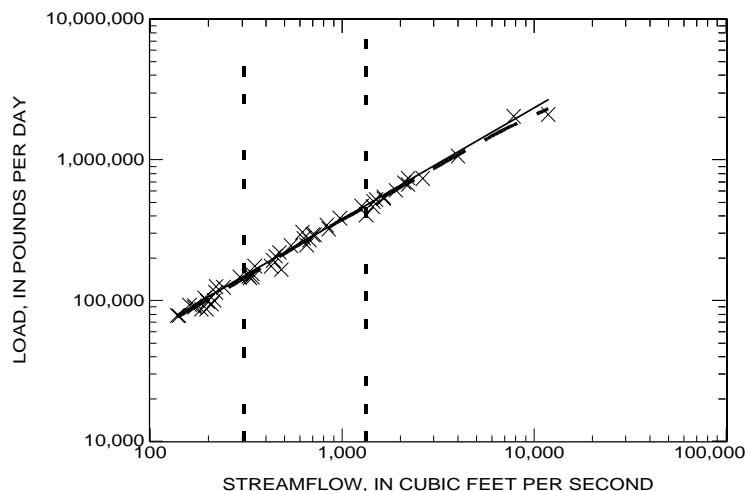
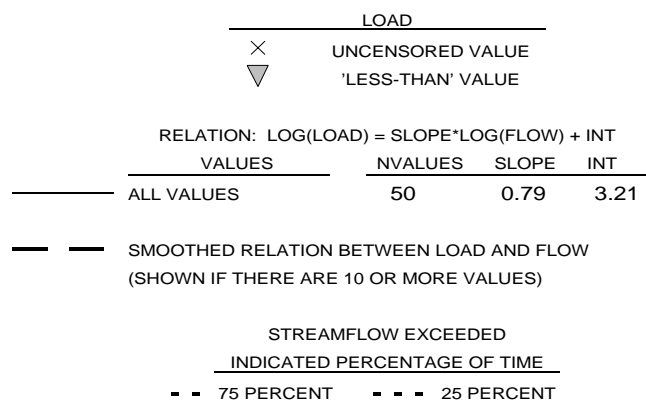
TOTAL HARDNESS
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

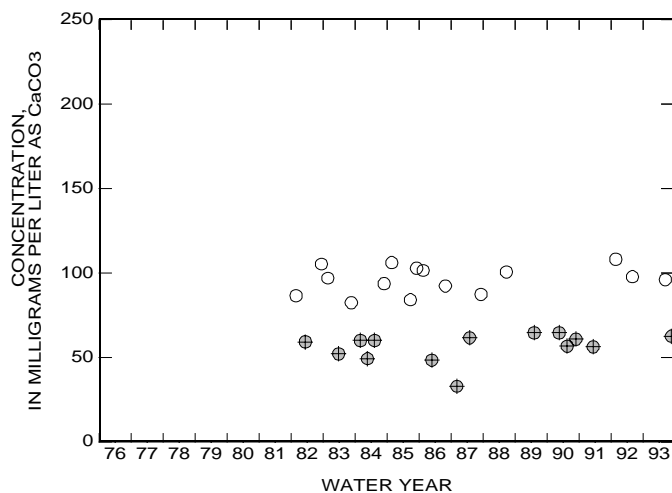
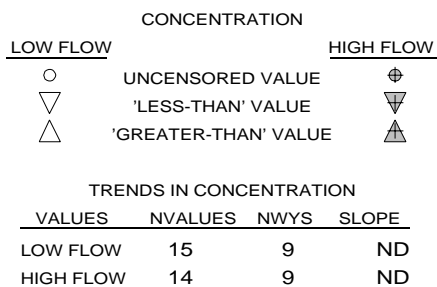
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



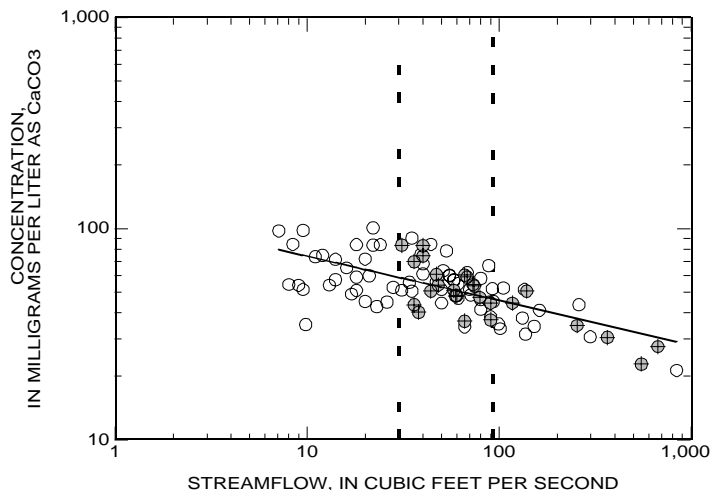
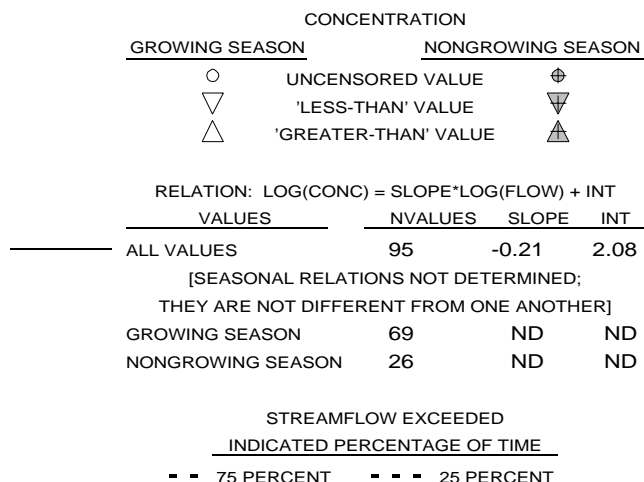
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



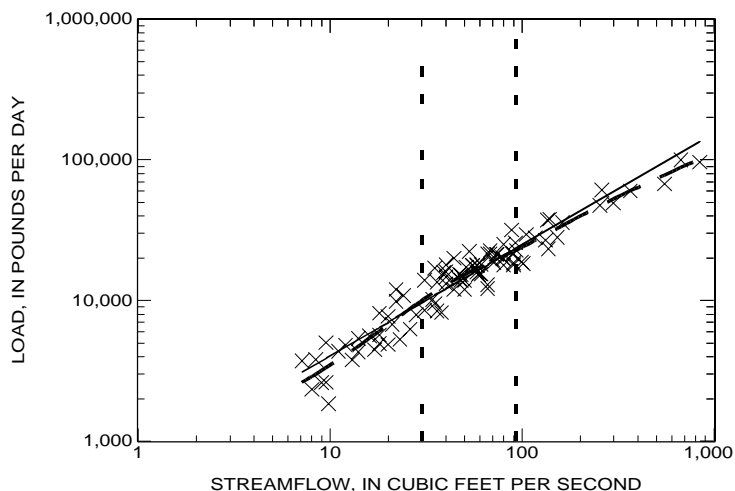
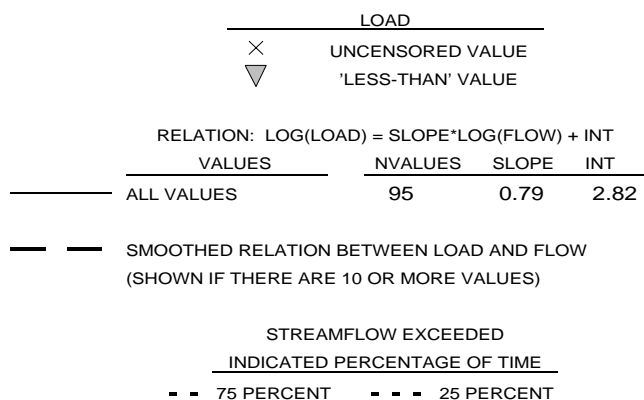
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

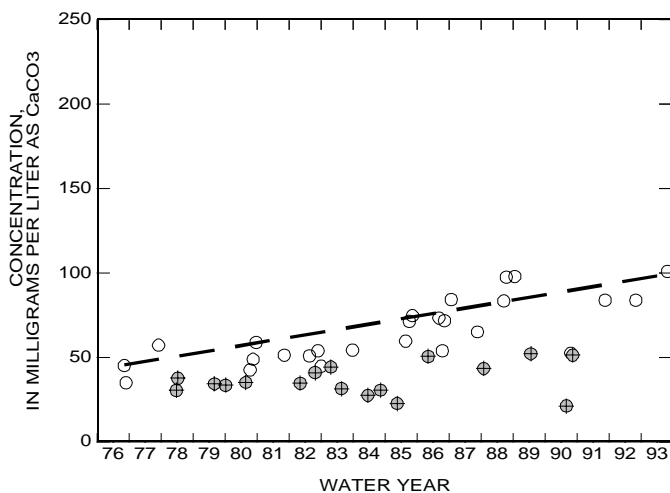
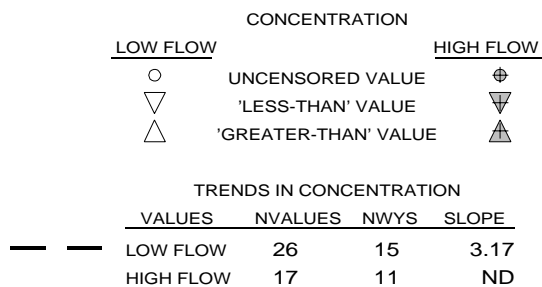
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



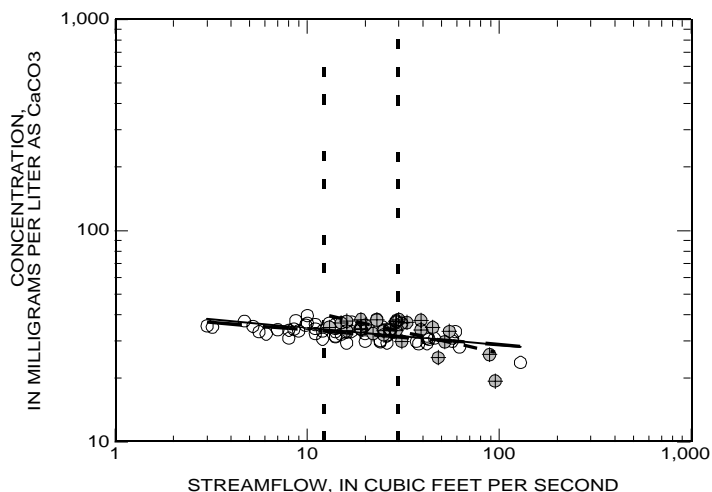
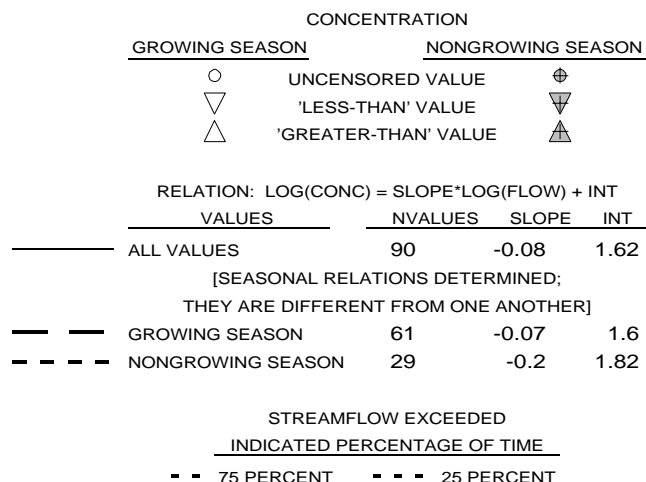
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



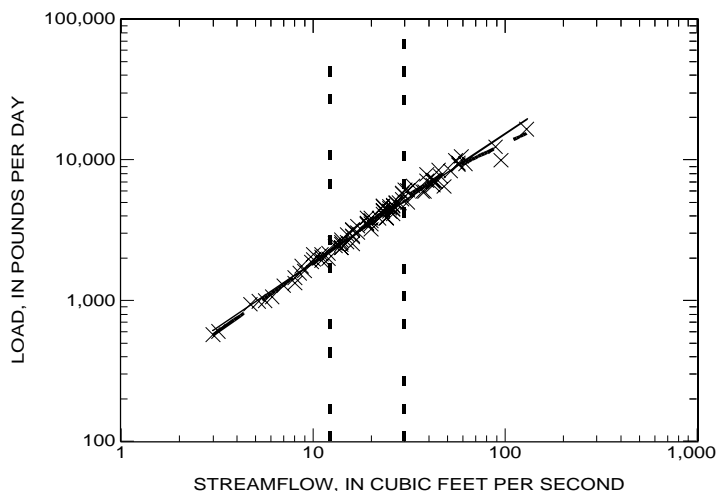
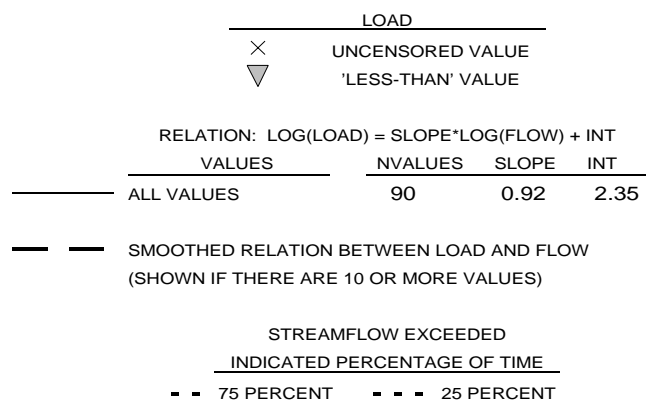
APPENDIX 2. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL HARDNESS
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

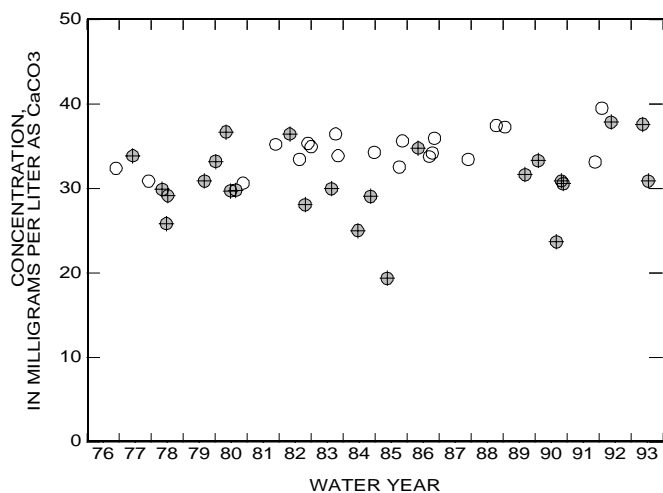
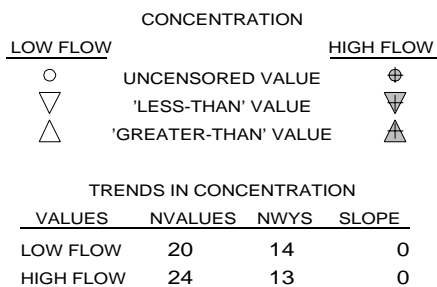
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



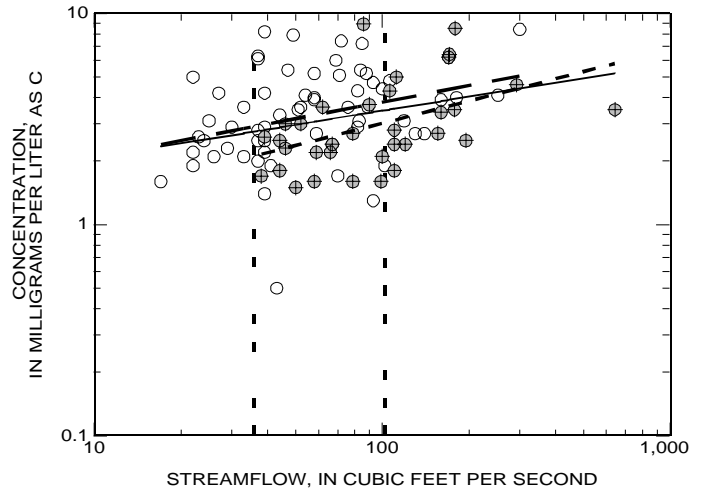
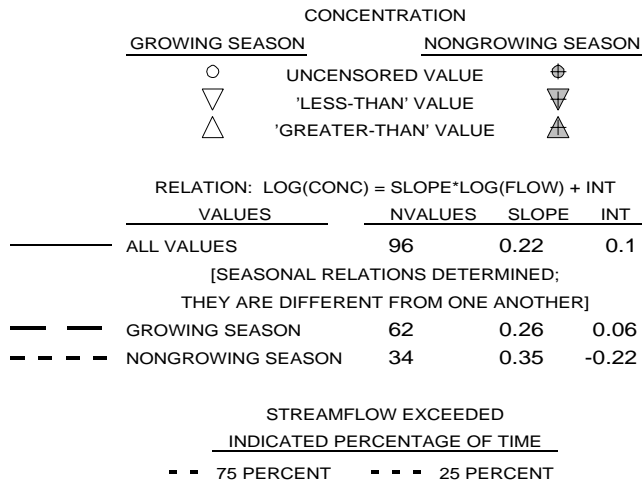
Appendix 3 - Total organic carbon

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

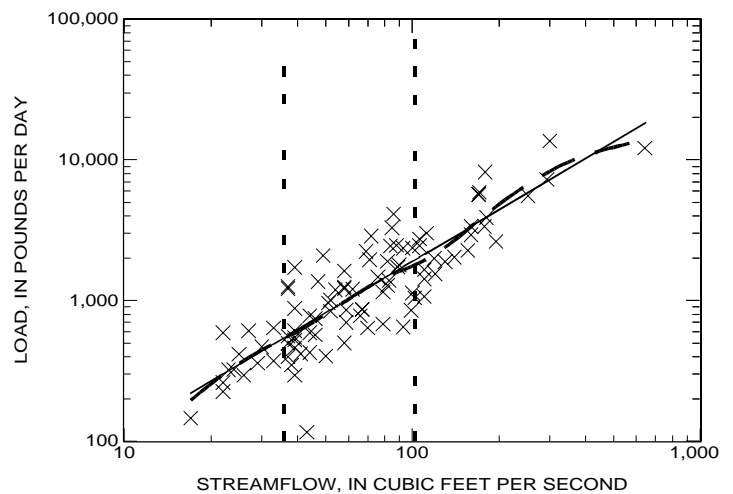
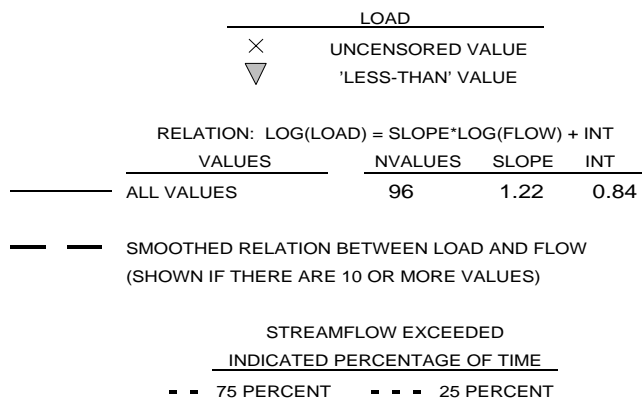
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

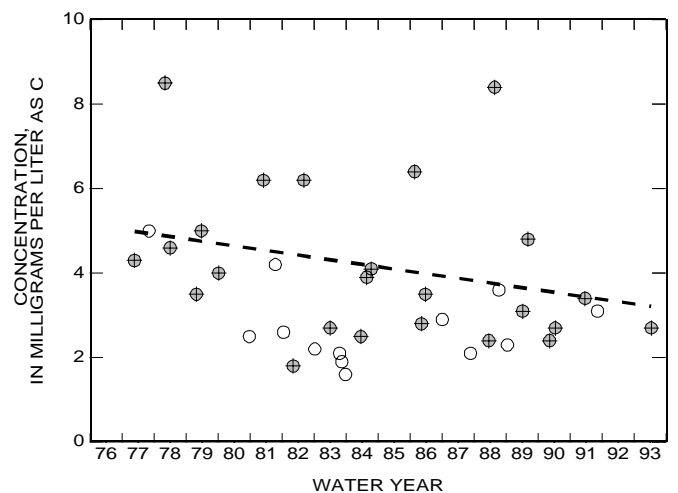
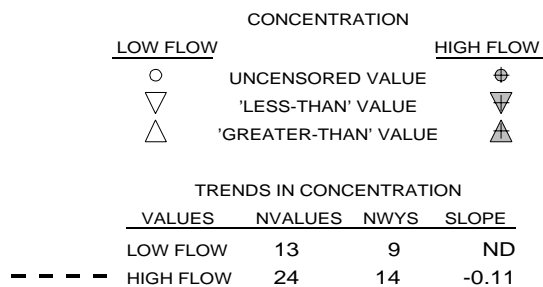
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



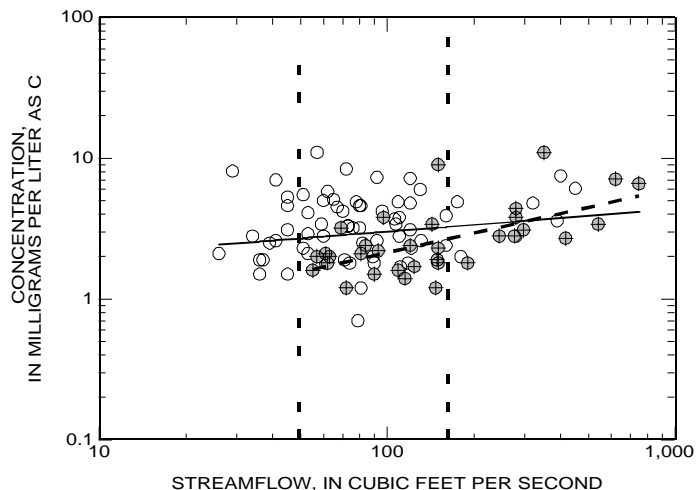
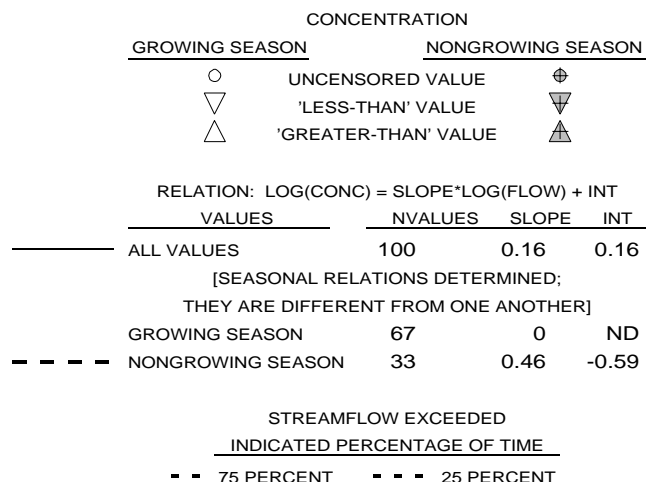
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



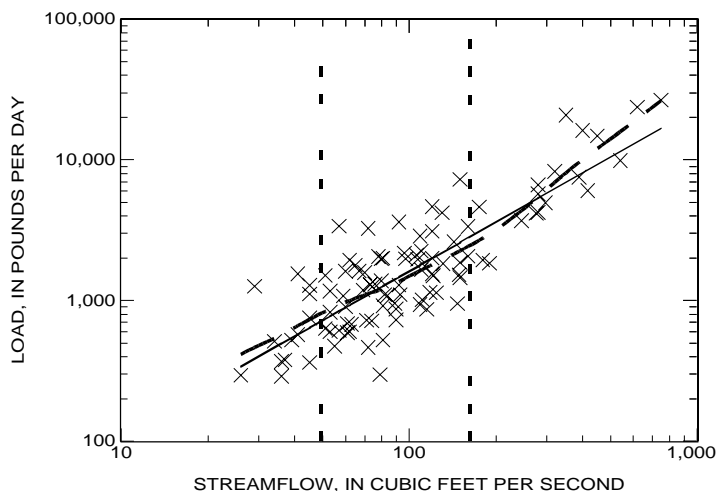
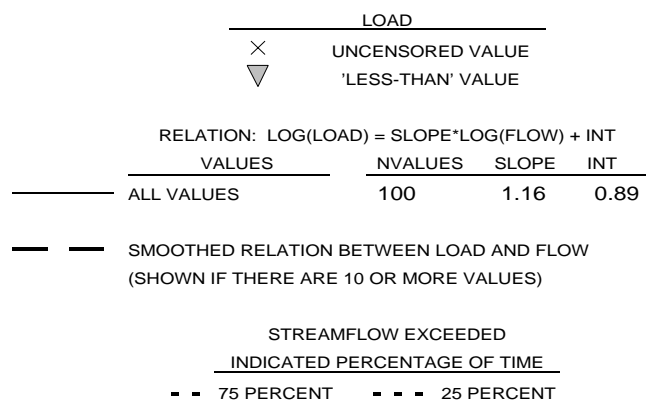
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

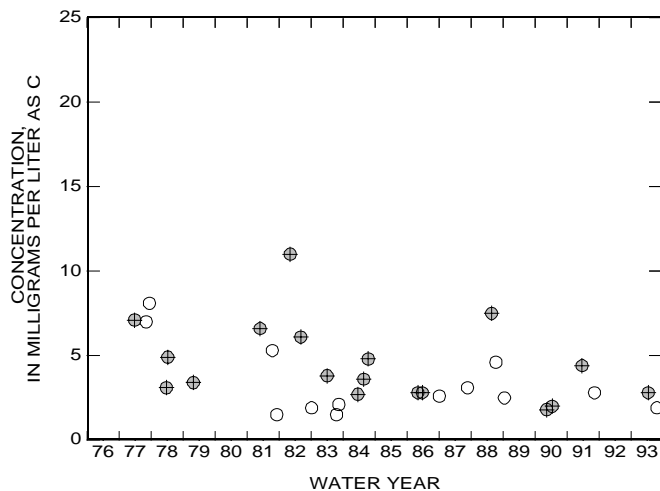
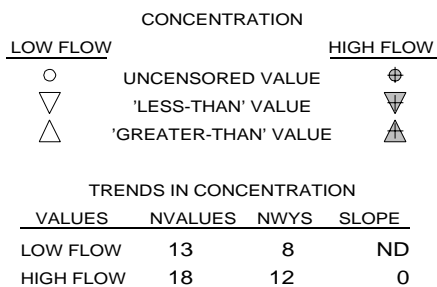
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



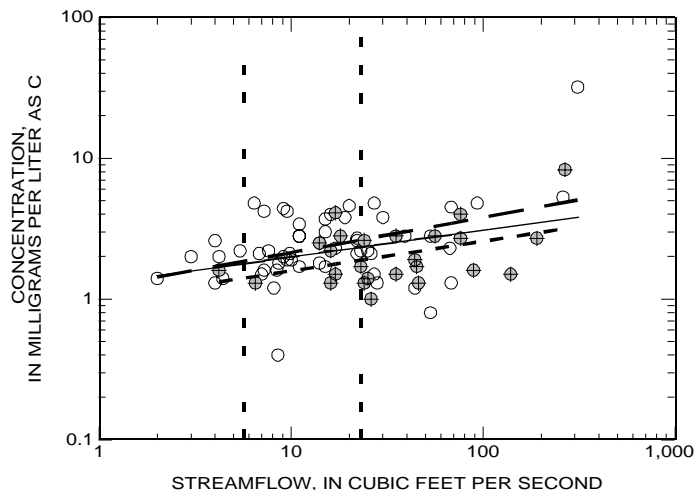
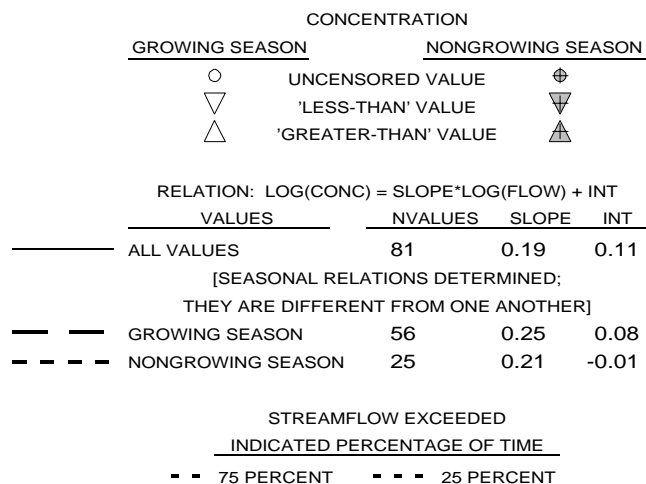
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



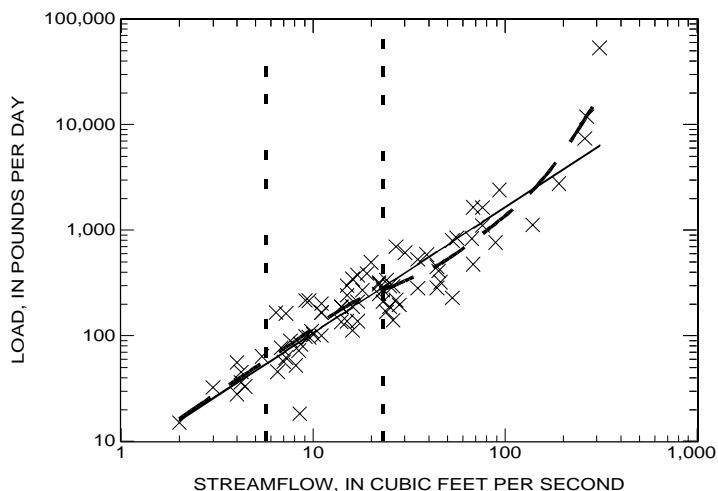
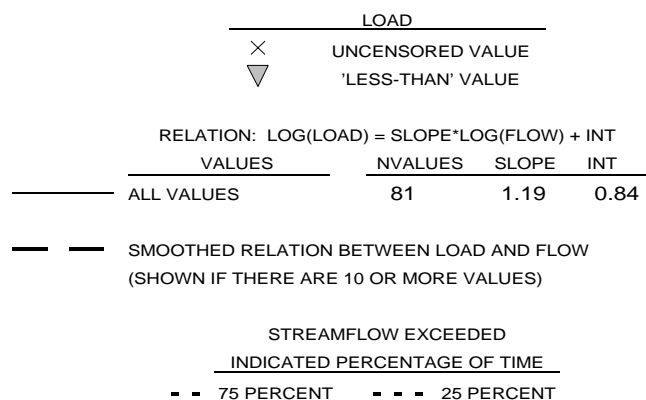
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

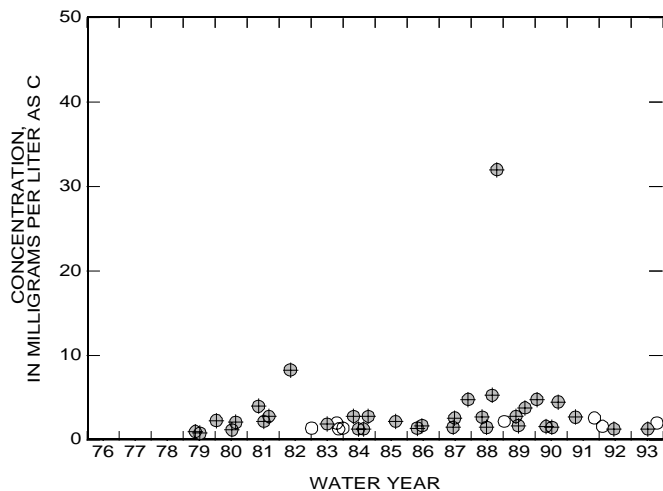
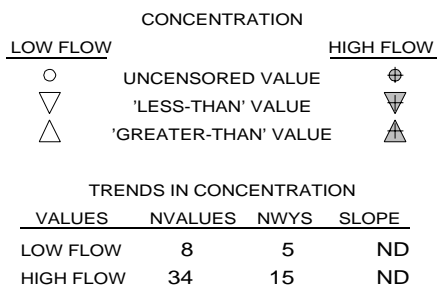
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



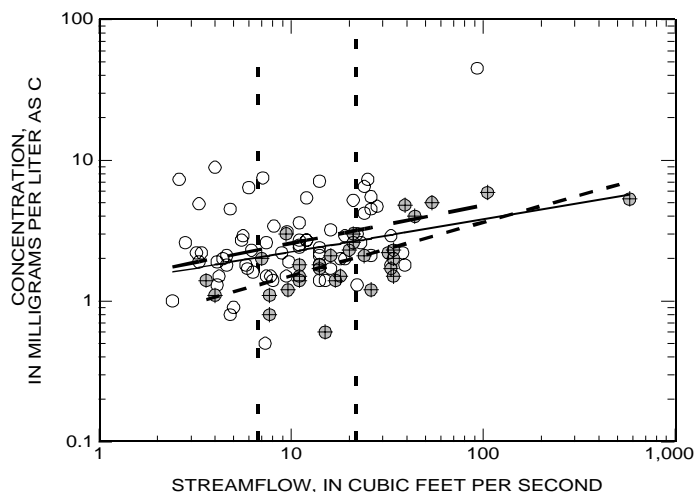
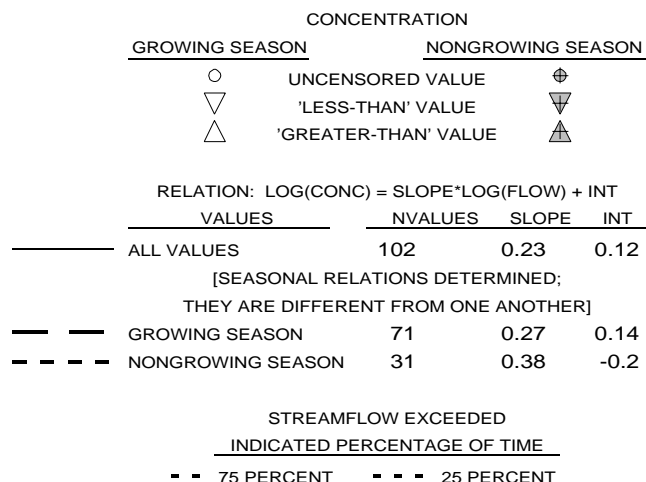
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



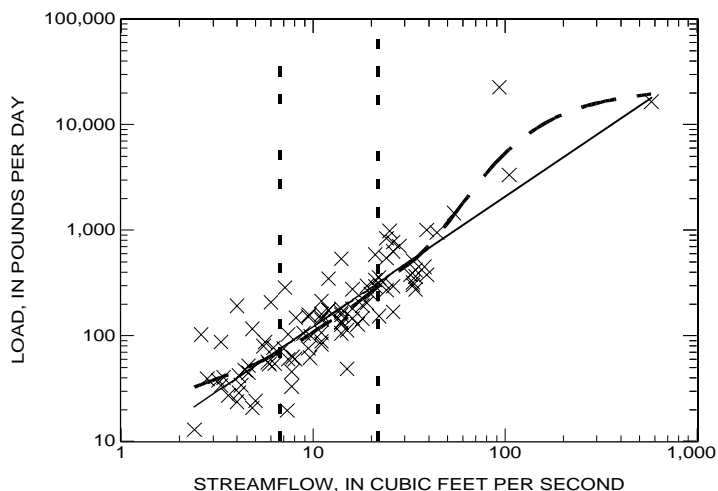
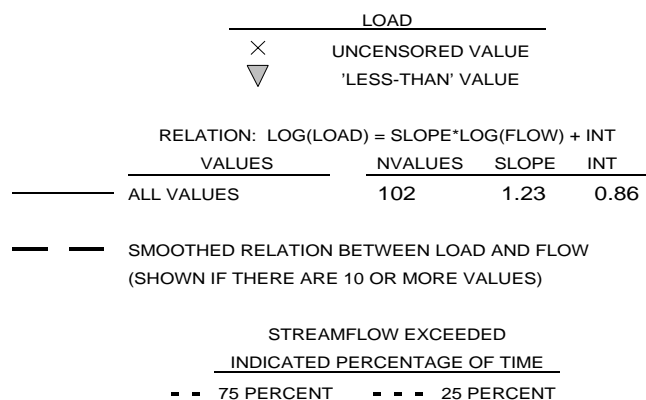
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

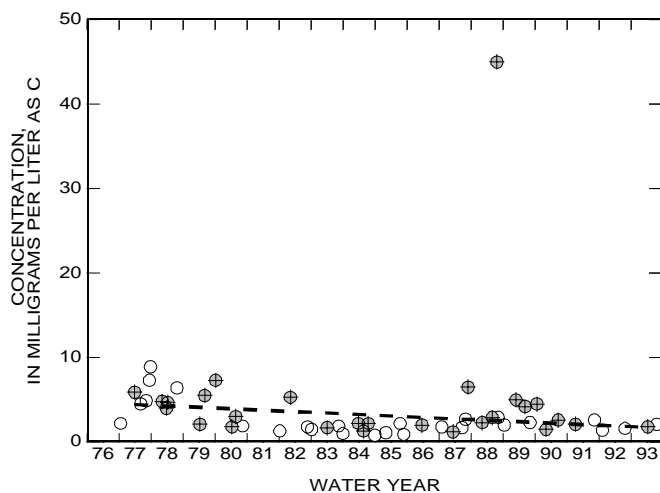
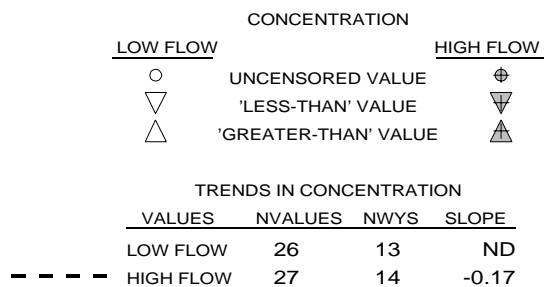
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

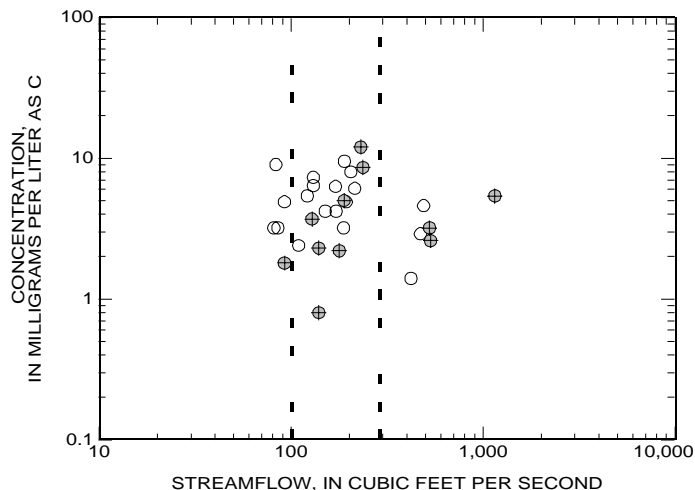


APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

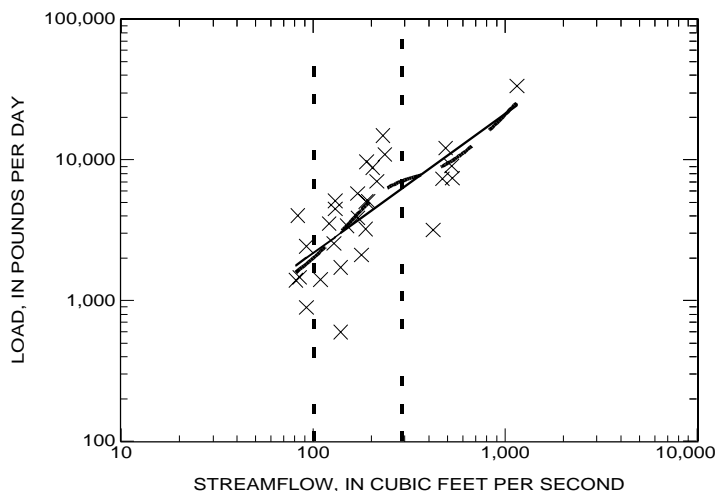
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	30	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	19	ND	ND
NONGROWING SEASON	11	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - - 75 PERCENT	- - - 25 PERCENT		



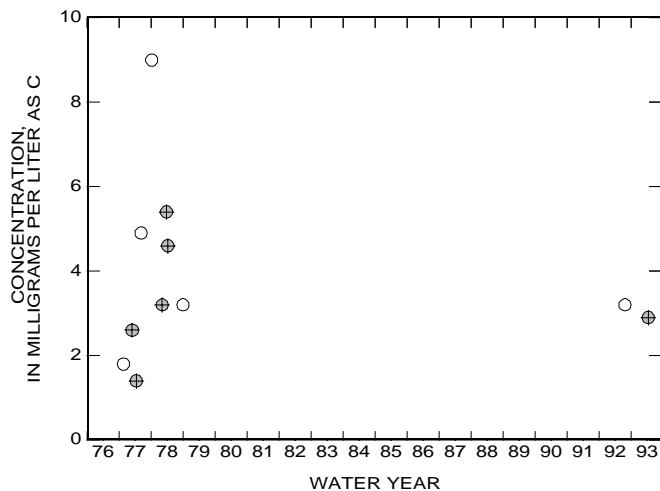
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	30	0.99	1.36
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
- - - 75 PERCENT	- - - 25 PERCENT		



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

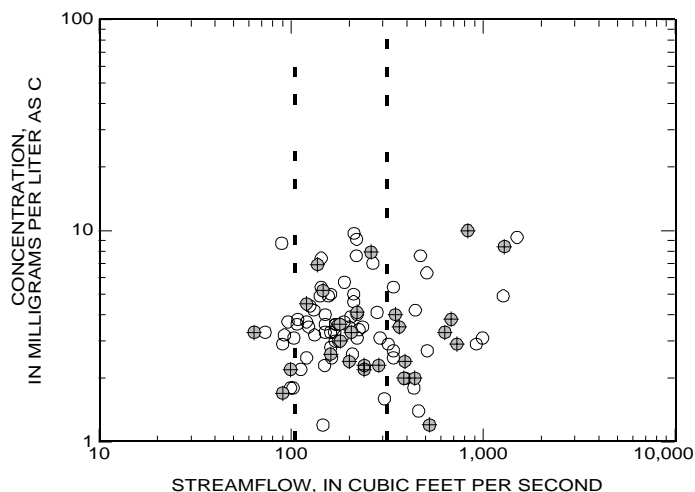
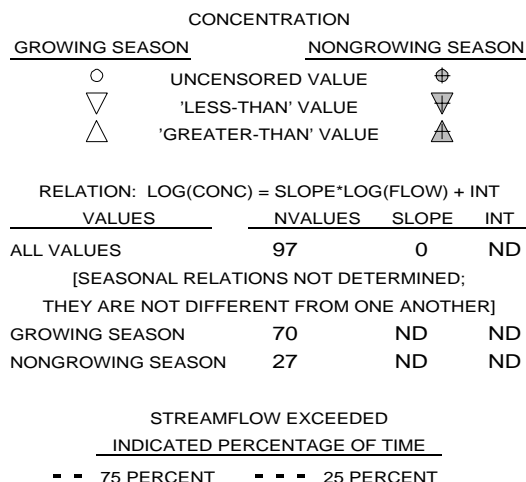
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	5	3	ND
HIGH FLOW	6	3	ND



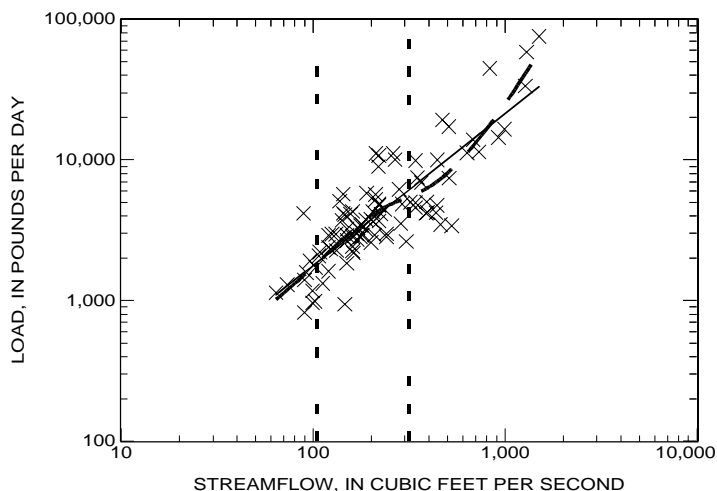
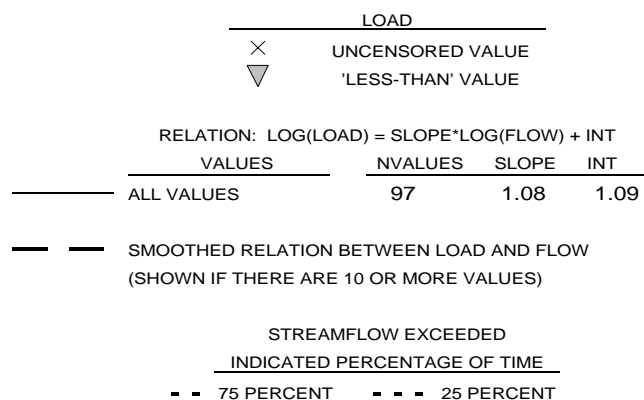
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

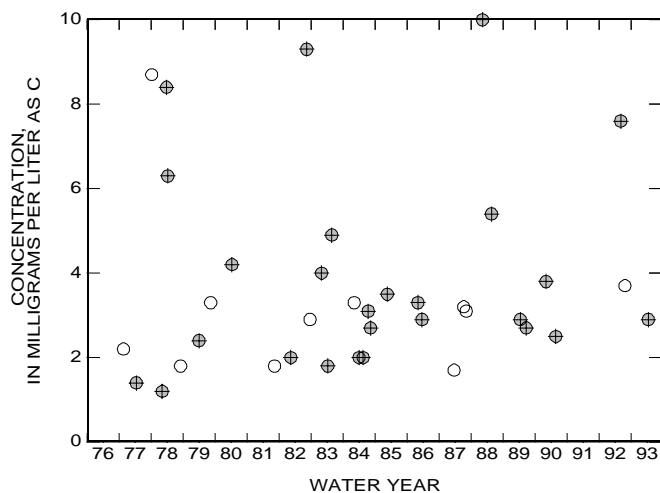
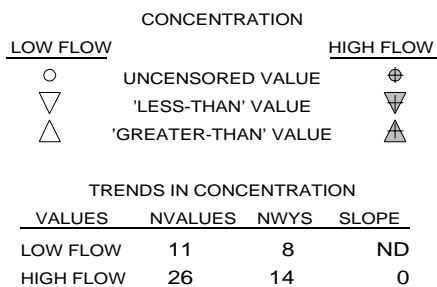
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



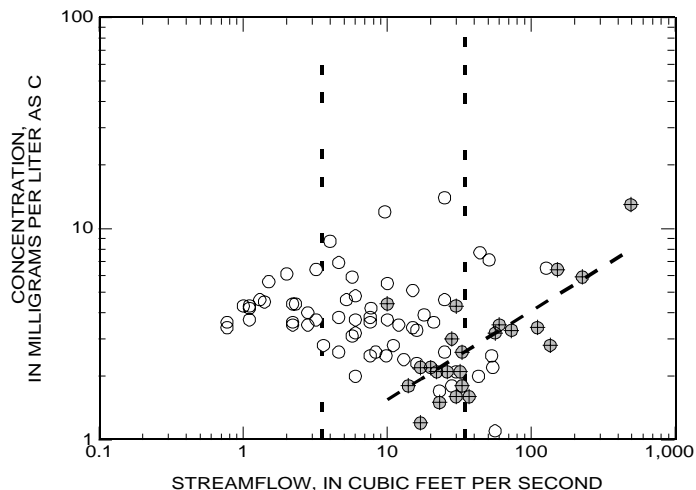
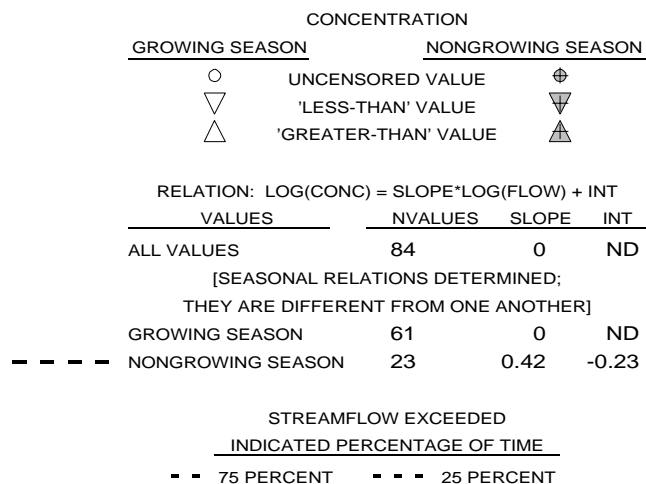
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



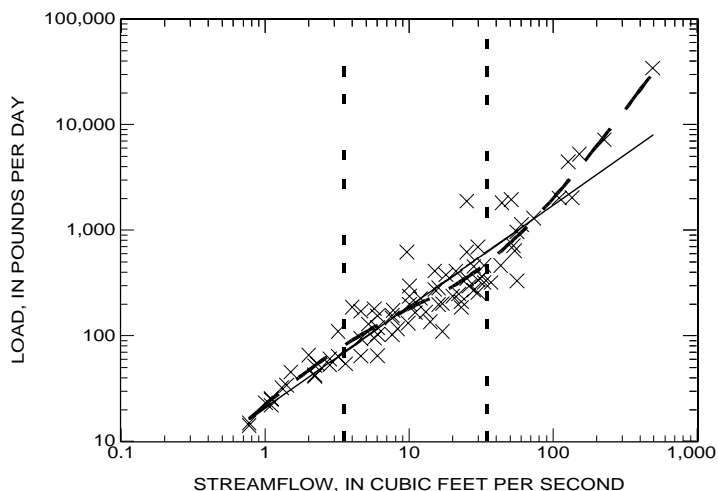
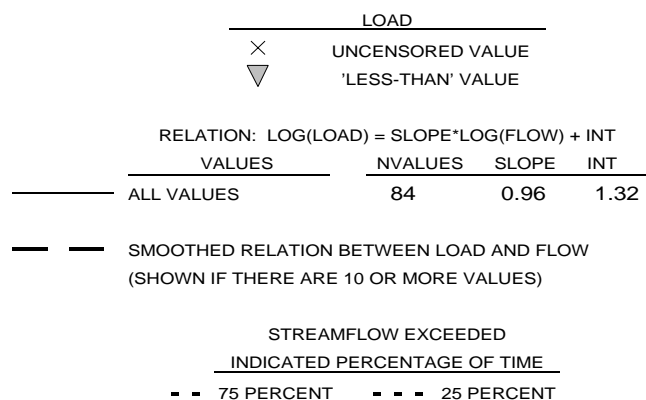
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

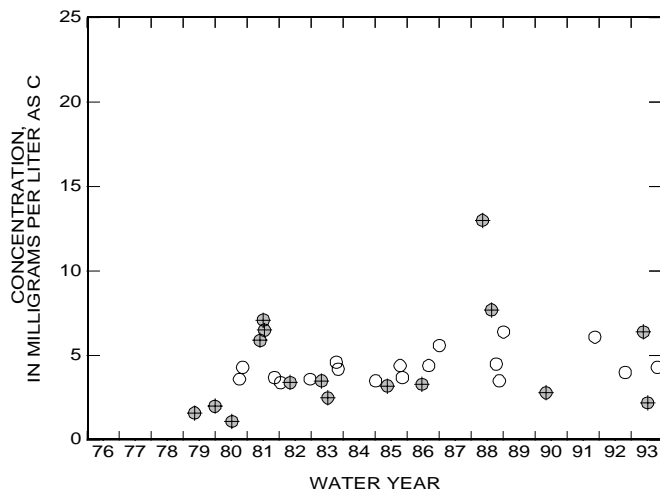
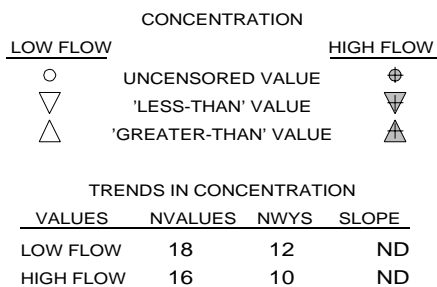
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



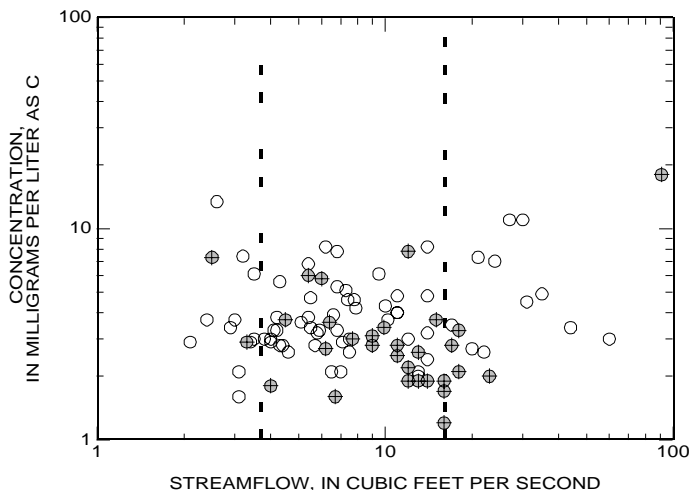
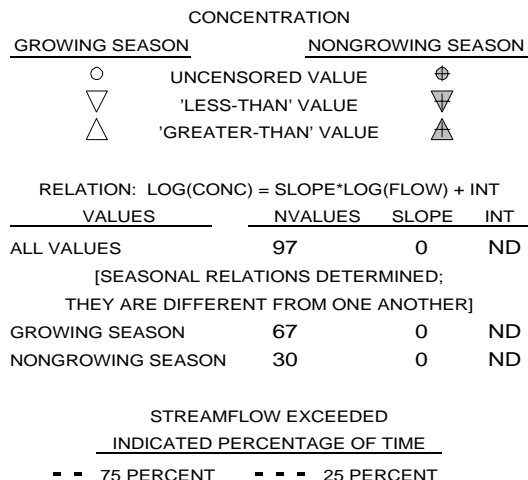
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



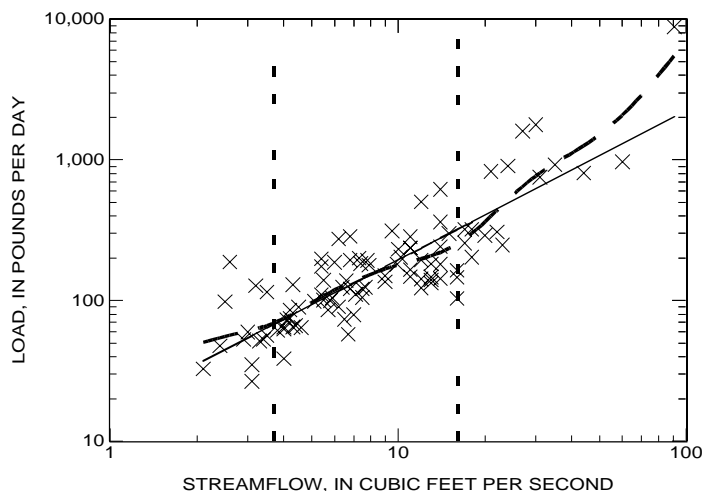
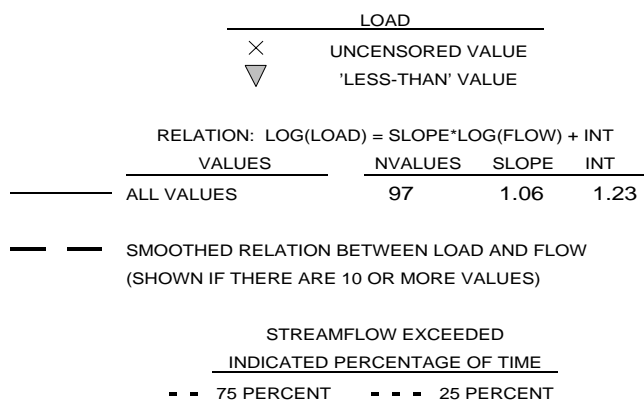
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

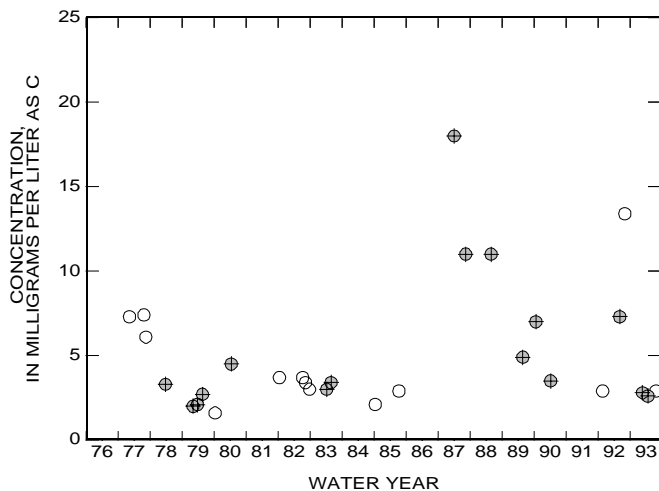
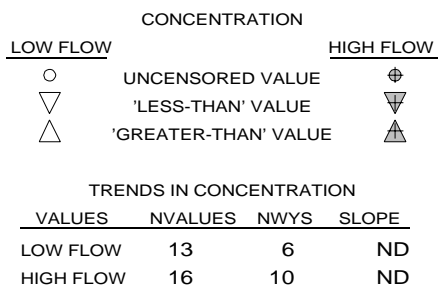
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



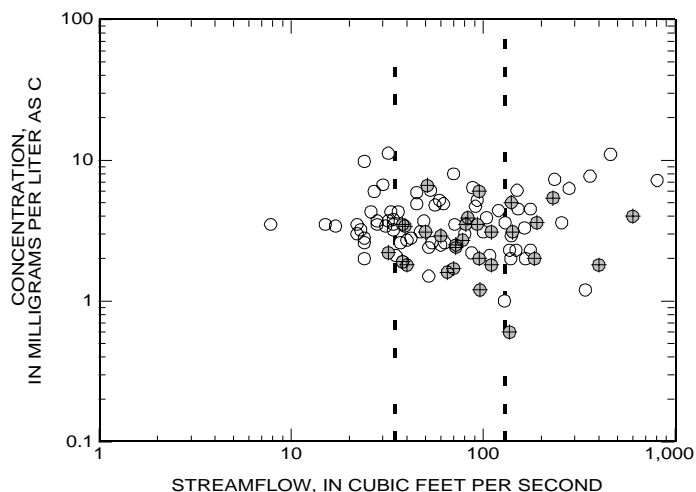
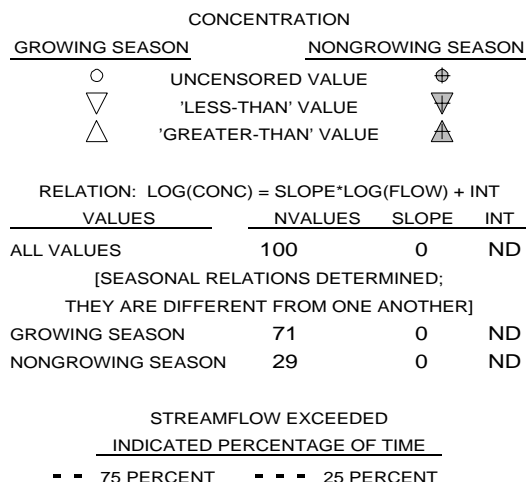
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



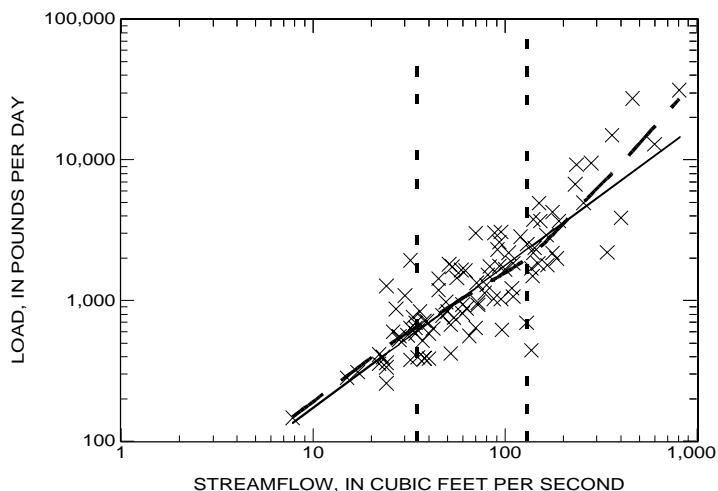
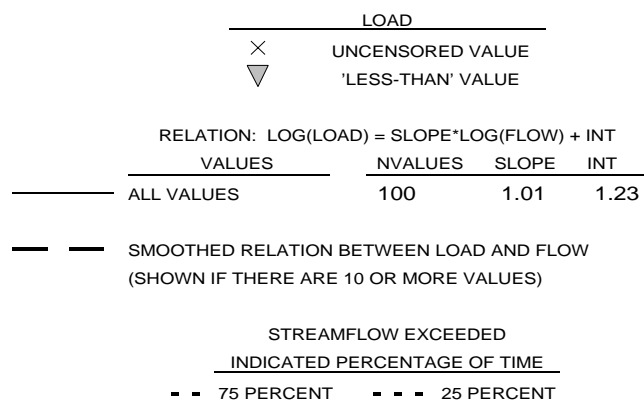
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

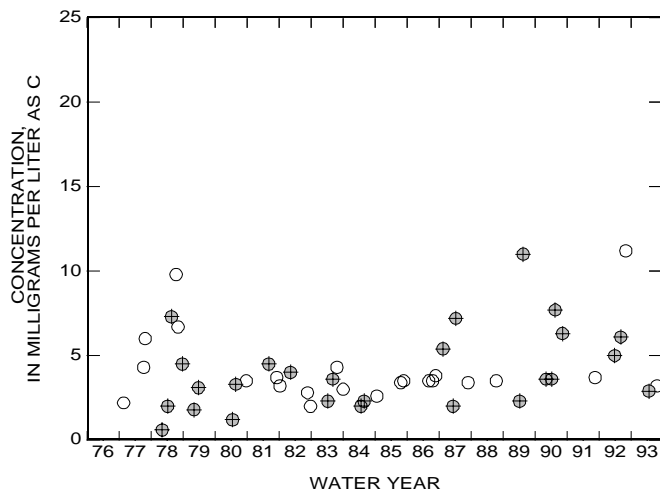
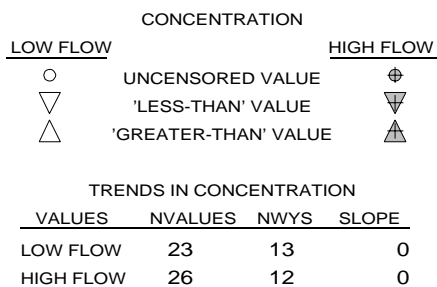
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



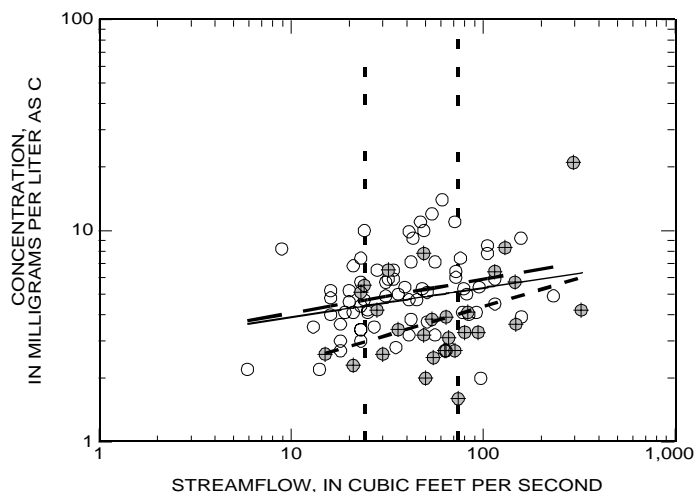
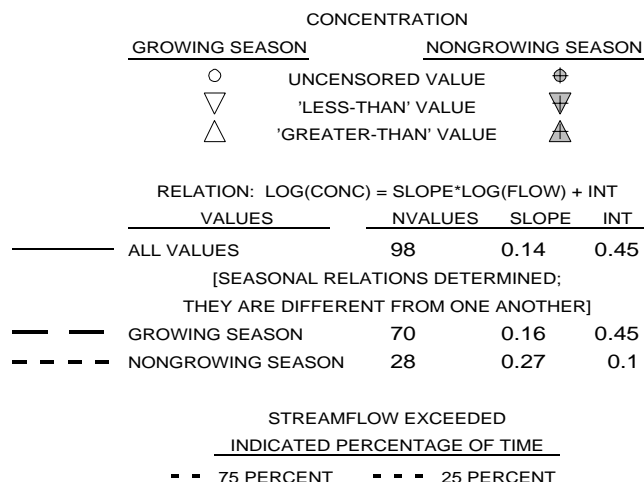
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



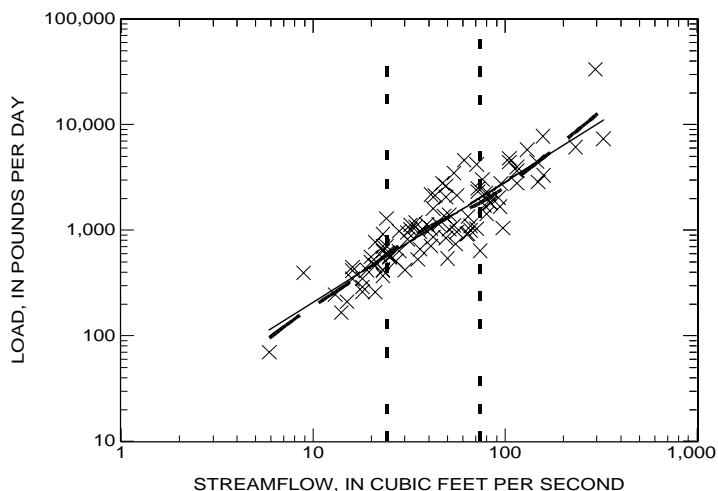
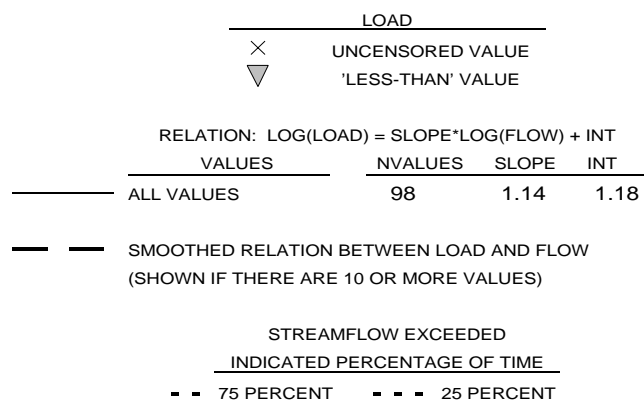
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

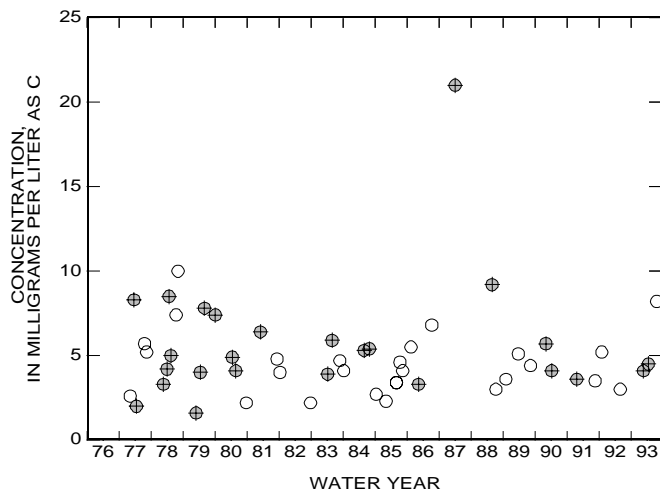
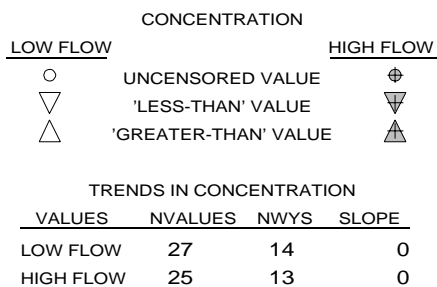
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



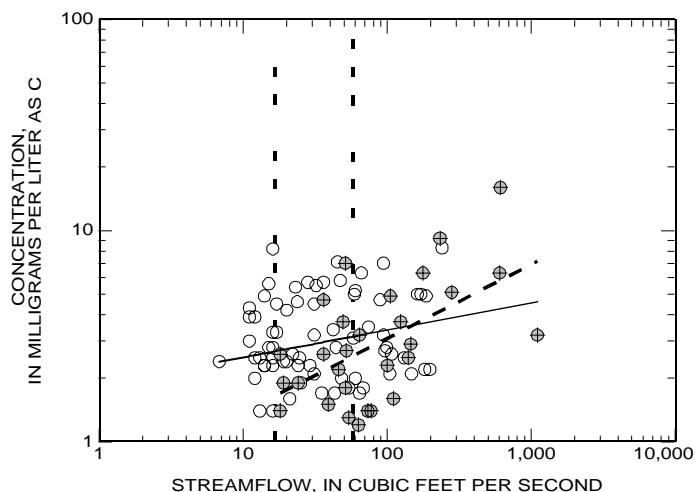
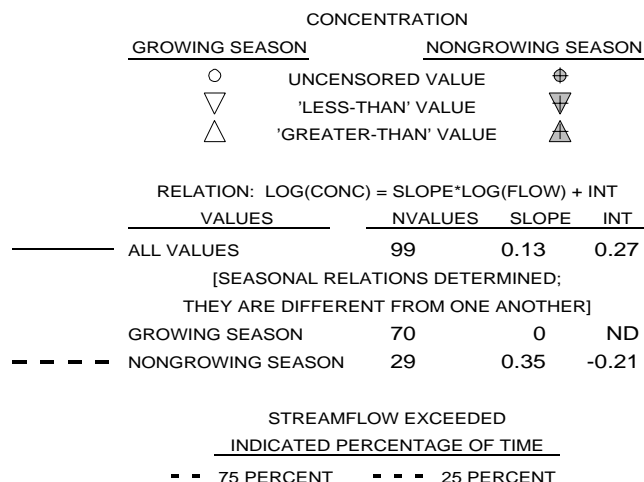
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



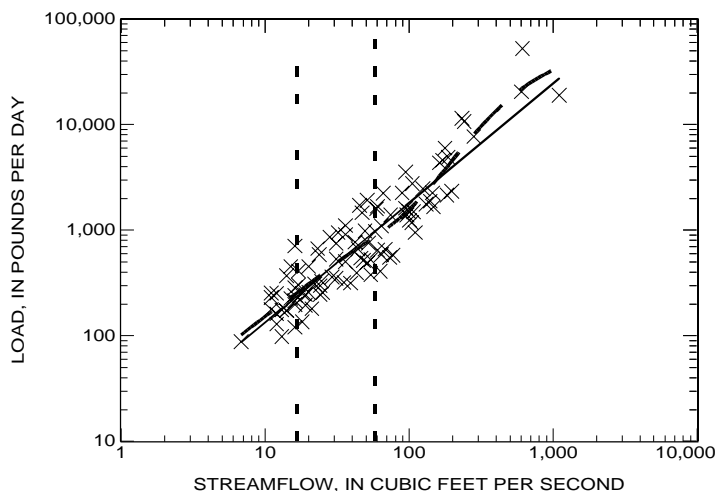
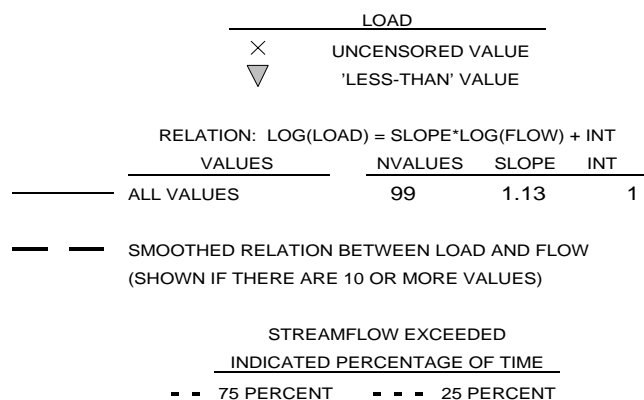
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

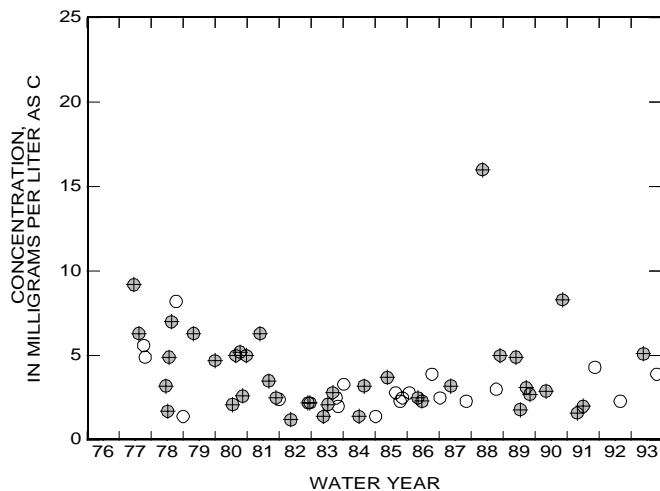
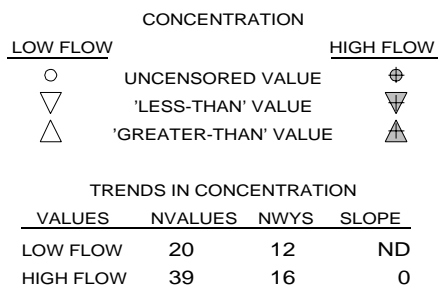
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



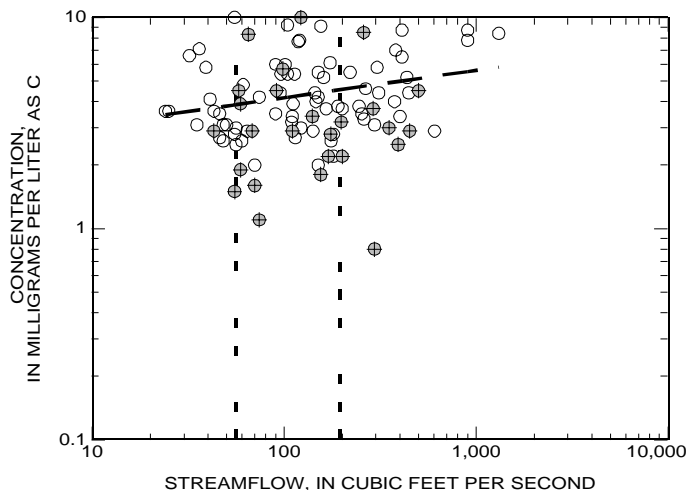
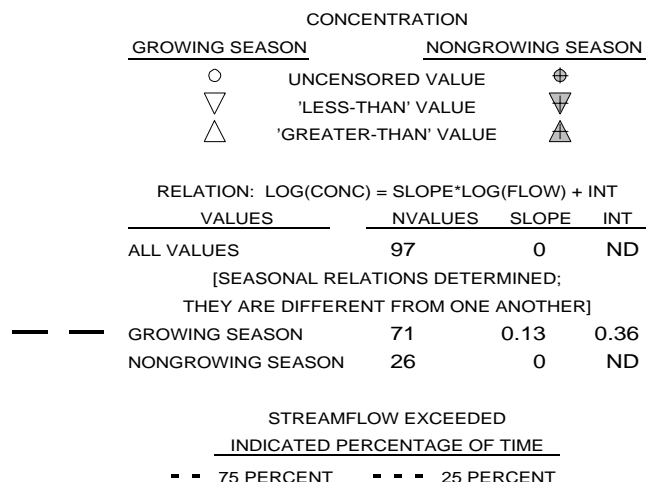
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



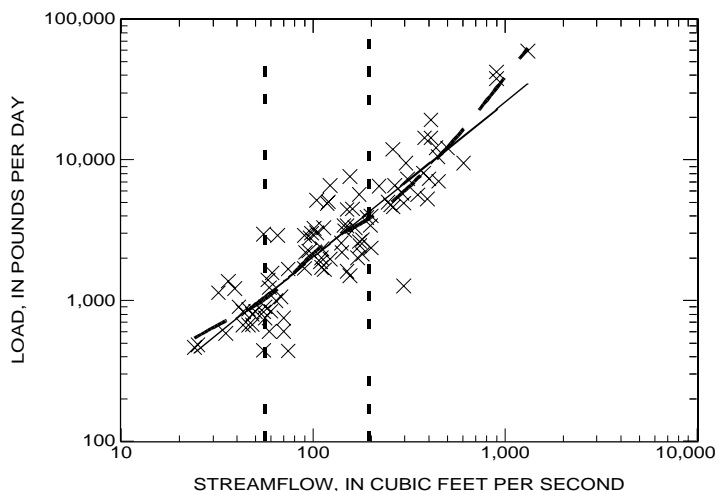
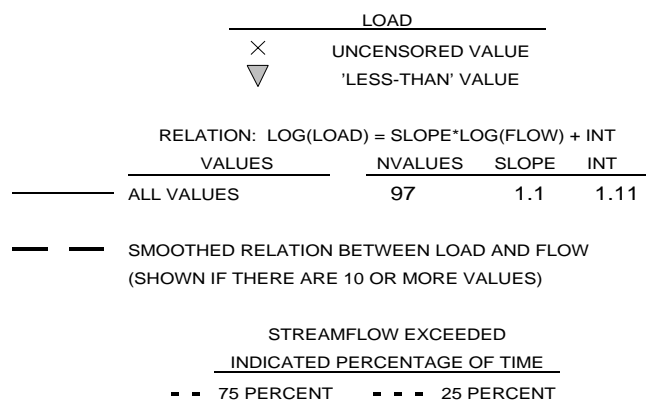
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

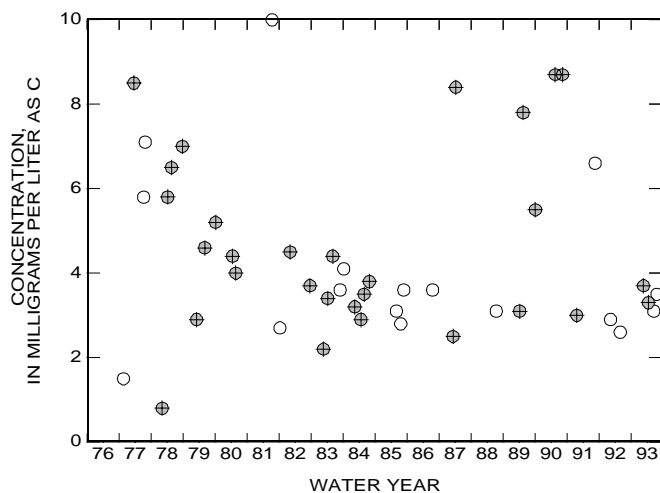
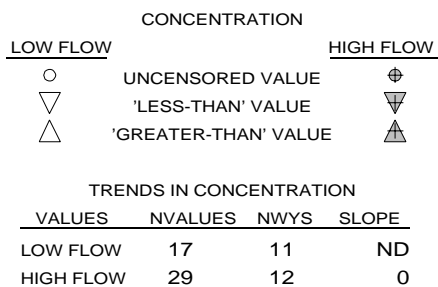
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



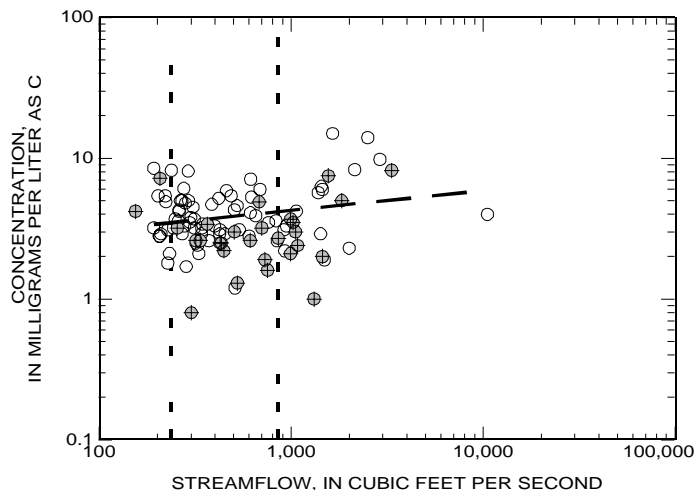
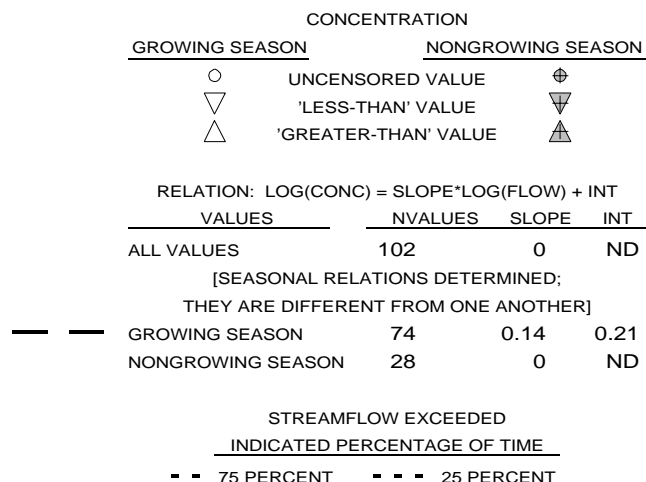
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



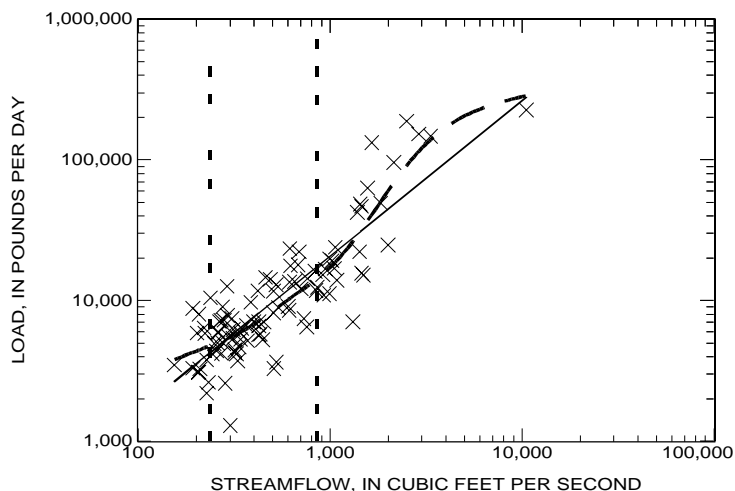
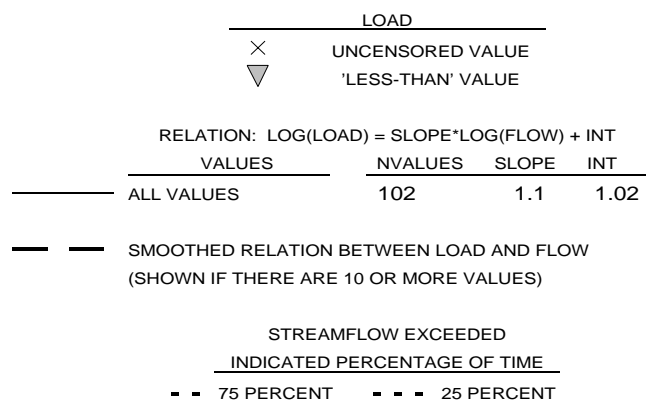
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

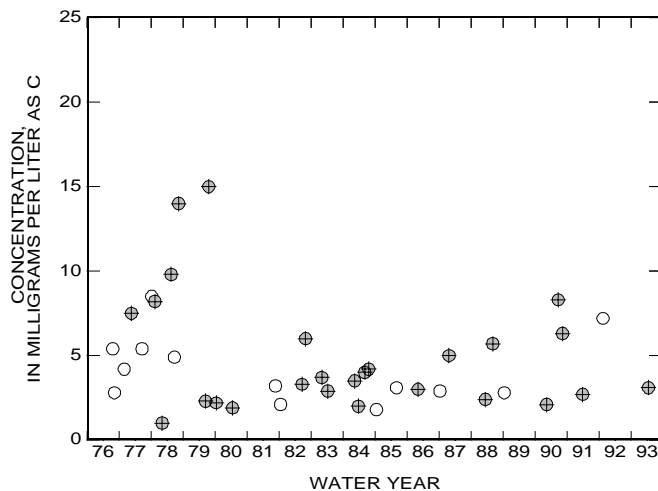
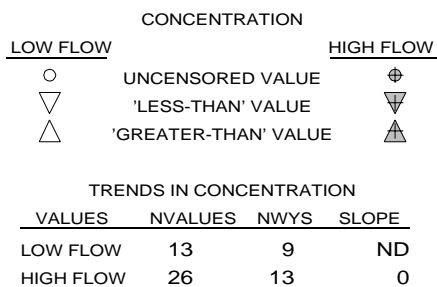
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



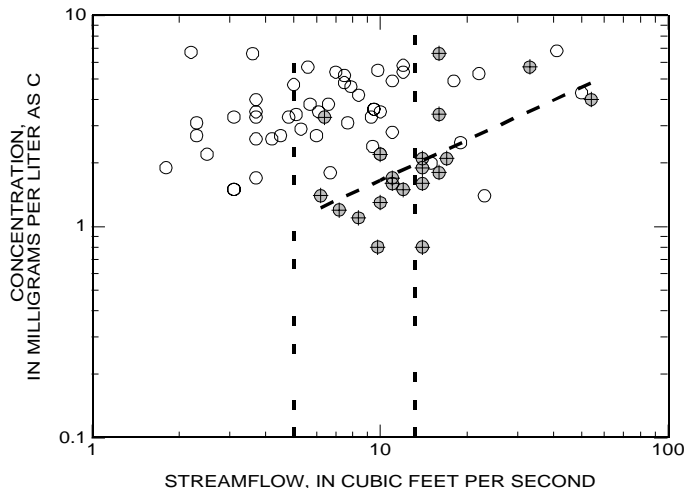
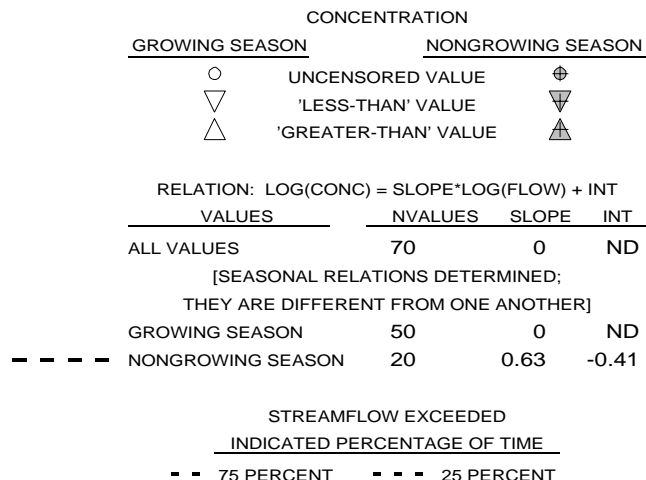
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



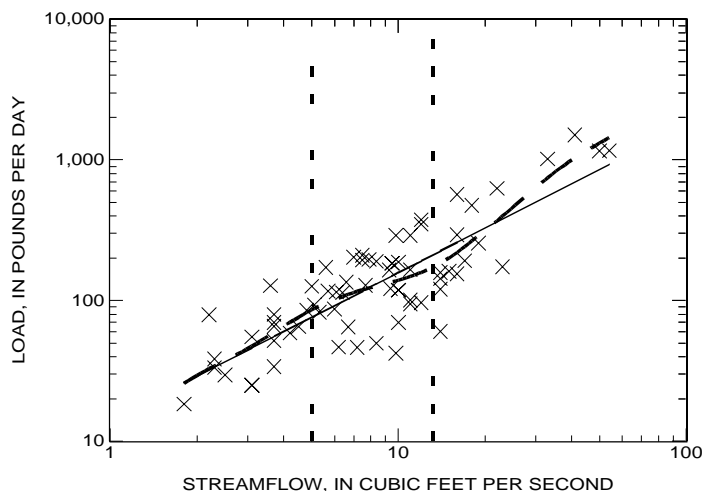
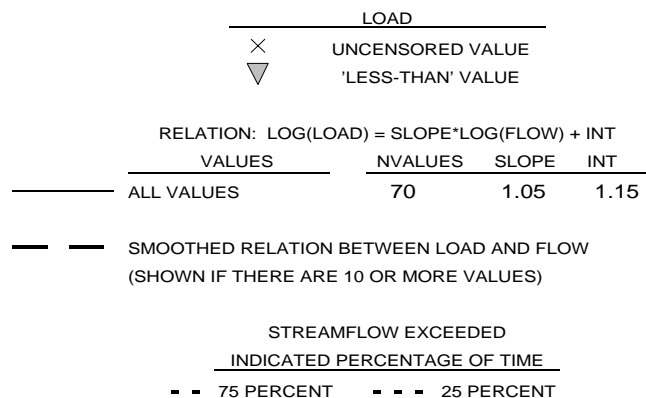
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

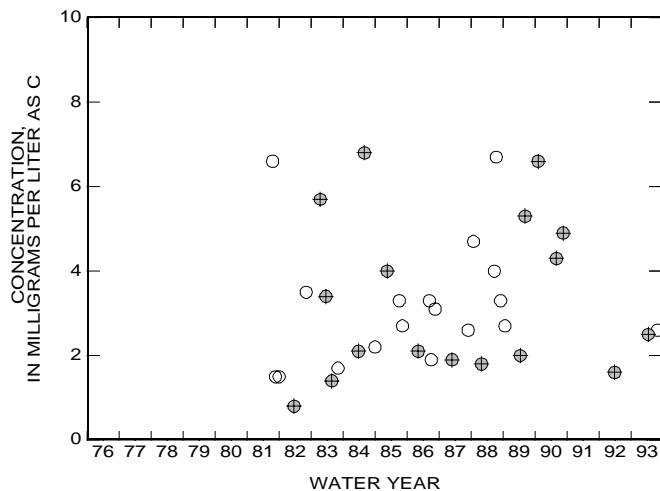
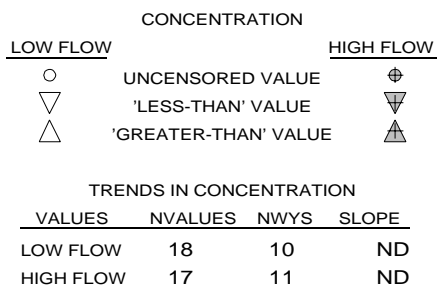
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



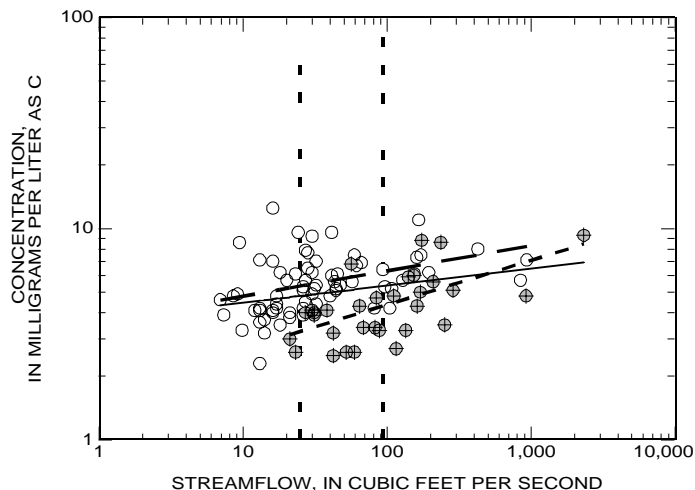
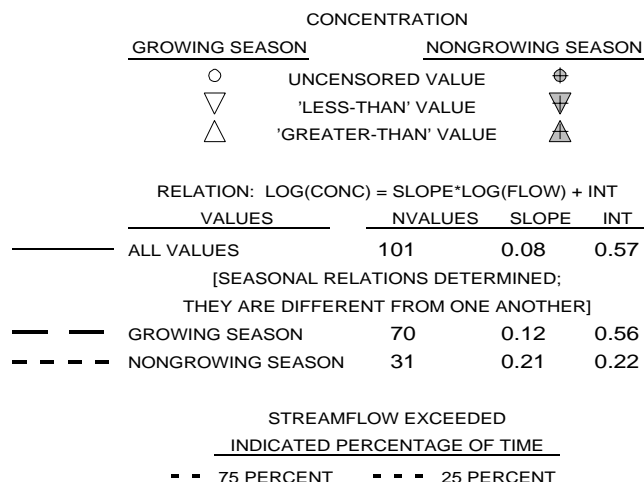
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



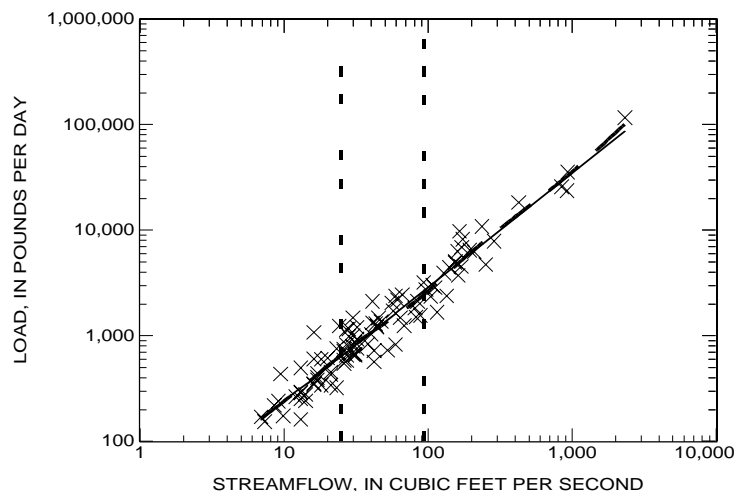
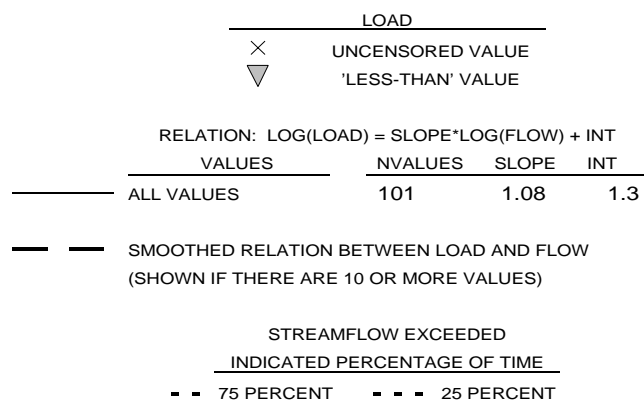
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

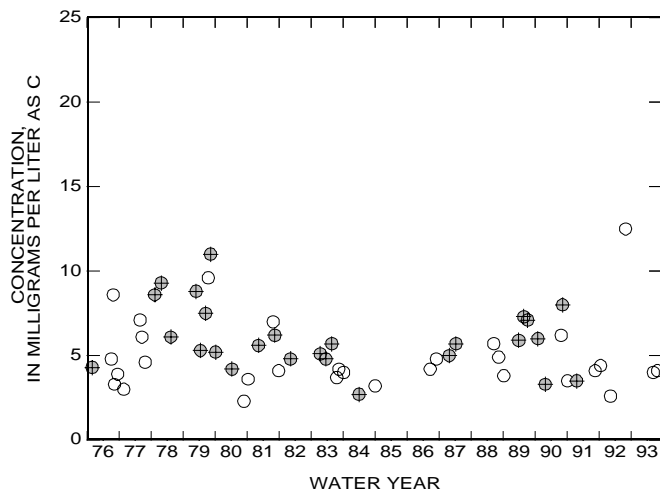
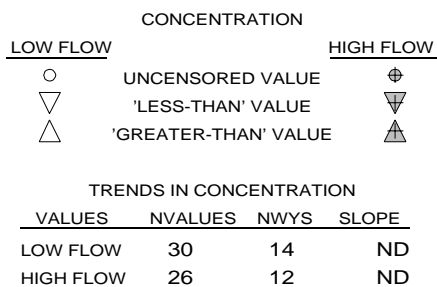
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



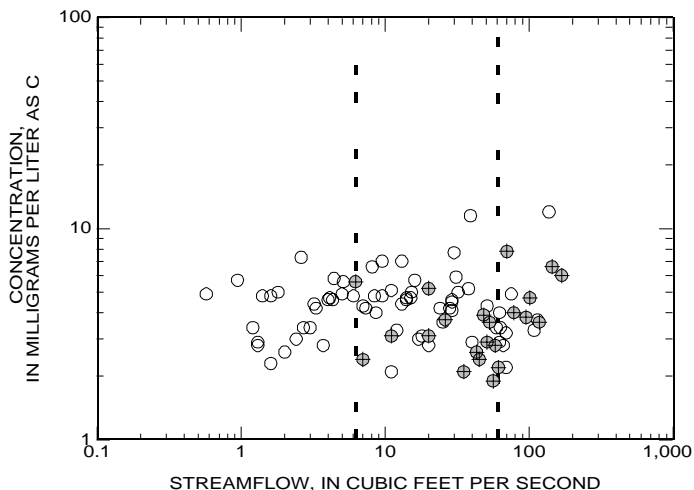
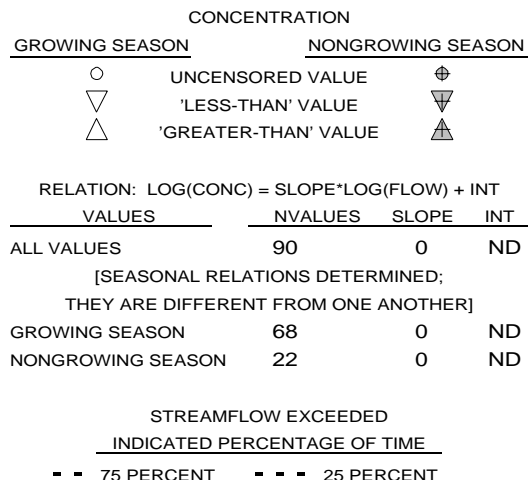
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



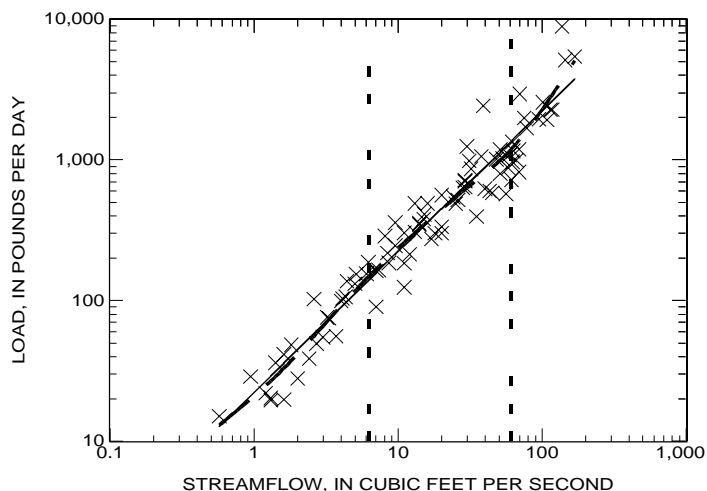
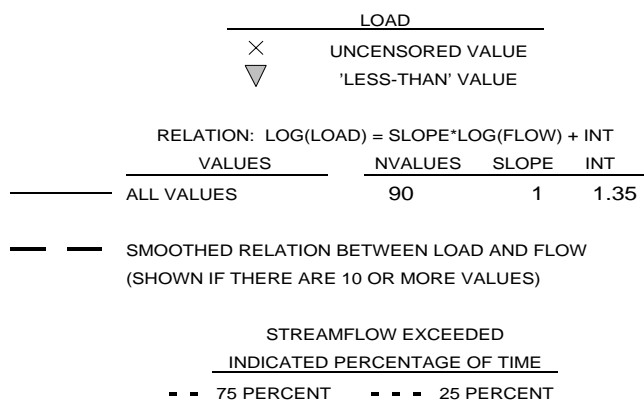
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

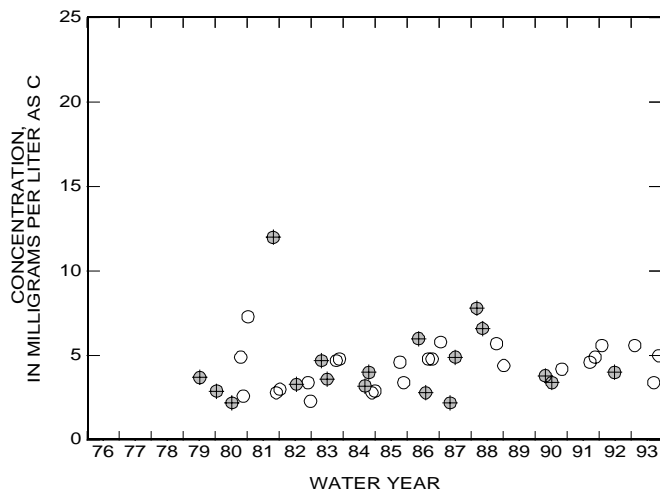
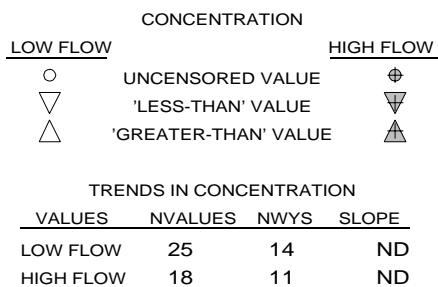
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



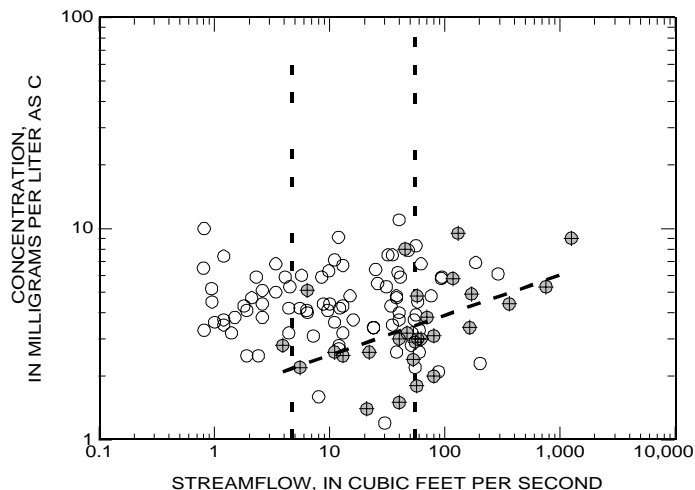
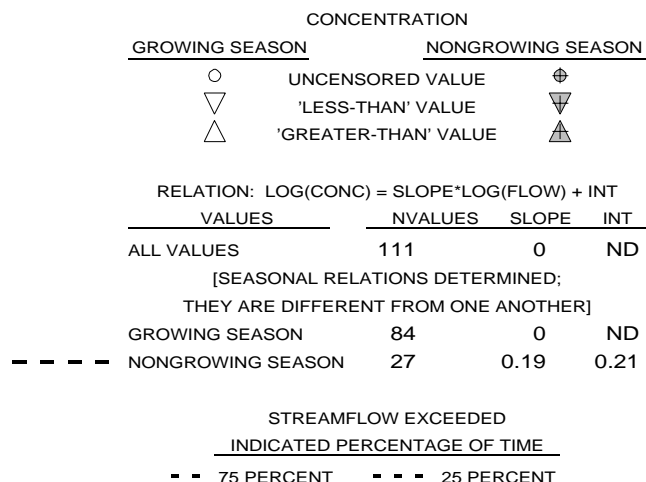
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



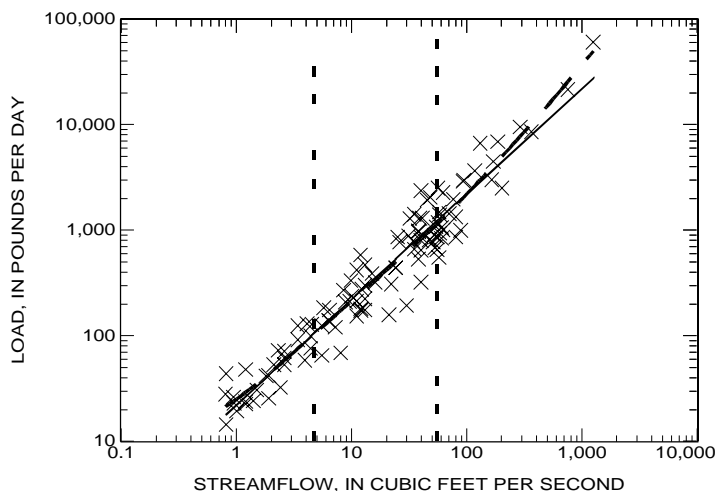
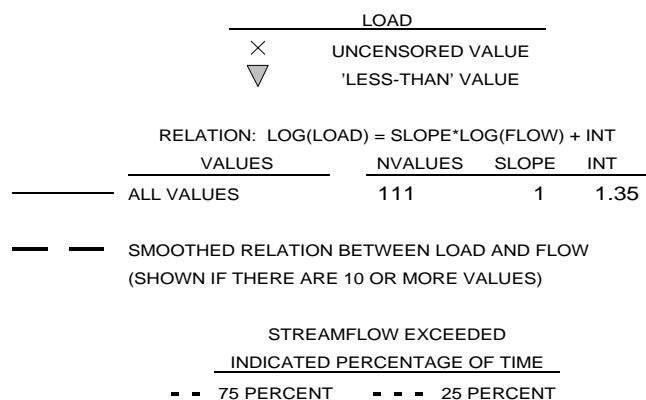
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

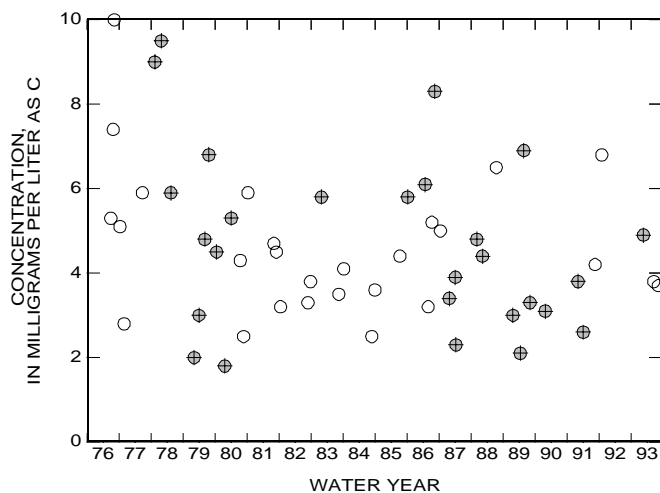
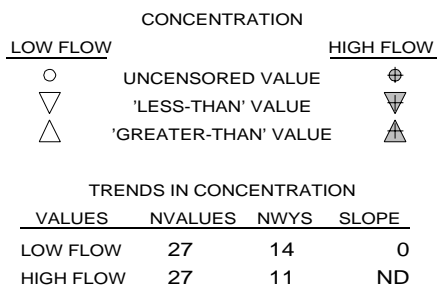
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



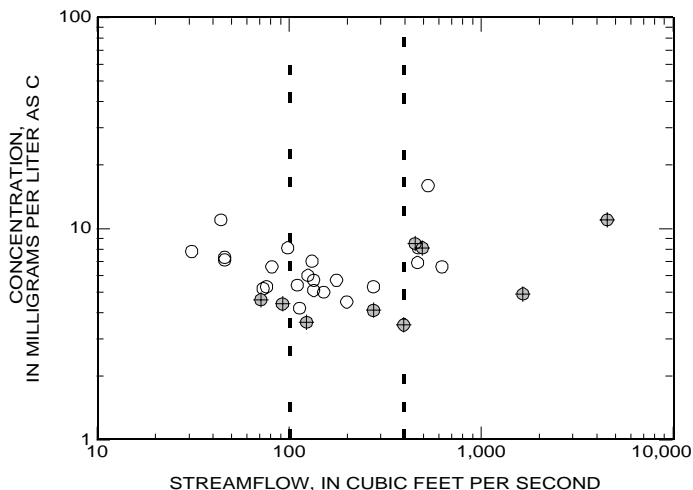
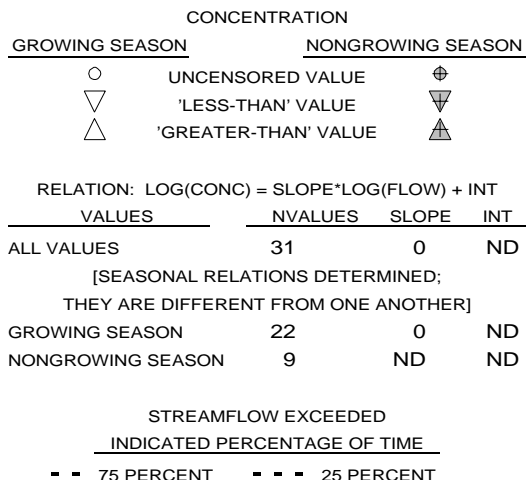
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



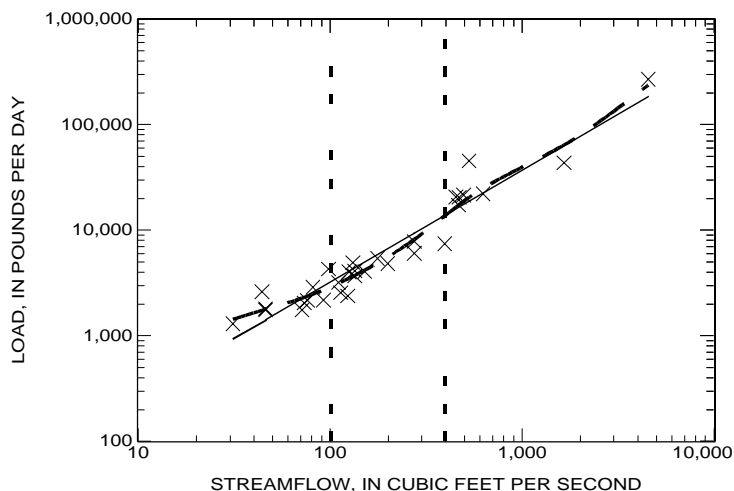
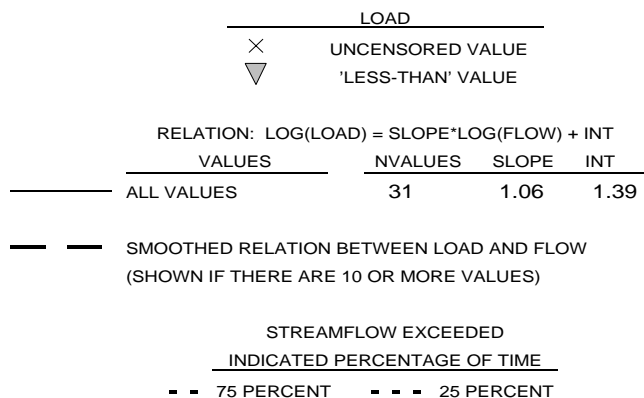
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

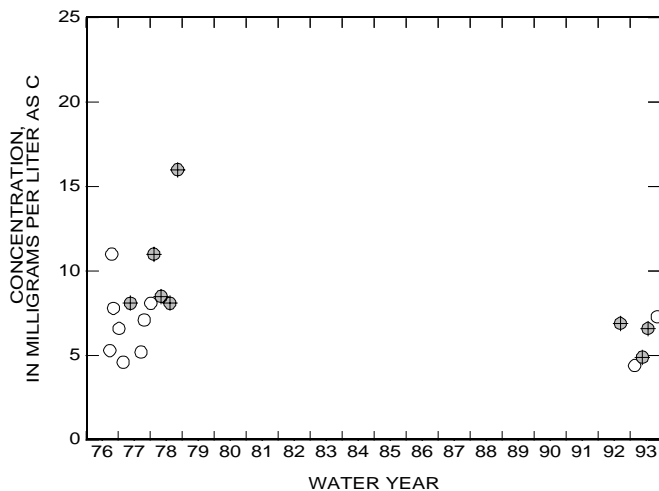
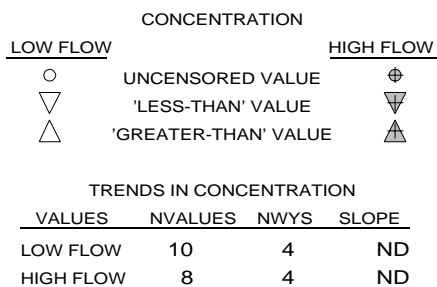
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



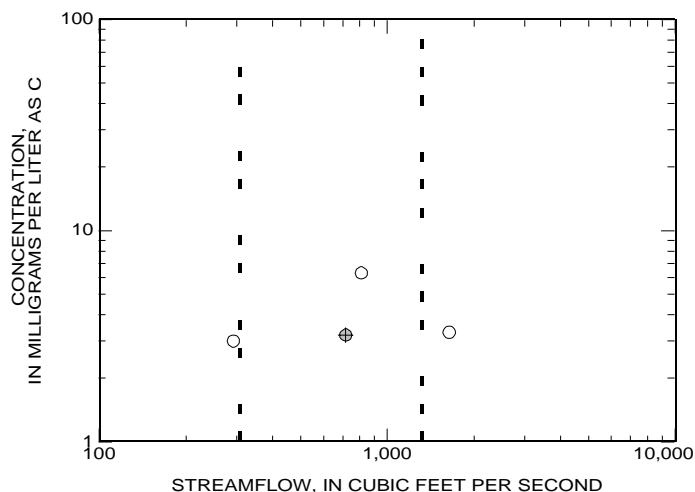
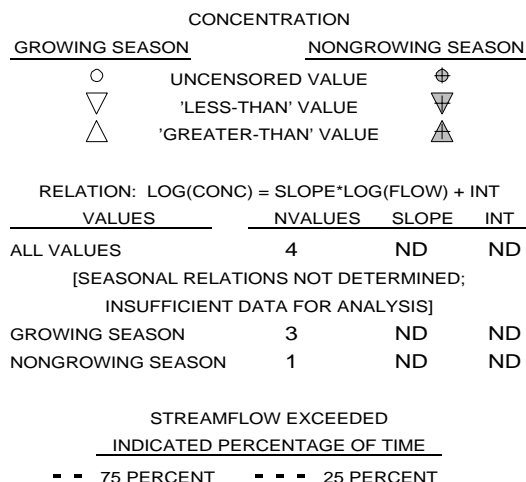
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



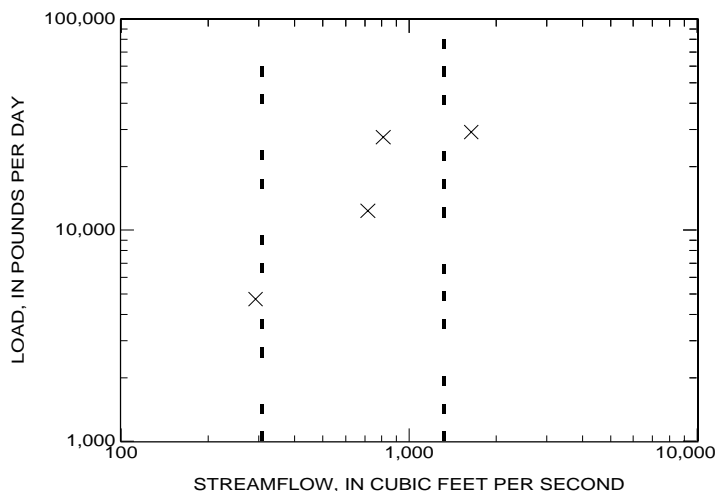
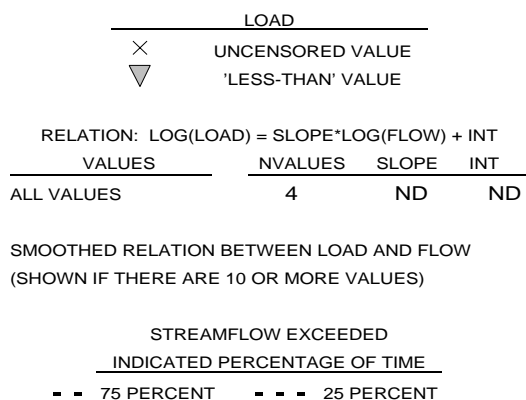
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

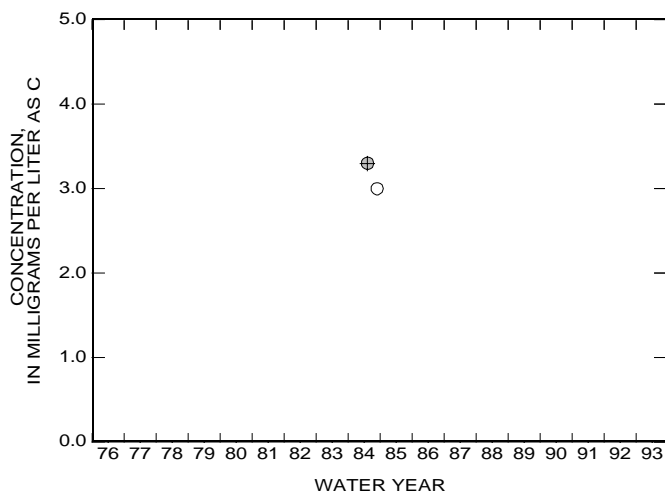
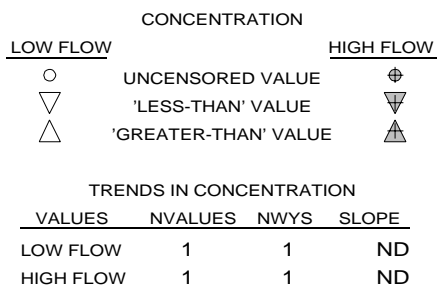
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



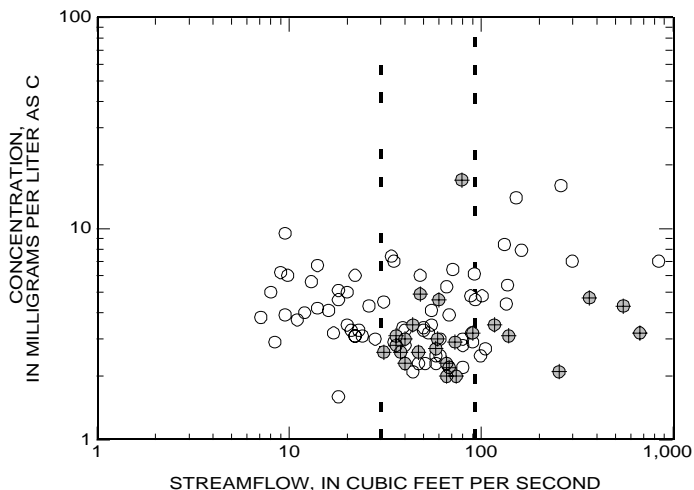
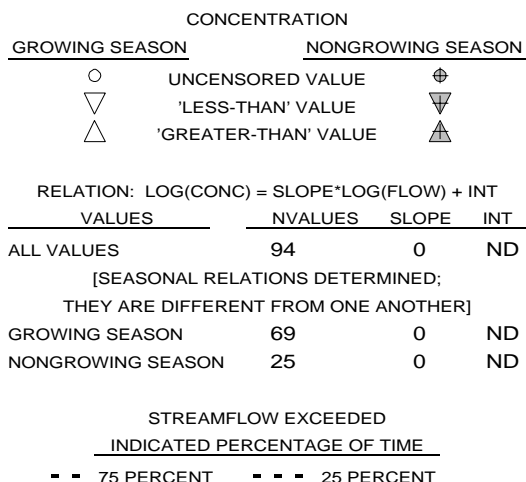
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



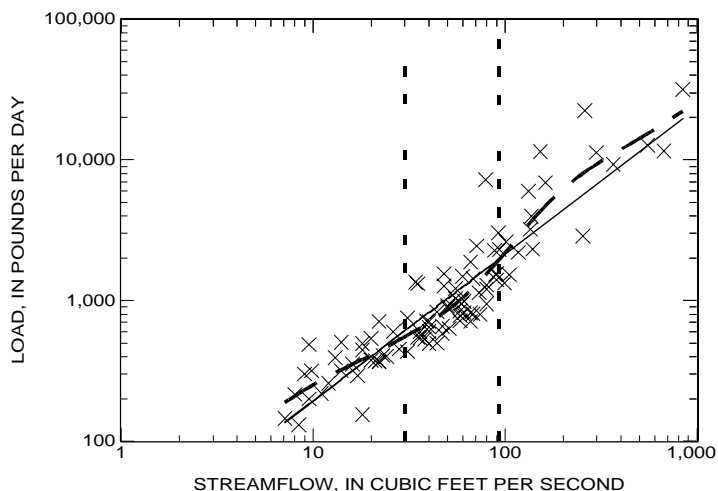
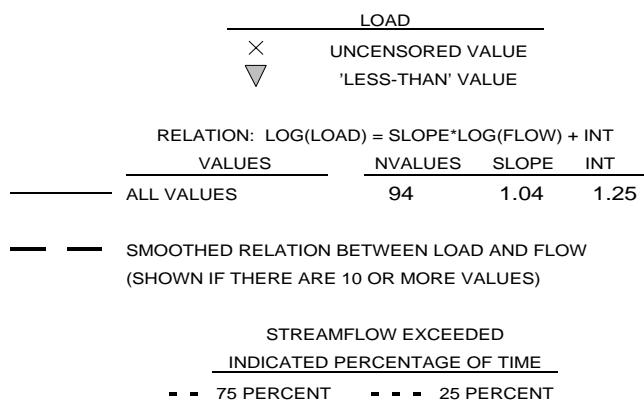
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

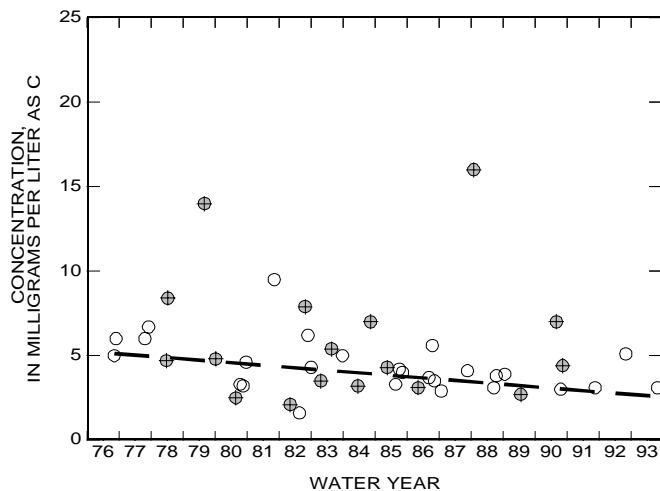
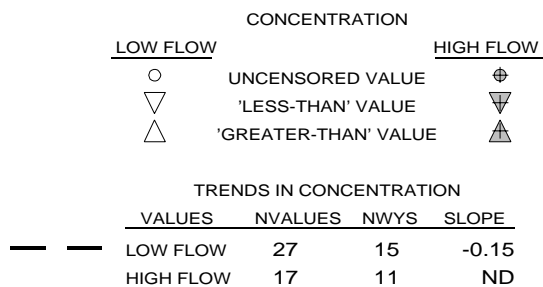
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



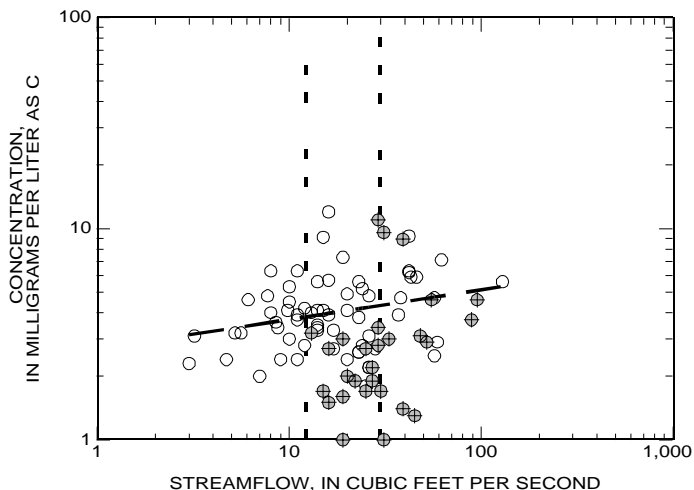
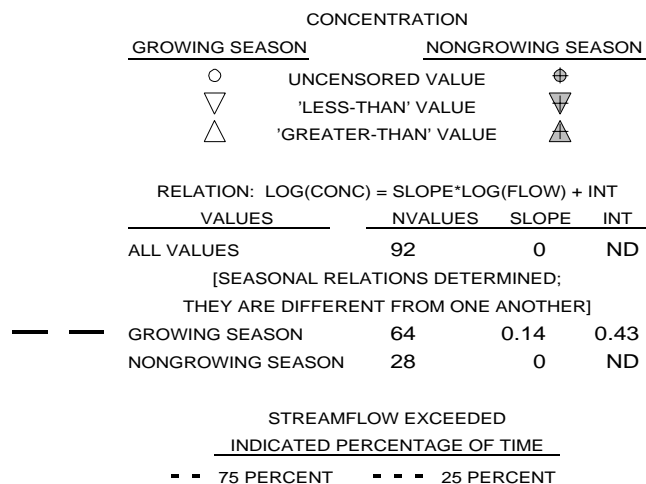
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



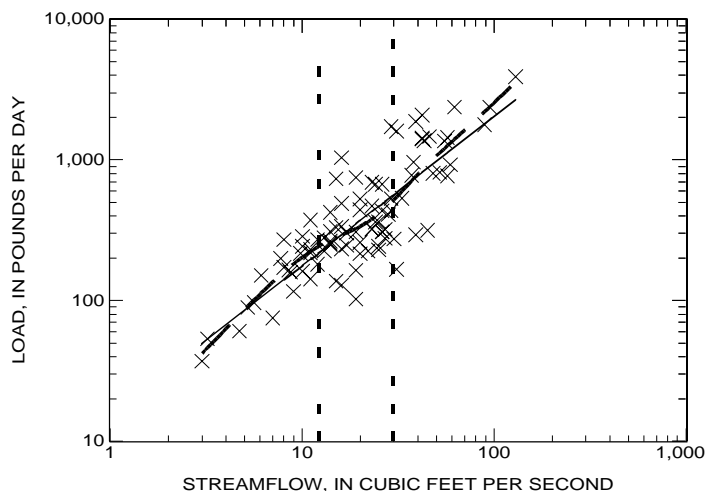
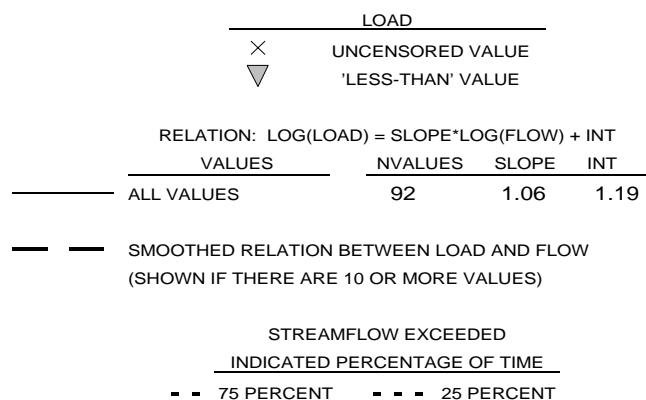
APPENDIX 3. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL ORGANIC CARBON
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

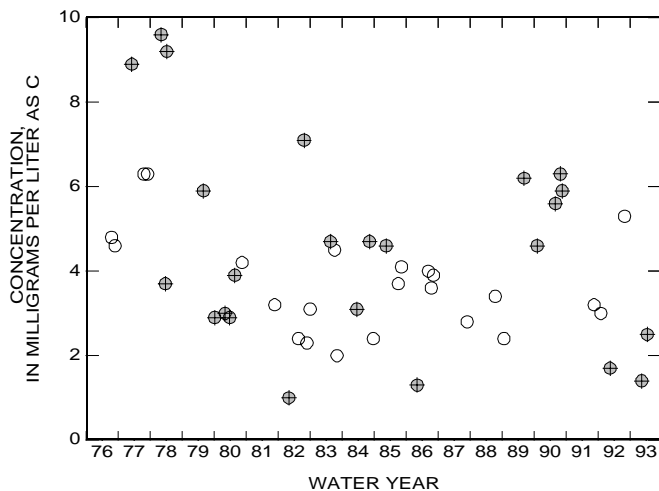
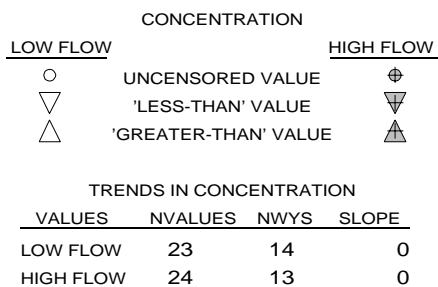
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



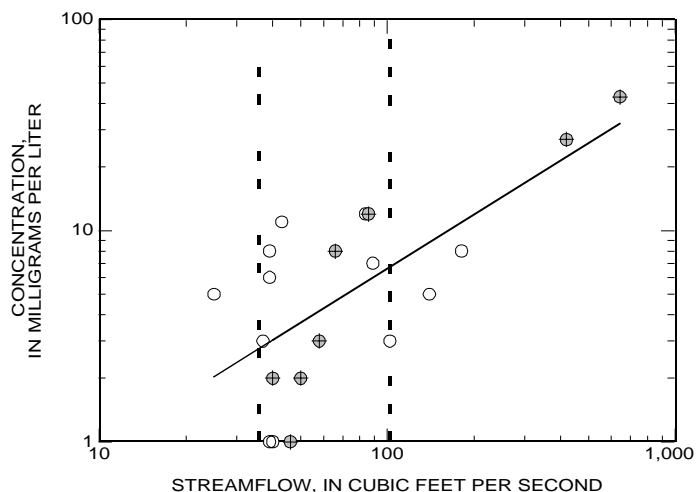
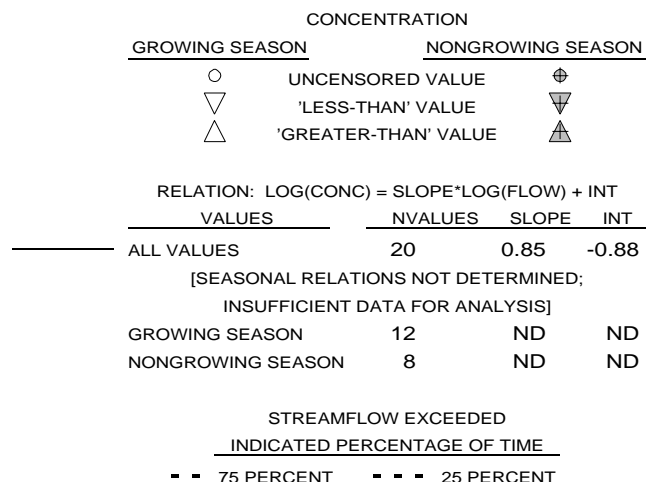
Appendix 4 - Suspended sediment

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

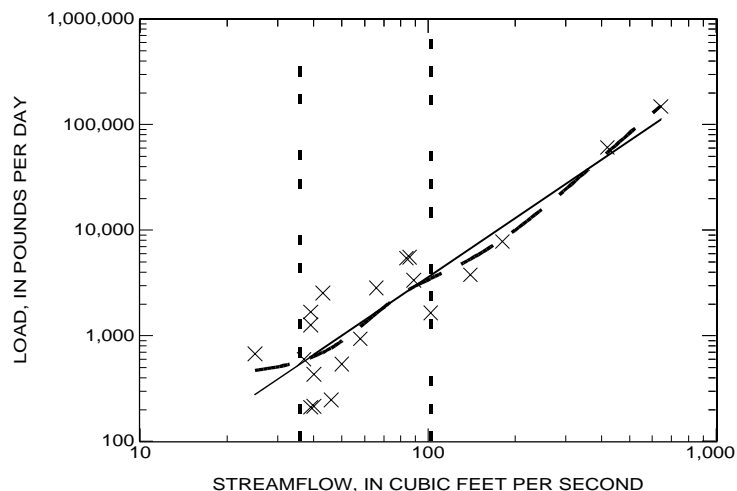
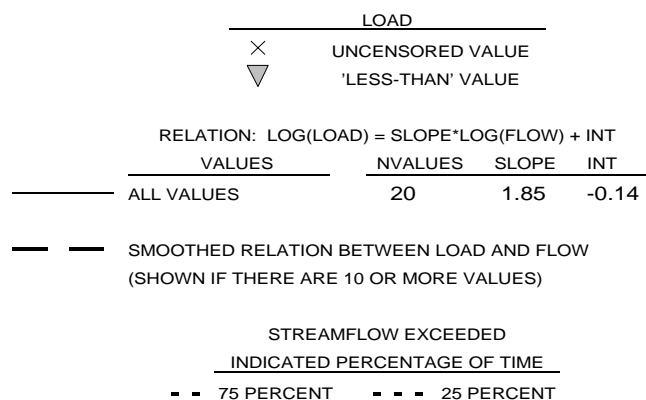
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

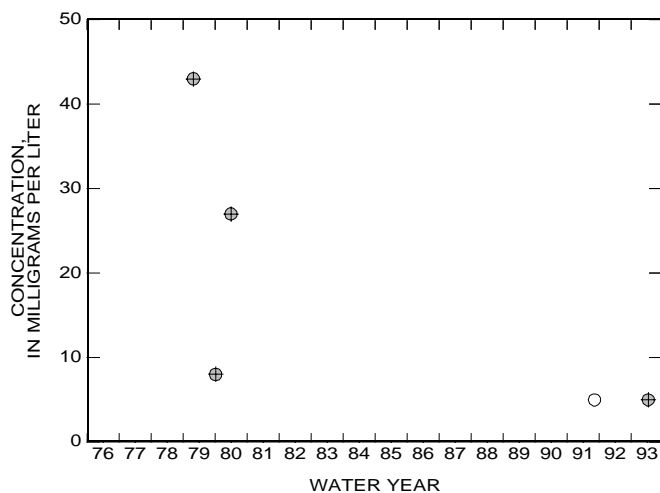
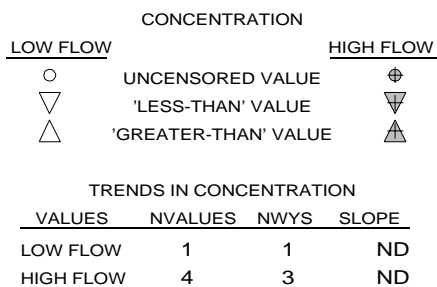
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



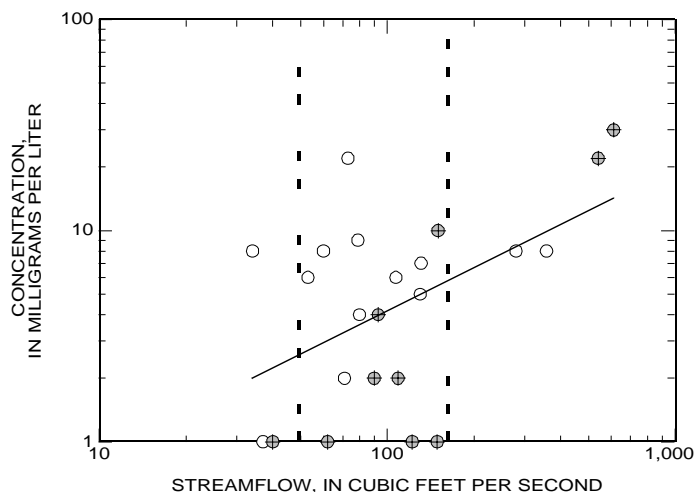
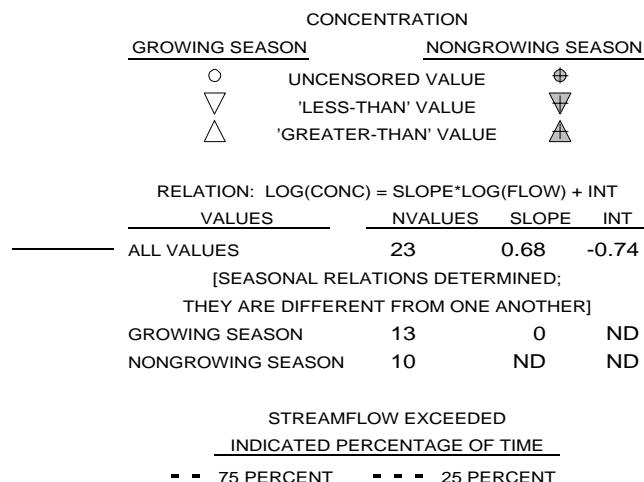
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



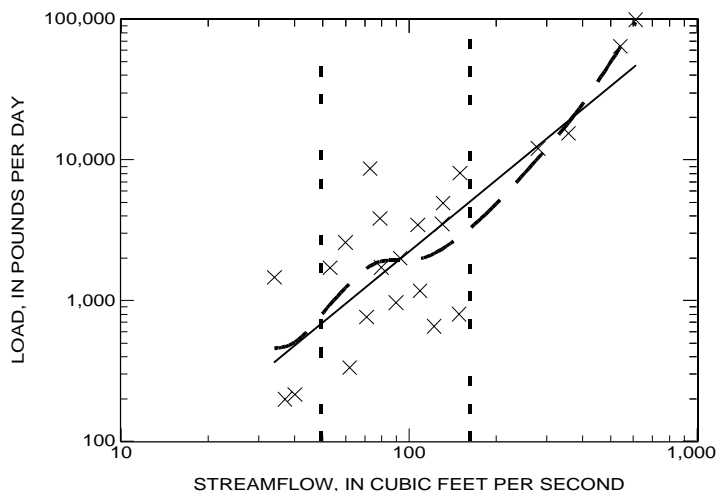
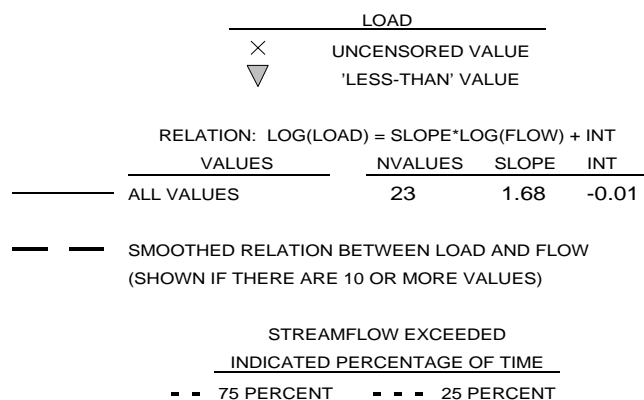
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

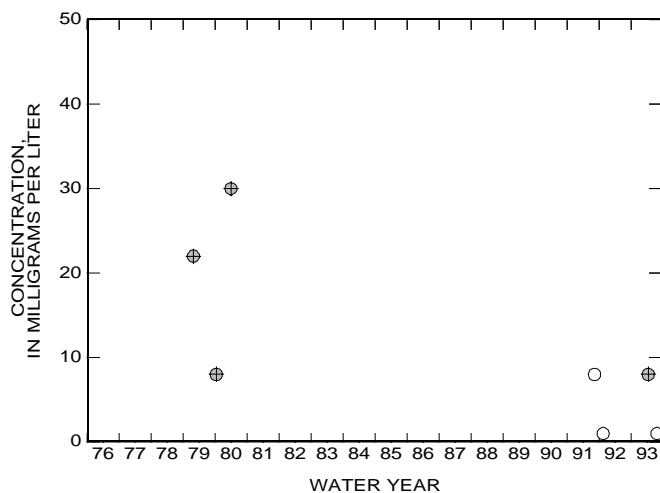
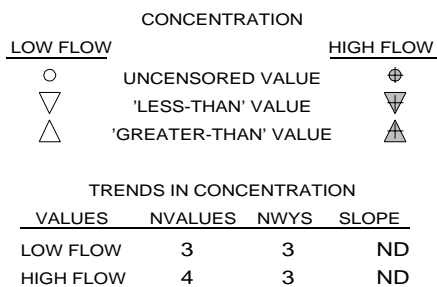
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



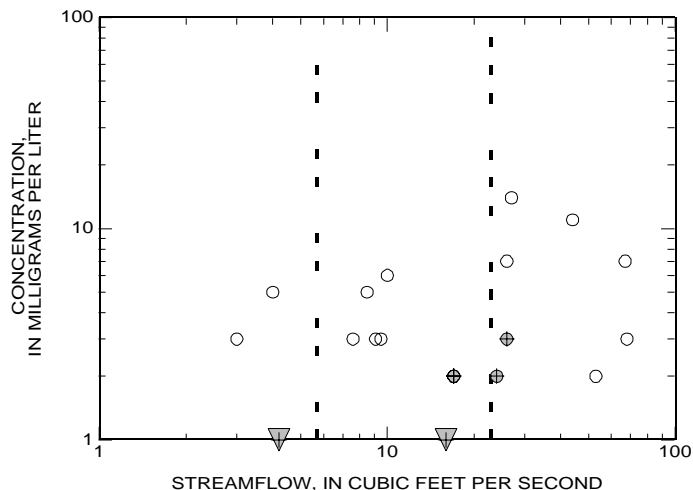
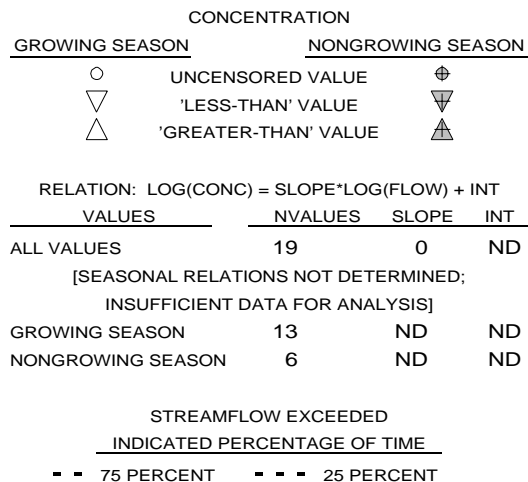
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



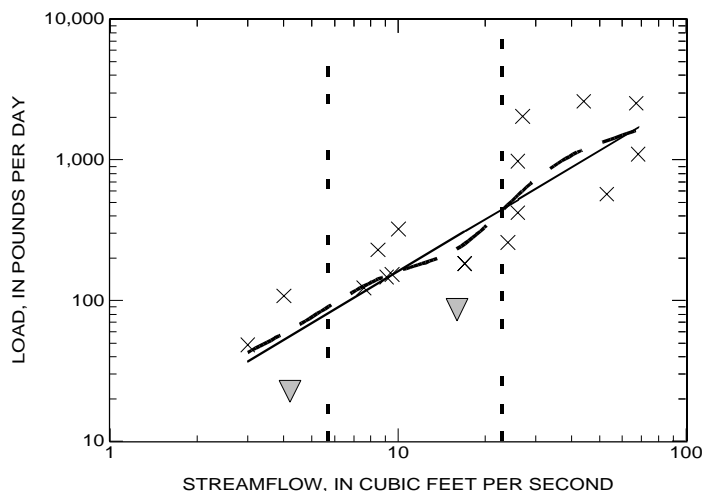
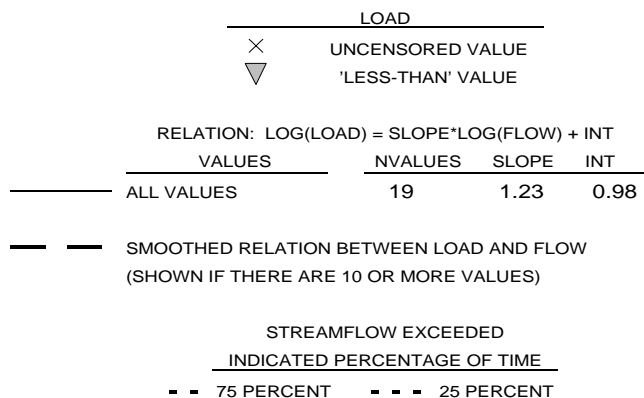
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

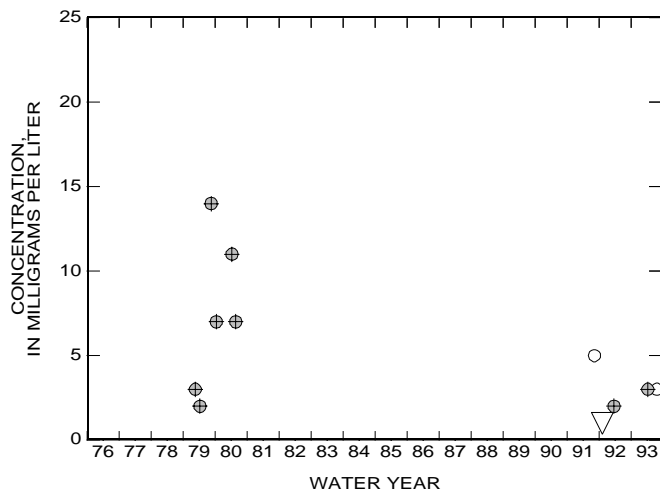
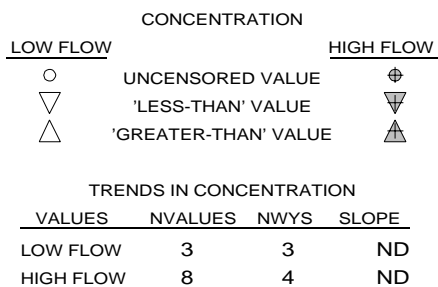
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



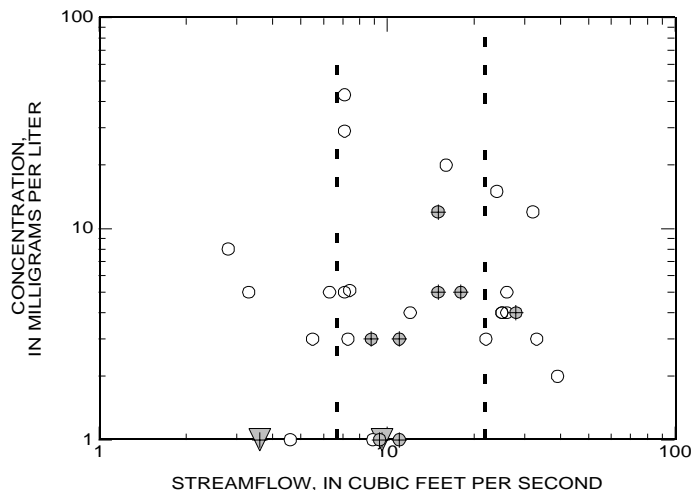
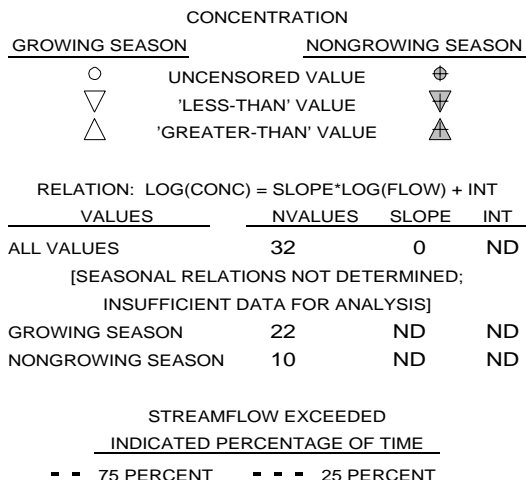
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



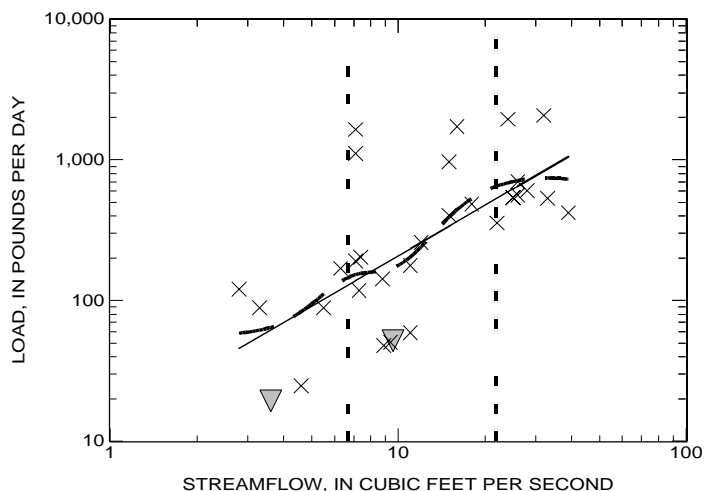
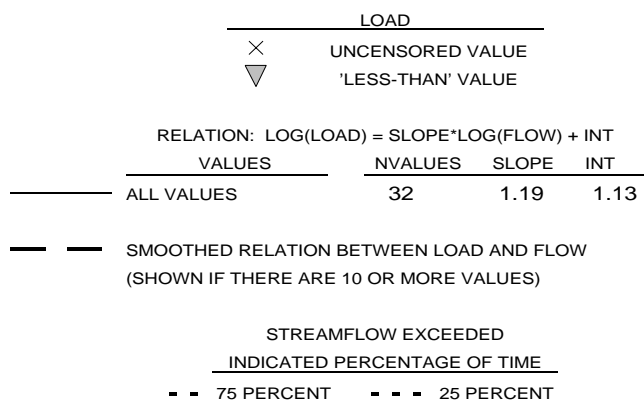
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

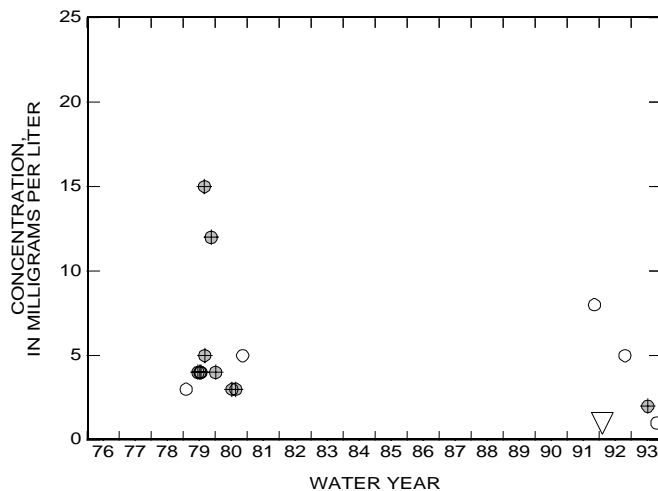
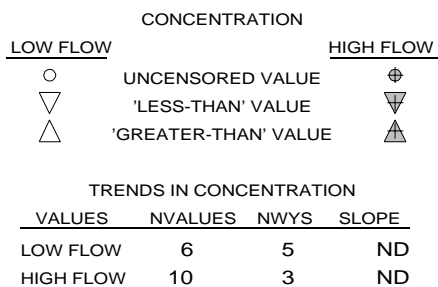
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



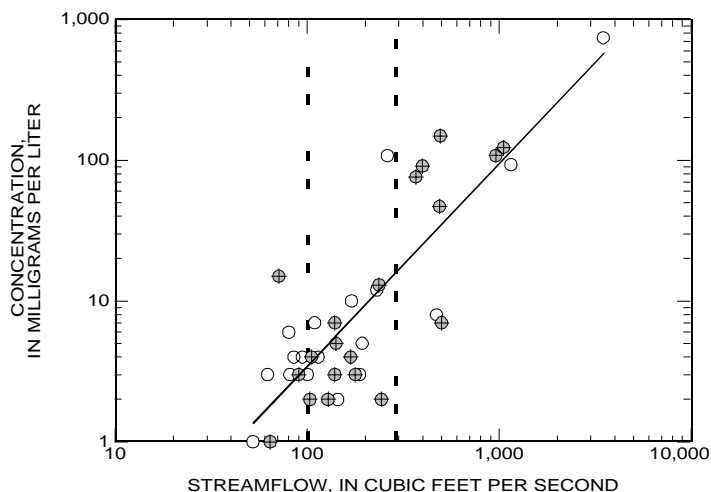
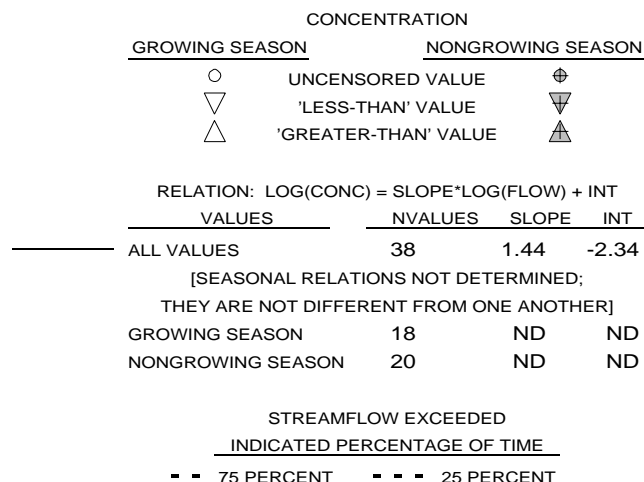
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



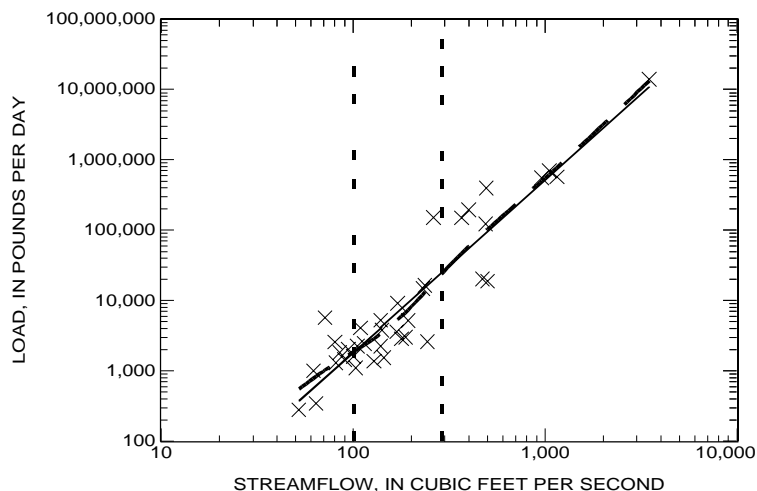
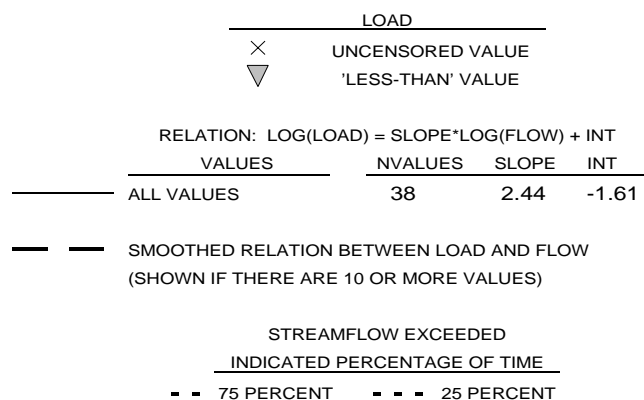
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

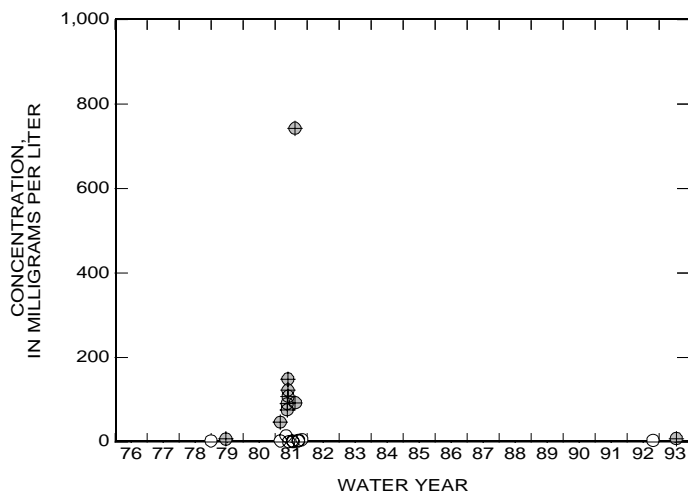
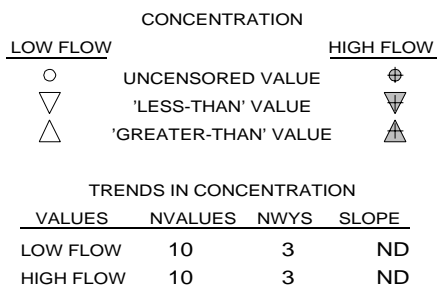
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



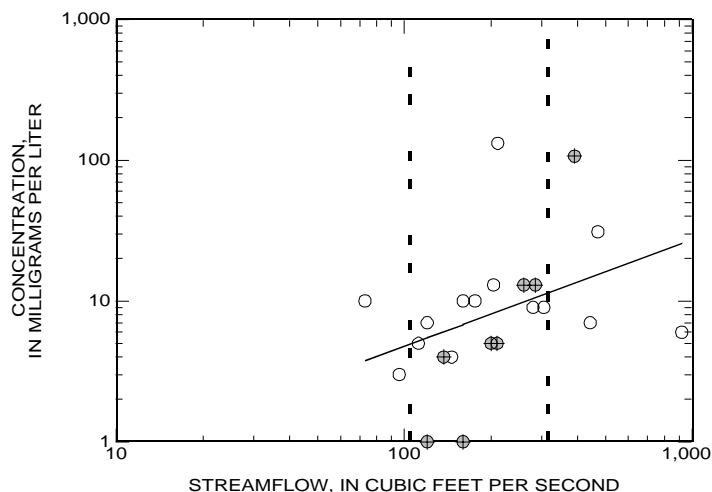
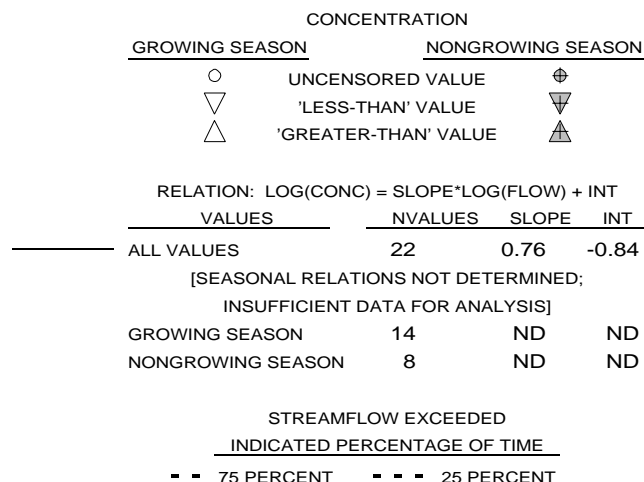
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



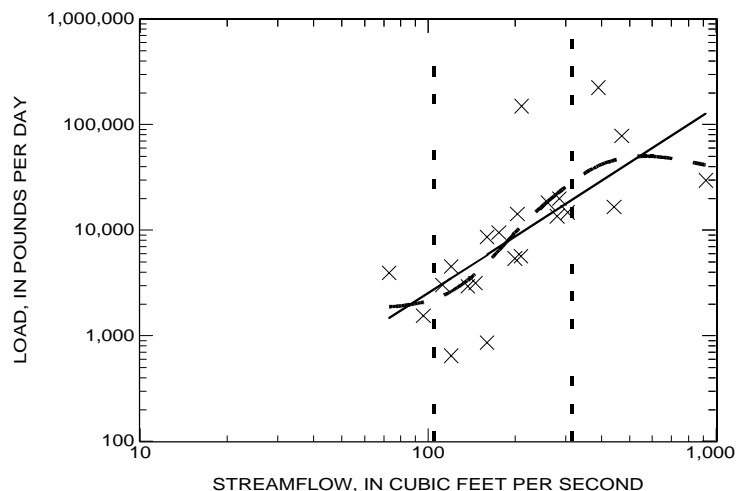
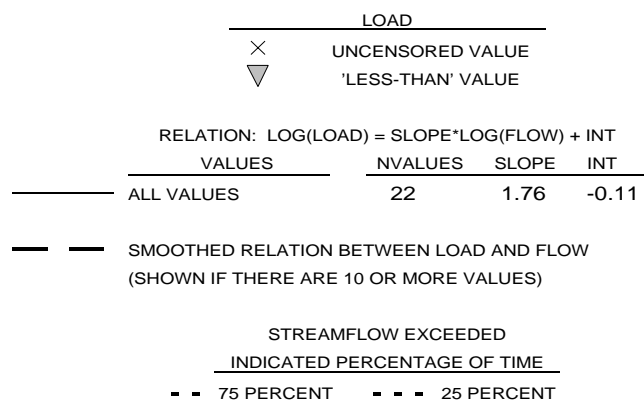
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

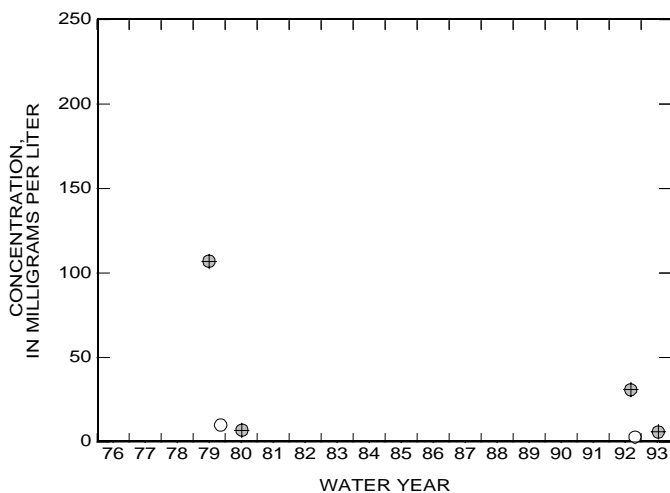
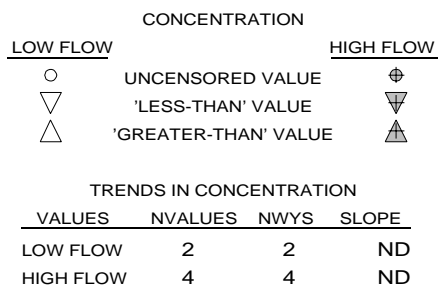
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



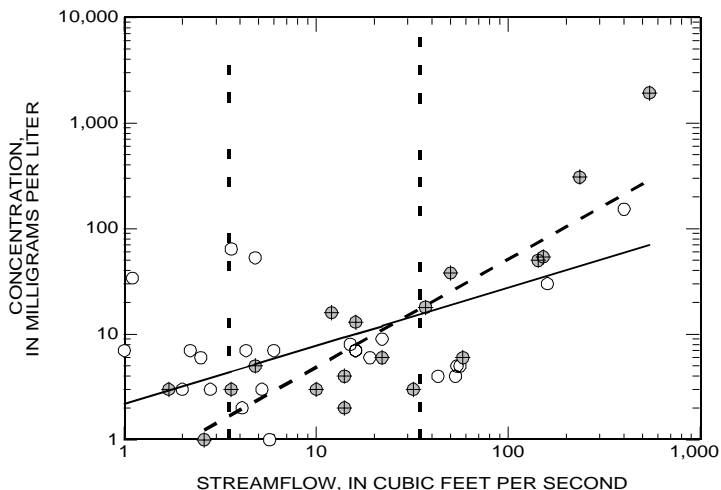
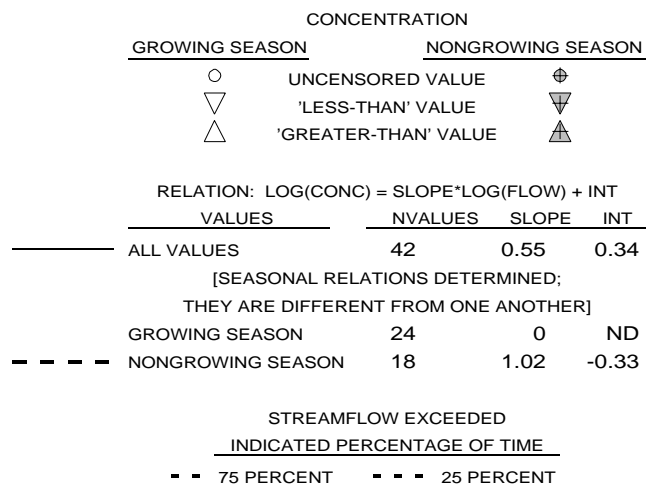
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



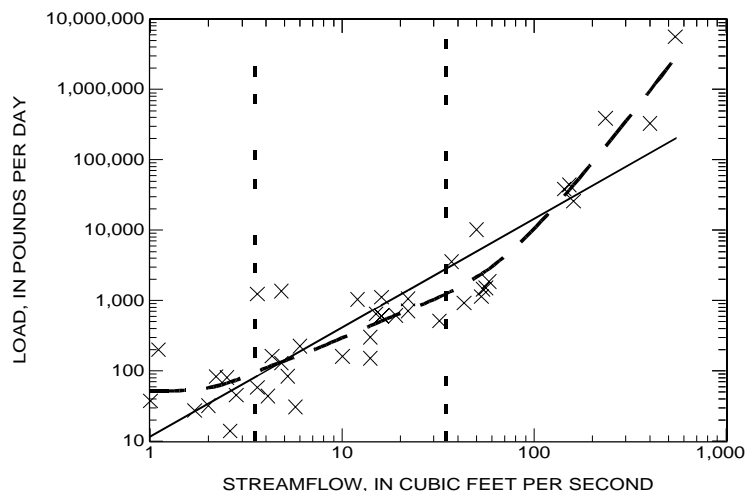
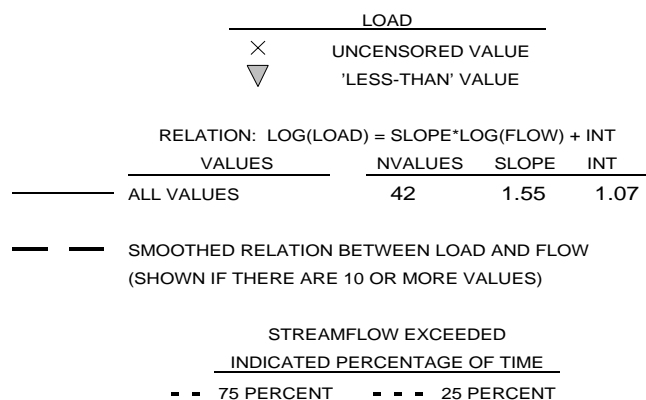
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

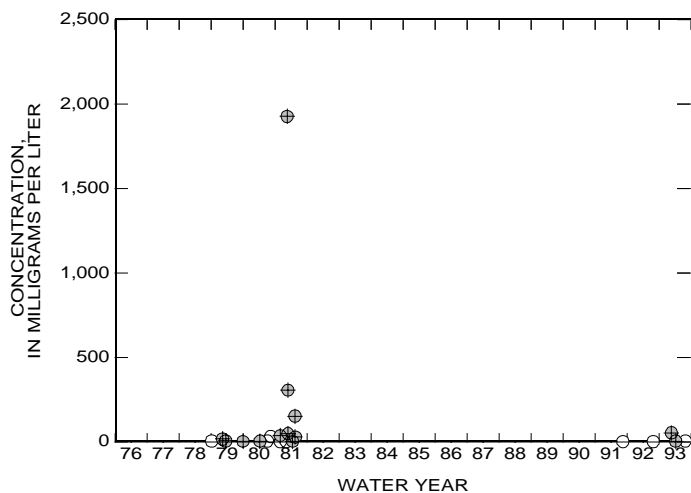
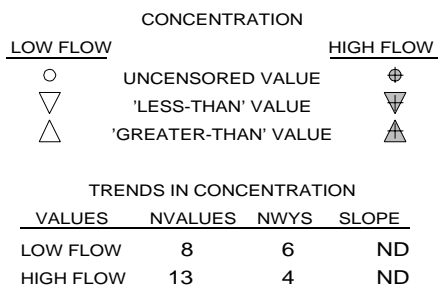
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

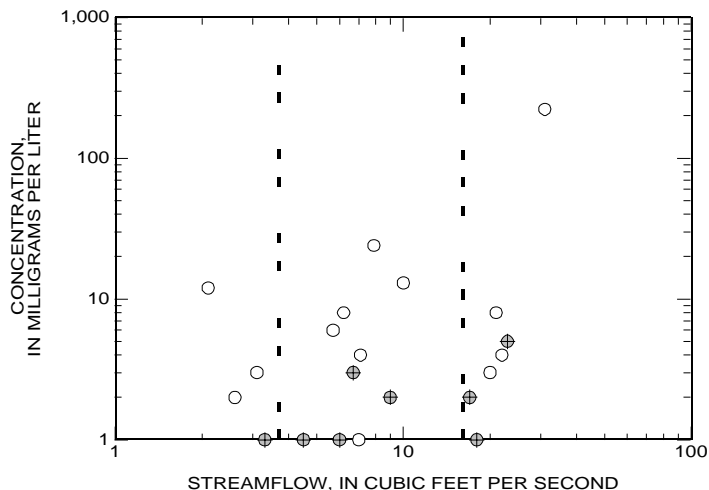


APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

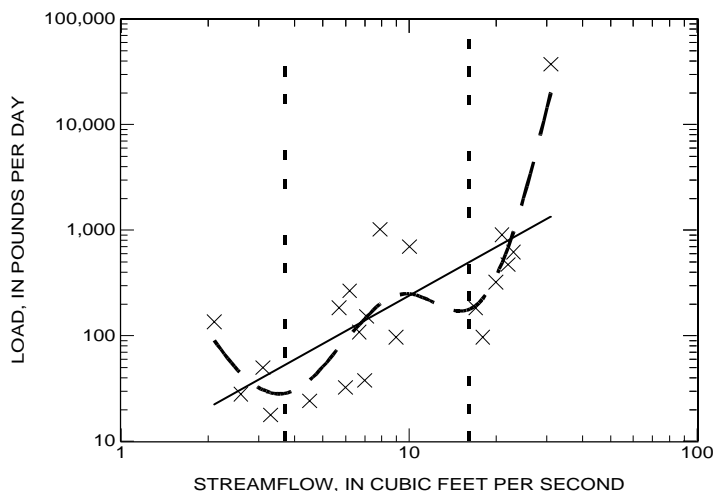
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	21	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	13	ND	ND
NONGROWING SEASON	8	ND	ND
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



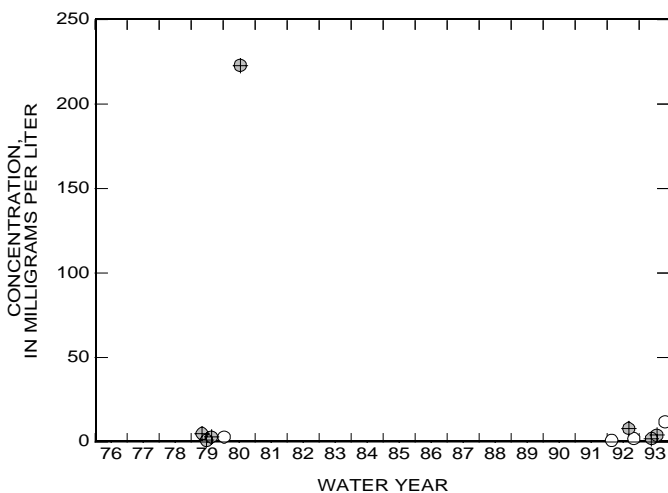
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	21	1.52	0.86
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

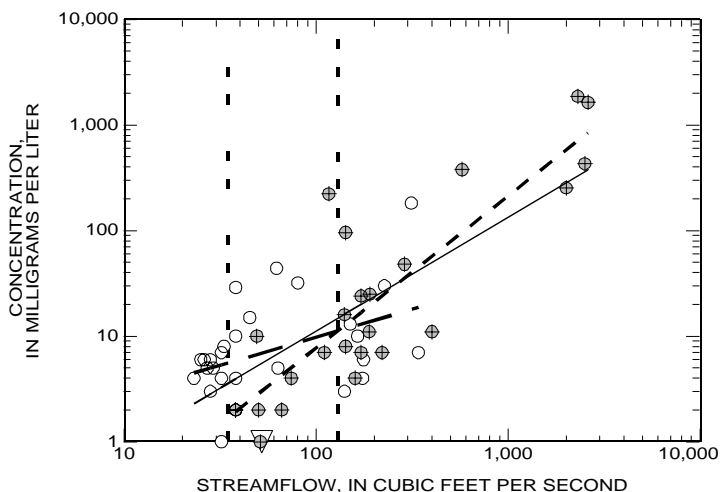
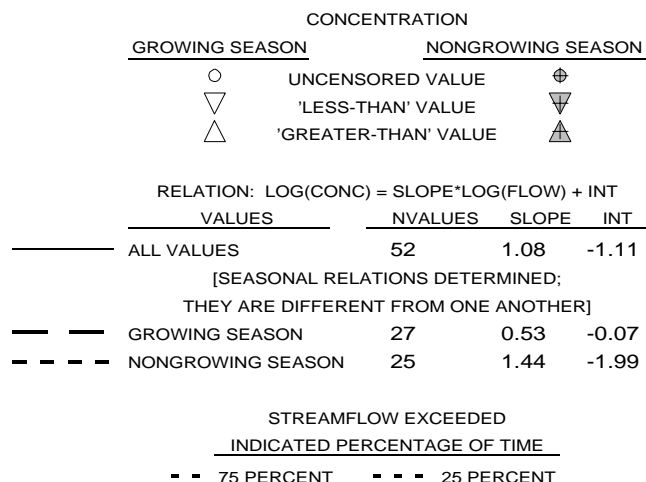
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	3	ND
HIGH FLOW	7	4	ND



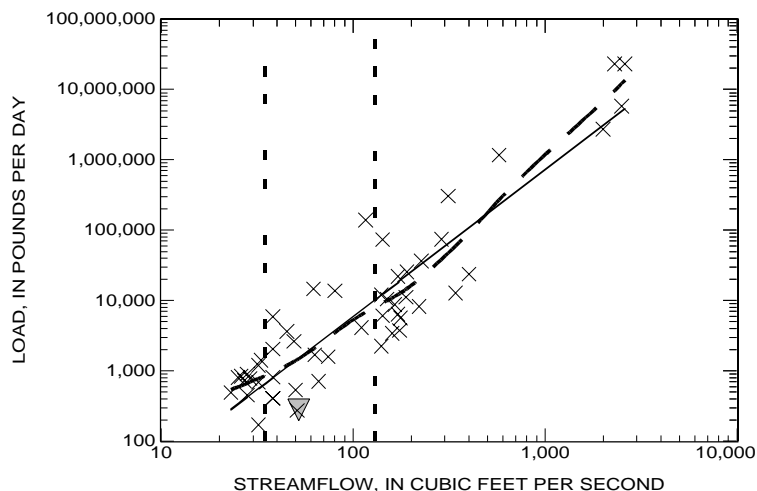
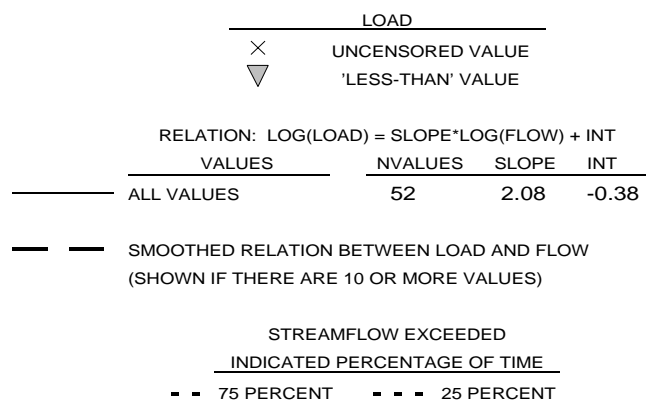
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

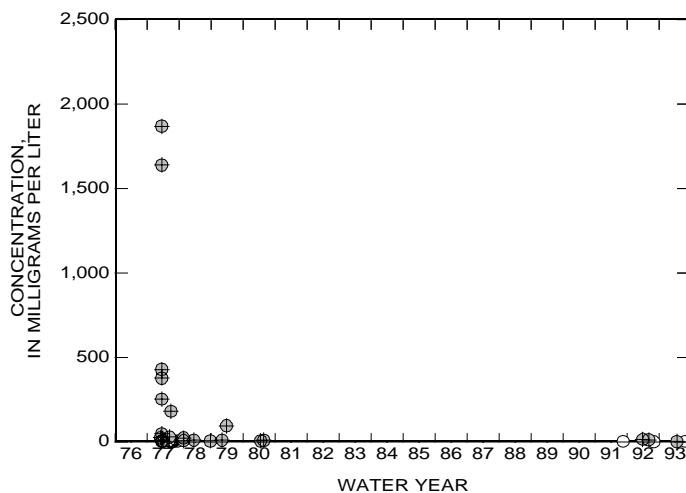
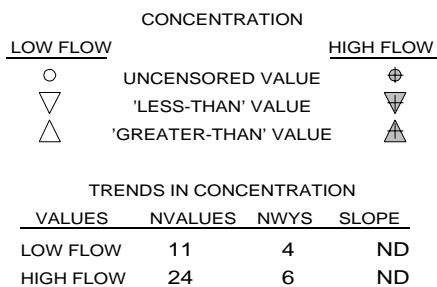
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



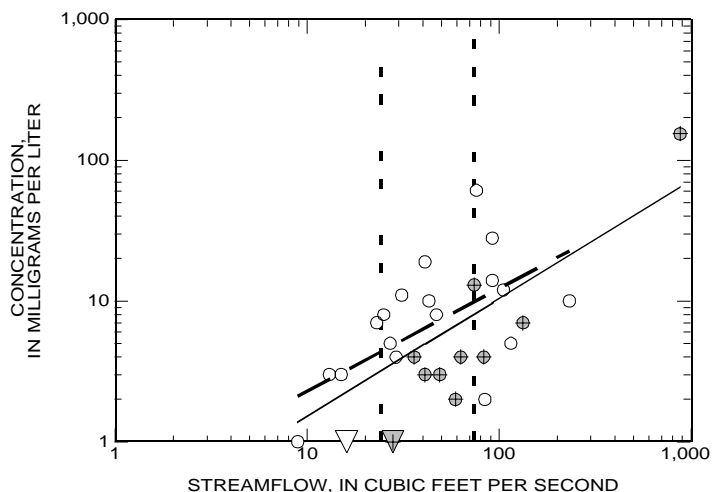
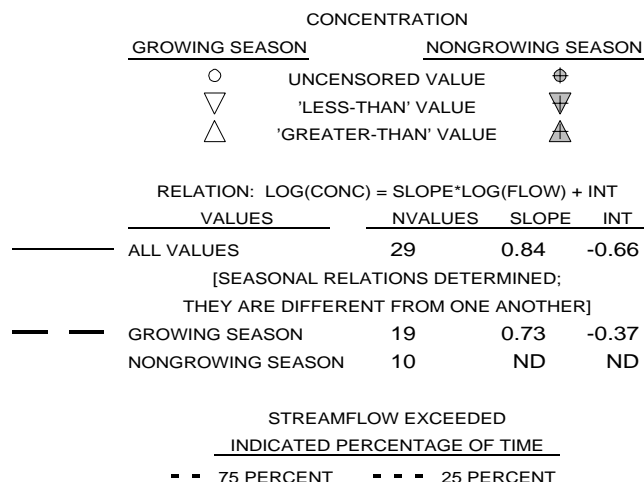
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



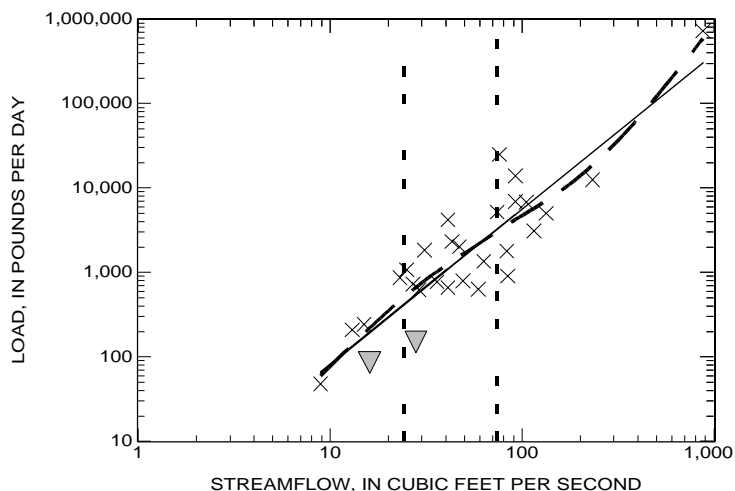
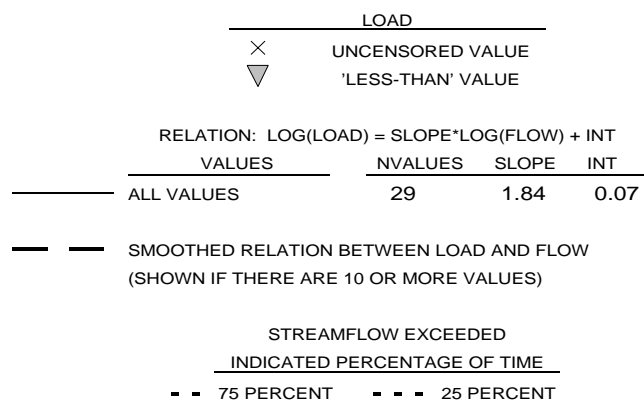
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

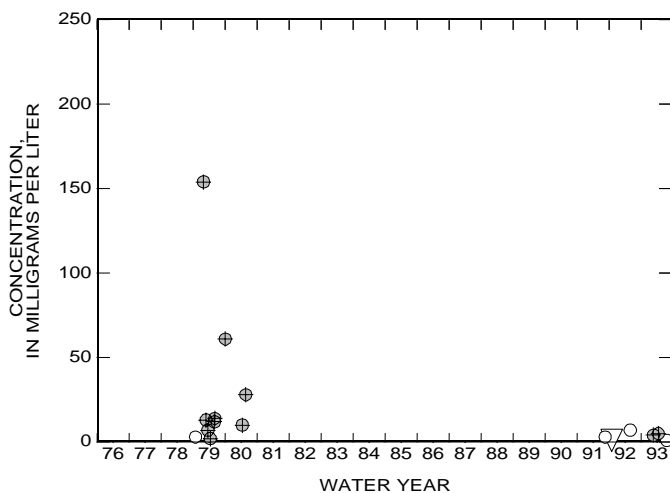
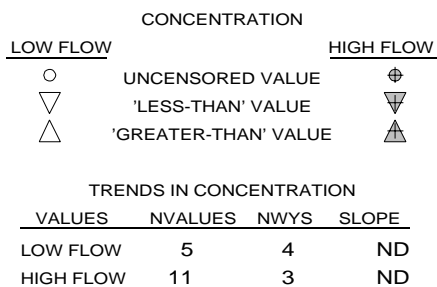
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



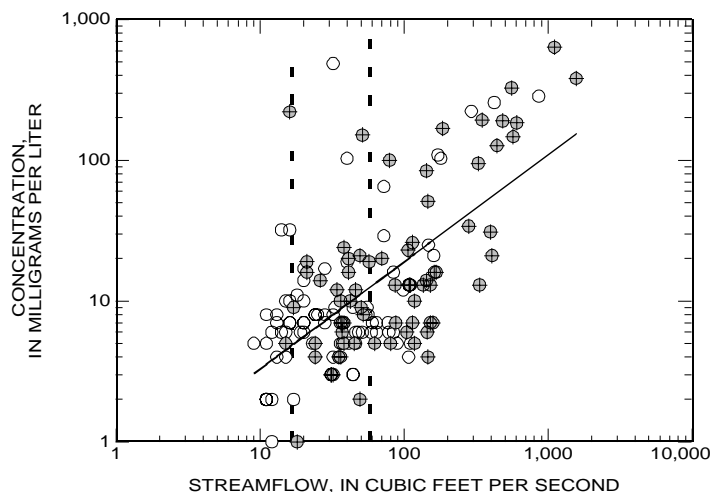
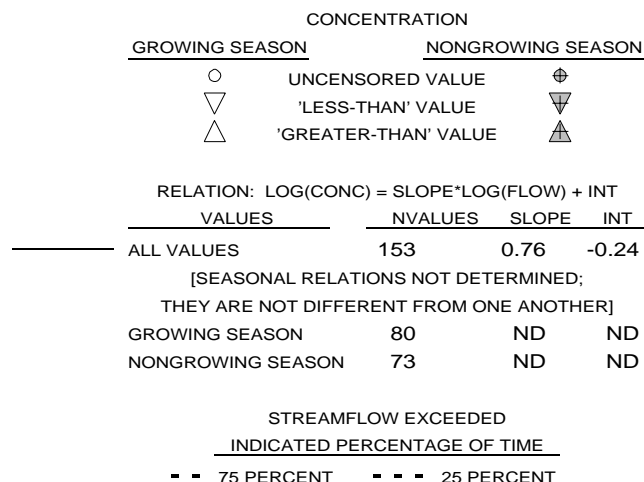
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



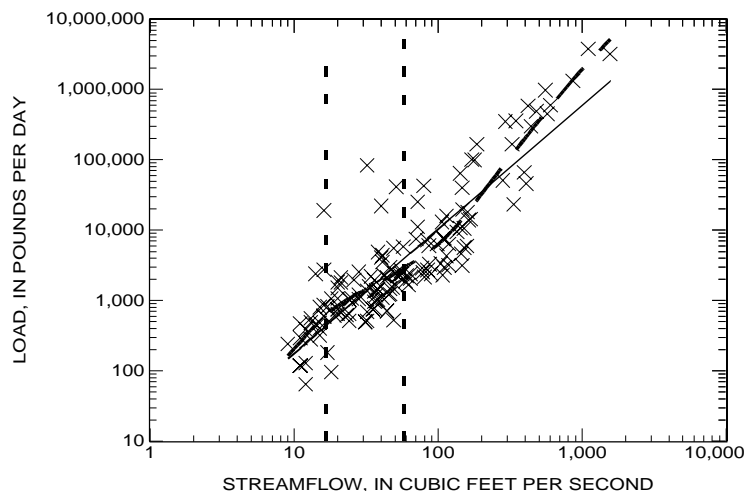
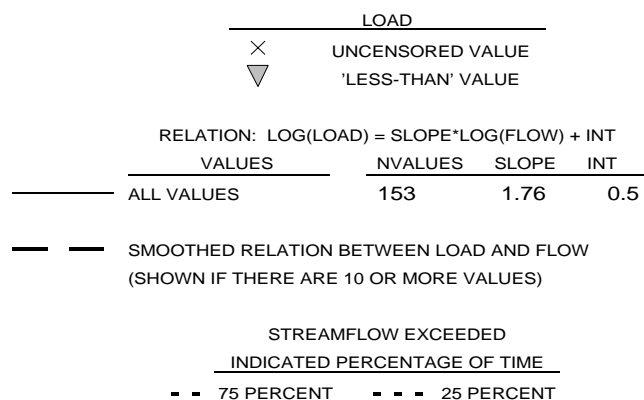
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

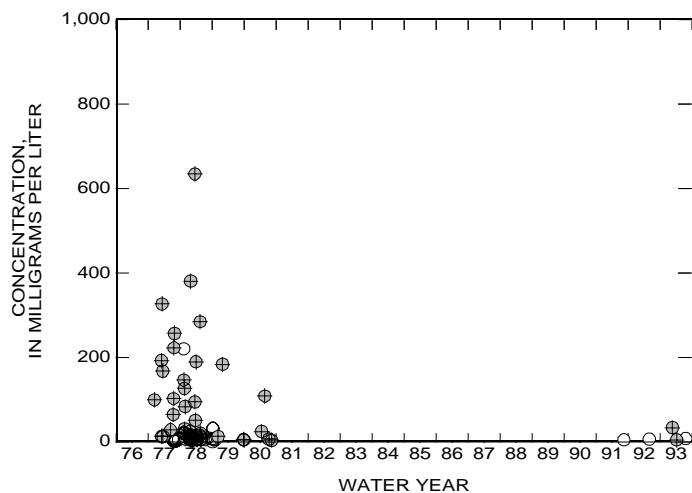
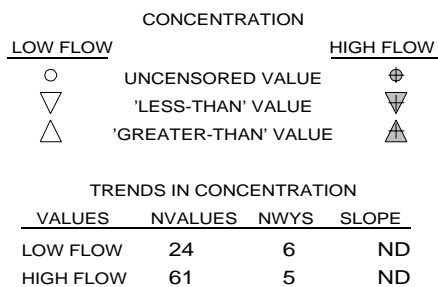
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



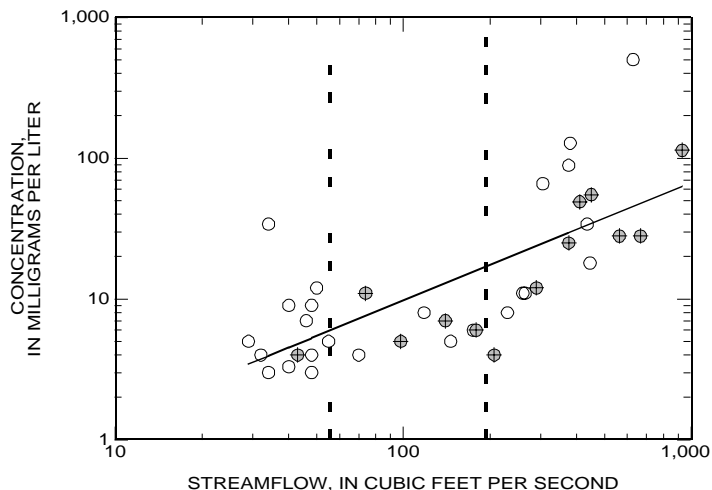
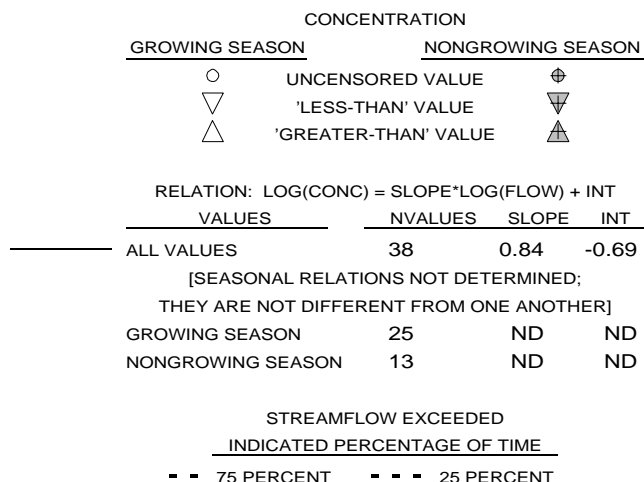
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



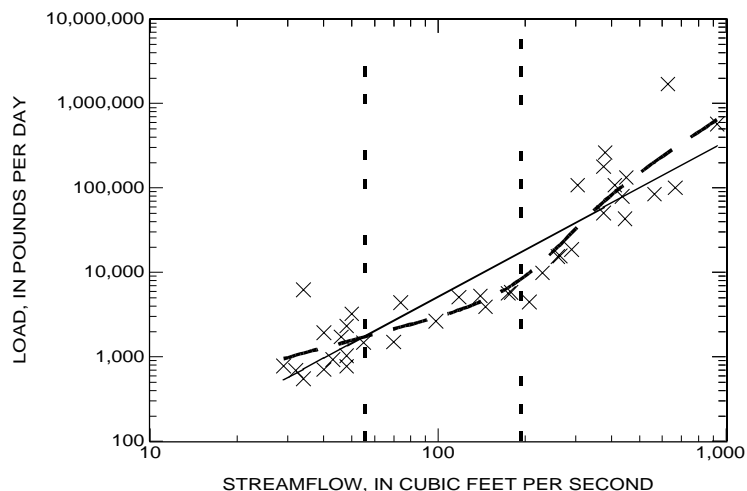
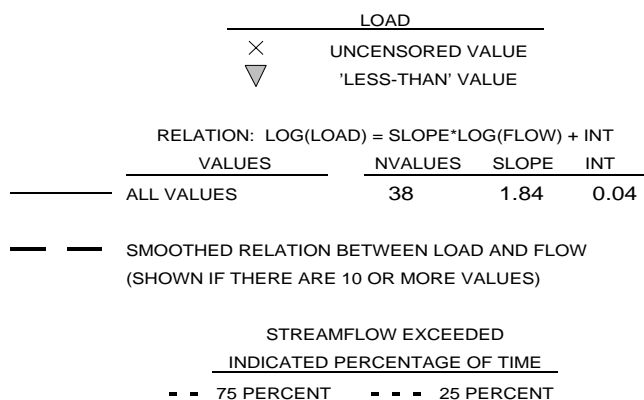
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

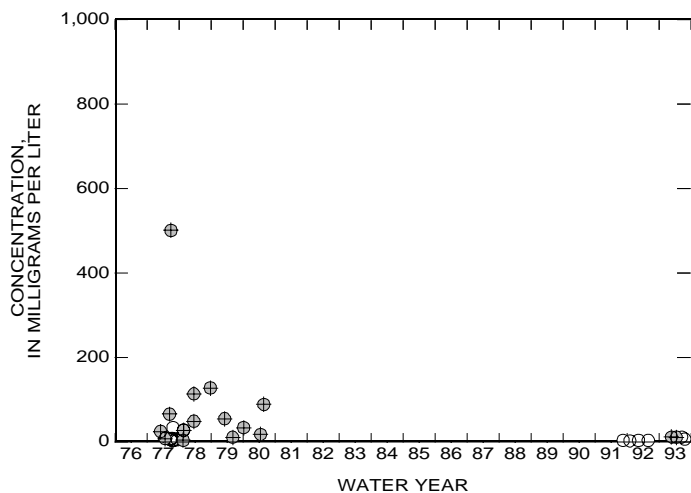
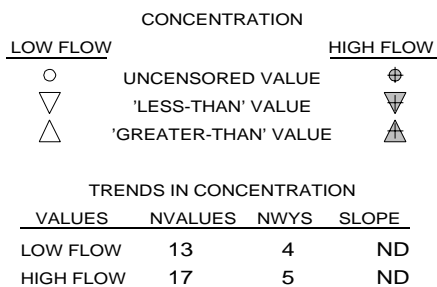
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



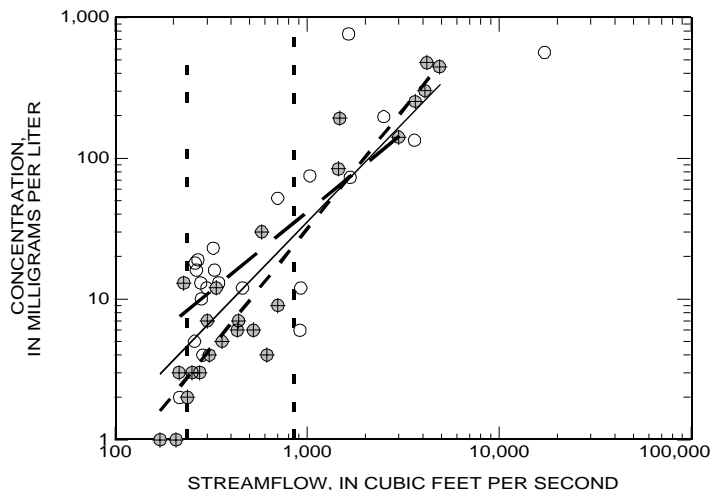
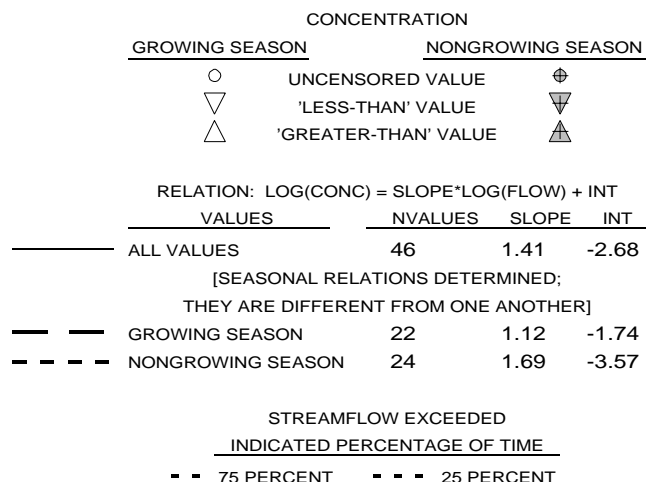
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



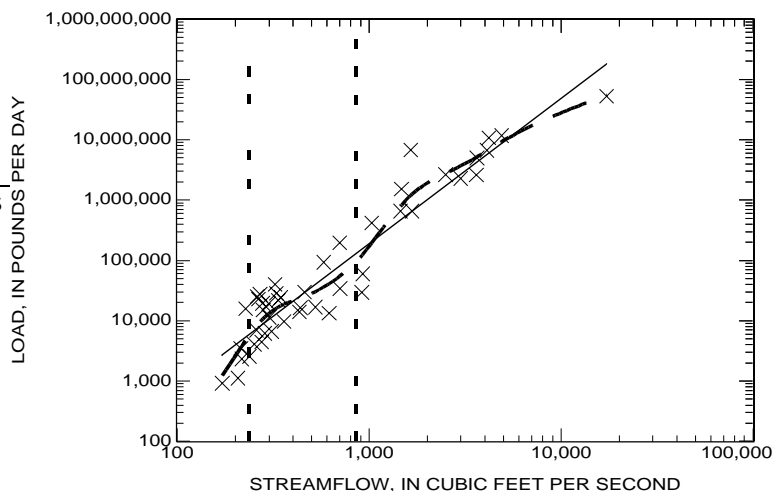
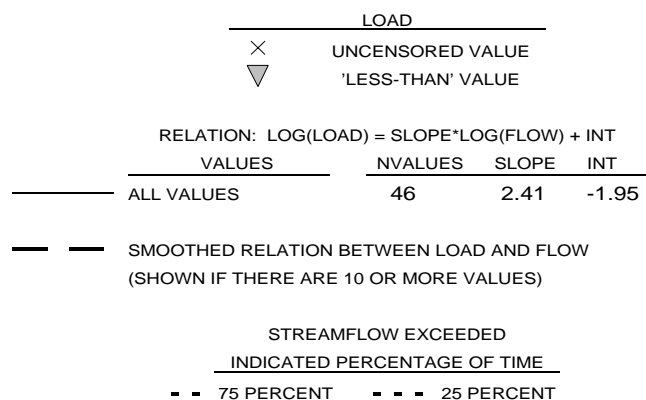
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

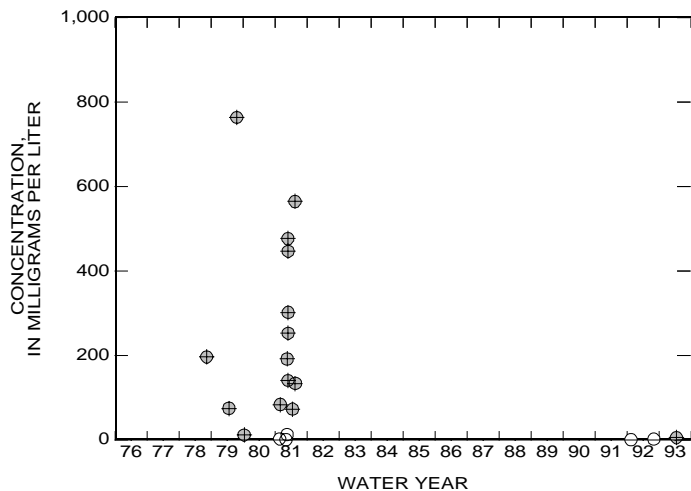
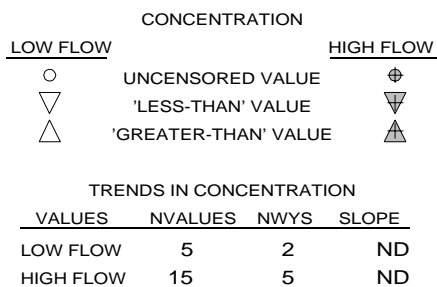
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



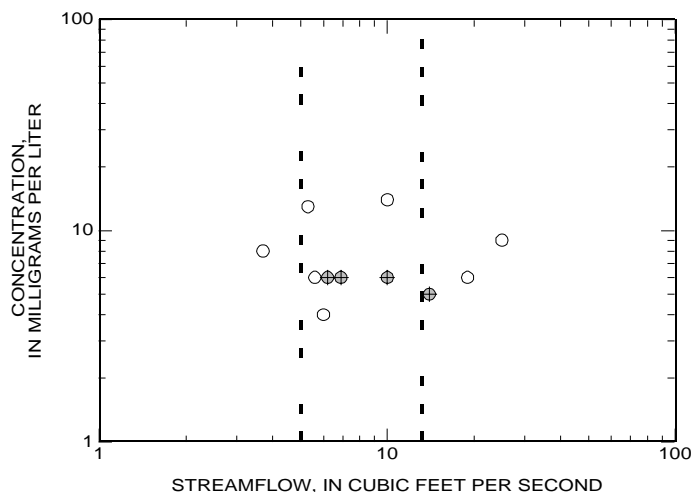
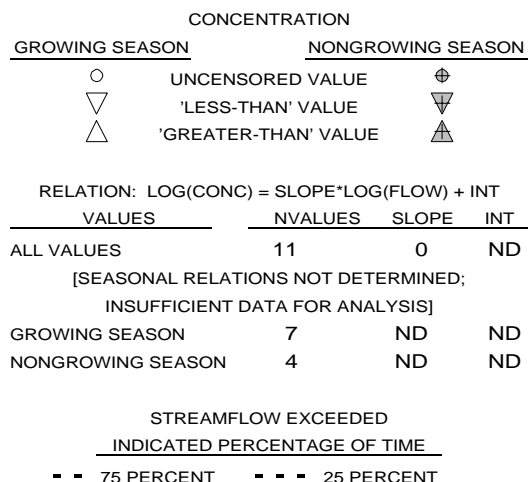
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



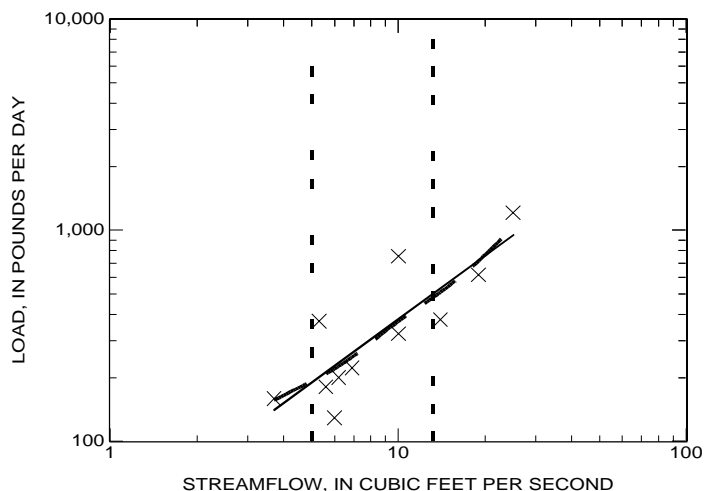
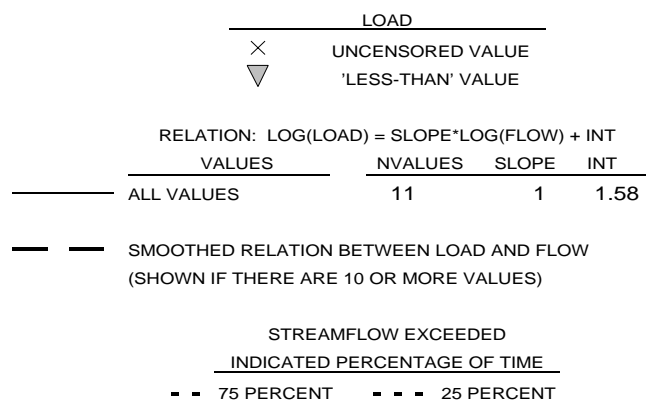
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

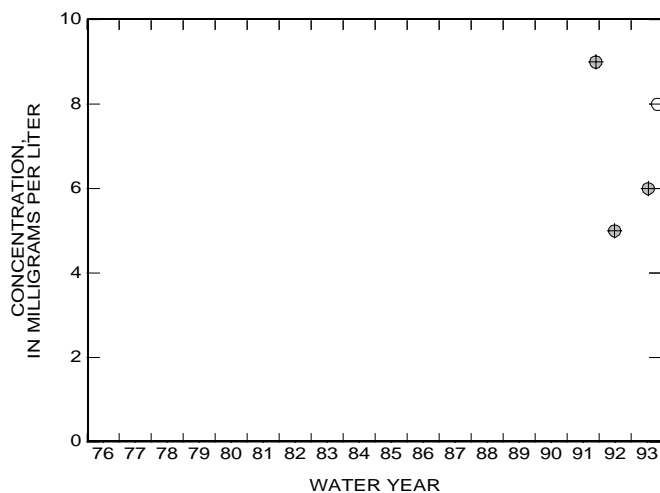
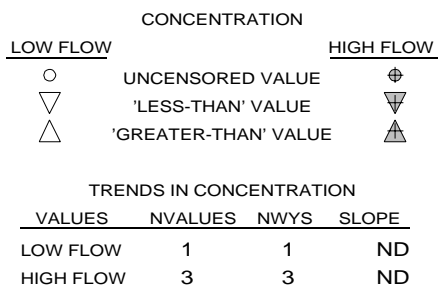
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



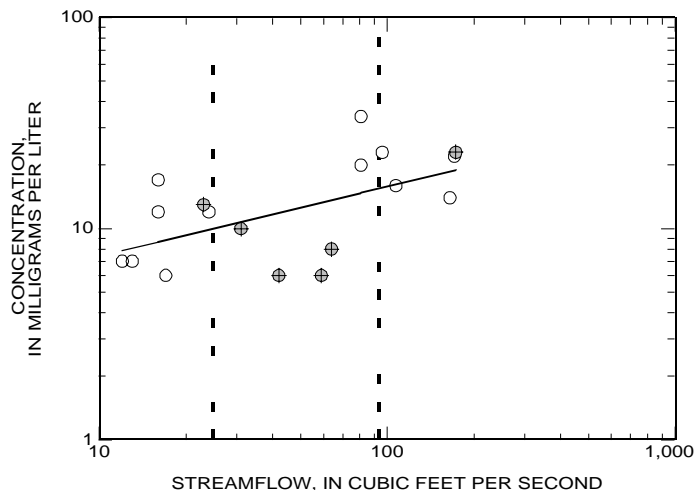
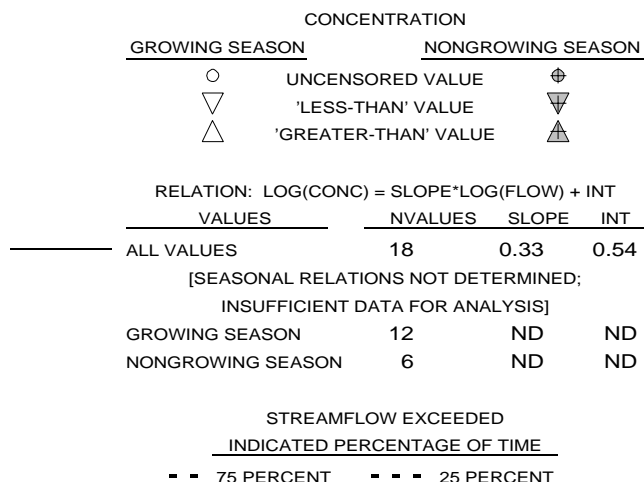
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



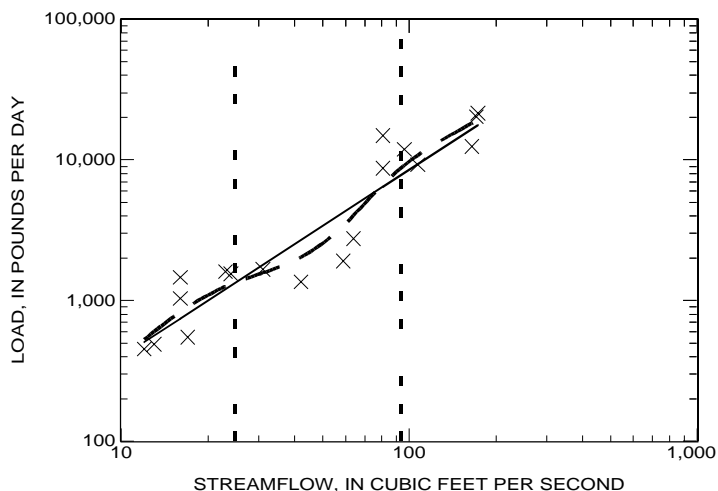
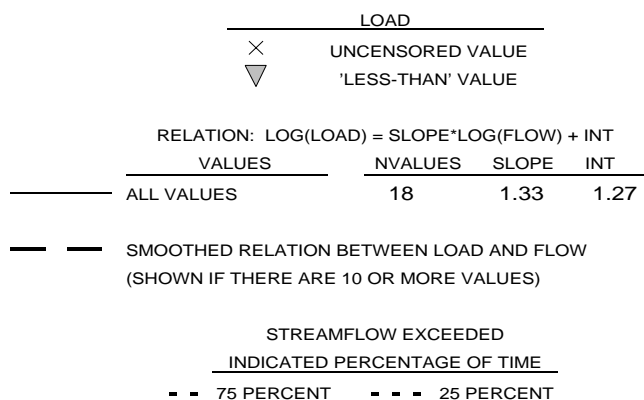
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

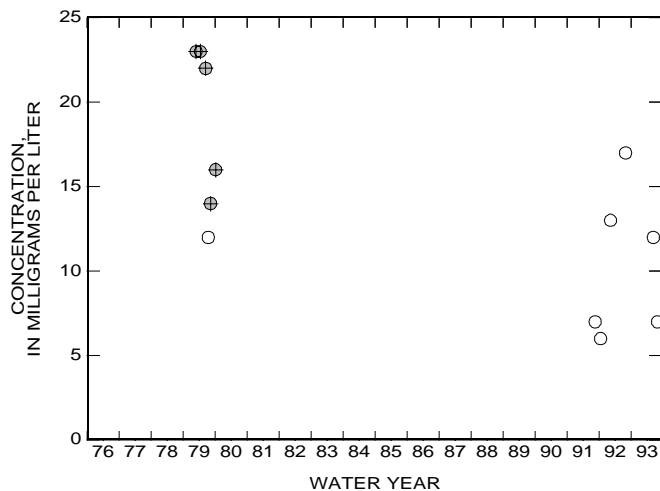
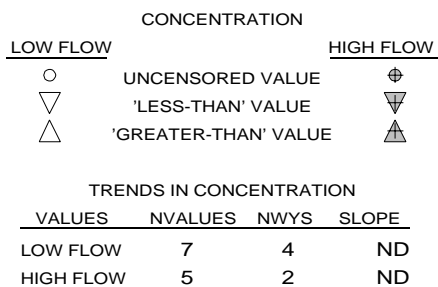
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



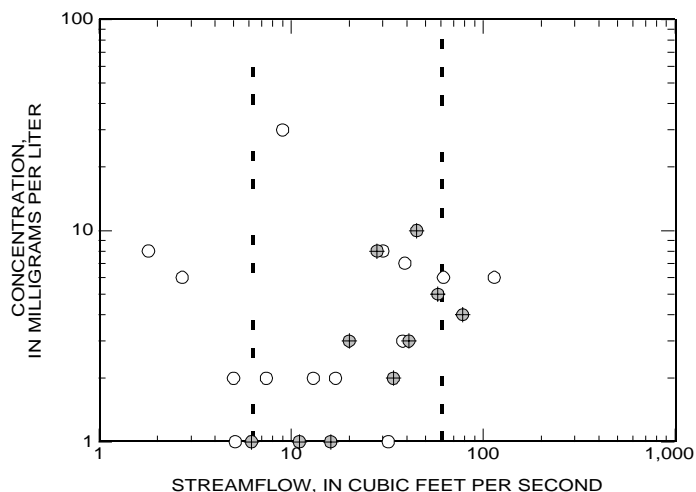
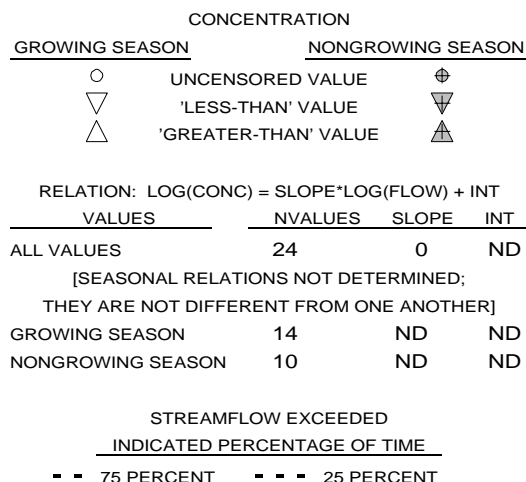
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



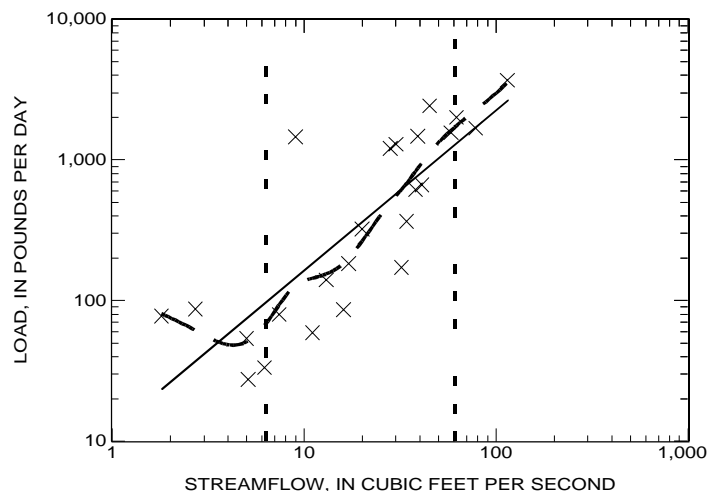
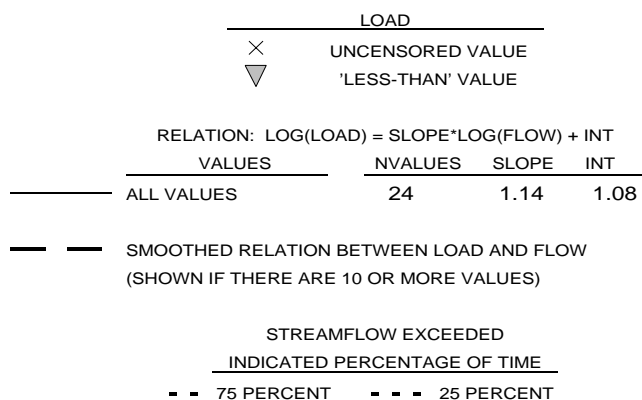
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
 SUSPENDED SEDIMENT
 01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

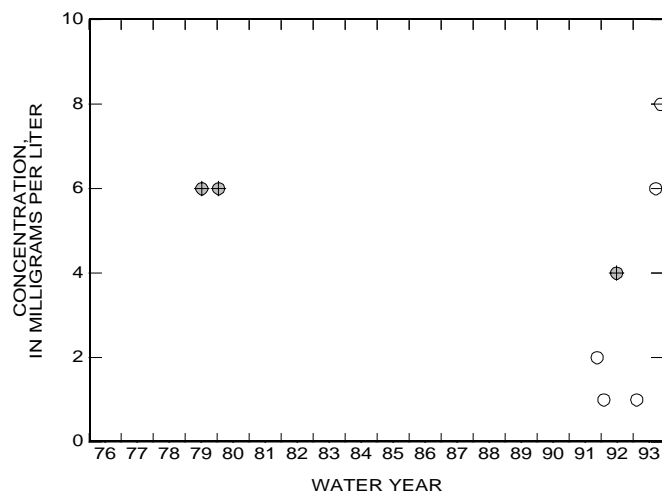
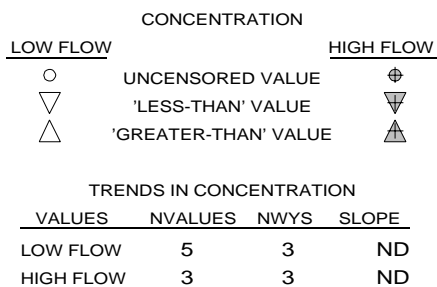
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



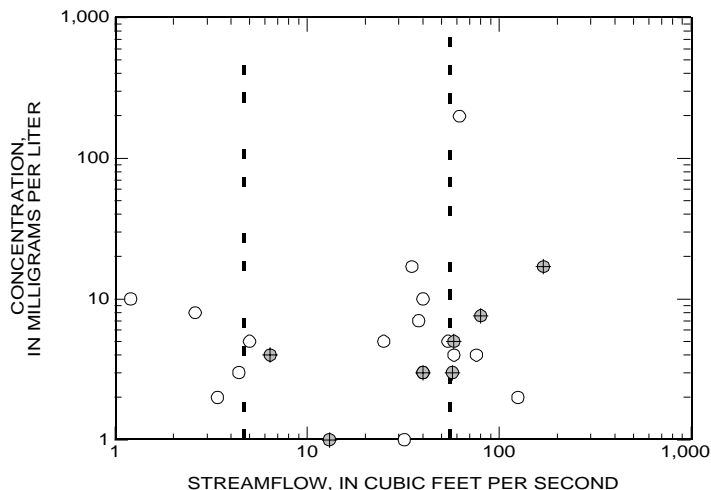
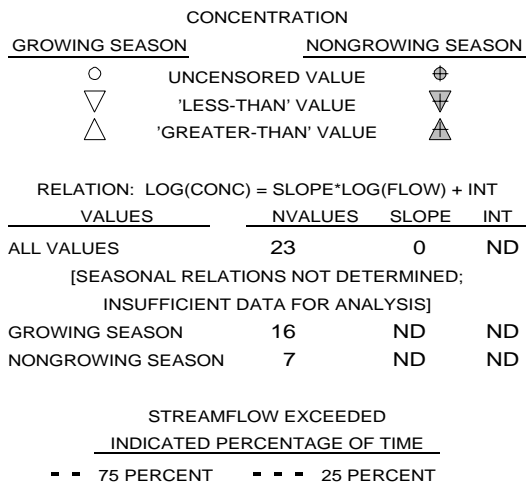
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



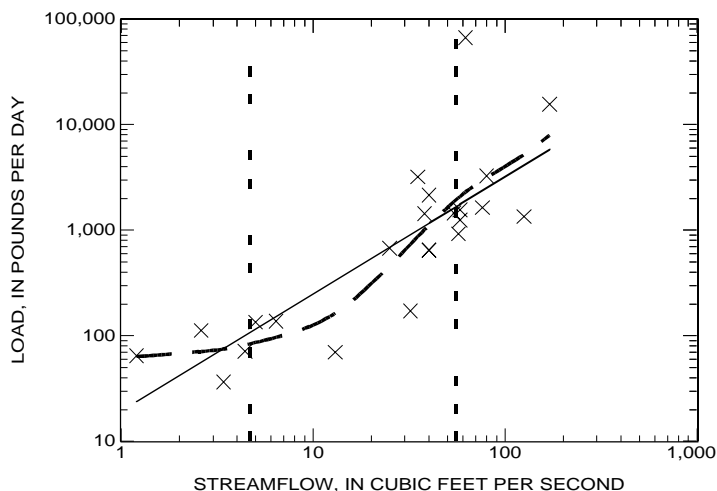
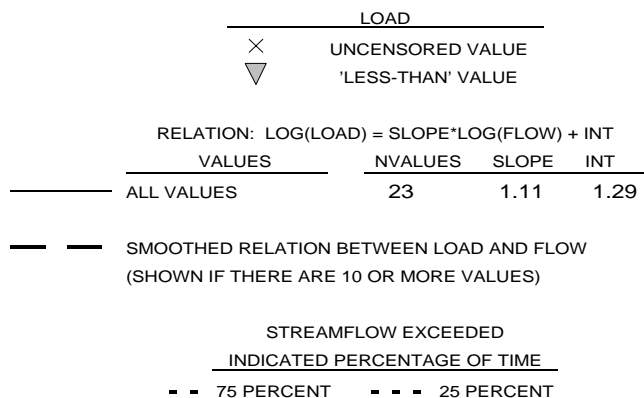
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

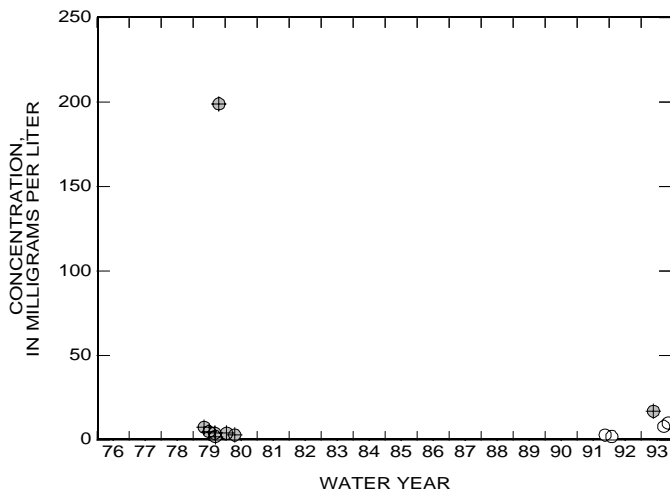
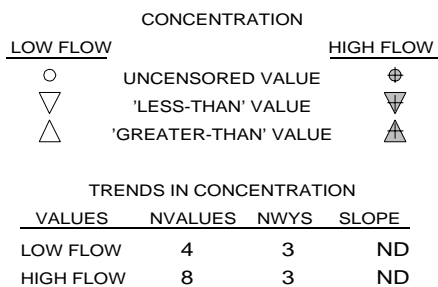
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



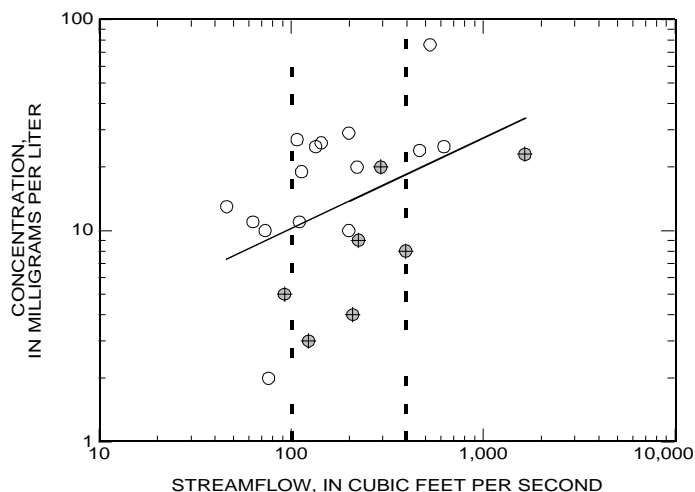
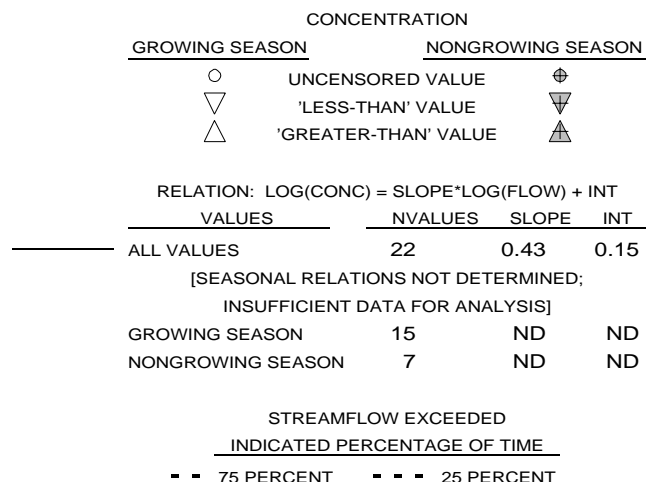
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



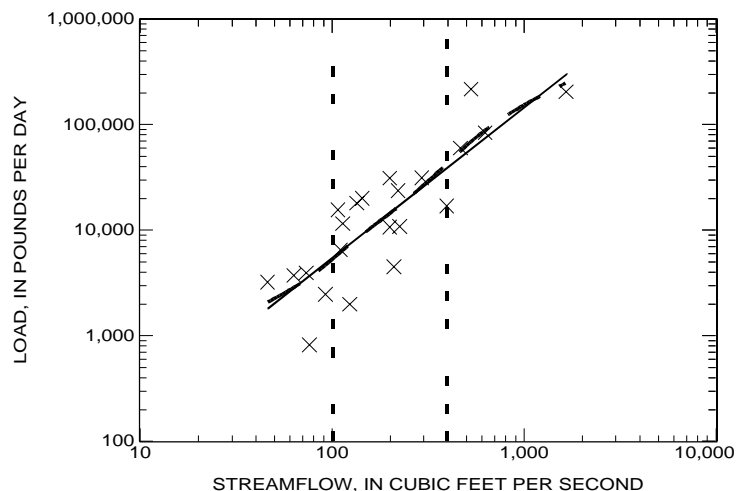
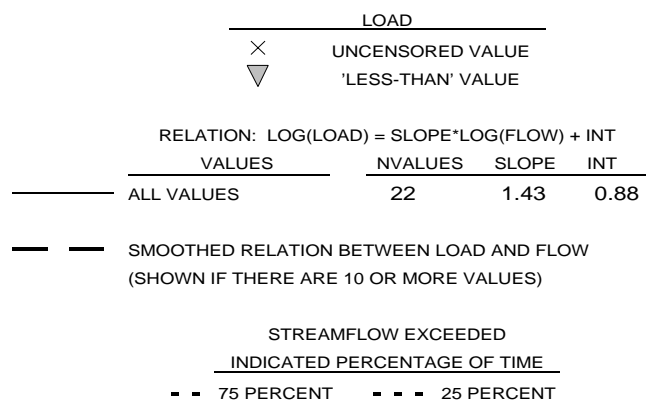
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

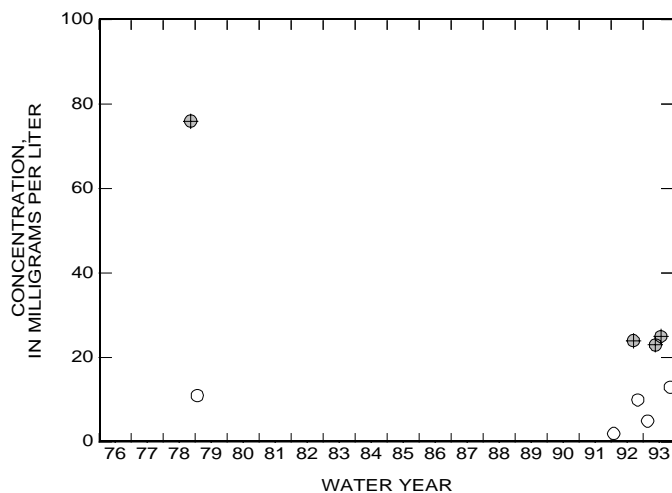
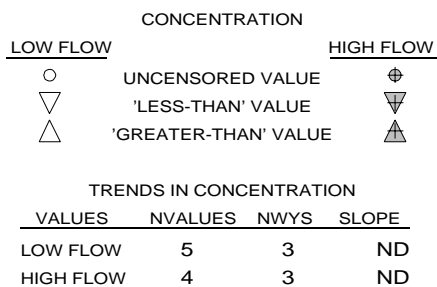
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



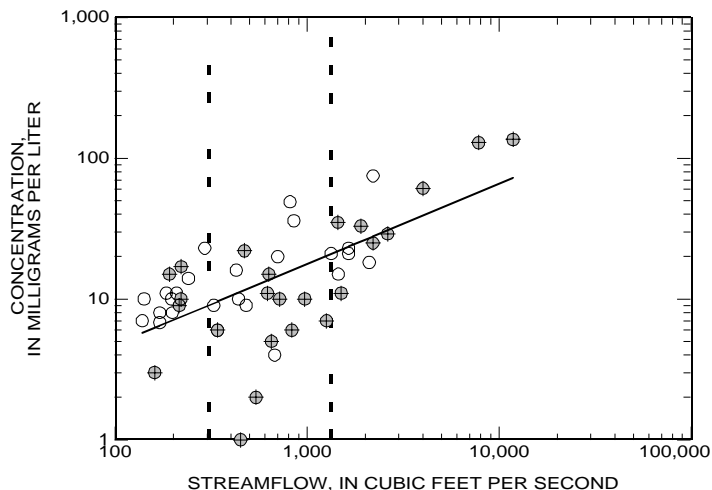
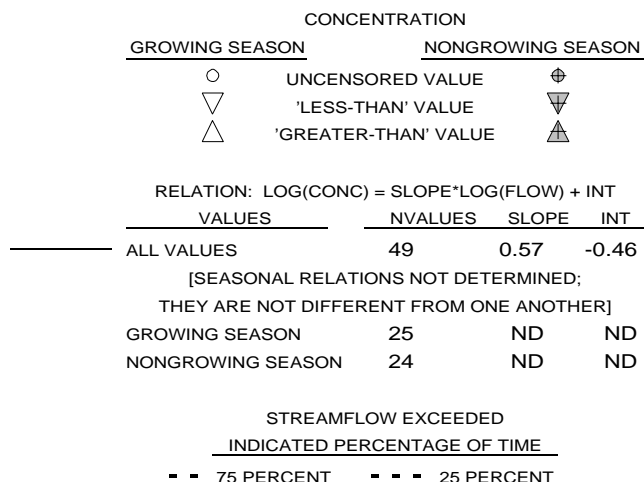
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



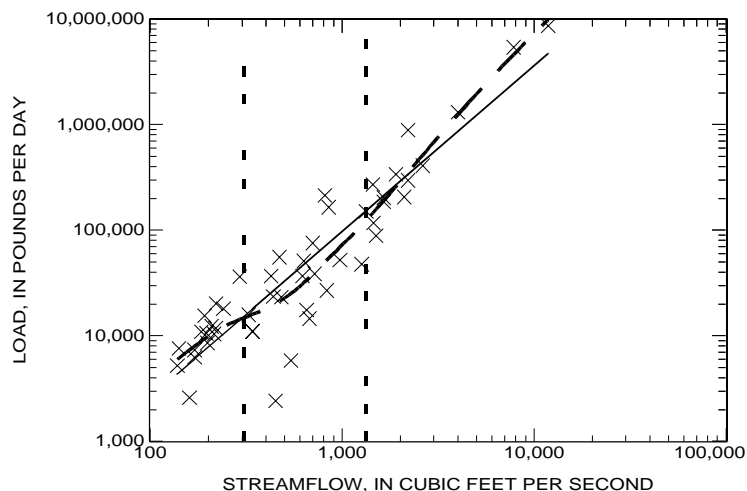
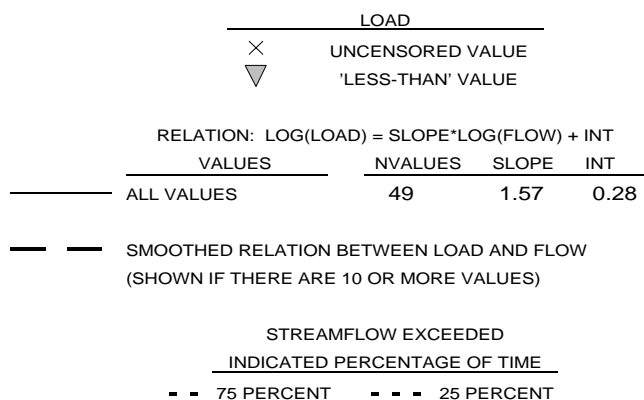
APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

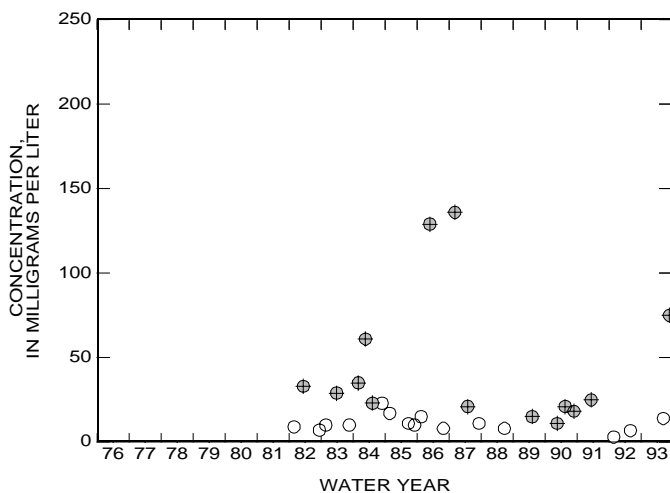
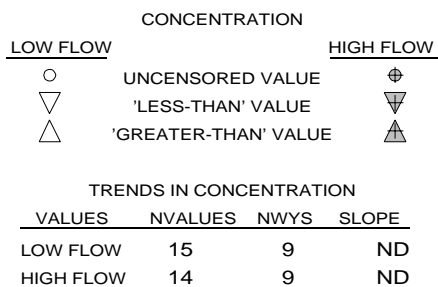
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

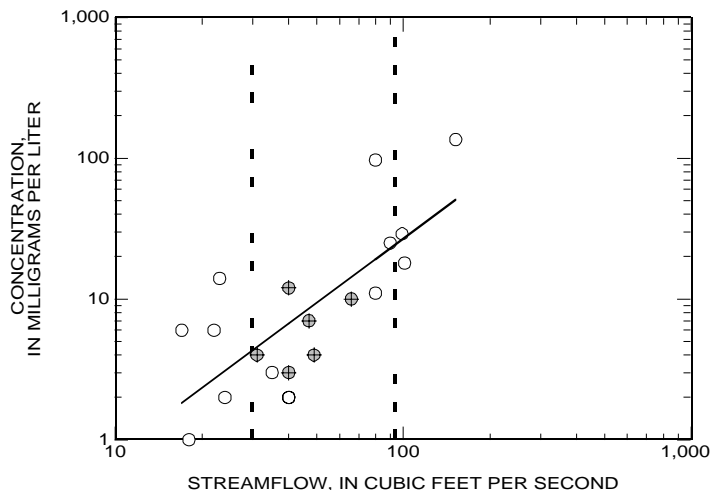


APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

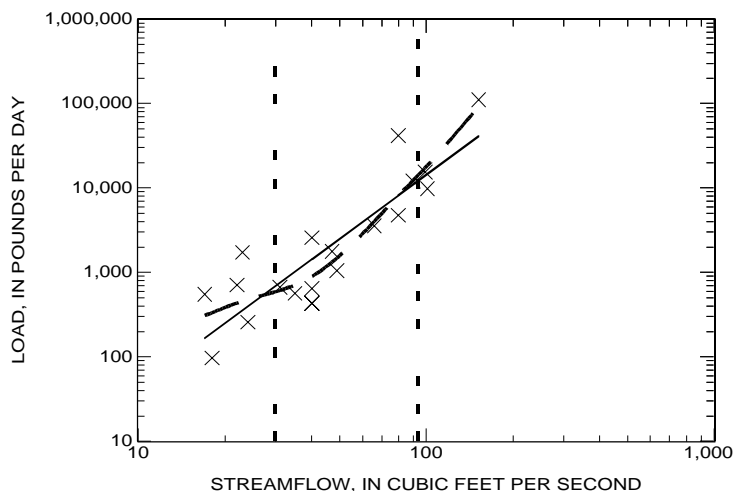
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	20	1.52	-1.61	
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]				
GROWING SEASON	14	ND	ND	
NONGROWING SEASON	6	ND	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
---	75 PERCENT	---	25 PERCENT	



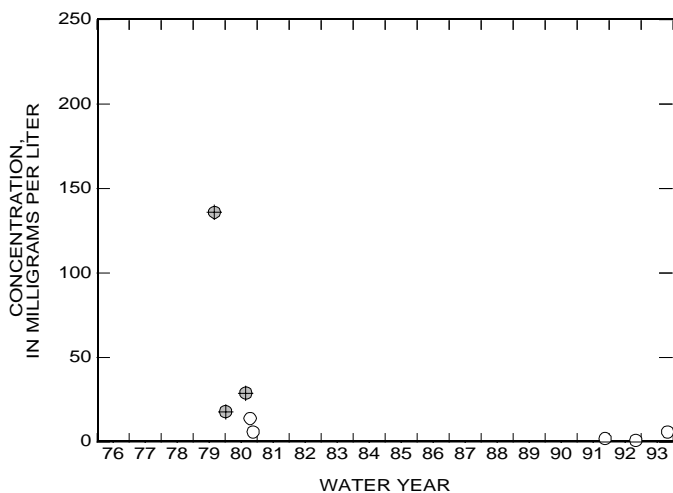
RELATION OF LOAD TO STREAMFLOW

LOAD				
×	UNCENSORED VALUE			
▽	'LESS-THAN' VALUE			
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	20	2.52	-0.88	
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)				
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
---	75 PERCENT	---	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	5	4	ND	
HIGH FLOW	3	2	ND	

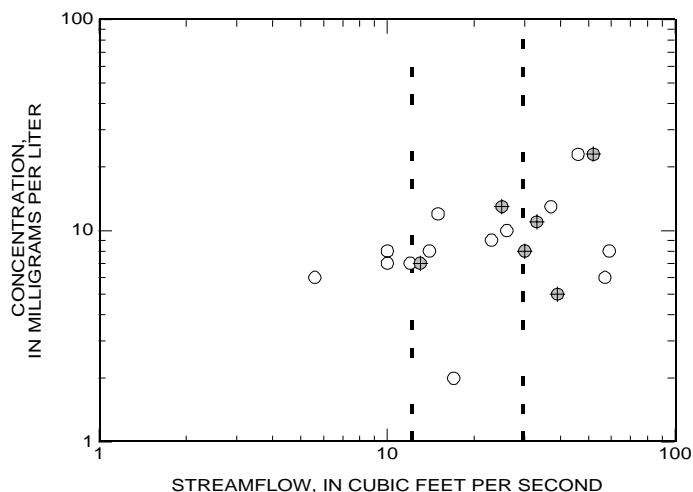


APPENDIX 4. Relations of constituent concentration and load to streamflow and trends in concentration with time
SUSPENDED SEDIMENT
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

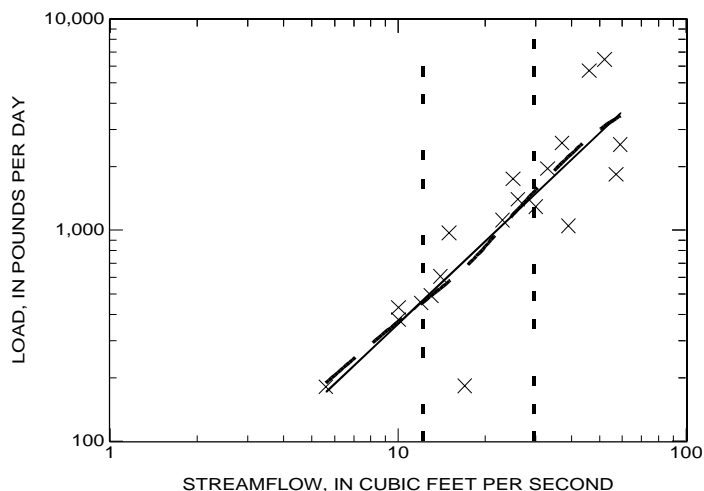
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	19	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	13	ND	ND
NONGROWING SEASON	6	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



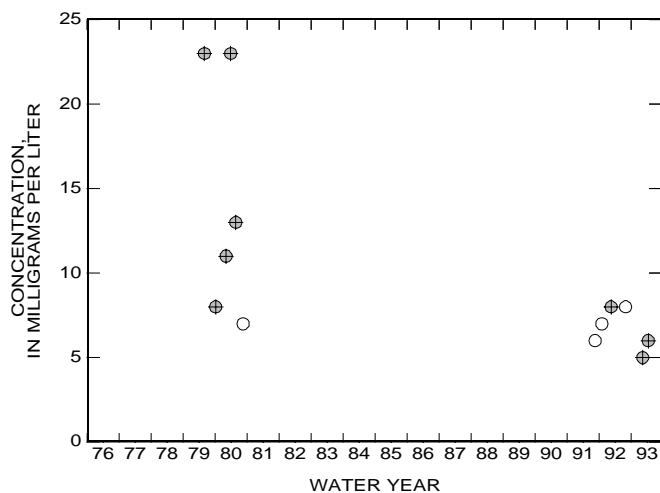
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	19	1.29	1.27
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	3	ND
HIGH FLOW	8	4	ND



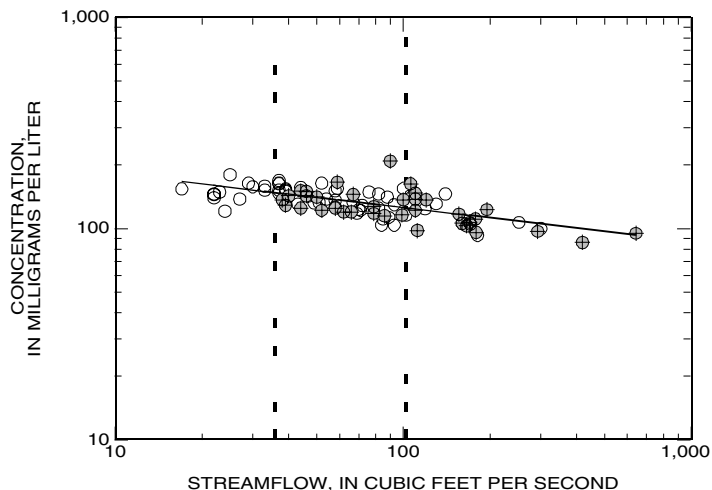
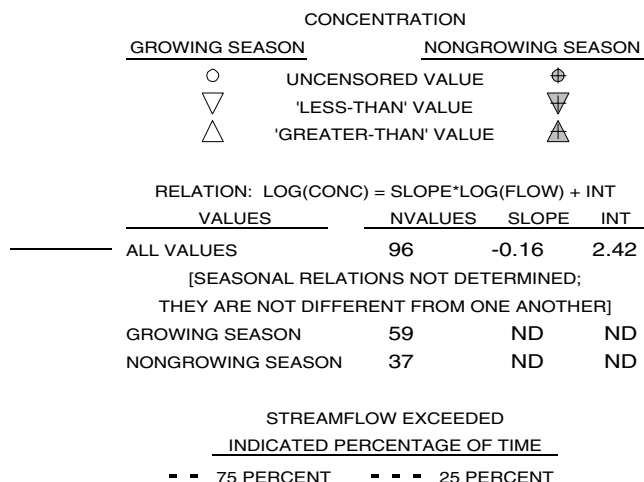
Appendix 5 - Dissolved solids

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

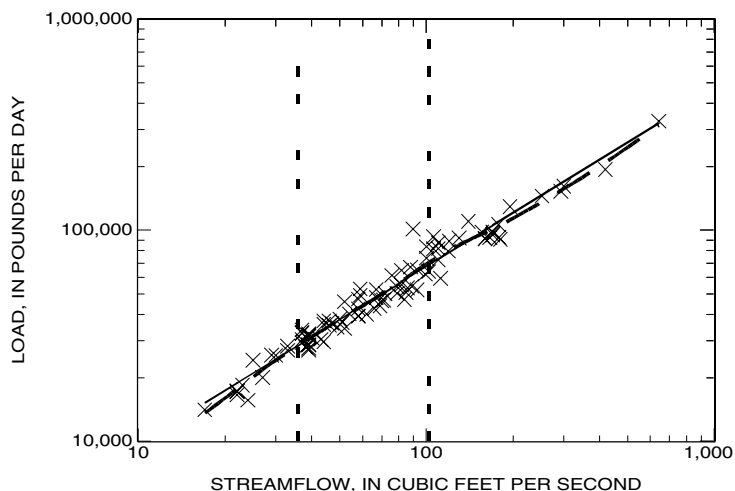
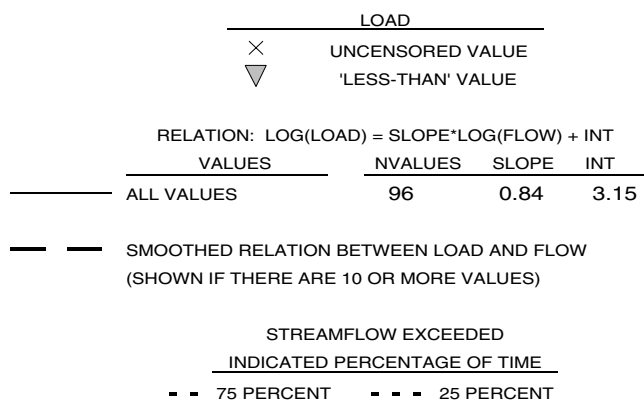
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

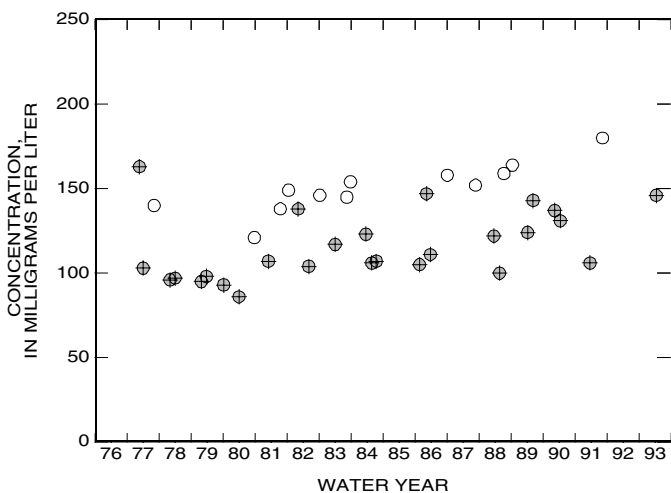
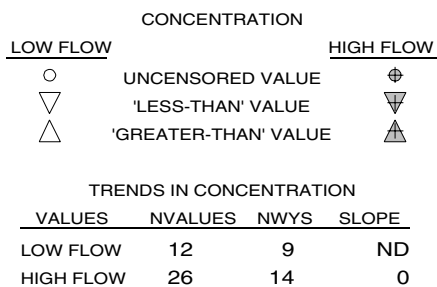
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



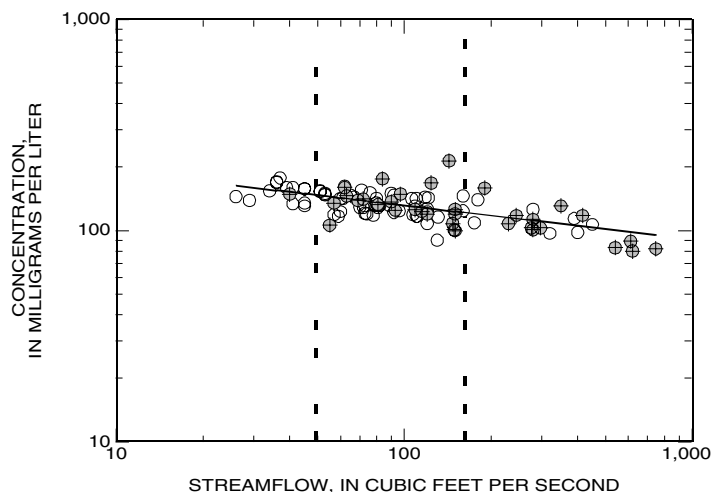
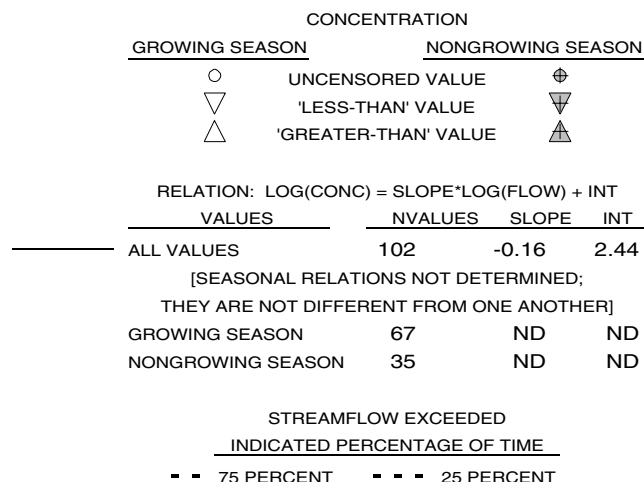
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



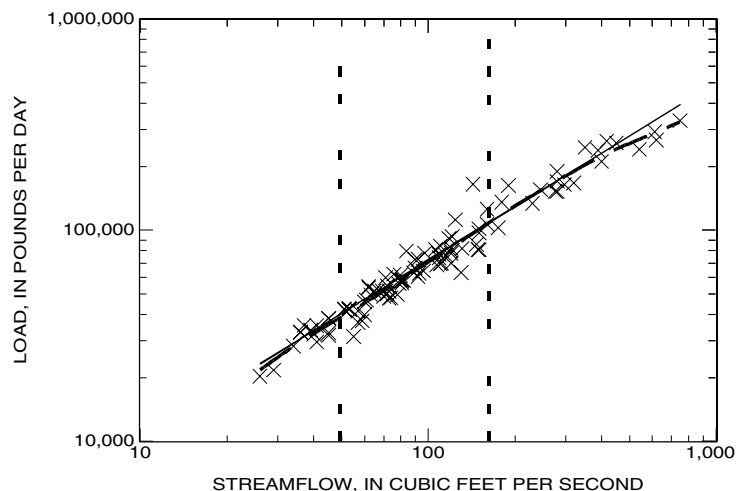
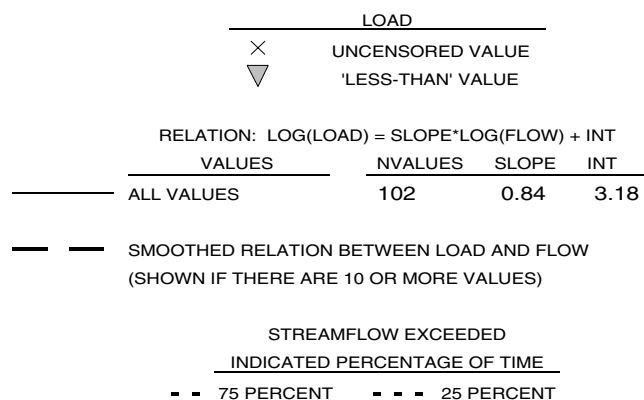
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

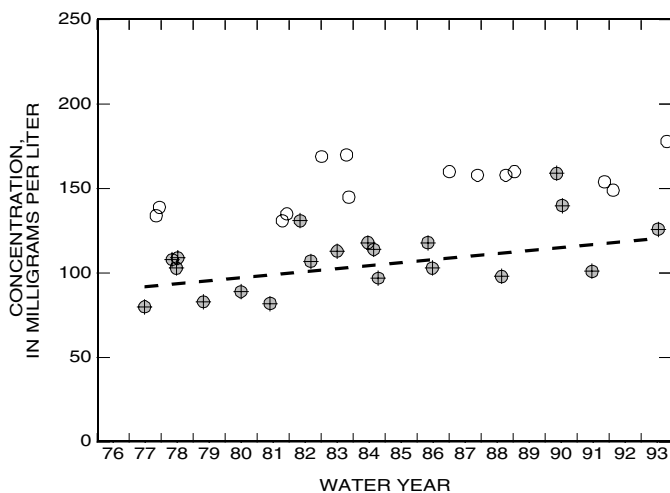
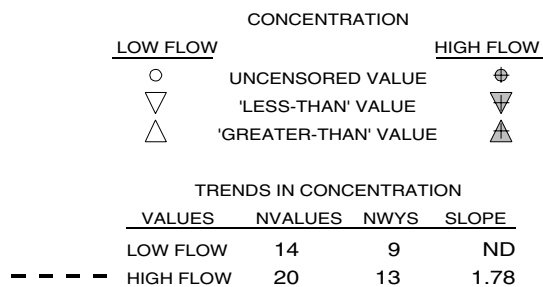
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



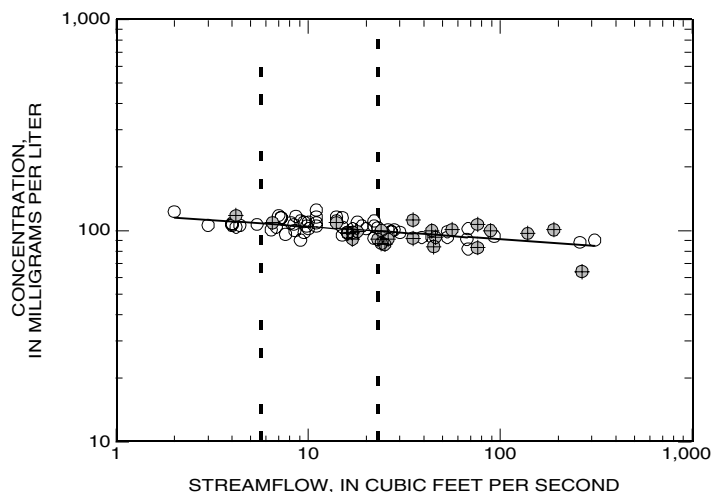
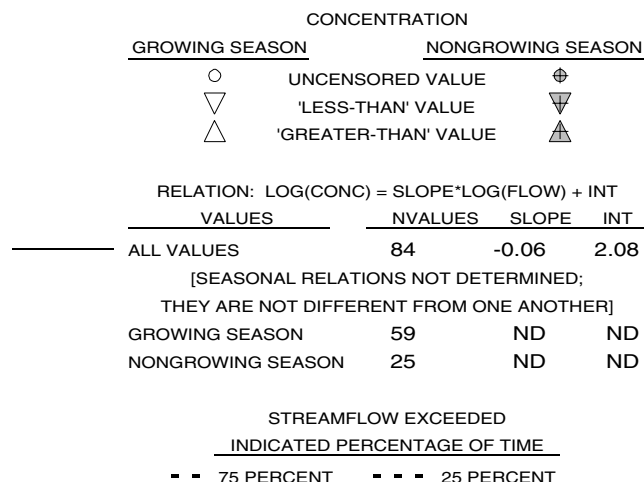
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



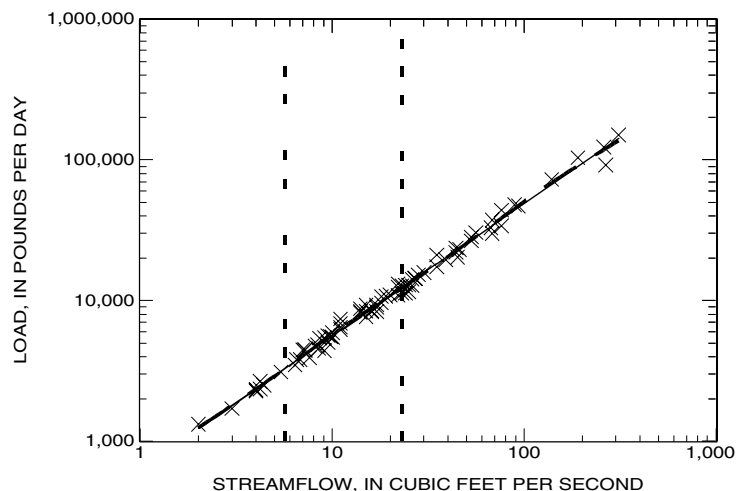
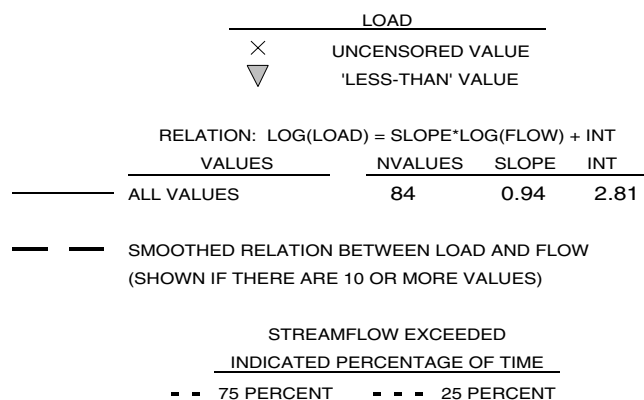
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

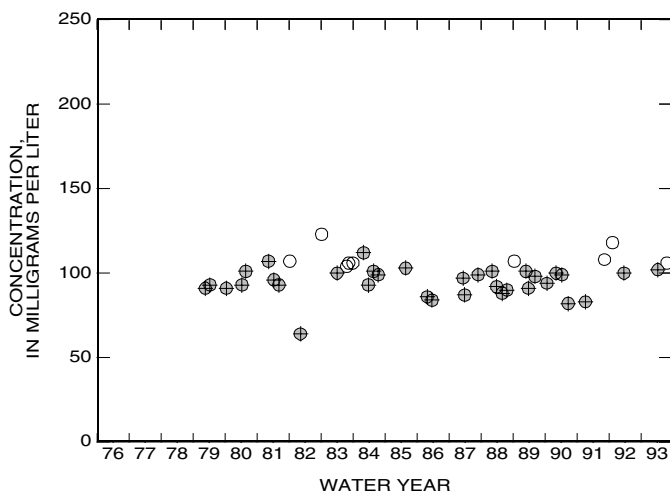
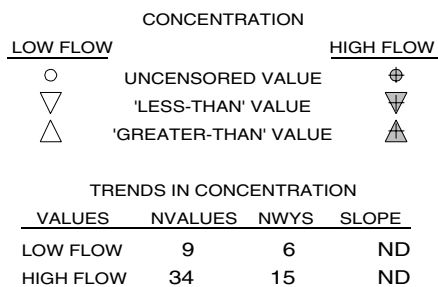
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



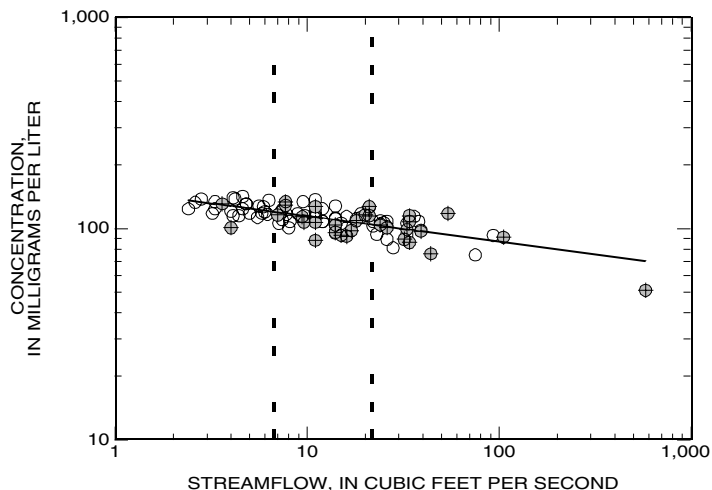
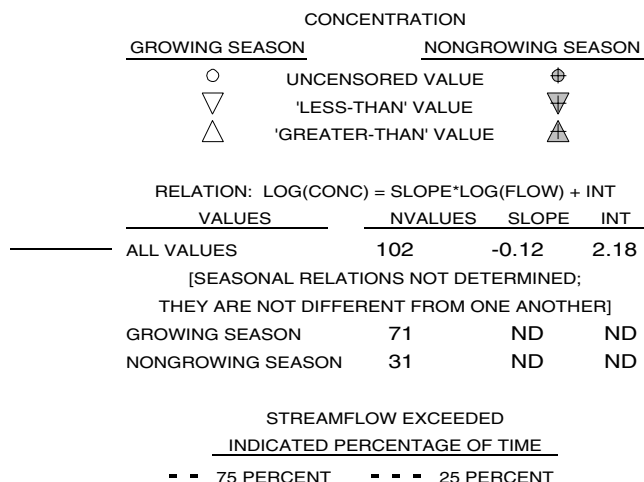
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



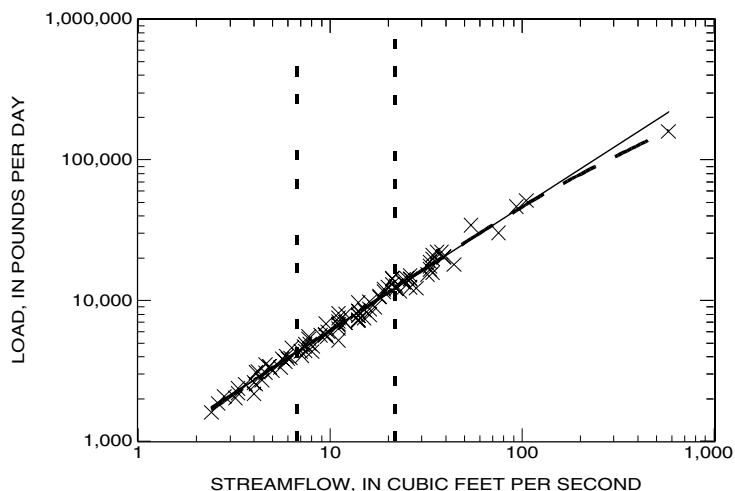
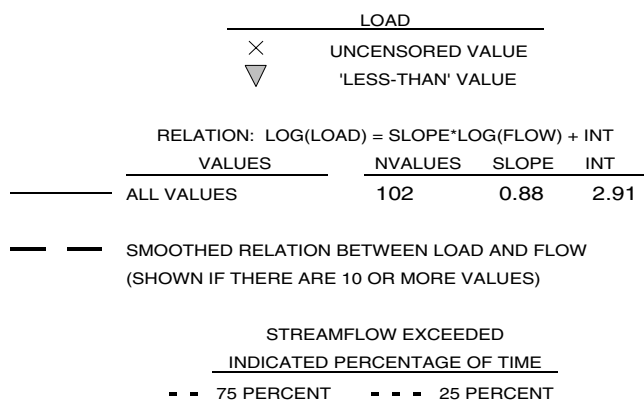
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

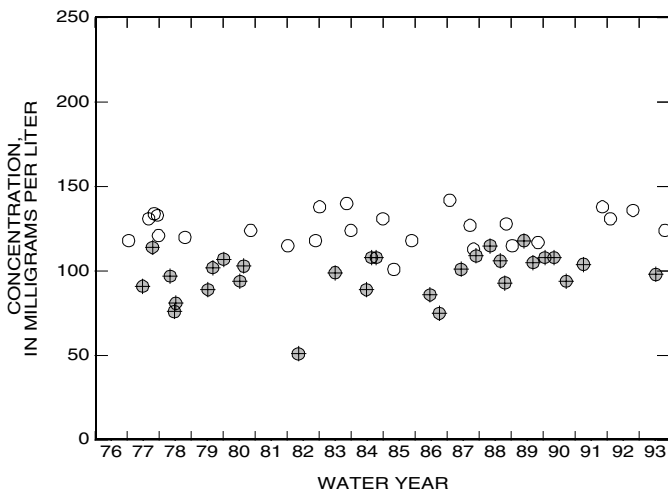
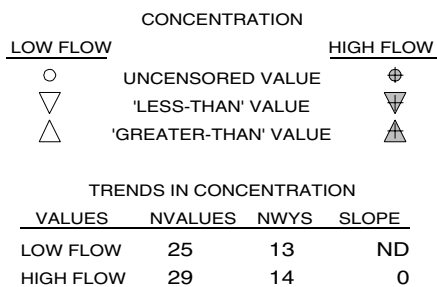
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



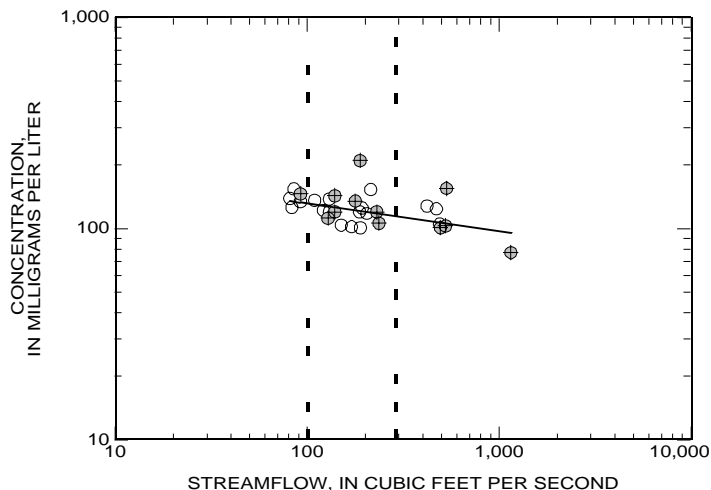
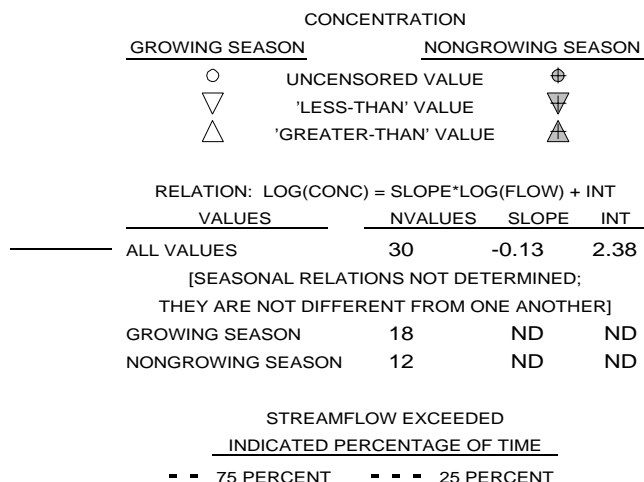
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



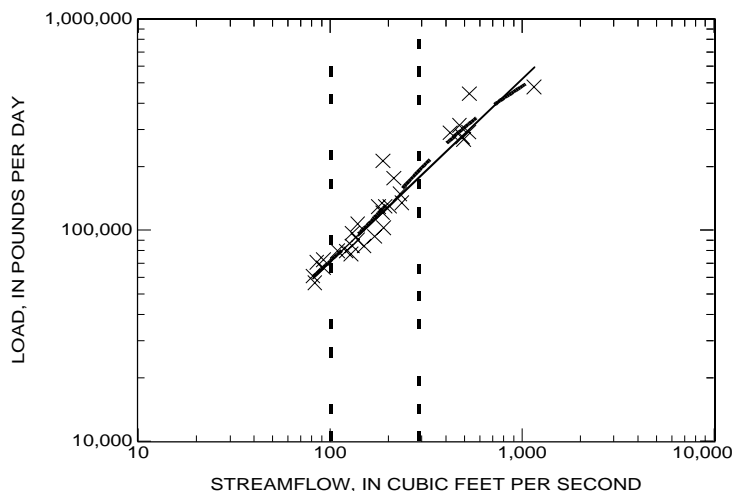
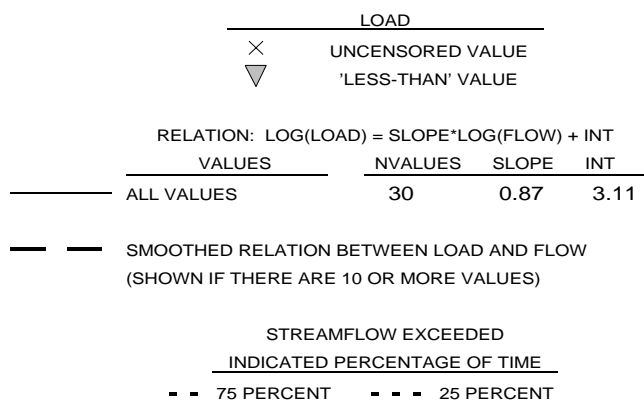
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

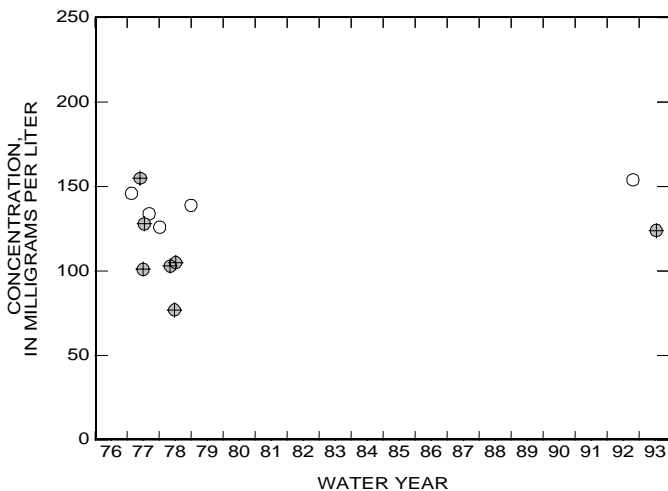
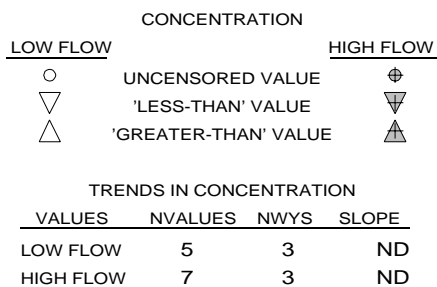
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



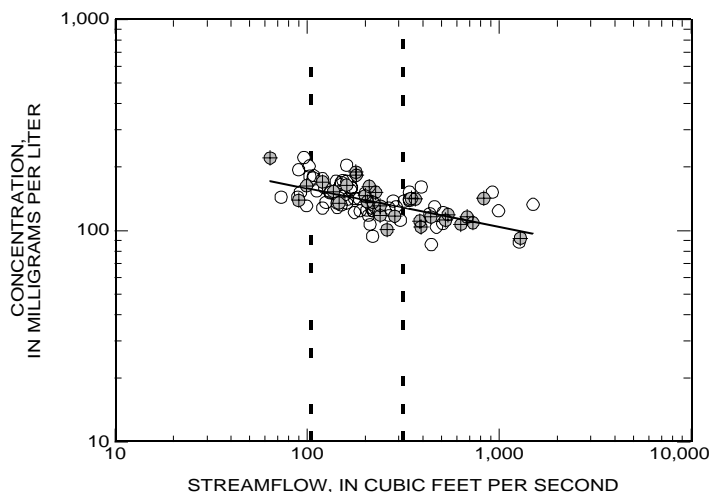
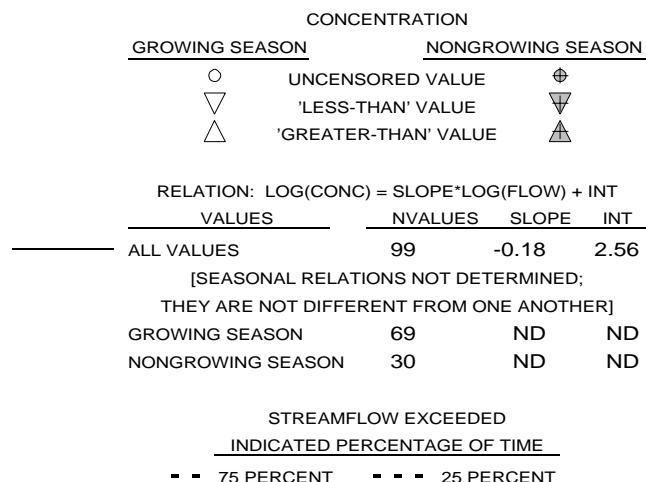
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



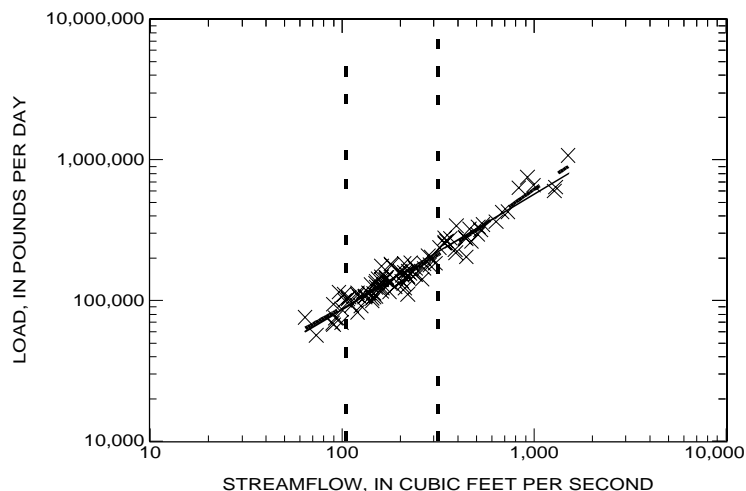
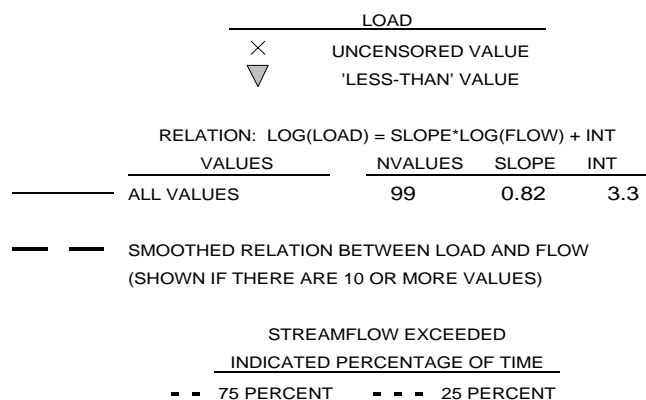
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

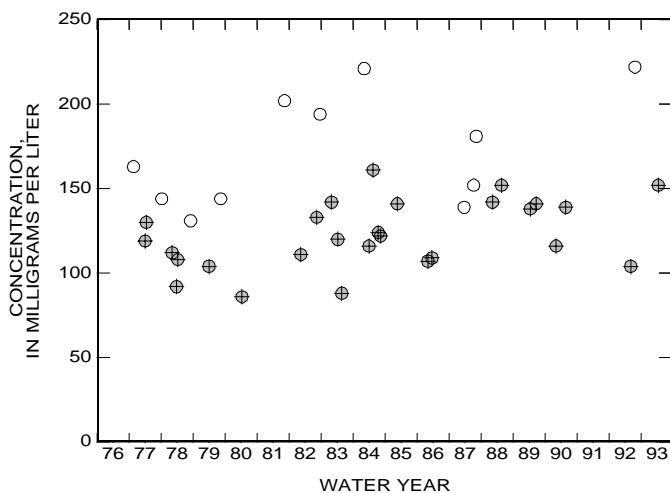
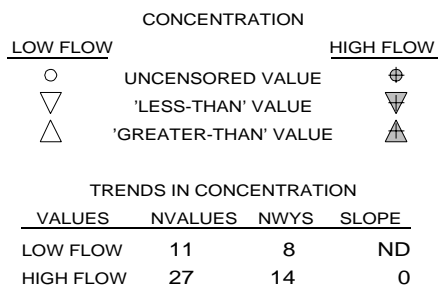
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



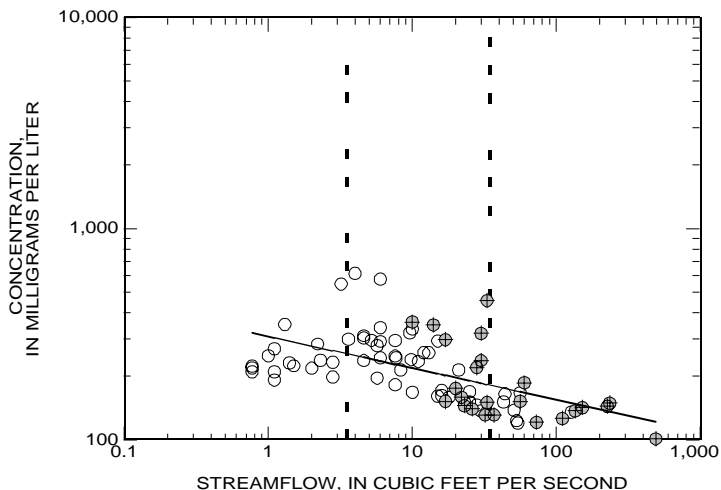
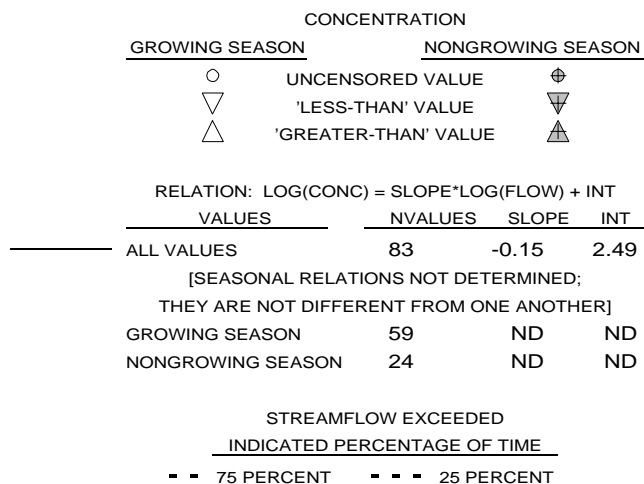
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



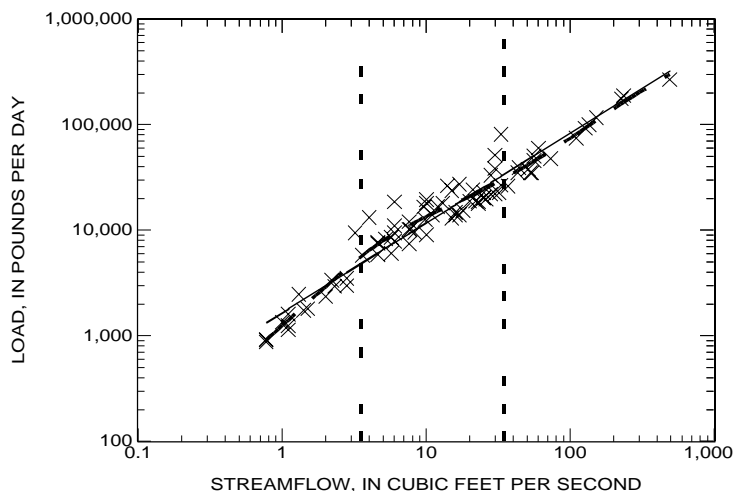
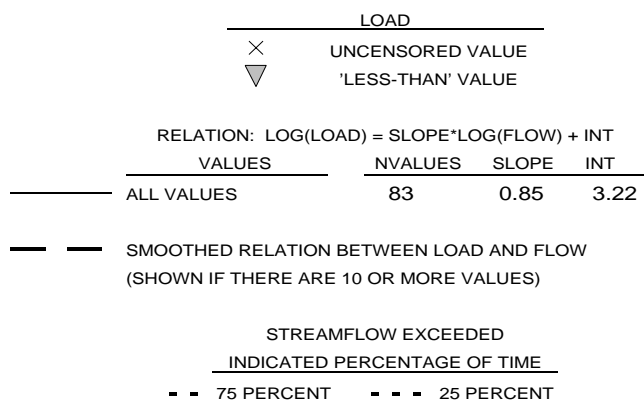
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

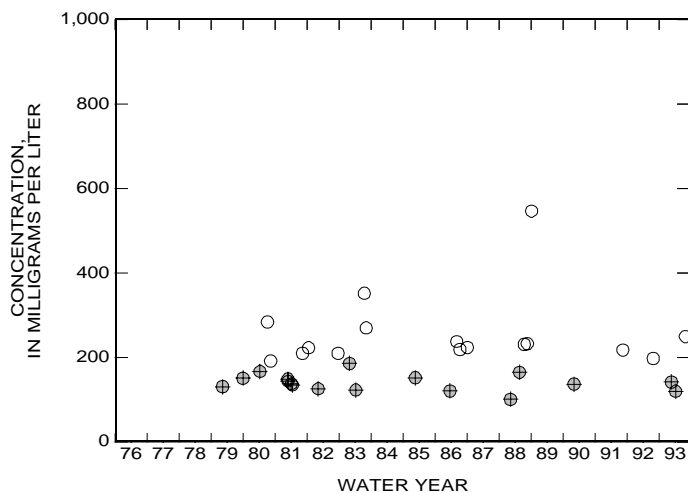
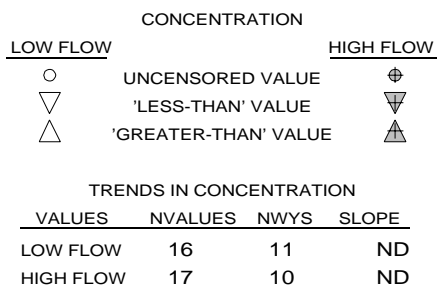
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



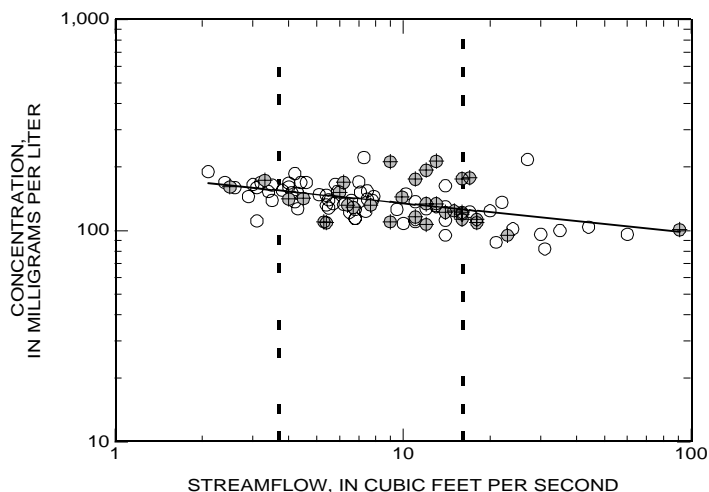
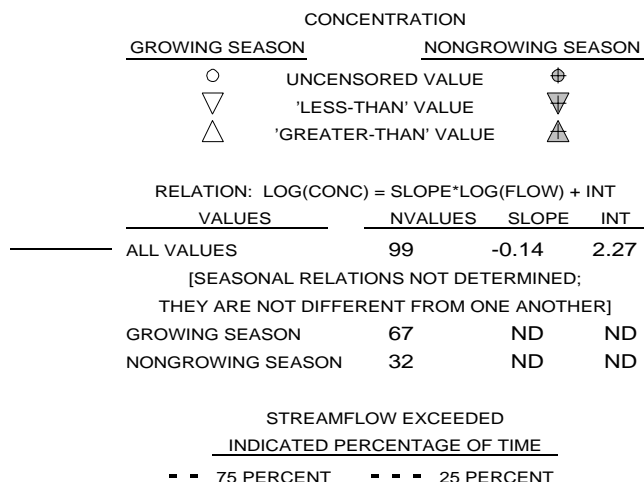
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



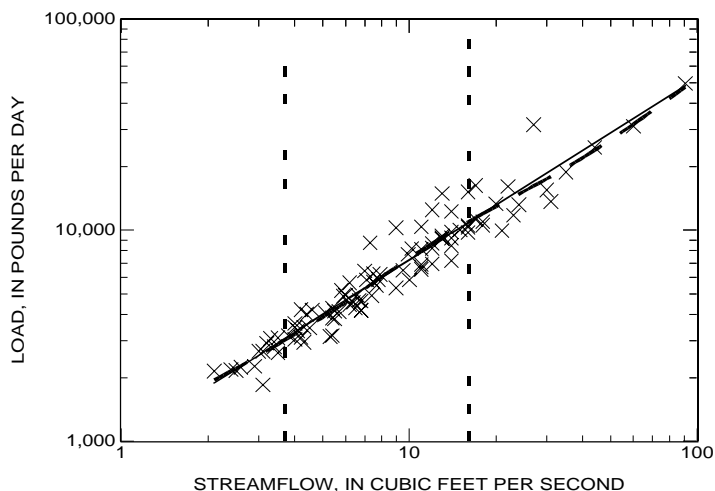
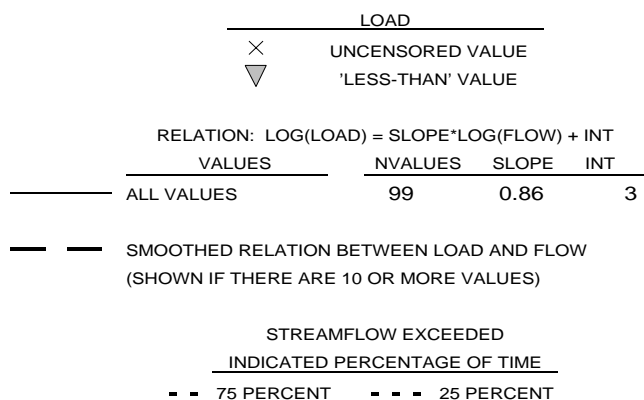
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

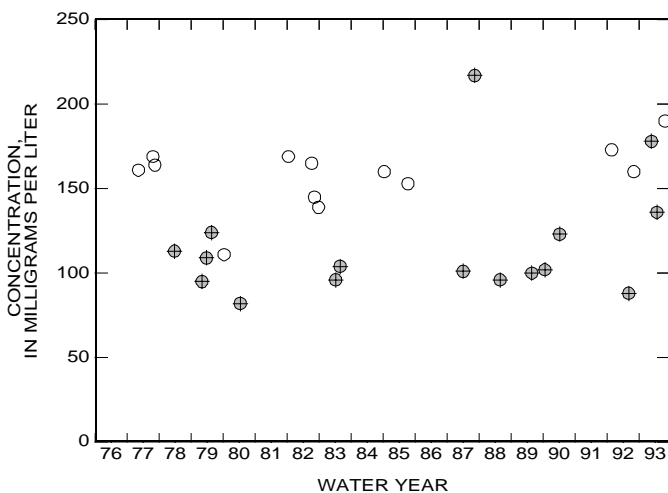
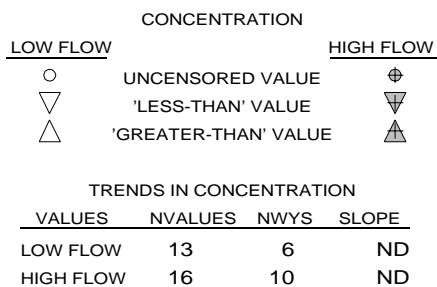
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



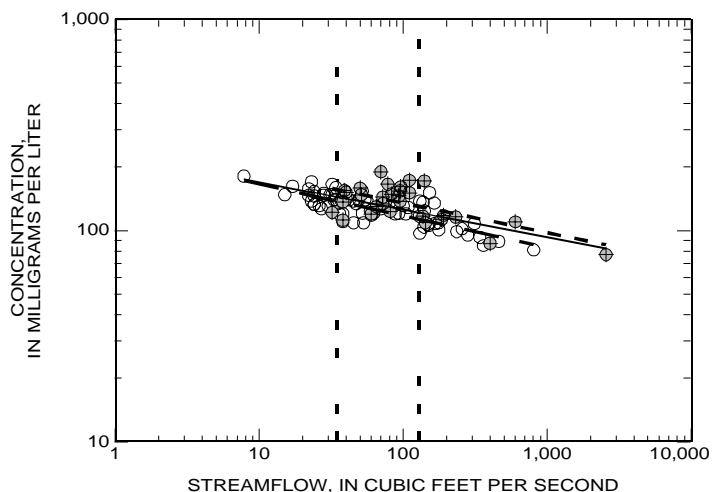
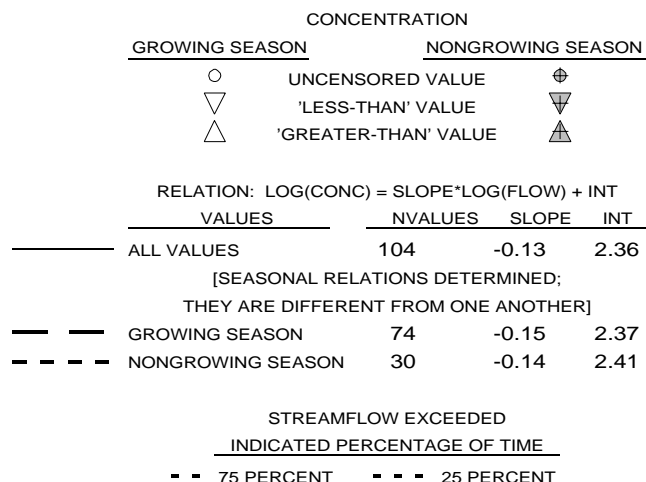
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



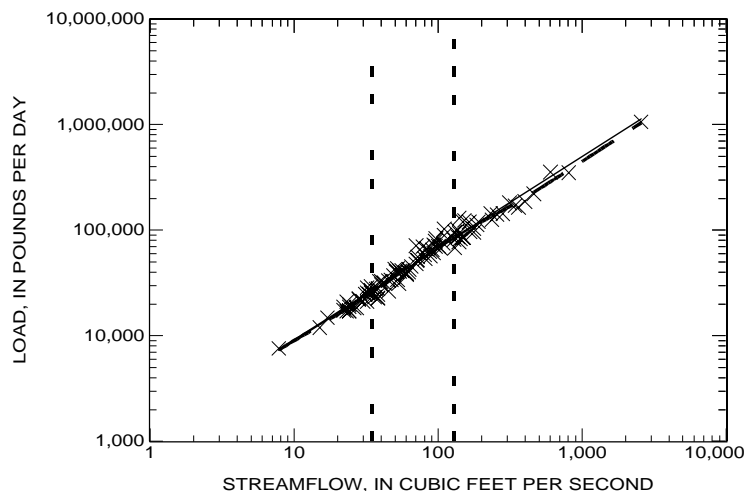
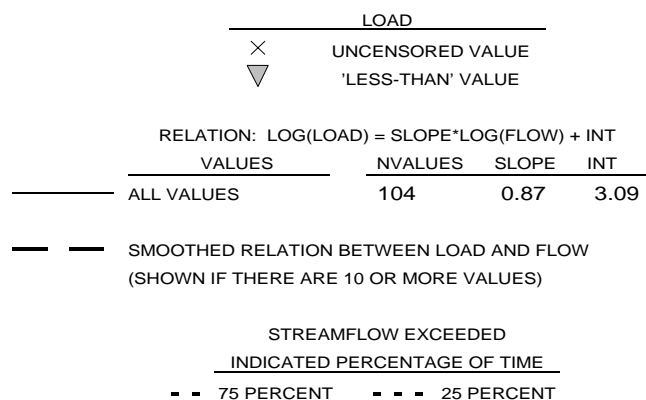
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

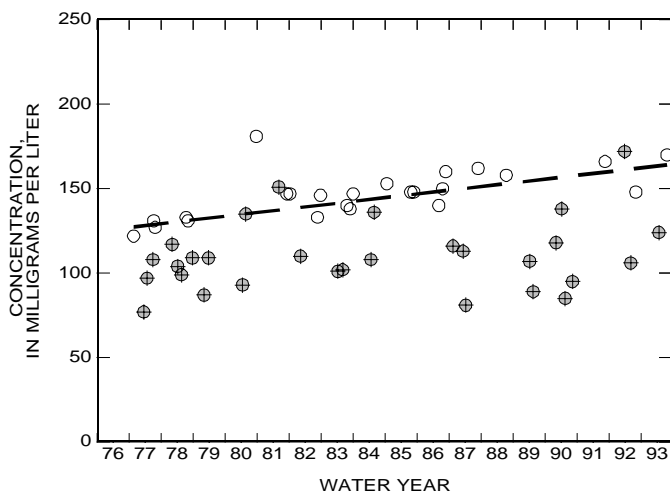
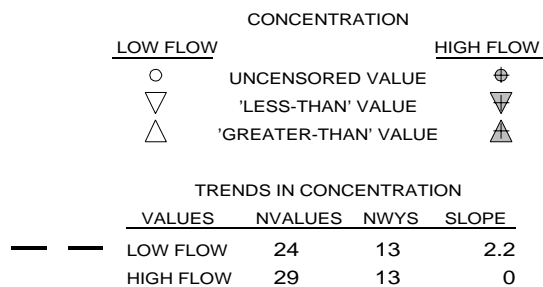
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



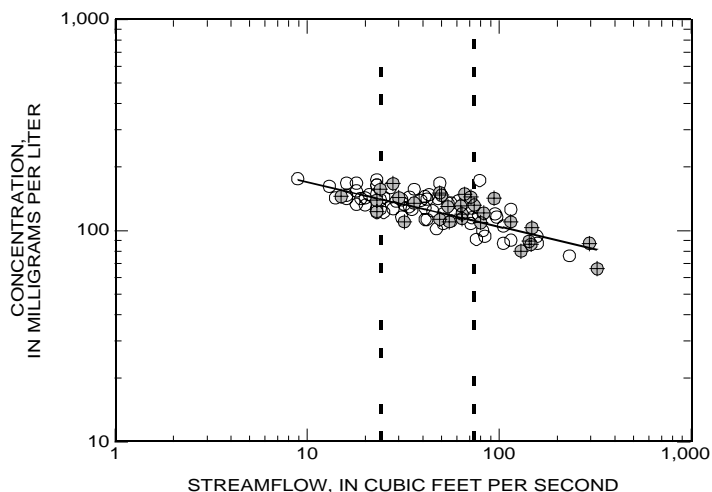
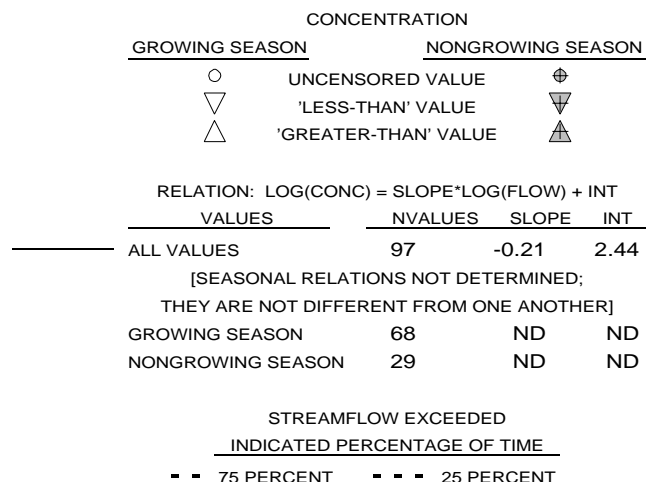
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



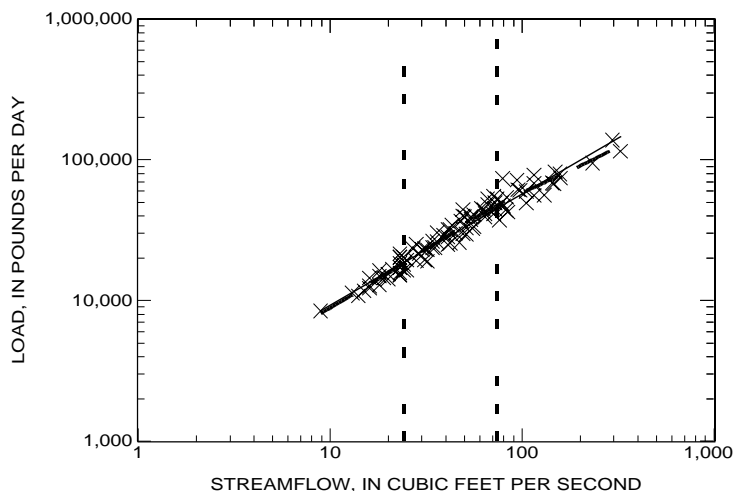
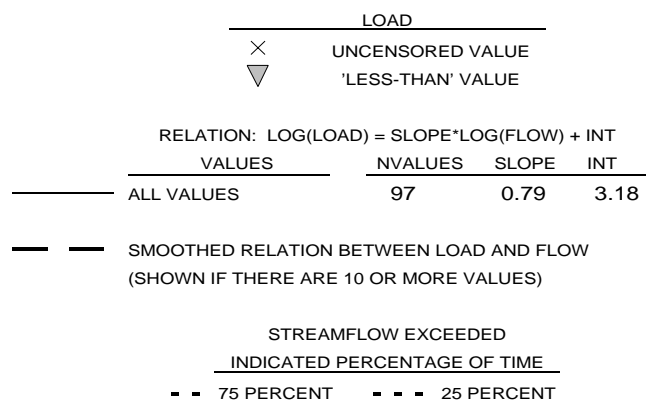
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

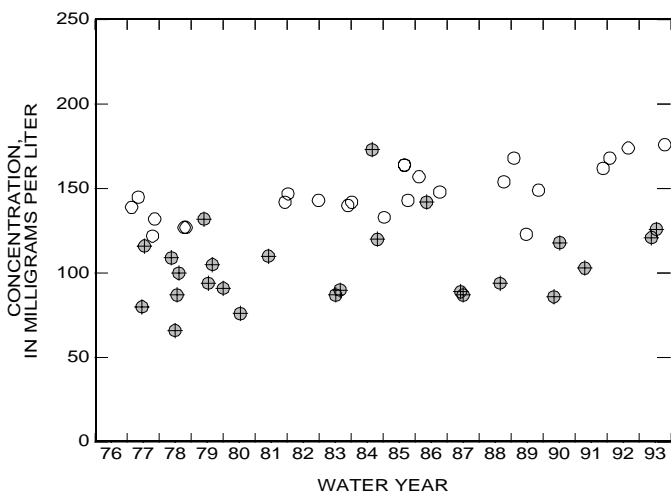
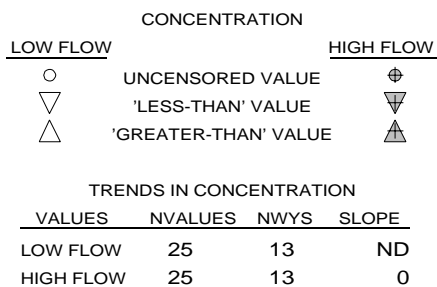
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



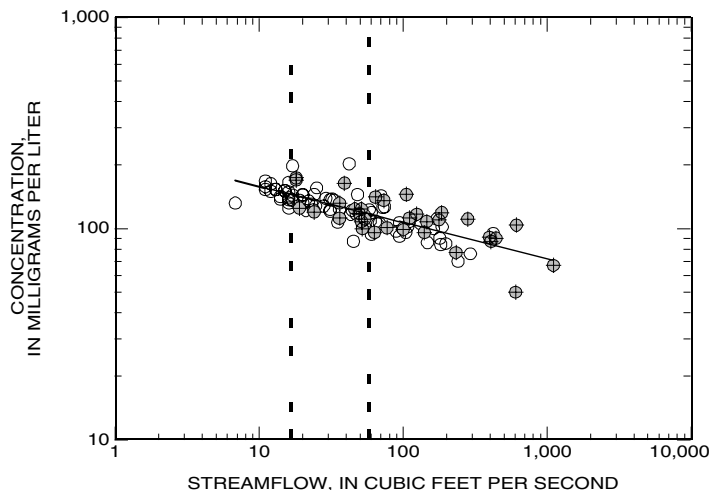
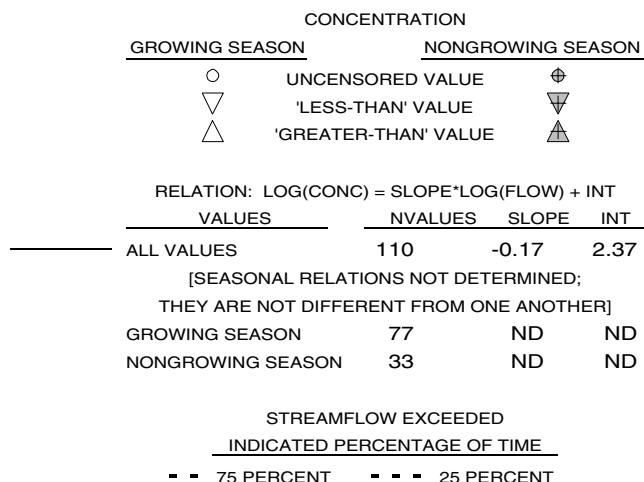
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



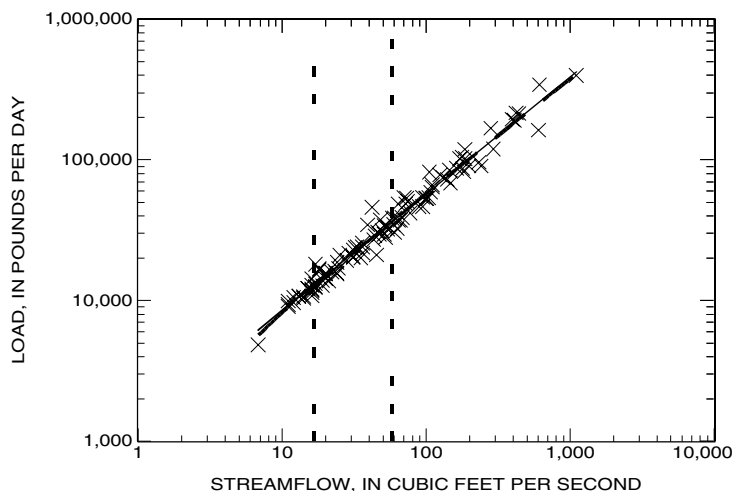
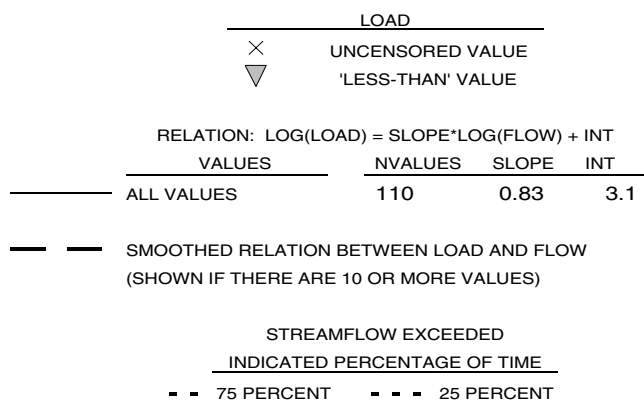
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

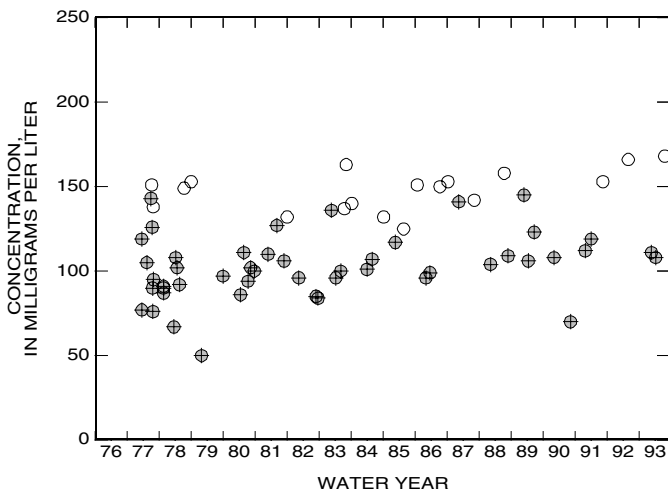
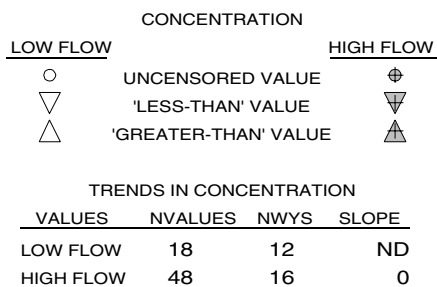
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



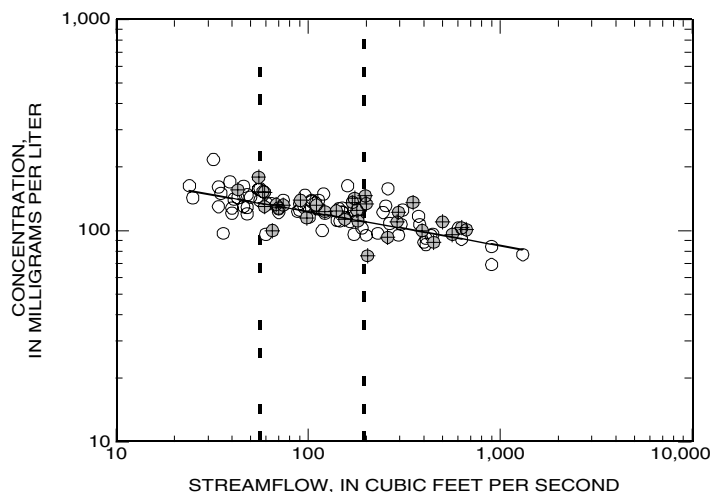
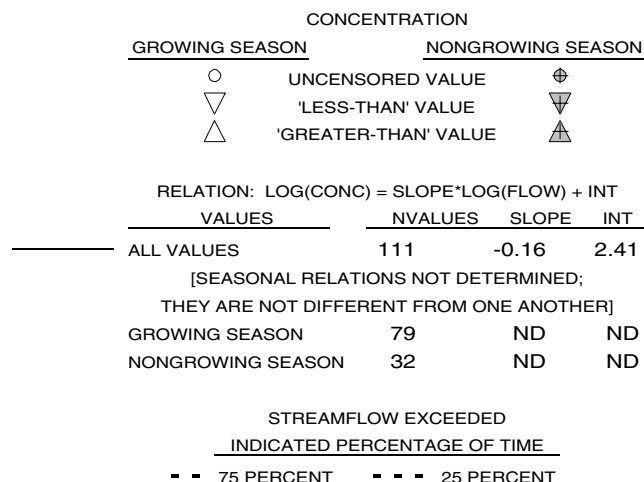
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



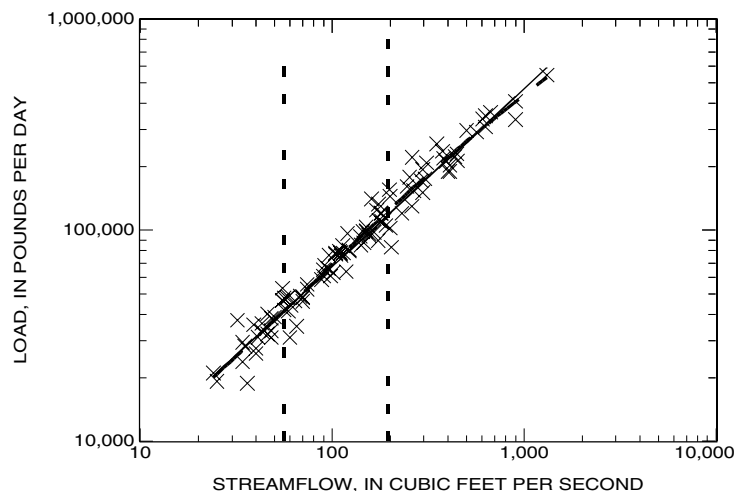
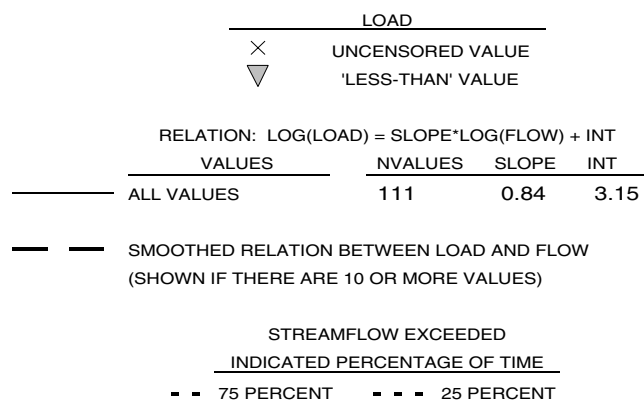
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

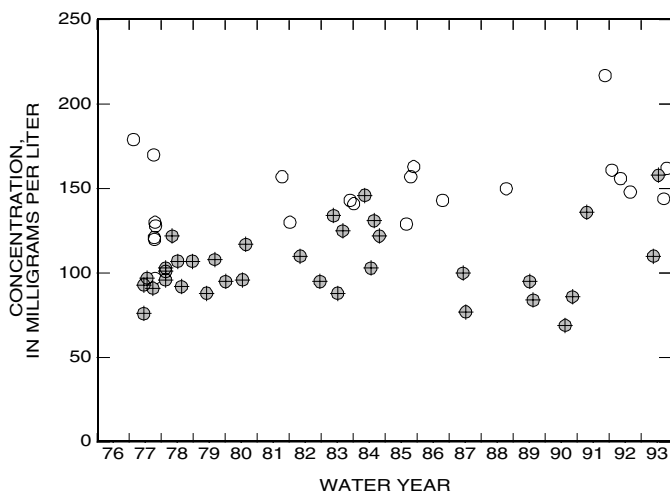
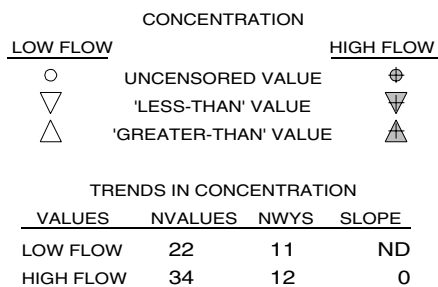
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



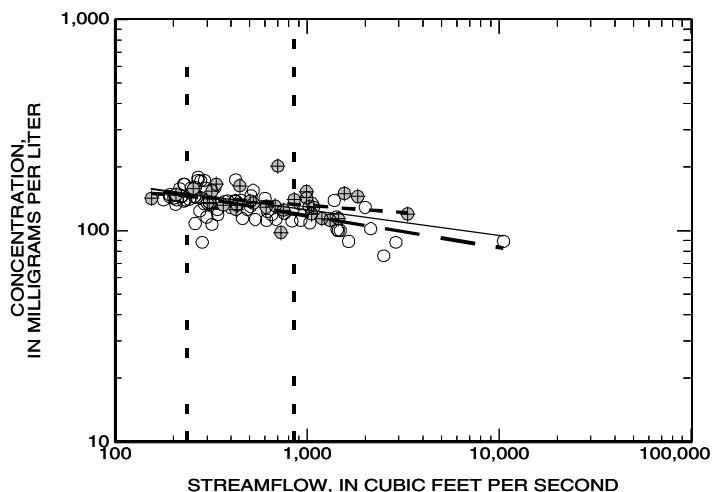
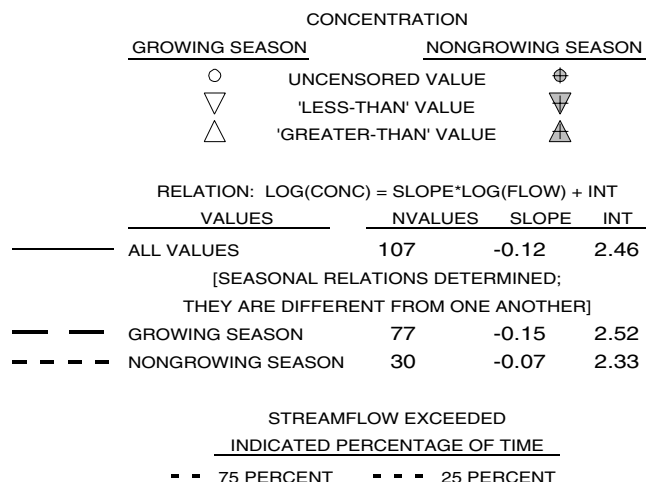
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



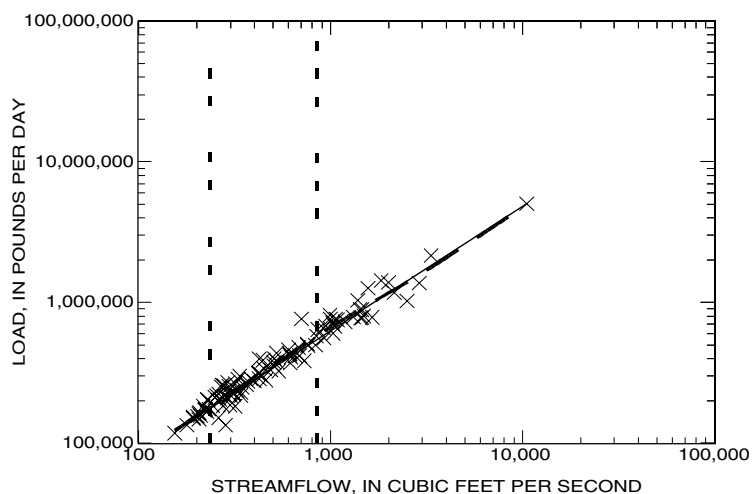
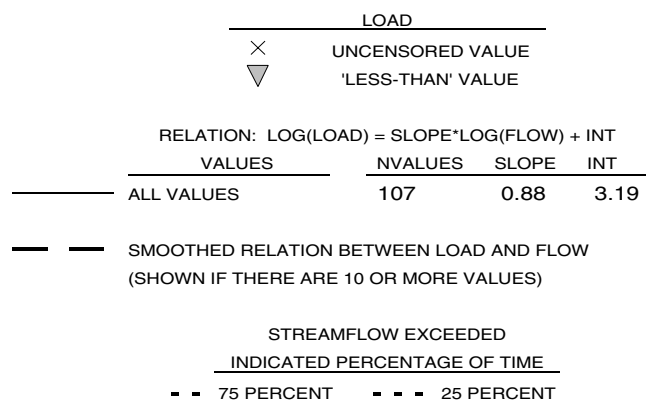
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

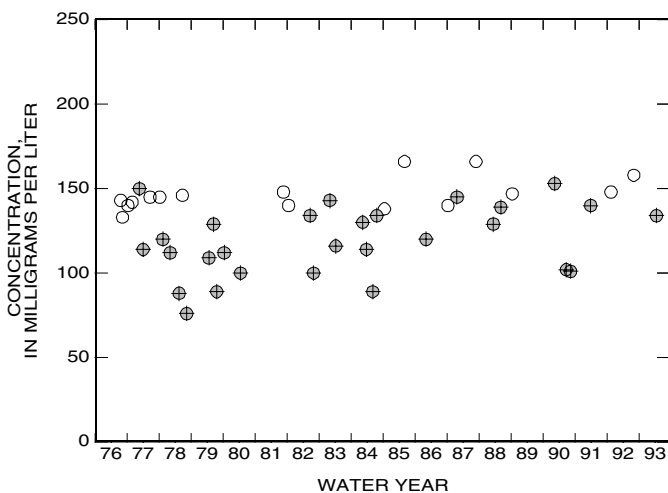
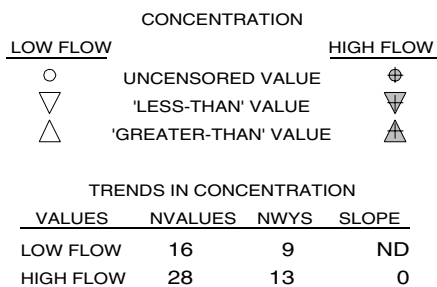
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



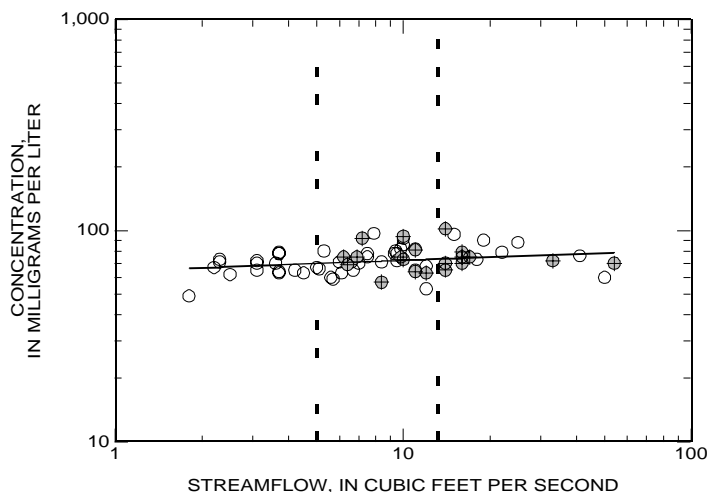
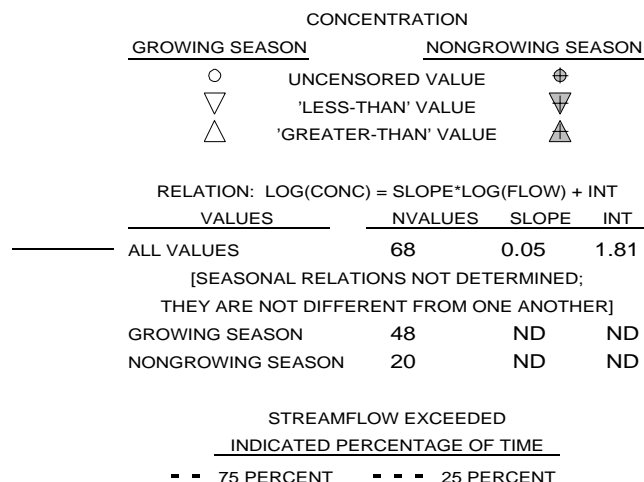
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



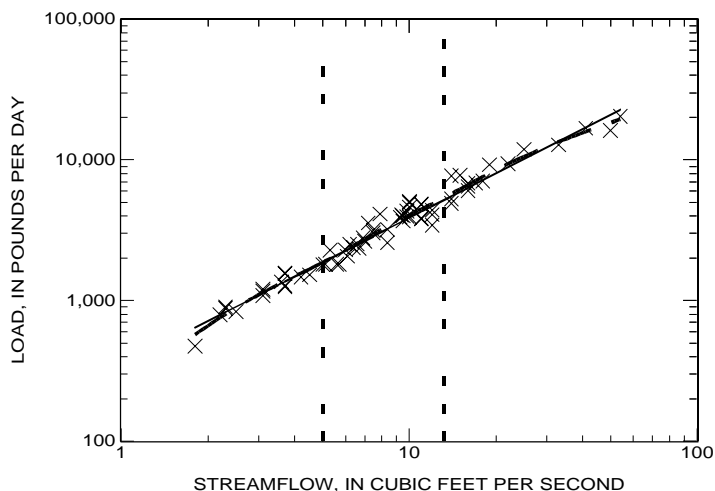
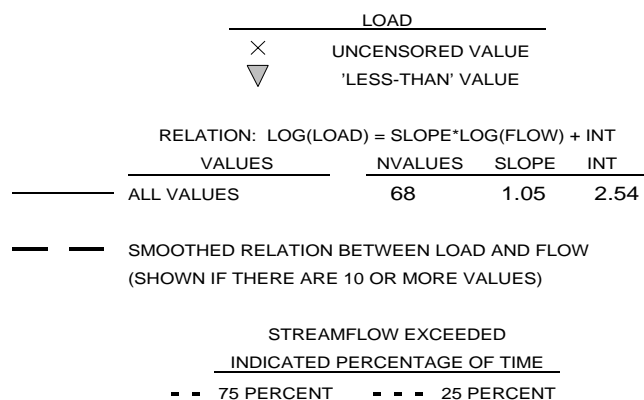
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

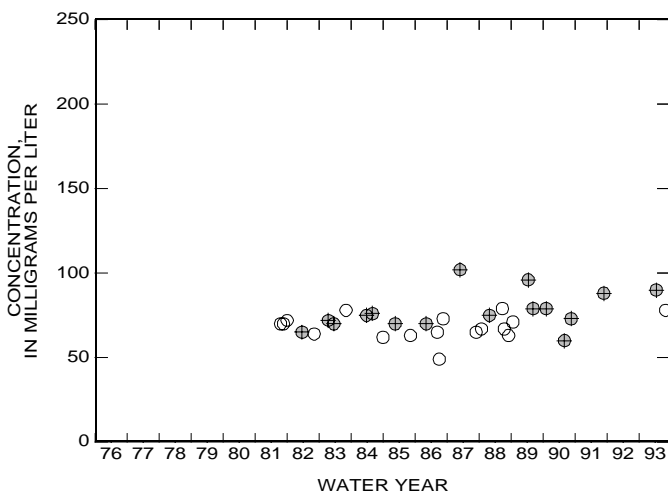
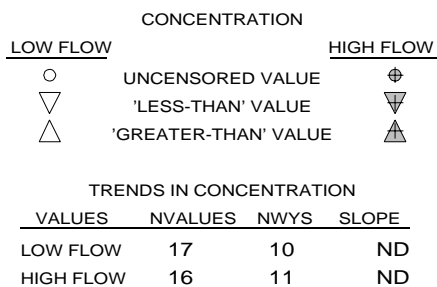
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



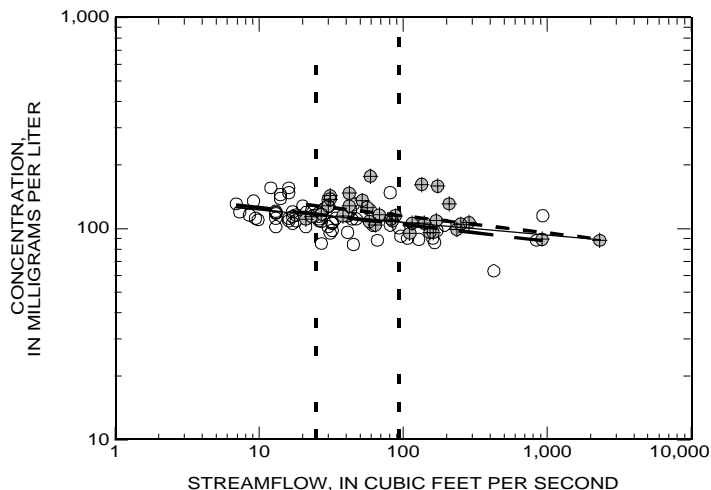
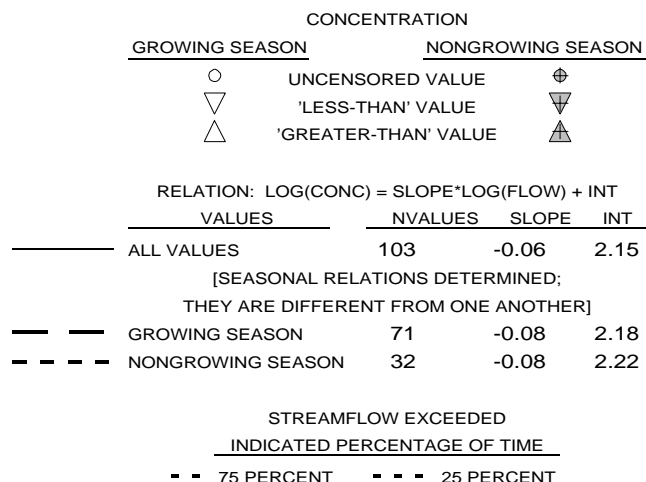
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



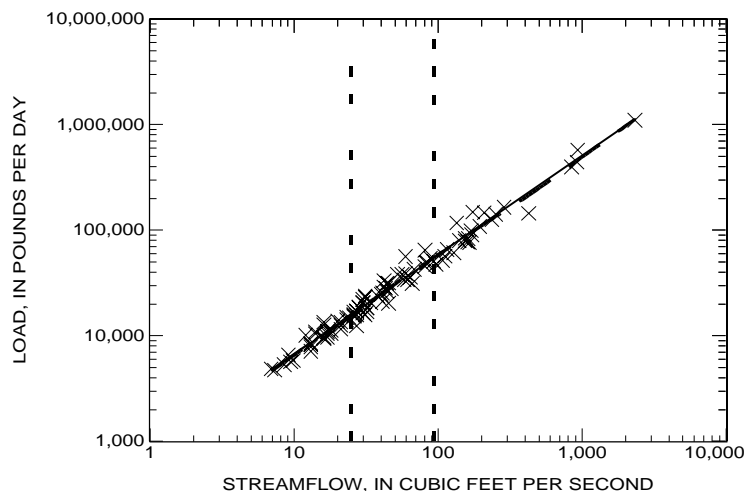
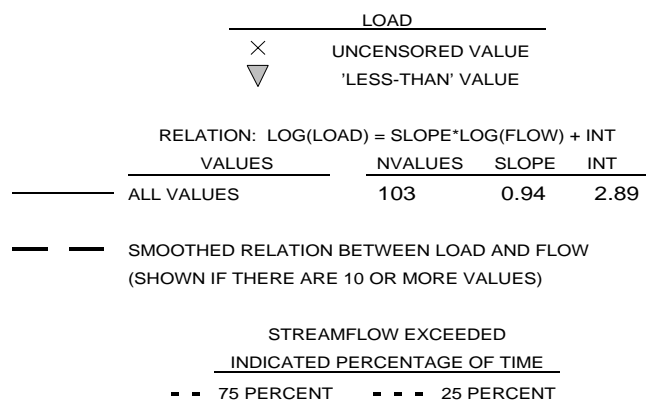
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

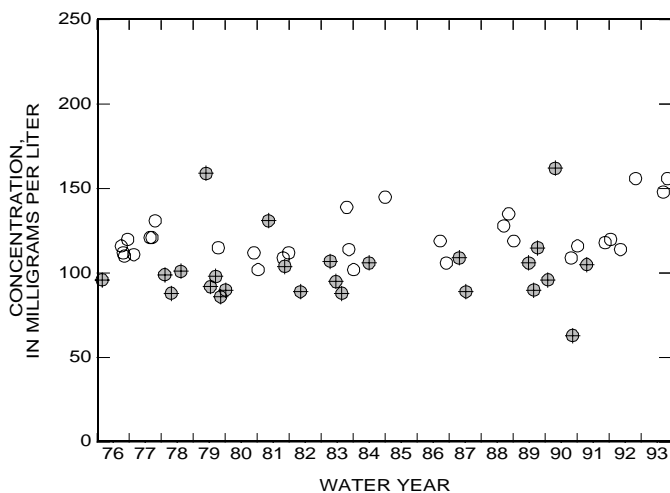
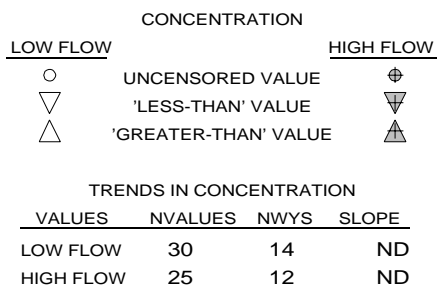
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



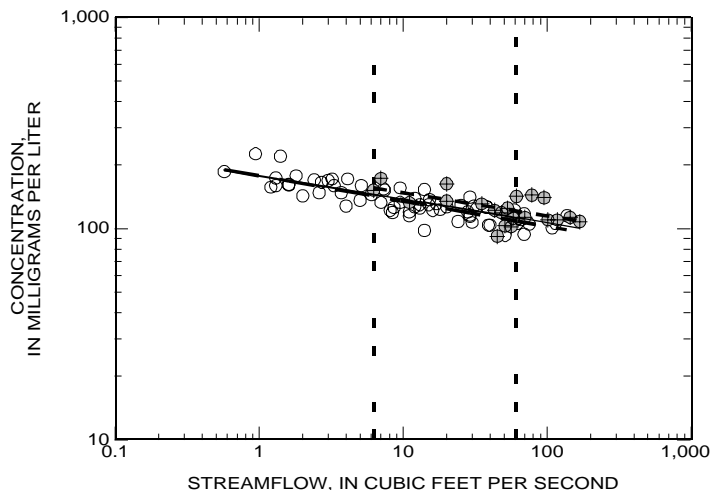
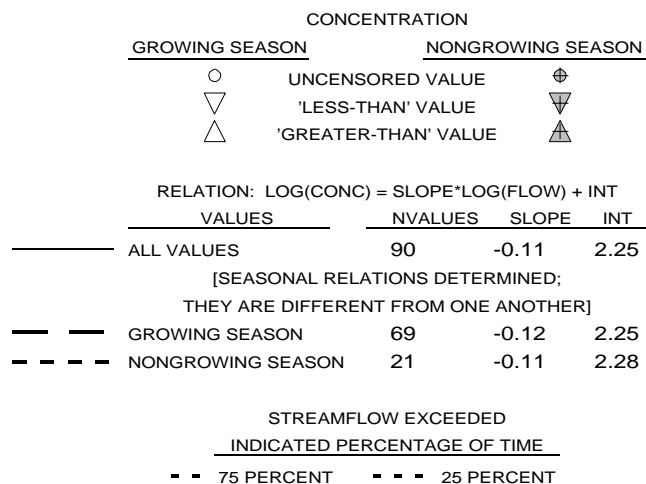
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



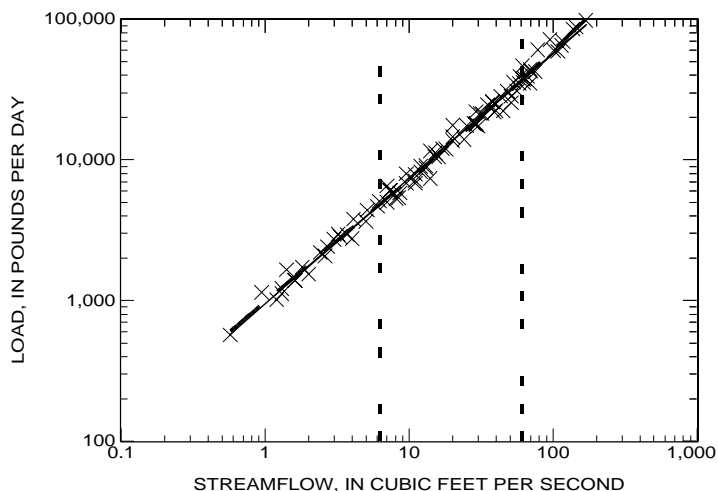
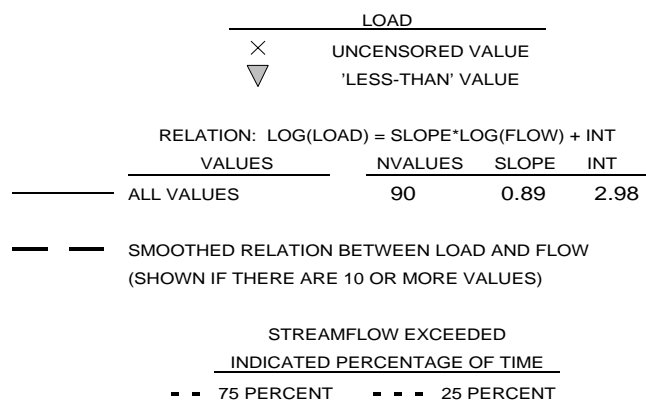
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

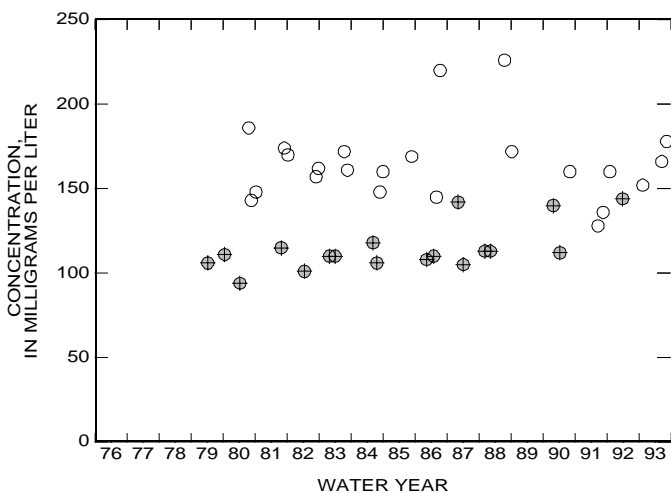
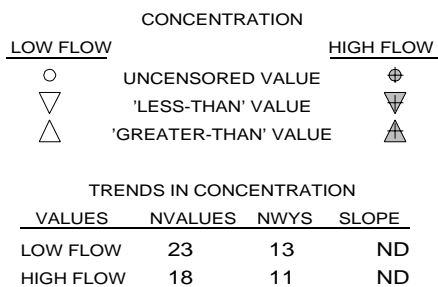
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



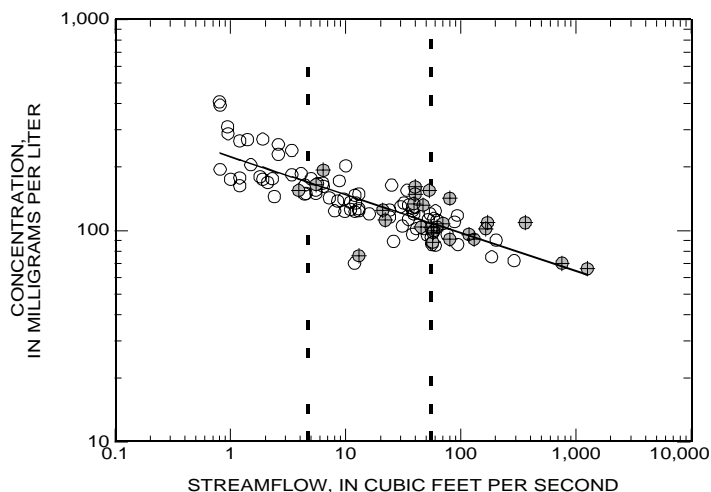
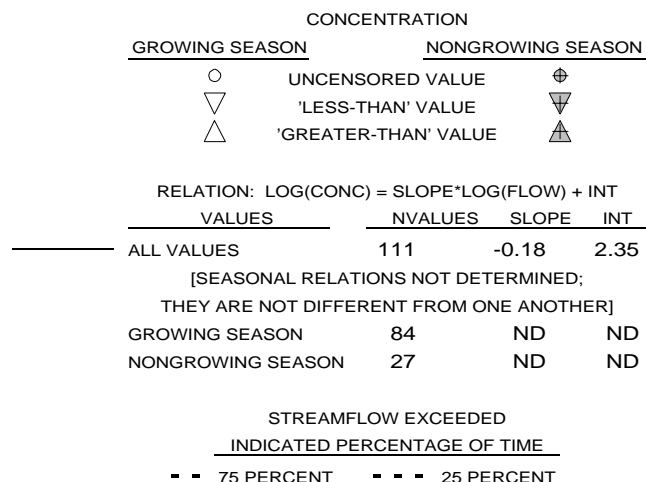
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



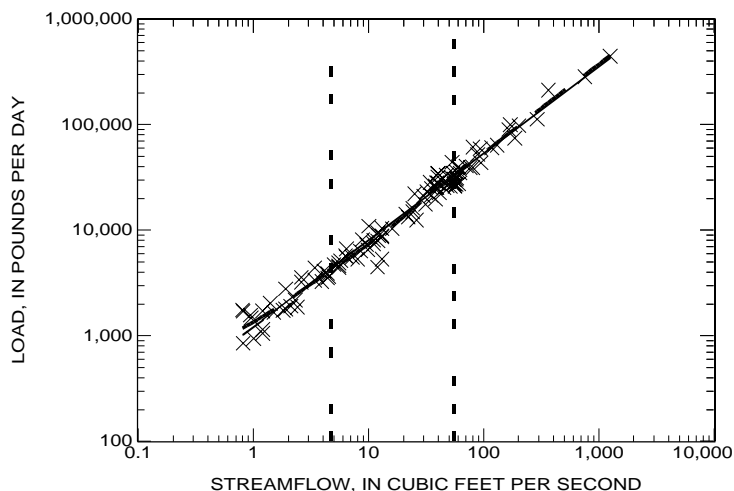
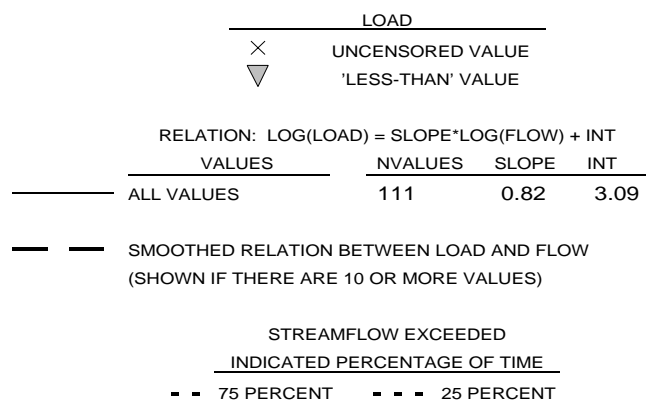
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

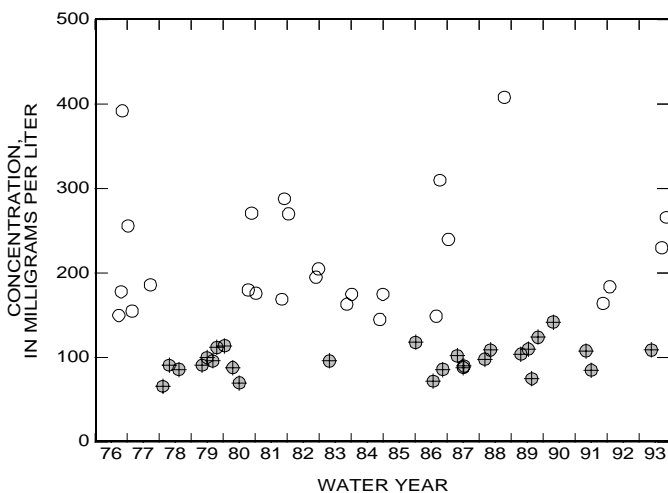
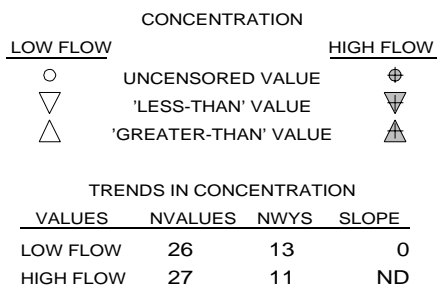
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



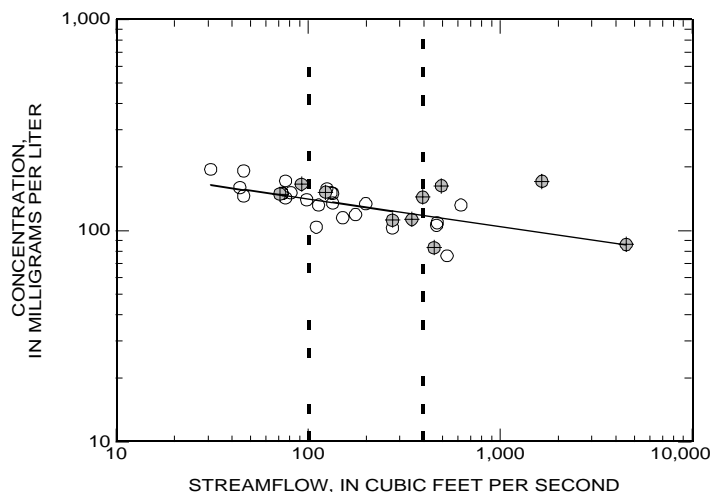
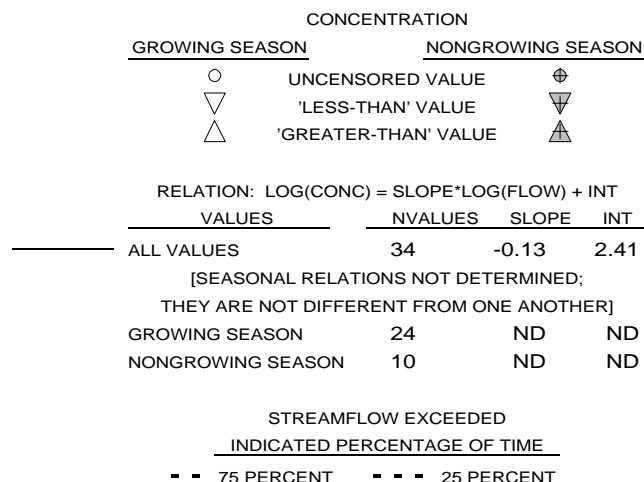
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



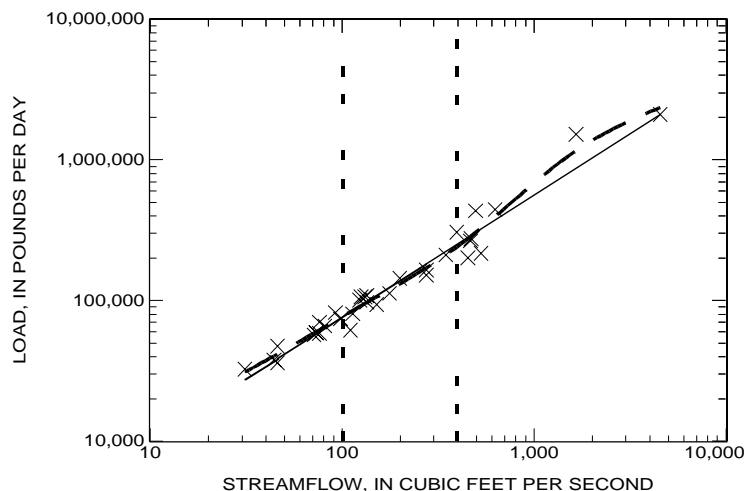
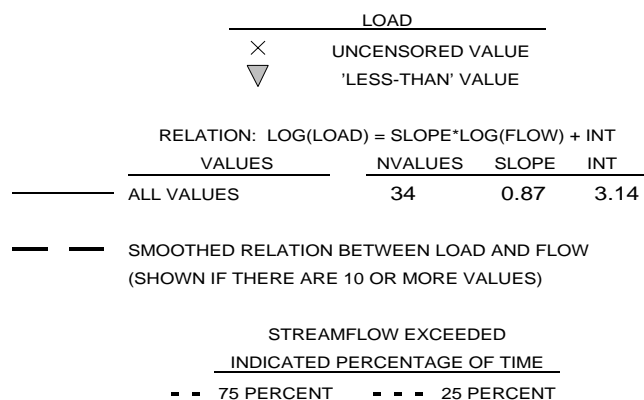
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

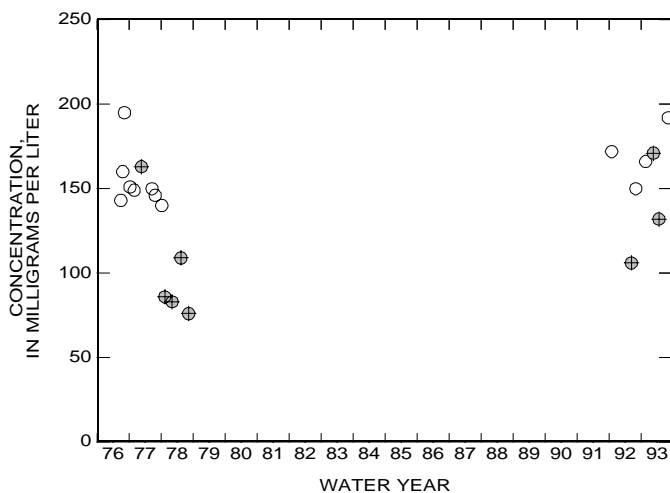
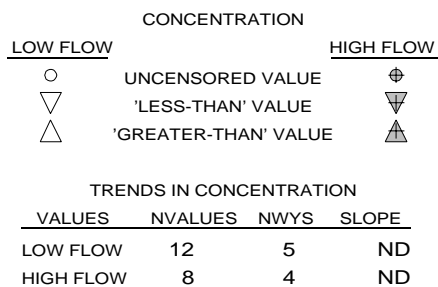
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



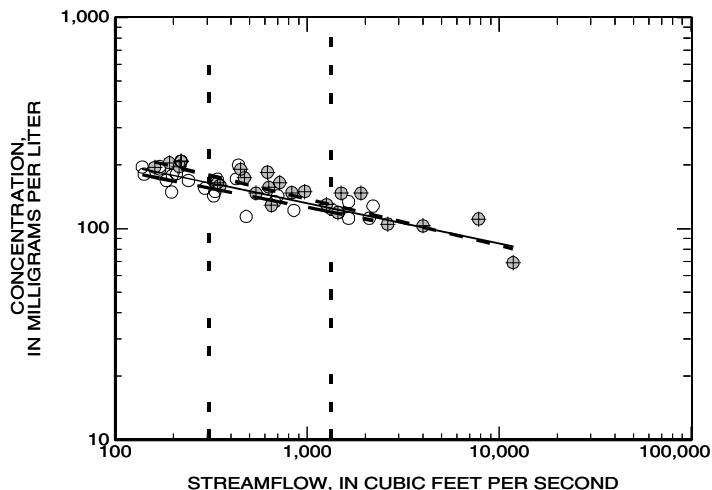
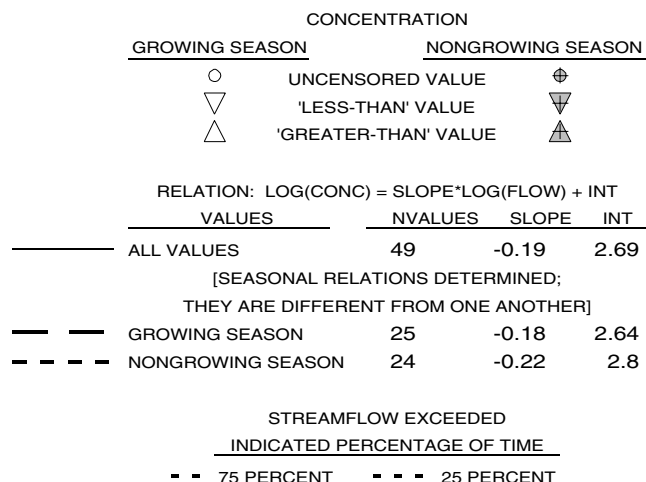
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



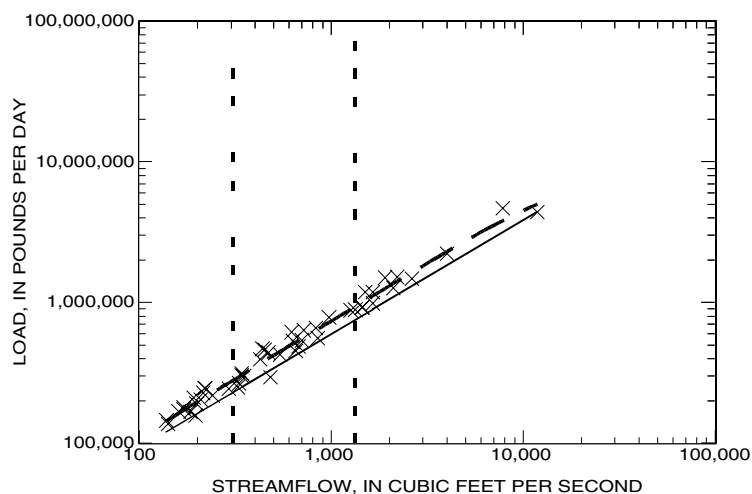
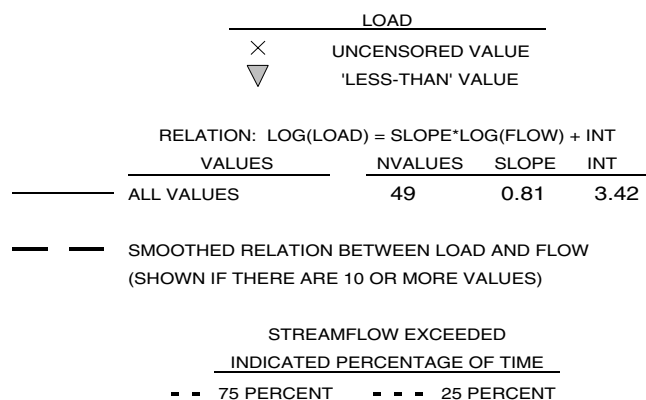
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

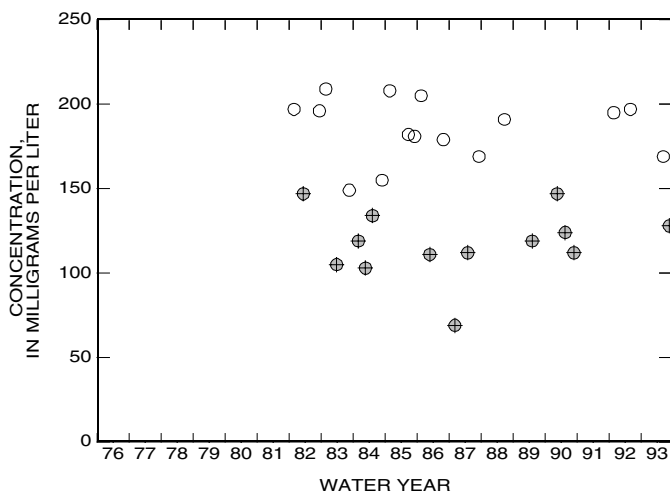
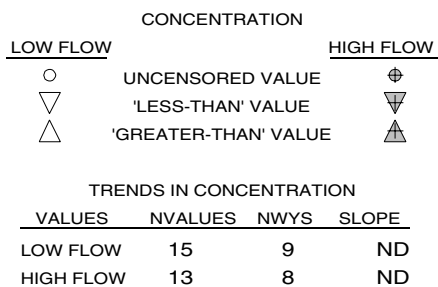
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



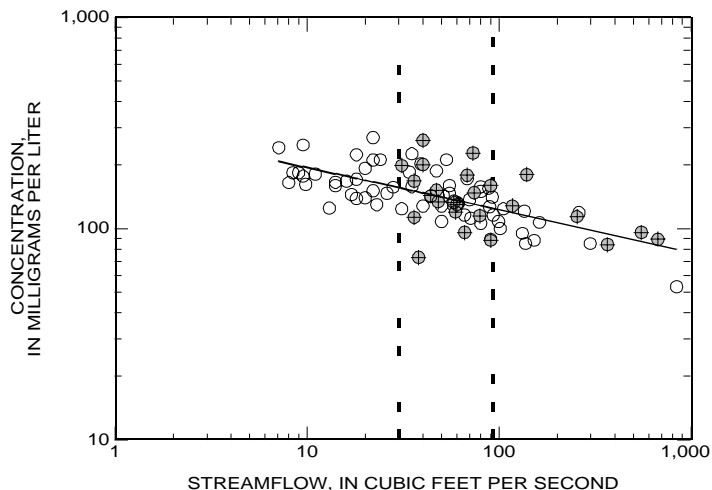
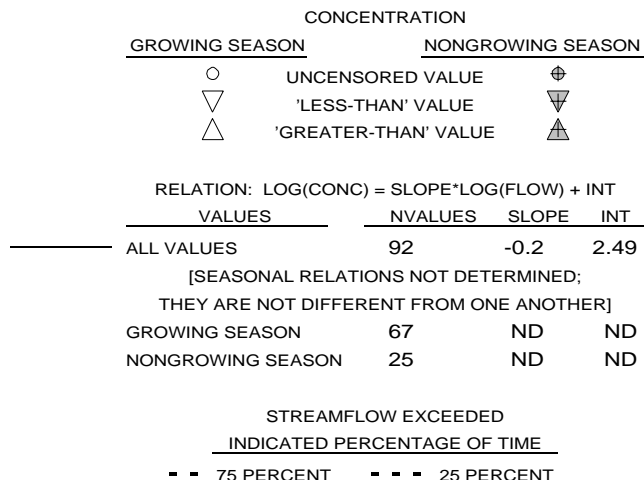
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



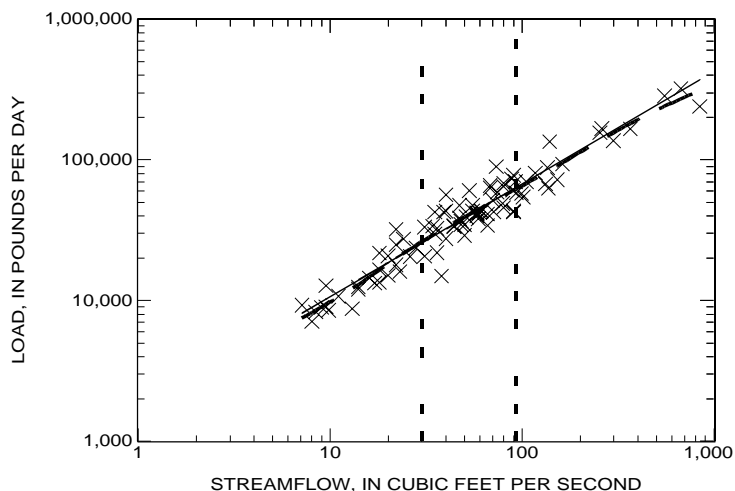
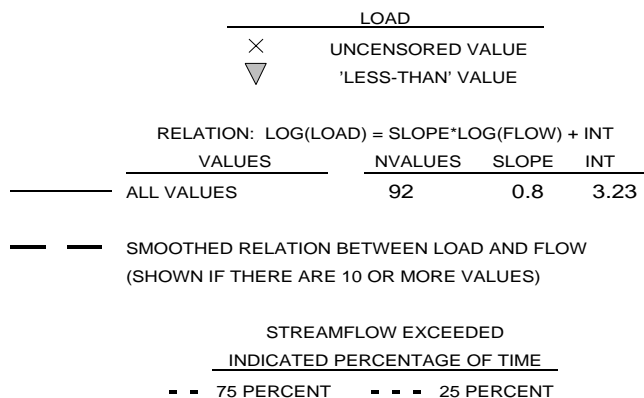
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED SOLIDS
 01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

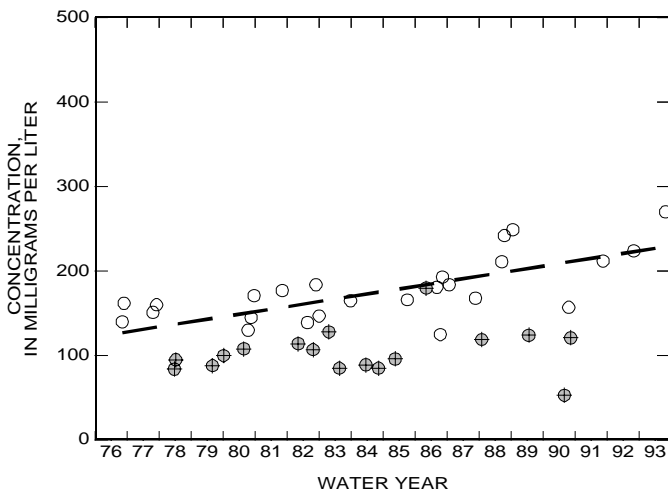
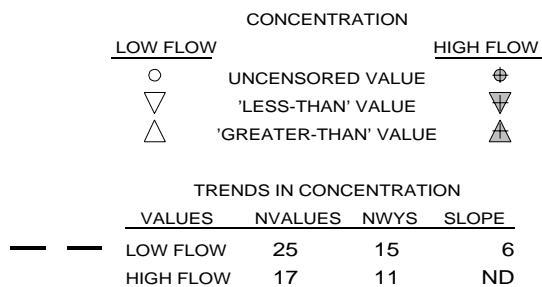
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



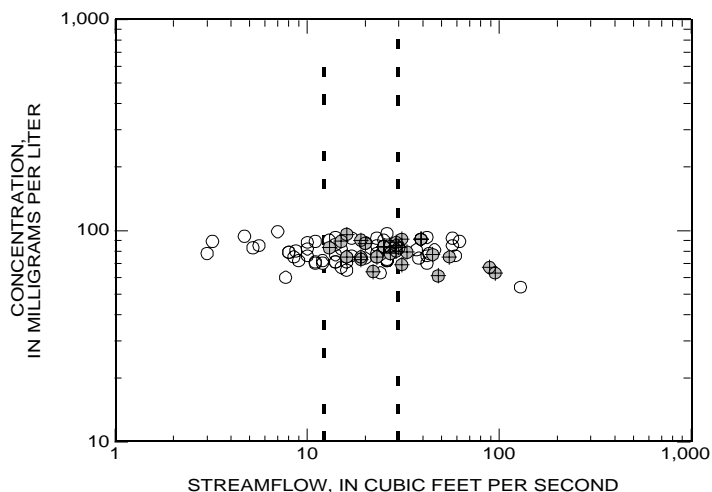
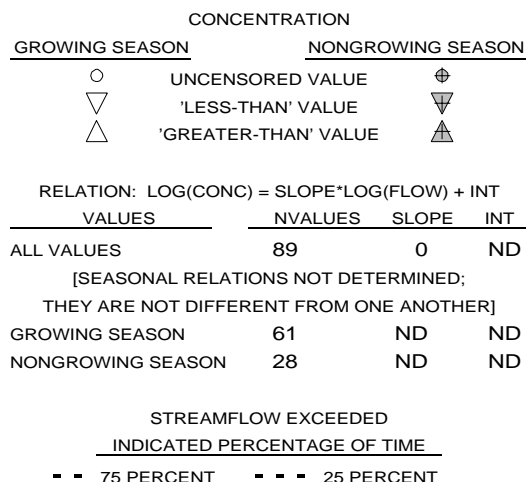
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



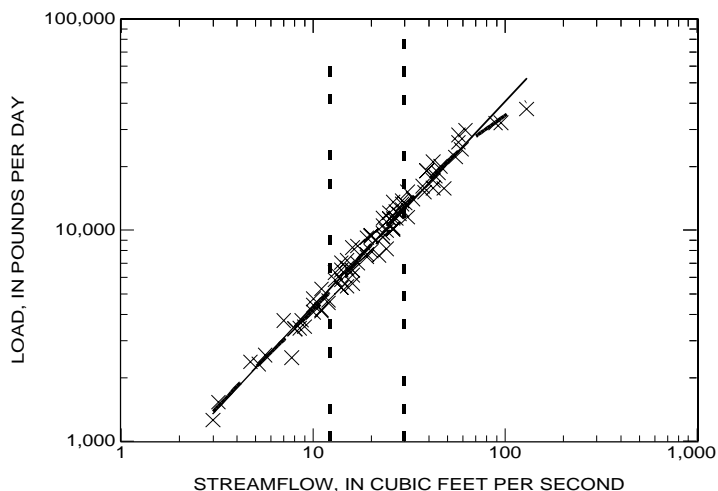
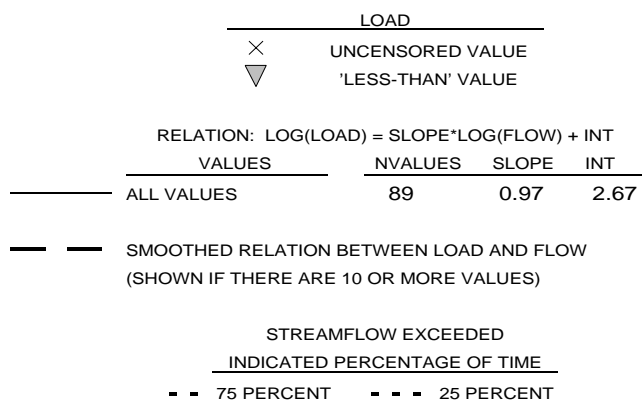
APPENDIX 5. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SOLIDS
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

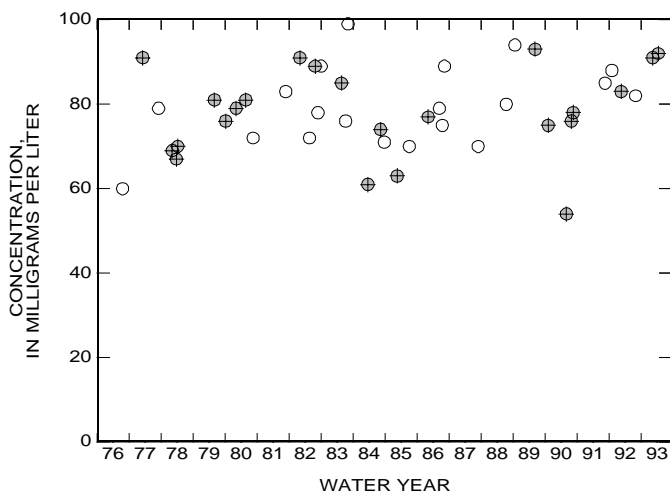
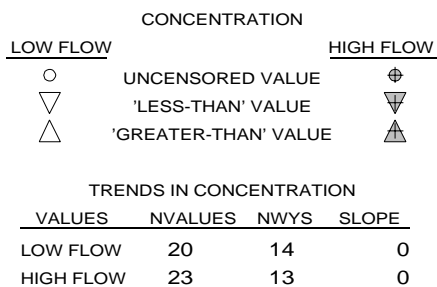
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



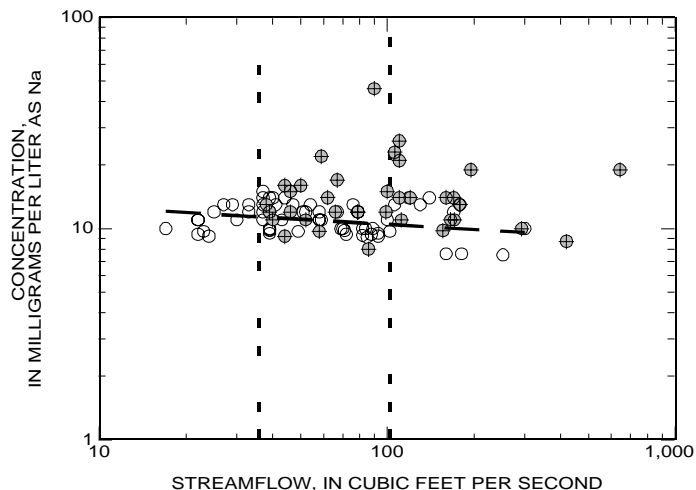
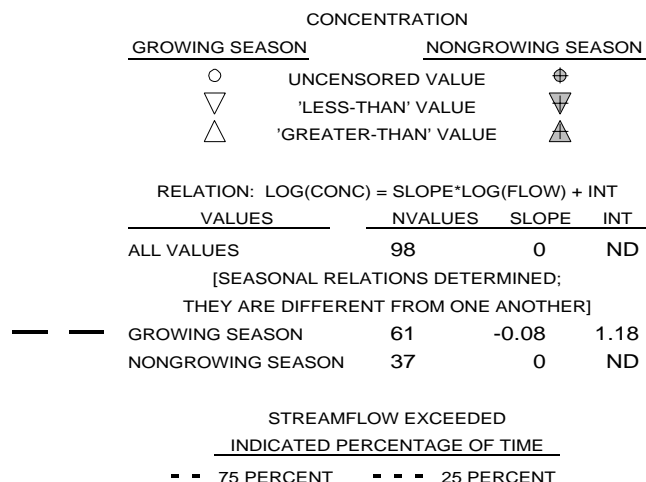
Appendix 6 - Dissolved sodium

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

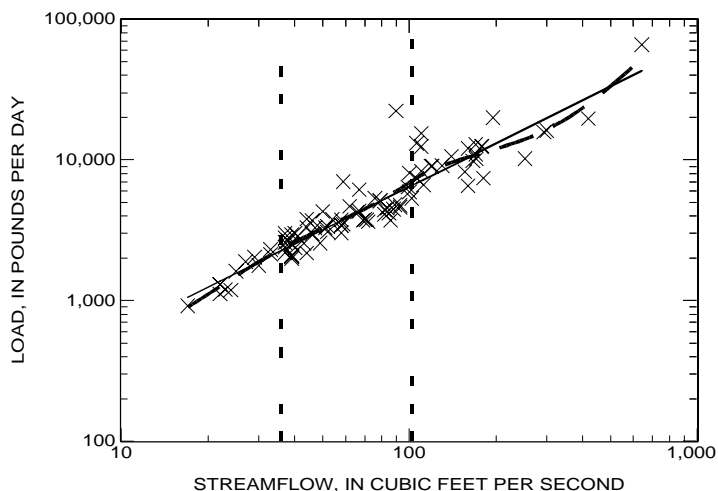
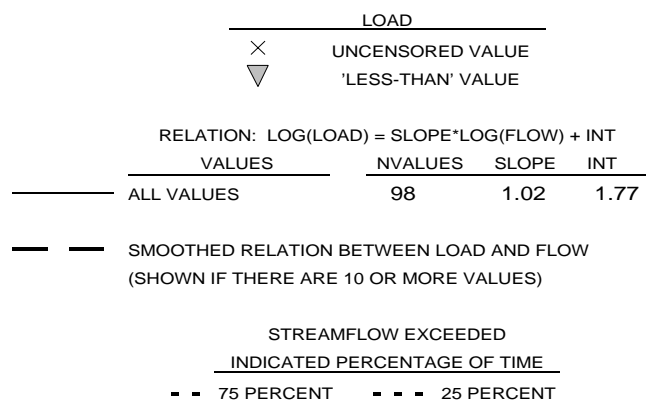
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

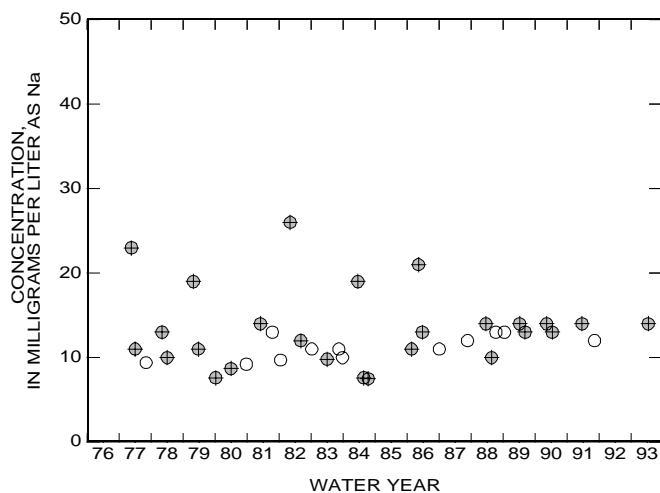
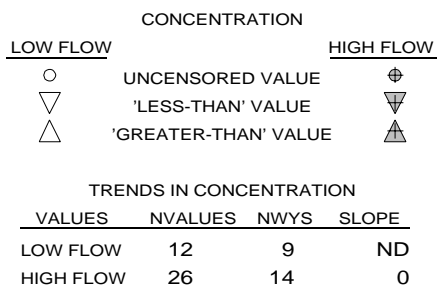
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



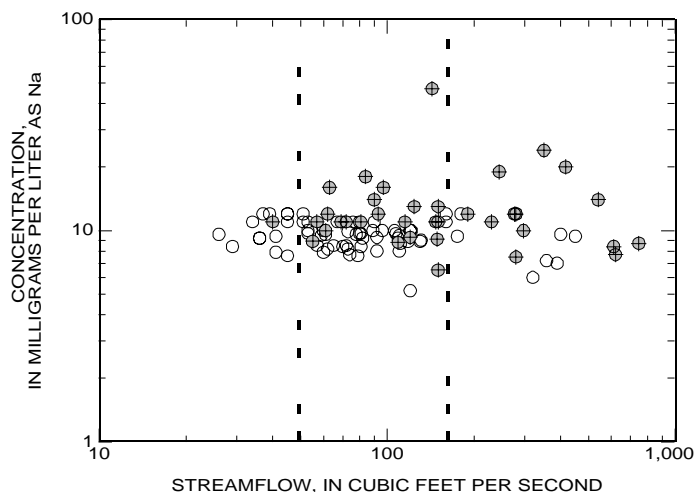
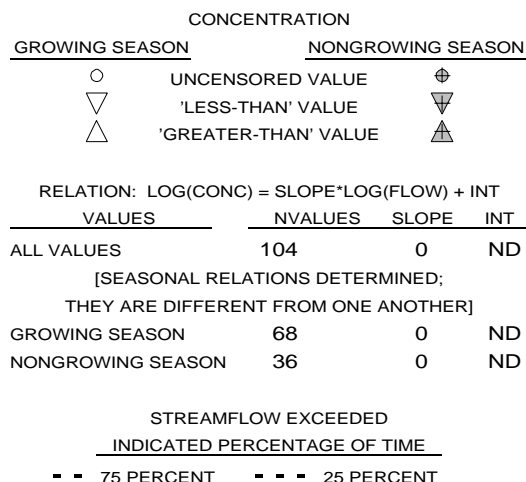
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



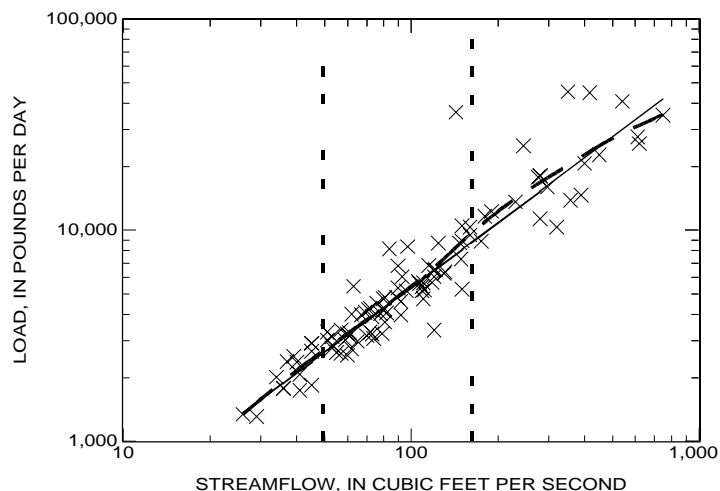
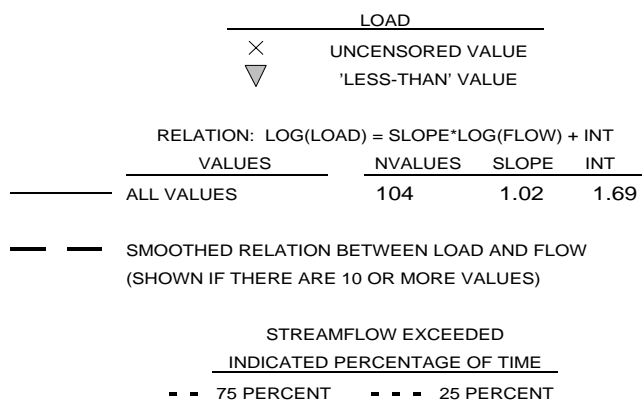
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

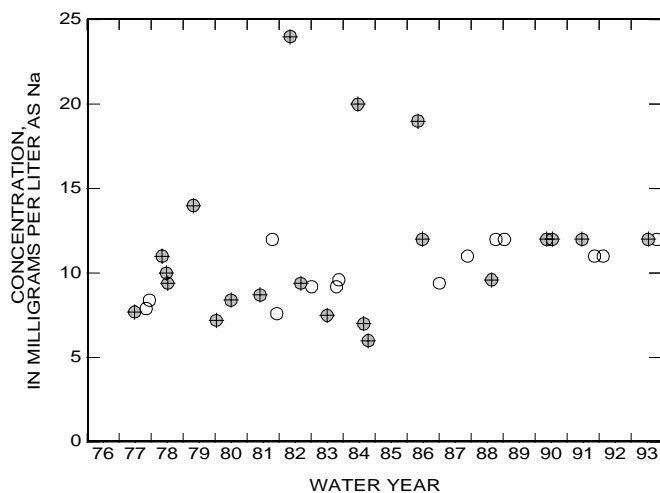
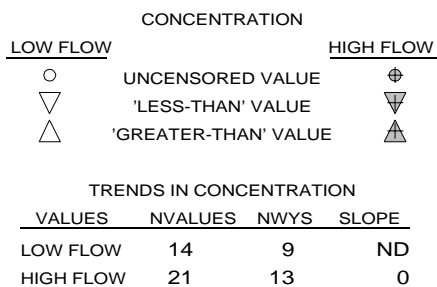
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



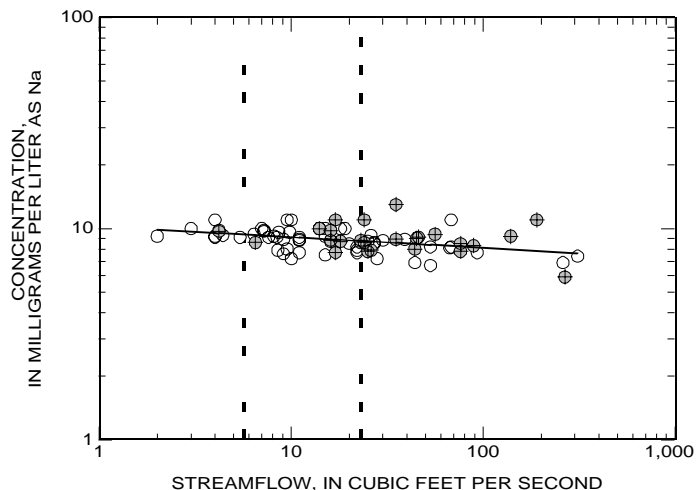
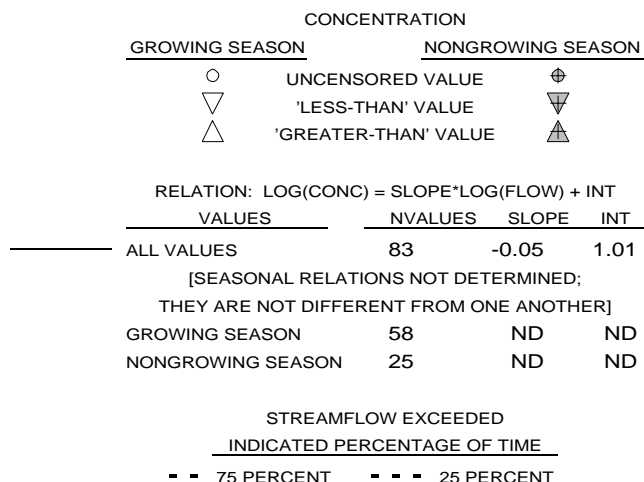
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



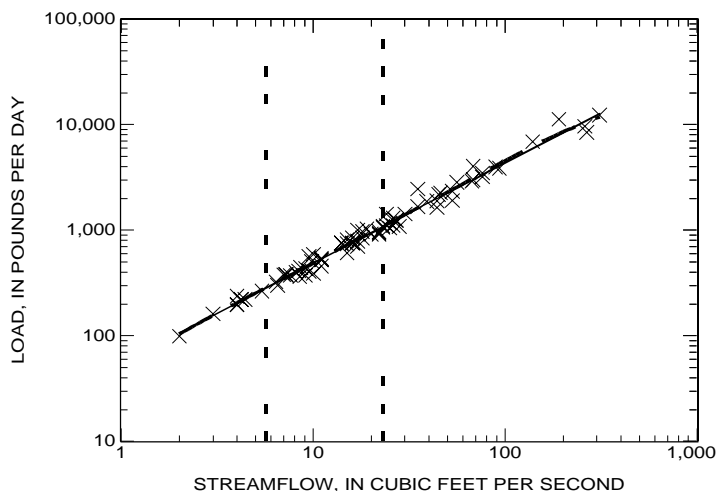
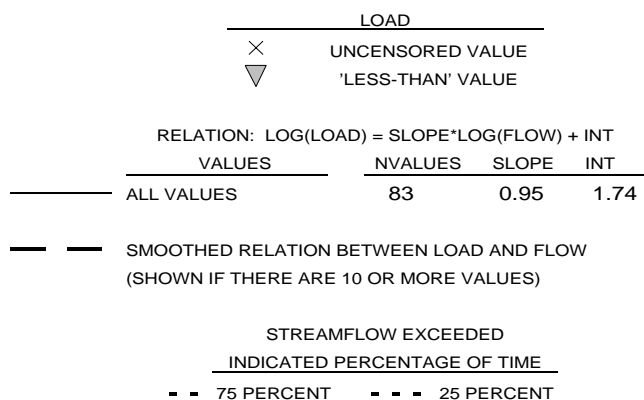
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED SODIUM
 01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

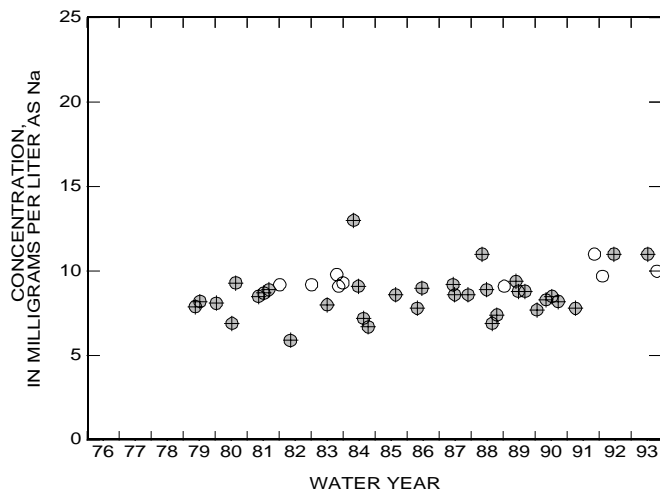
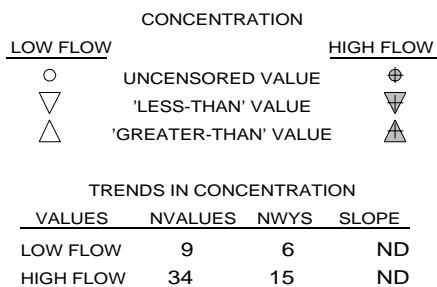
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



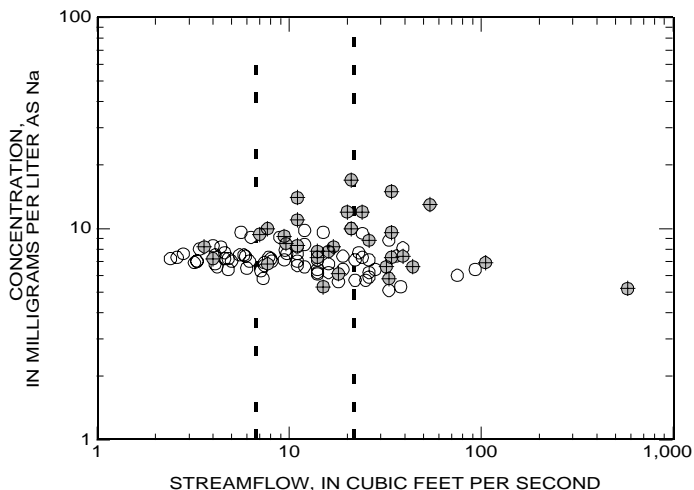
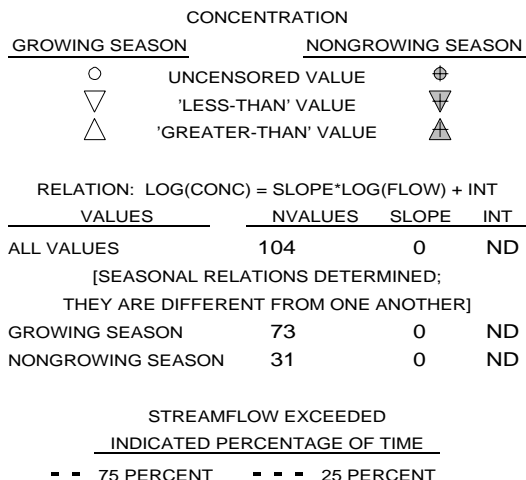
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



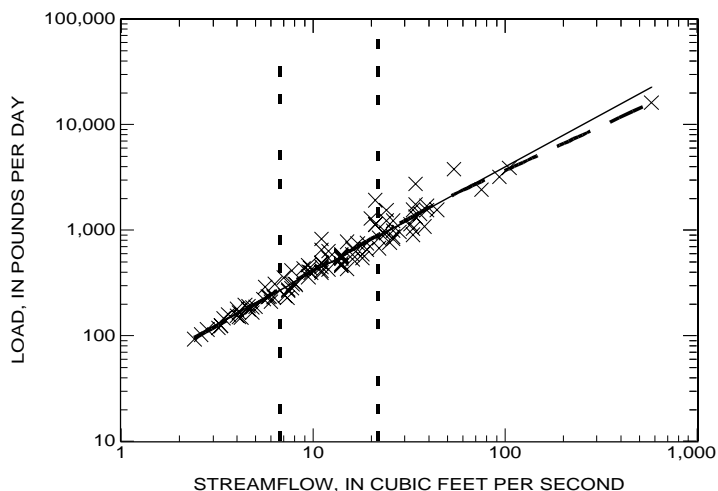
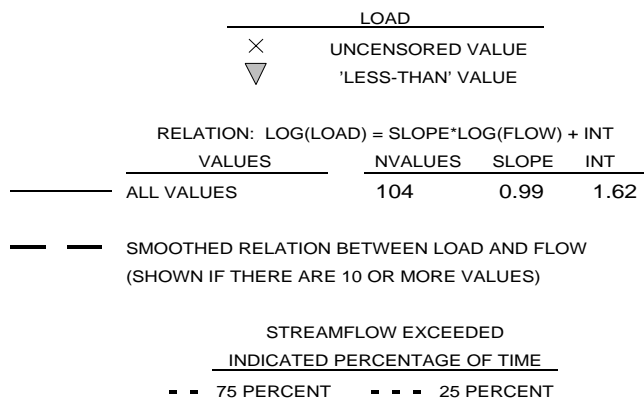
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

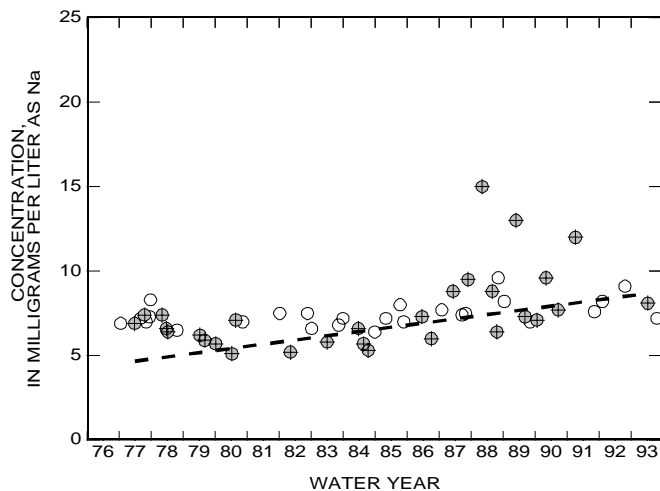
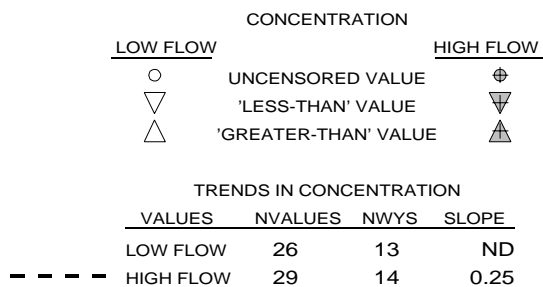
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



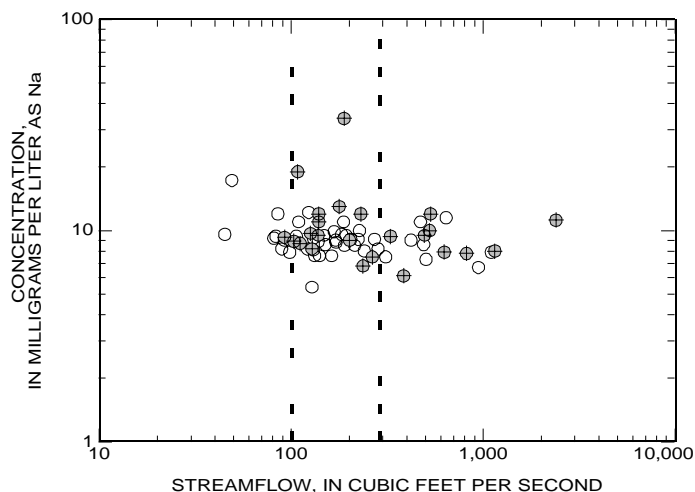
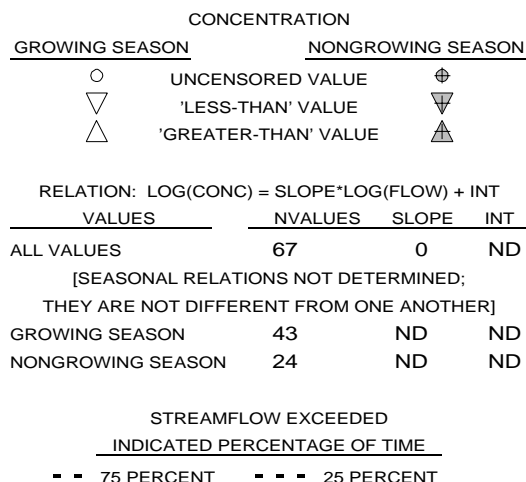
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



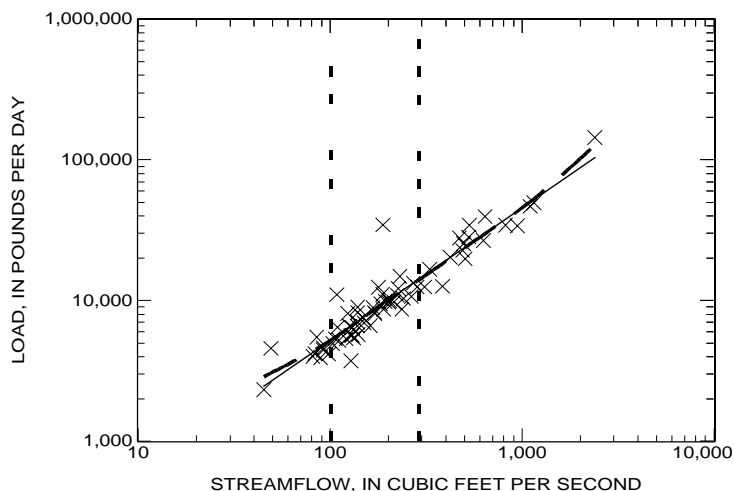
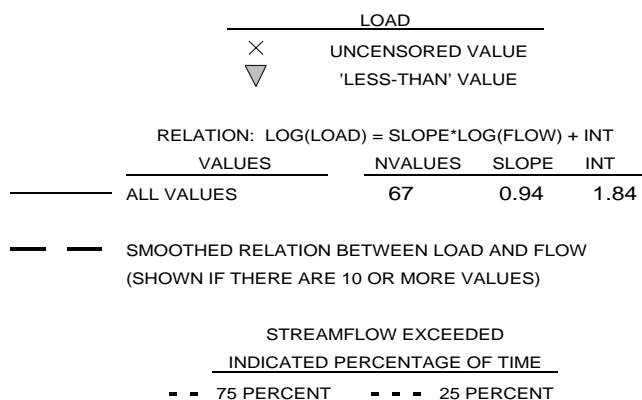
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

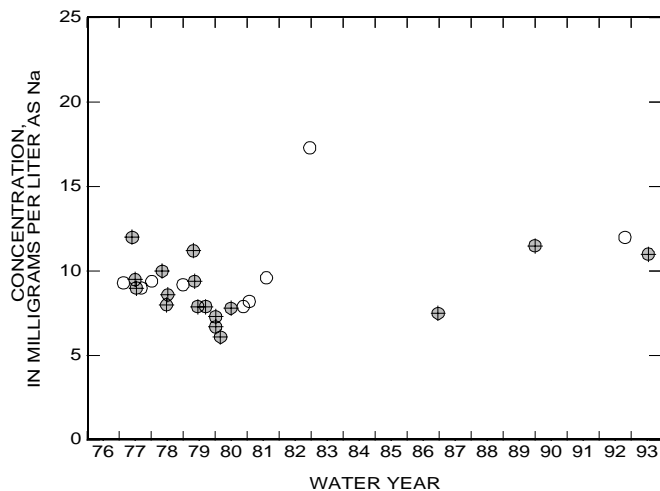
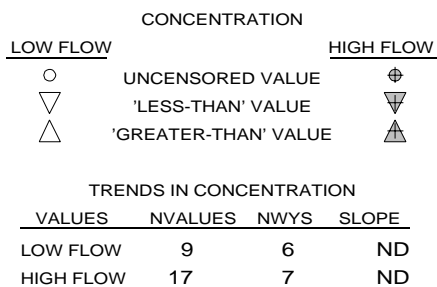
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



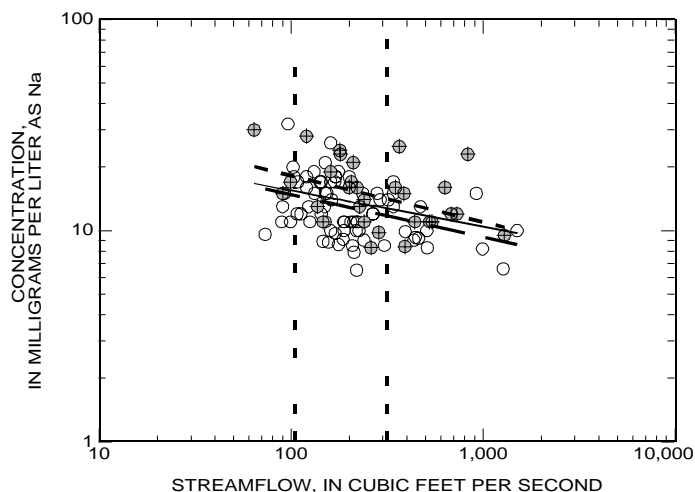
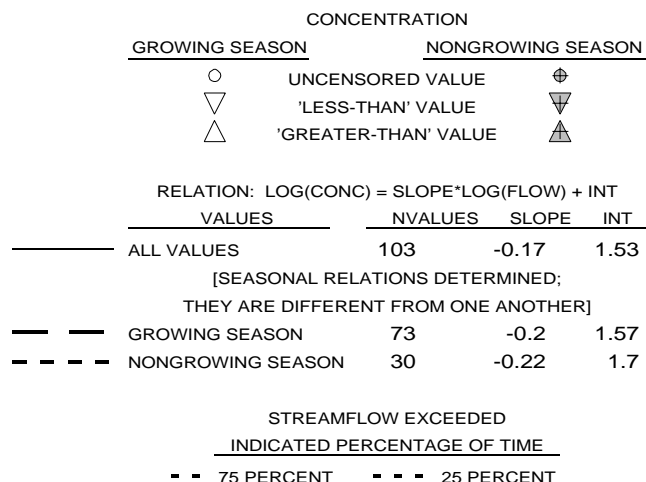
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



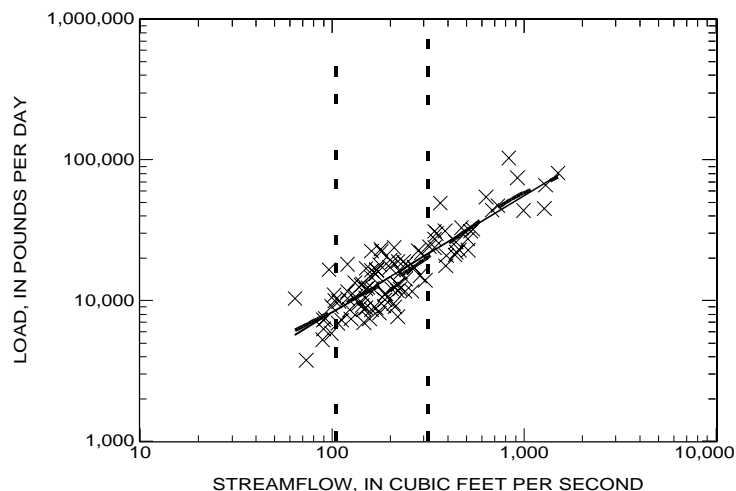
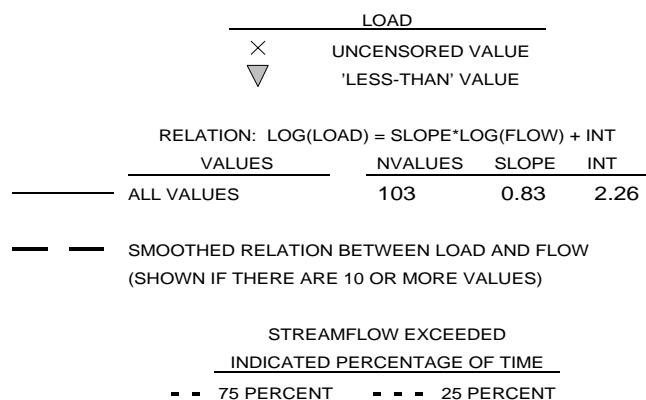
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

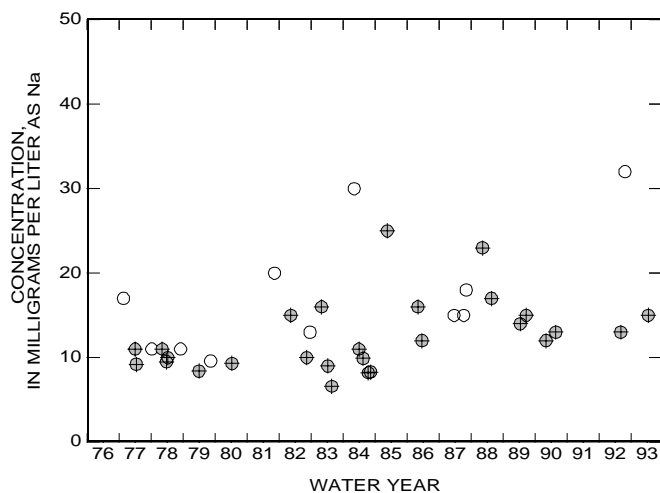
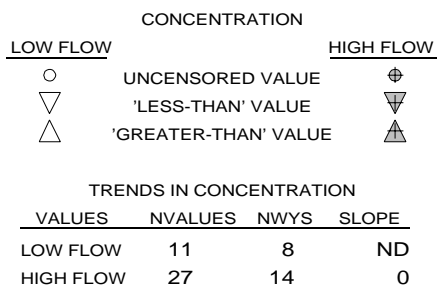
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



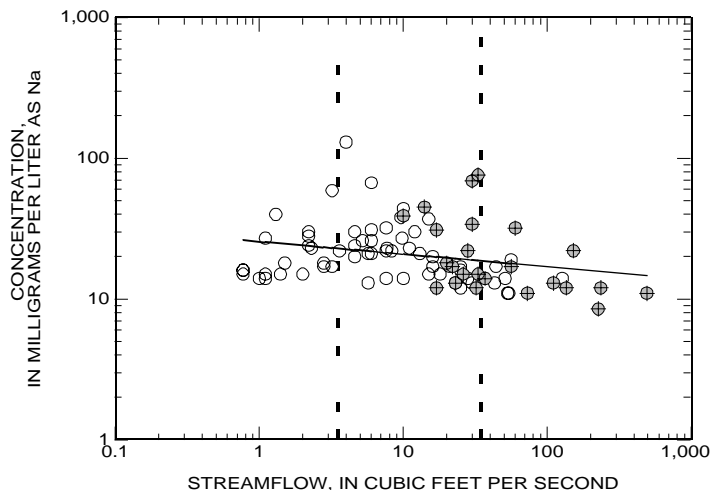
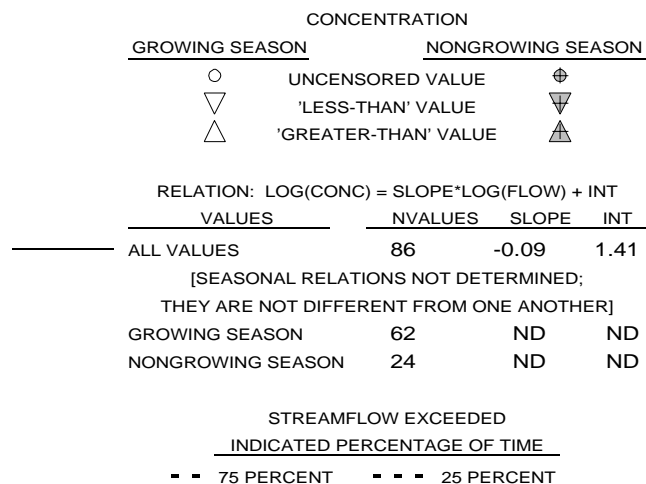
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



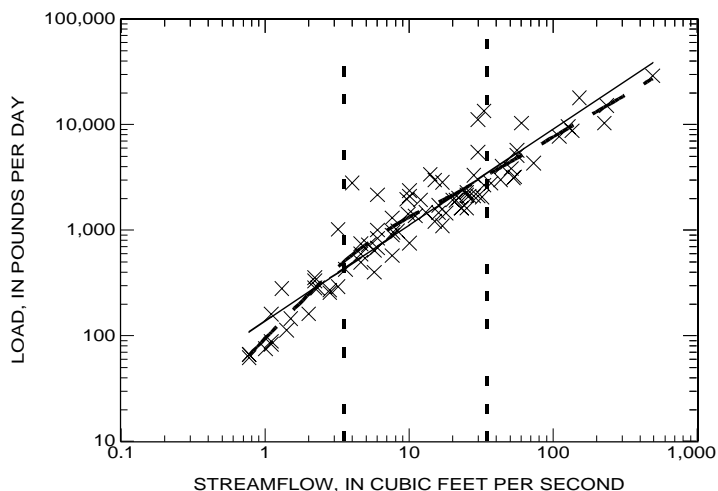
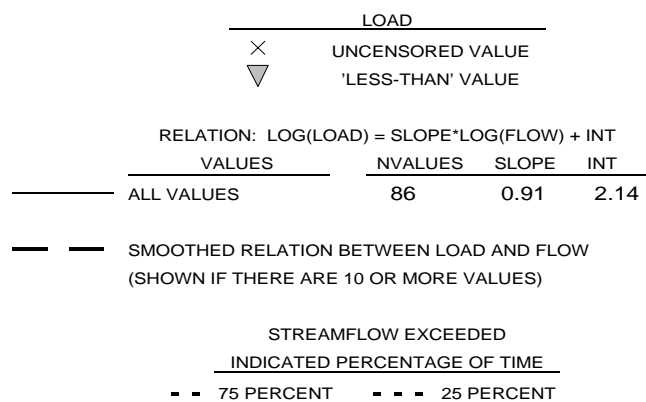
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

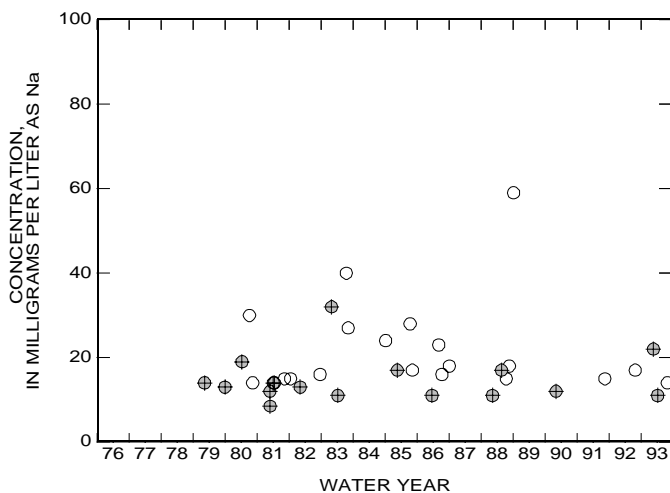
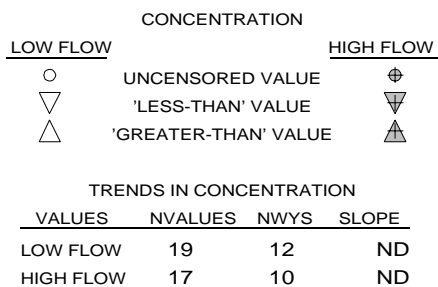
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



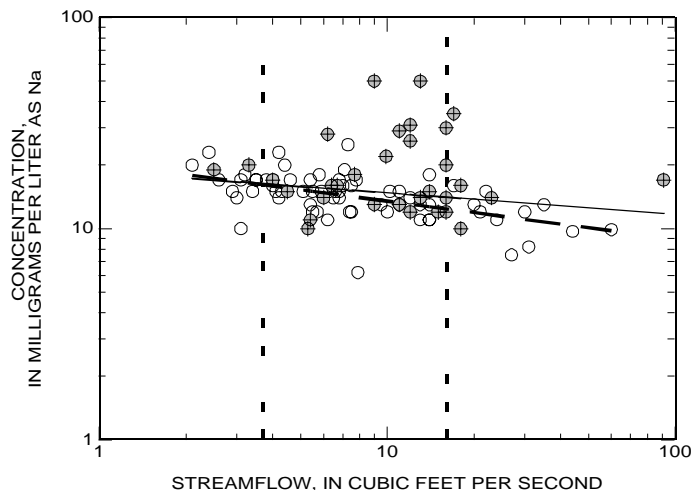
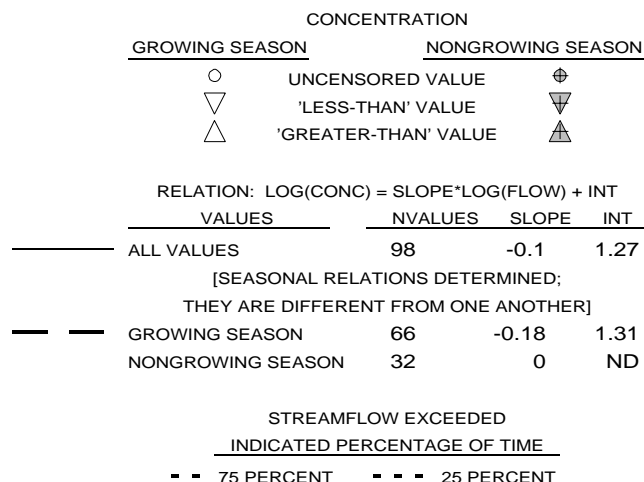
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



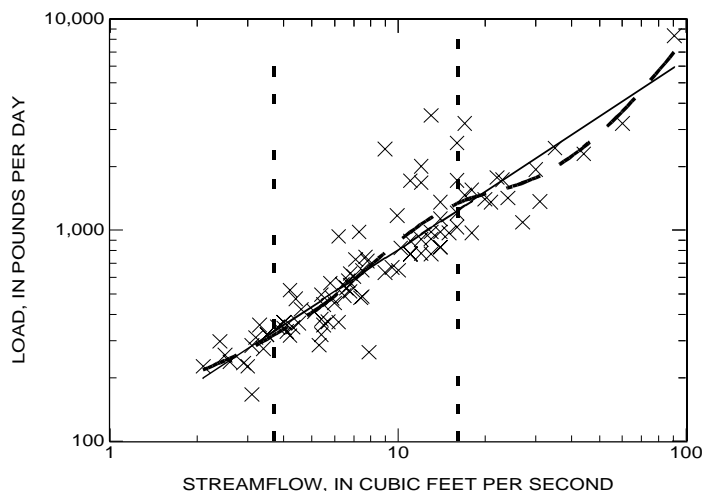
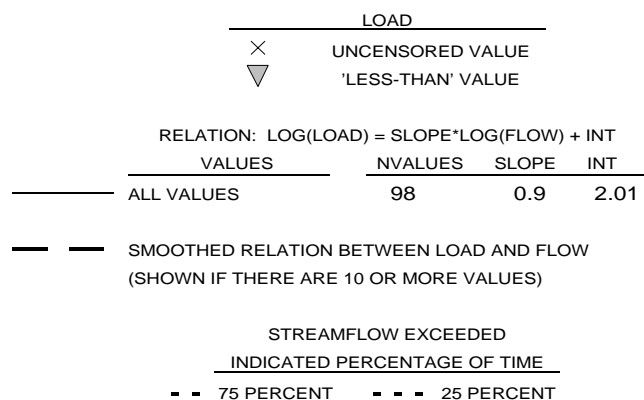
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

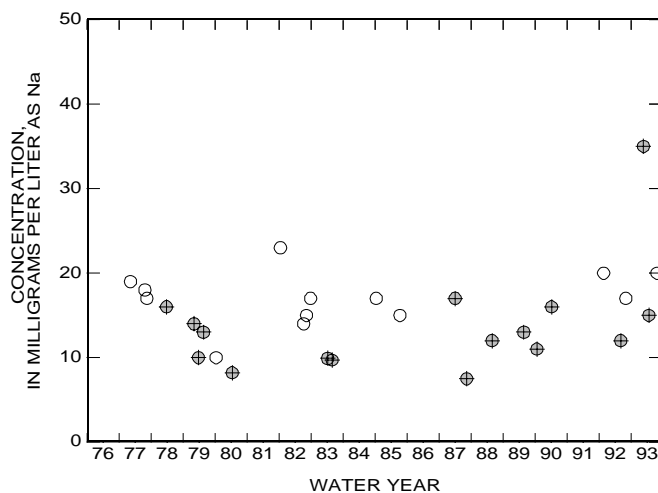
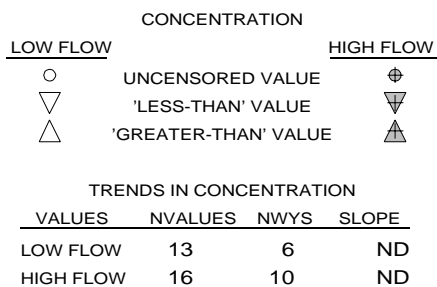
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



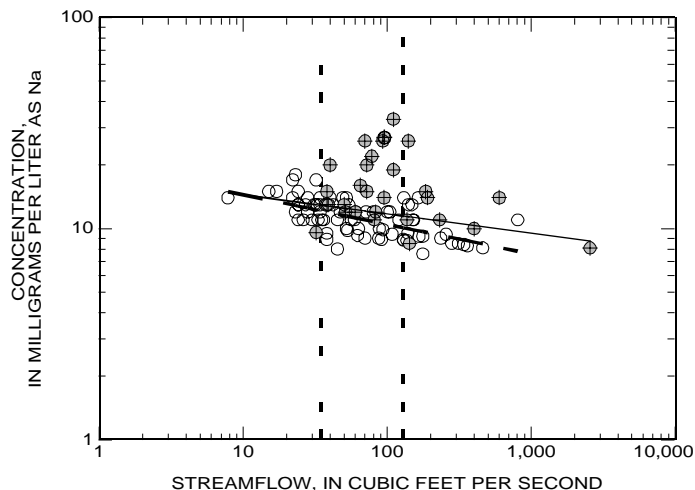
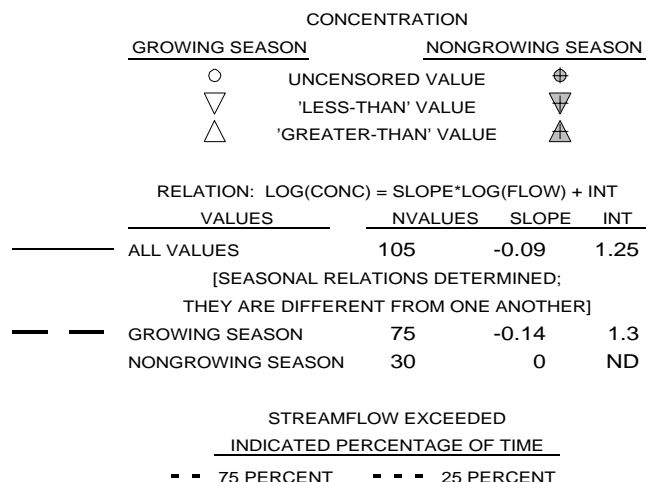
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



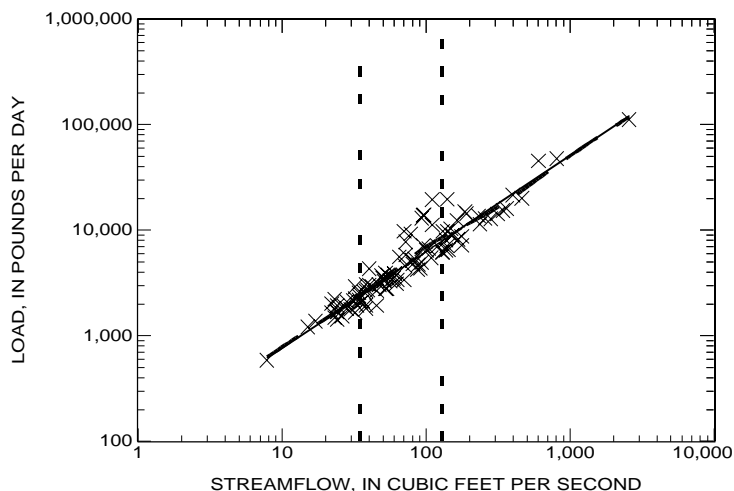
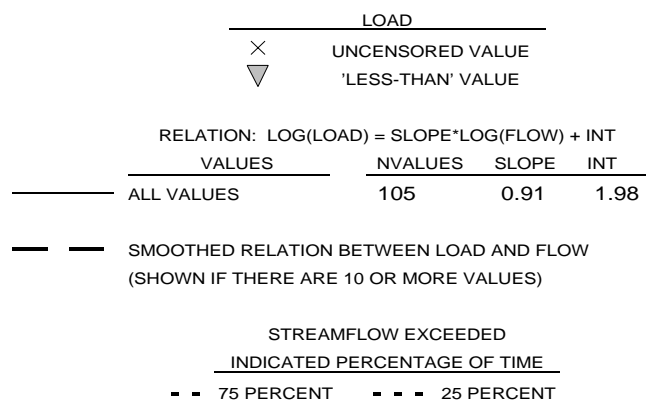
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

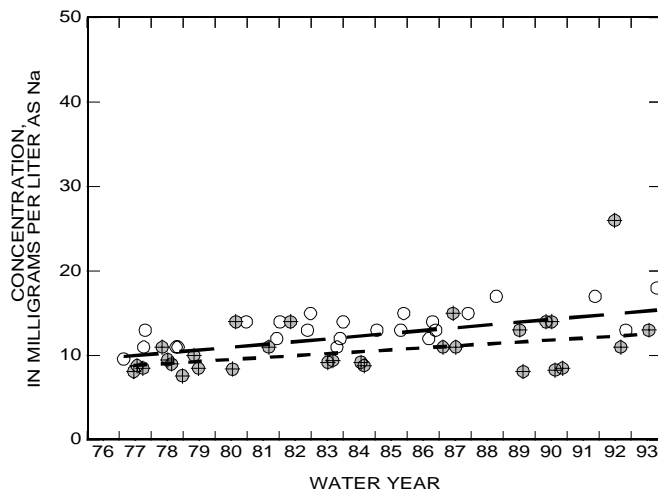
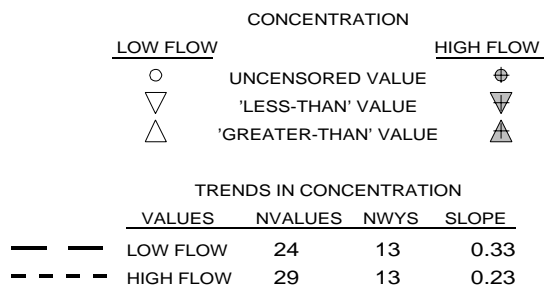
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



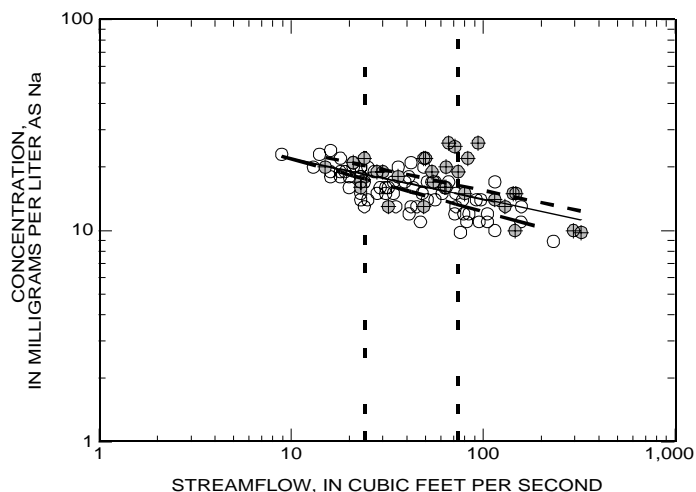
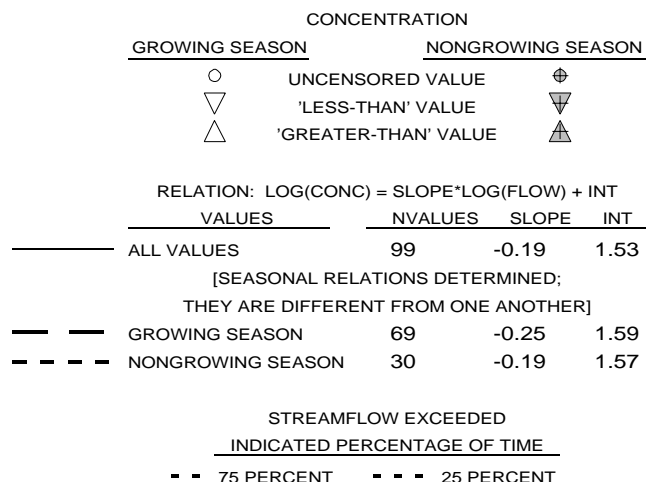
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



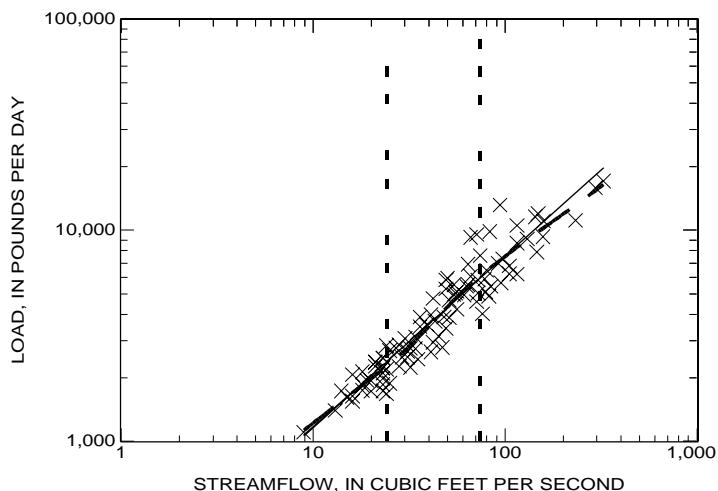
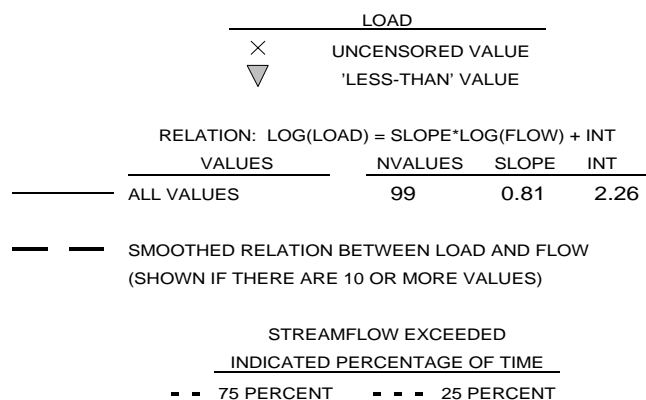
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

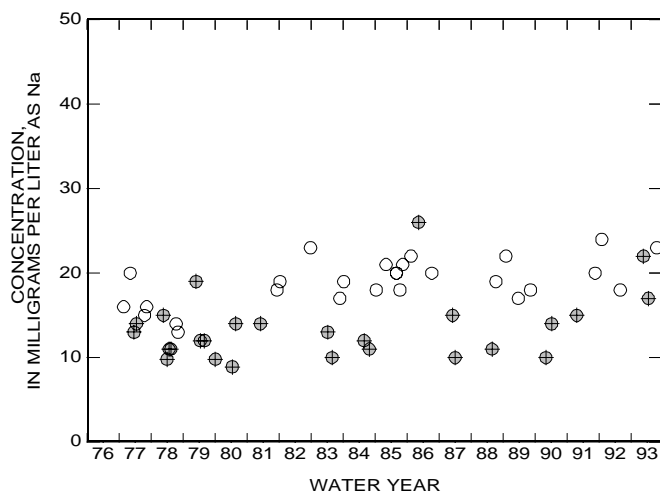
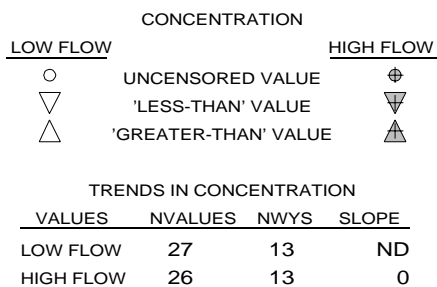
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



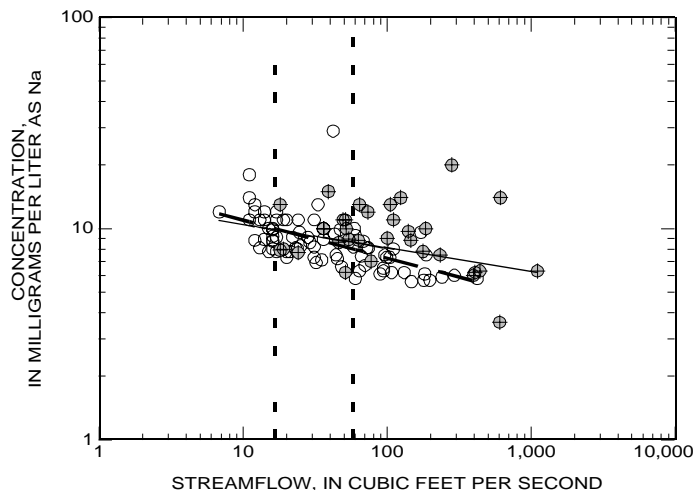
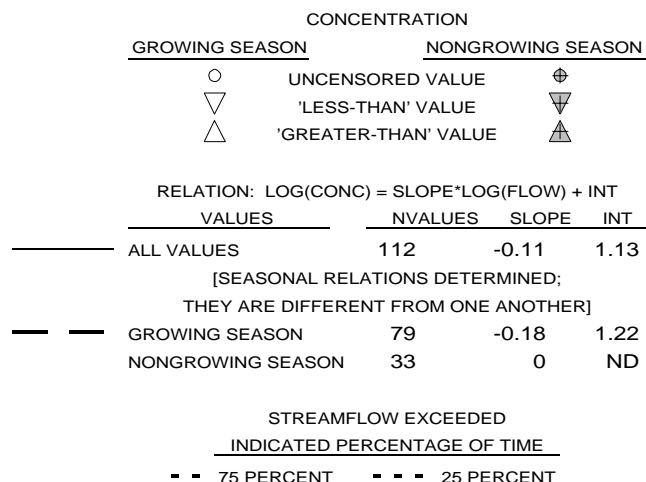
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



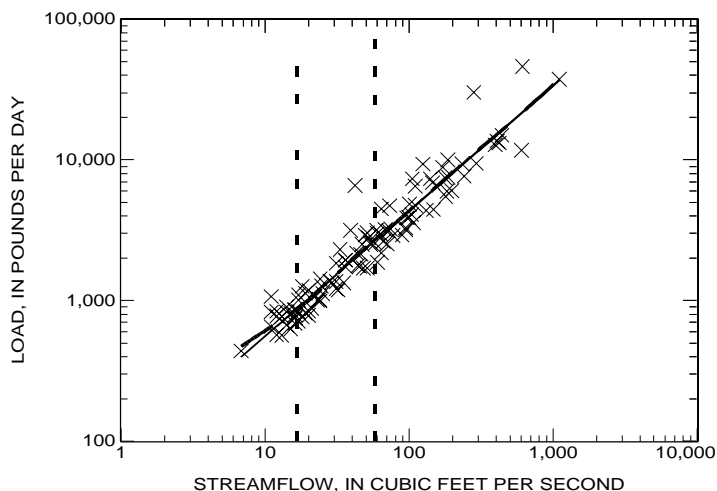
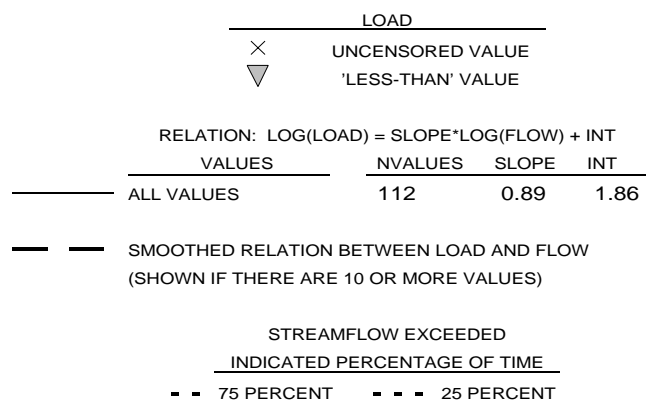
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

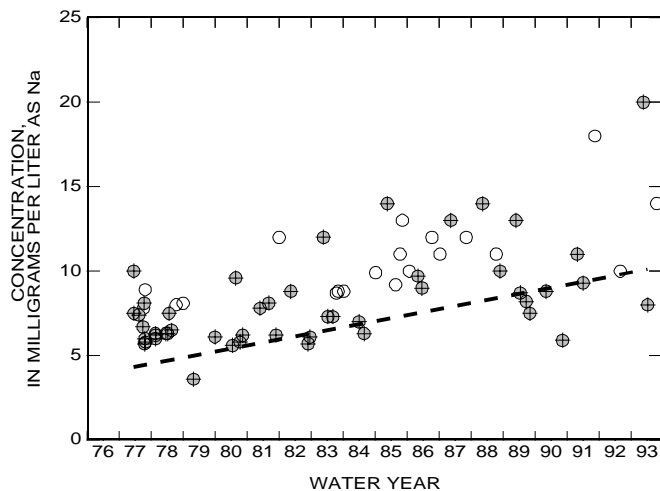
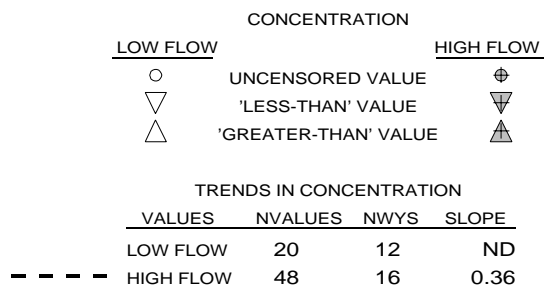
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



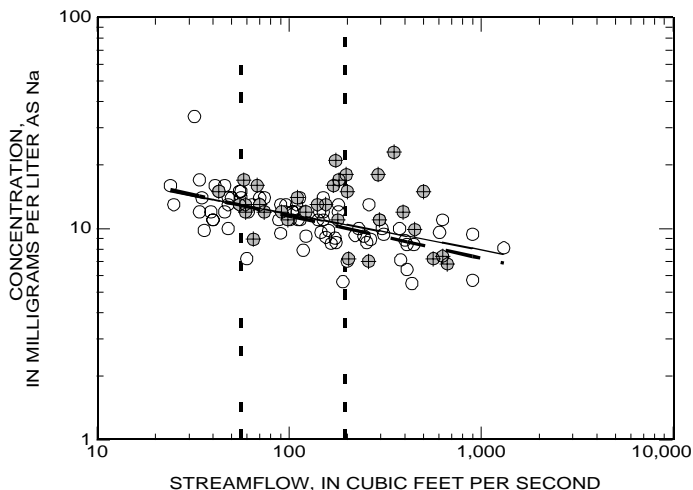
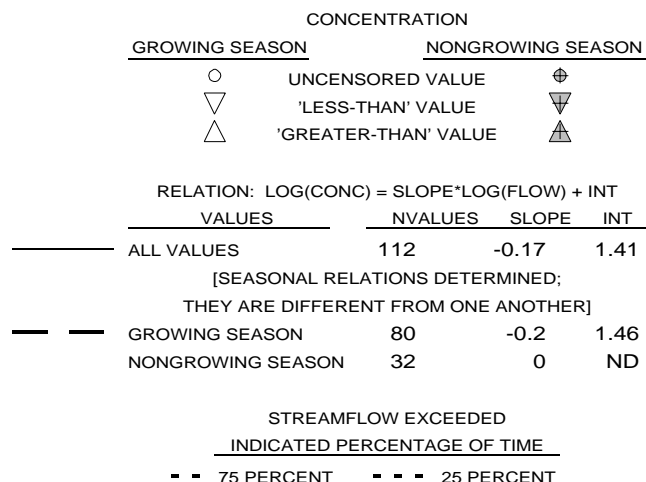
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



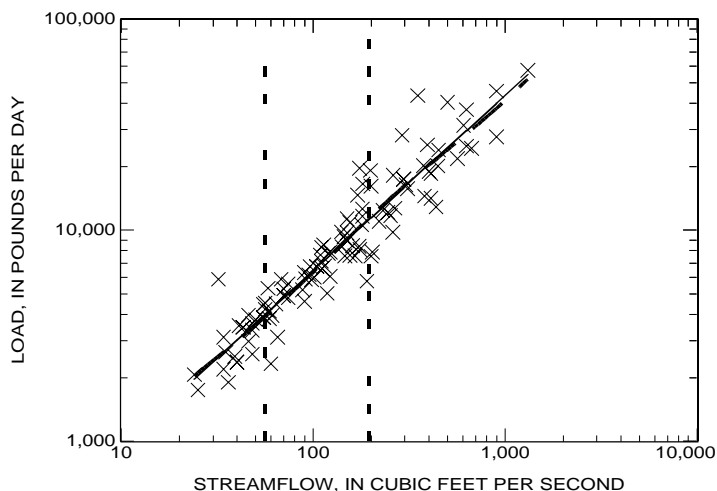
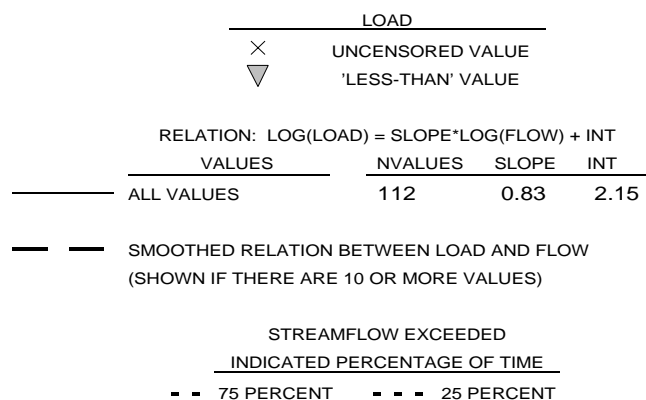
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

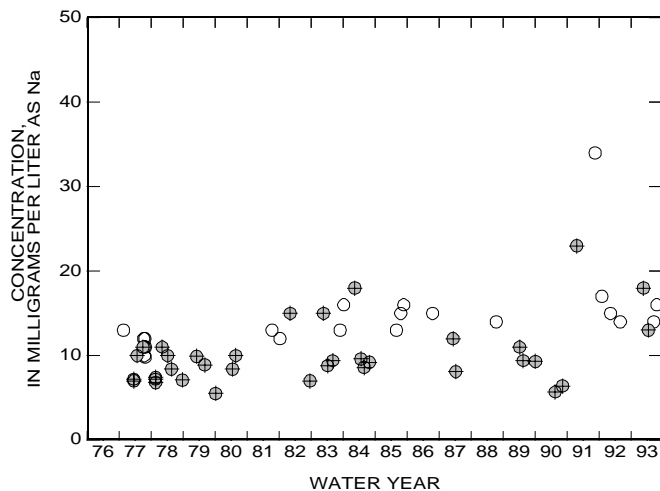
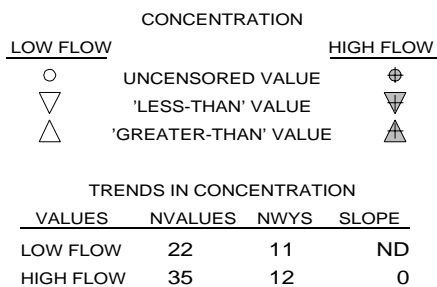
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



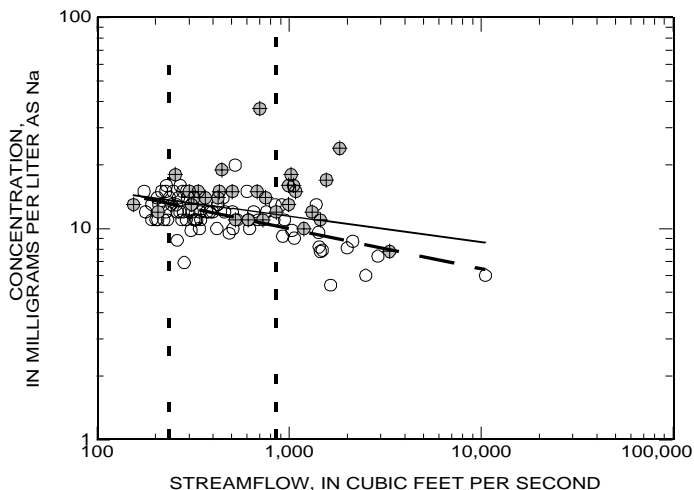
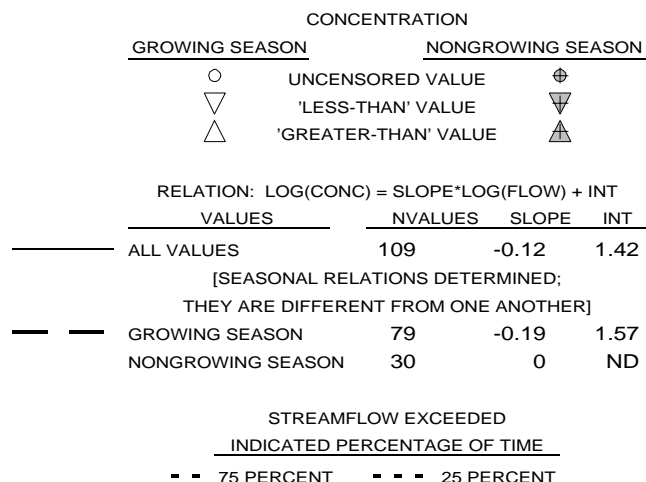
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



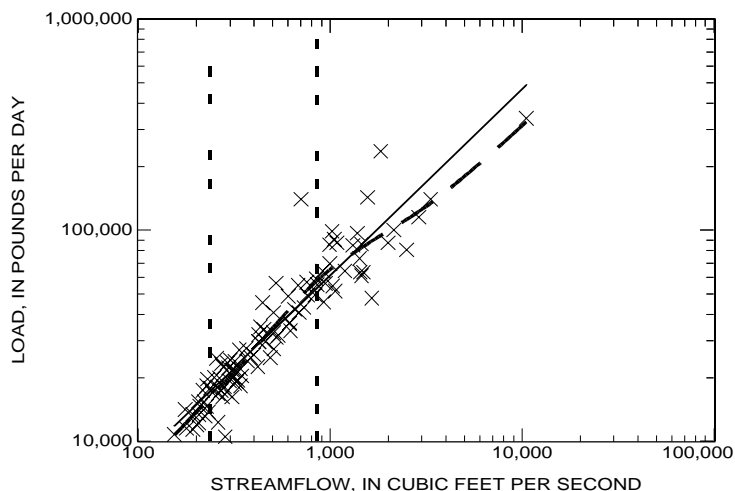
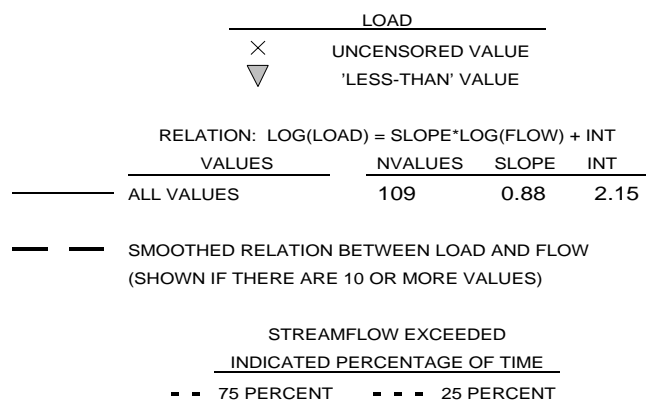
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

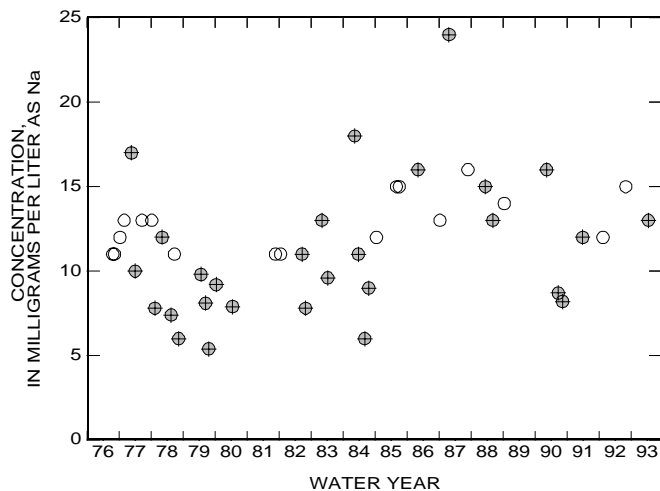
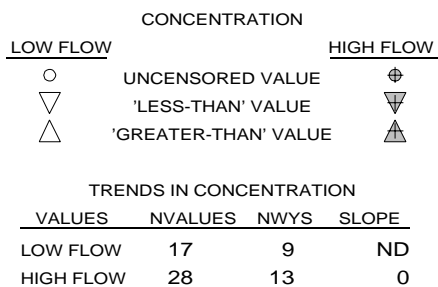
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



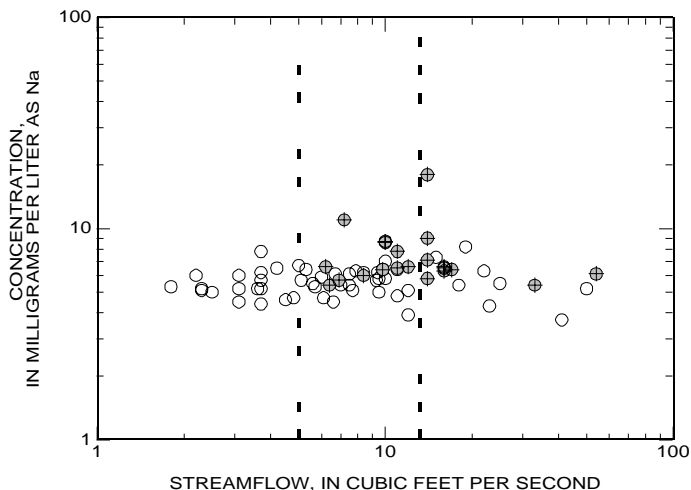
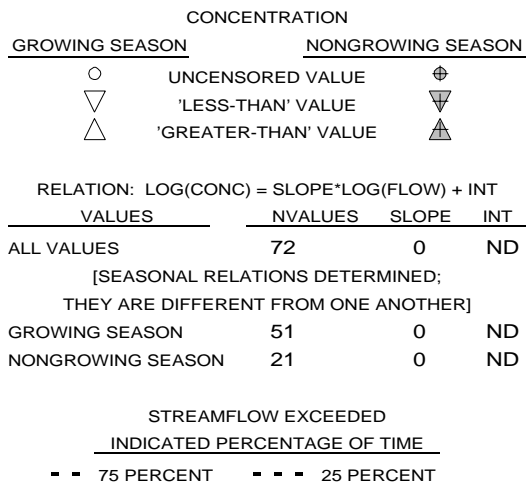
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



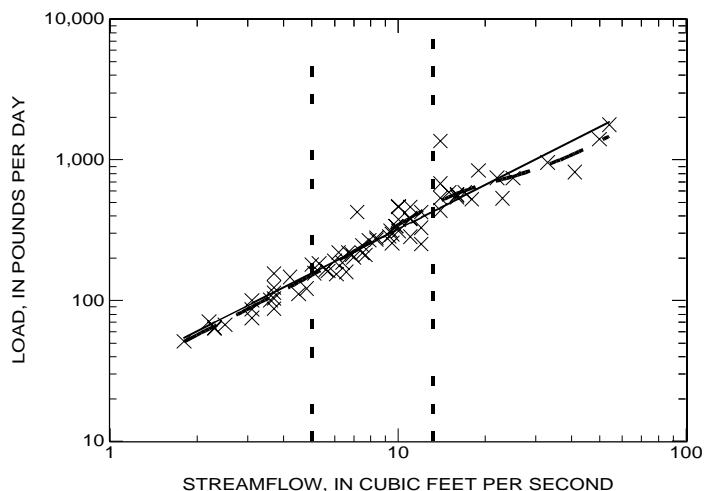
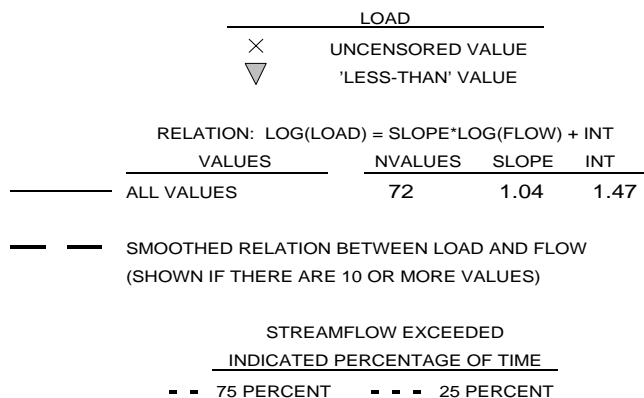
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

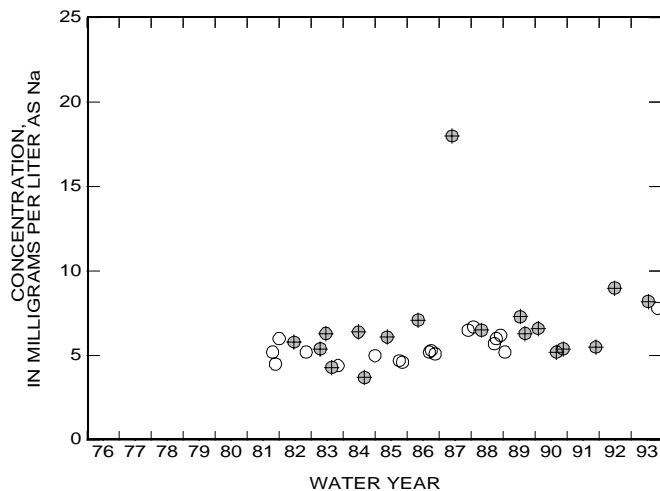
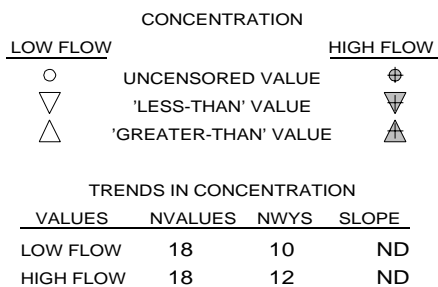
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



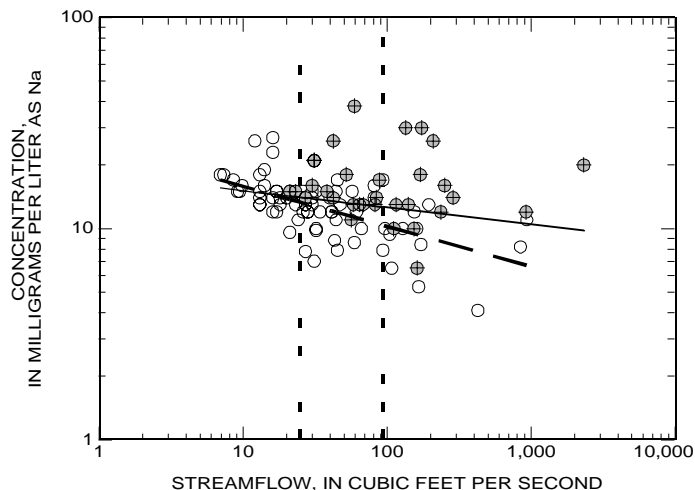
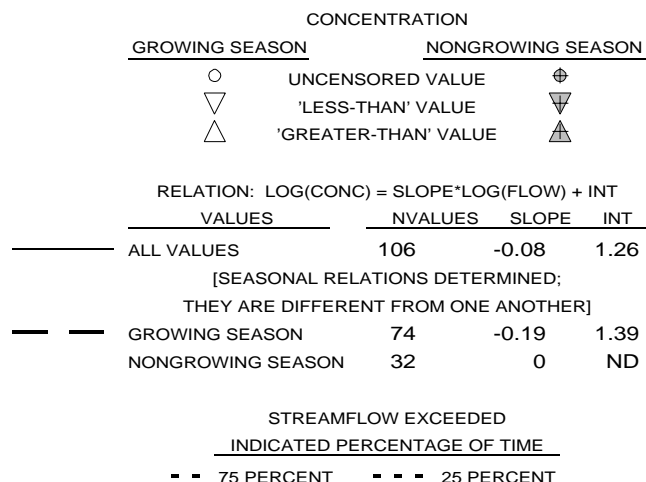
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



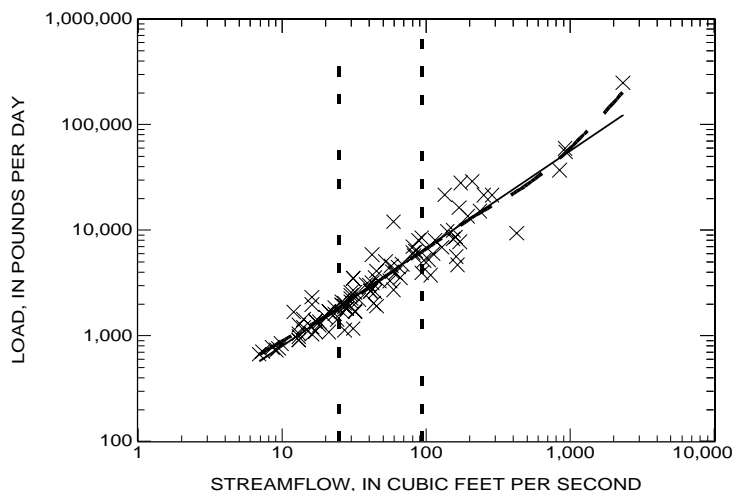
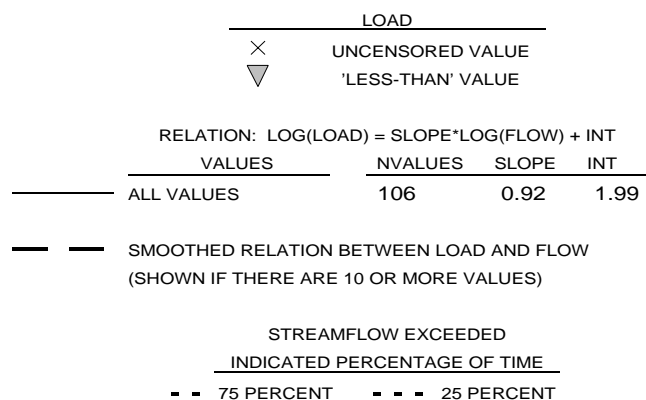
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED SODIUM
 01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

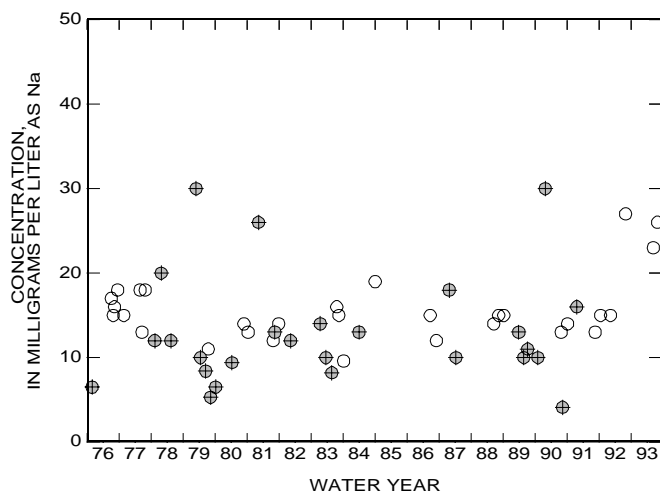
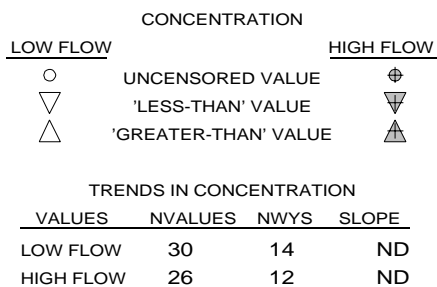
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



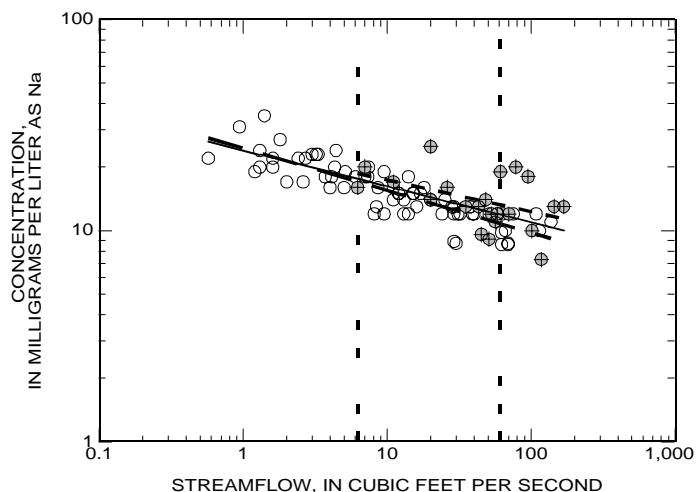
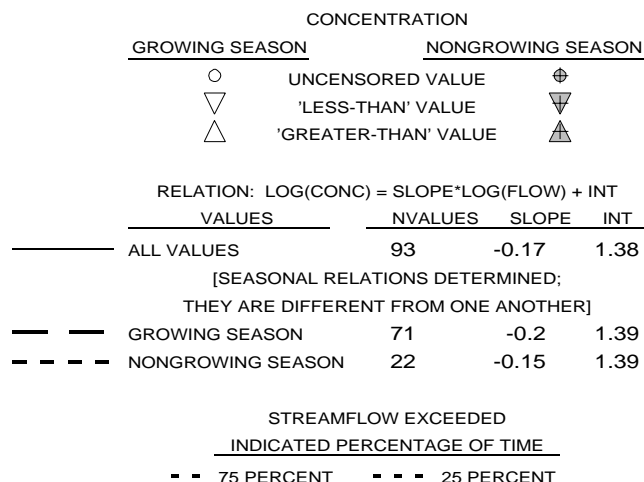
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



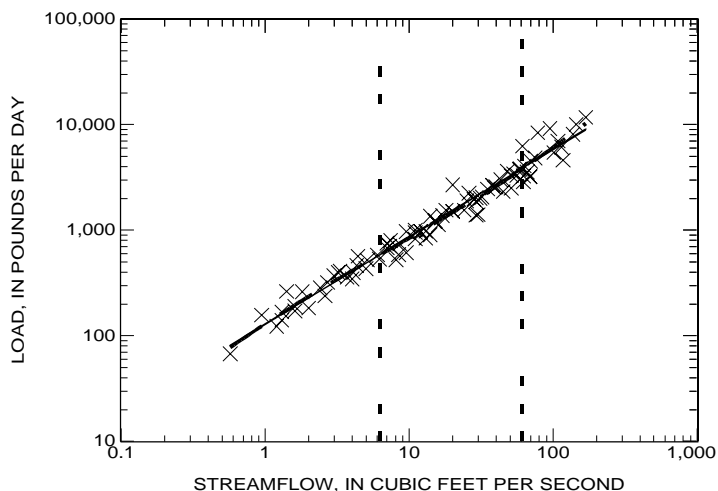
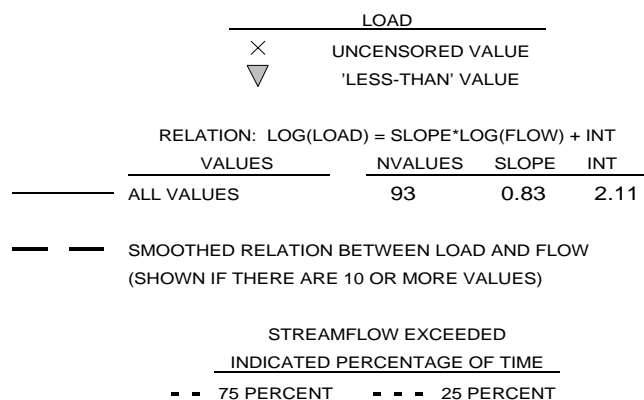
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

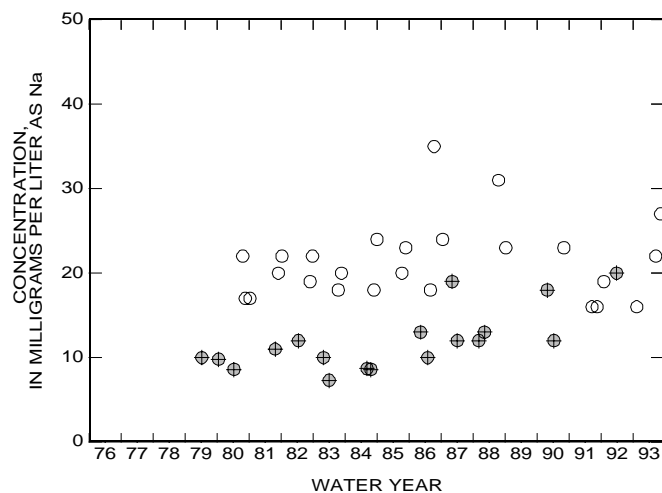
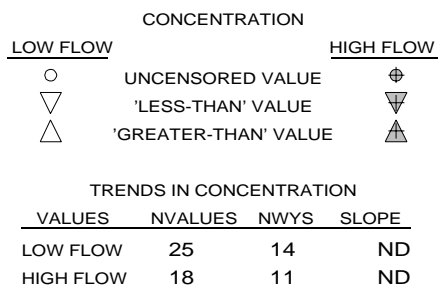
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



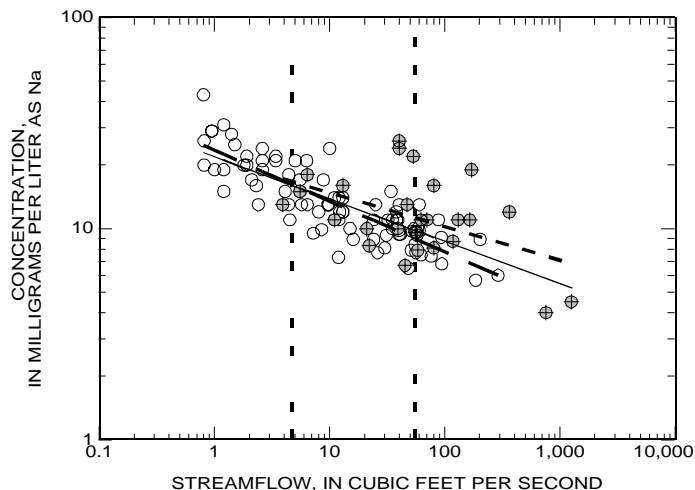
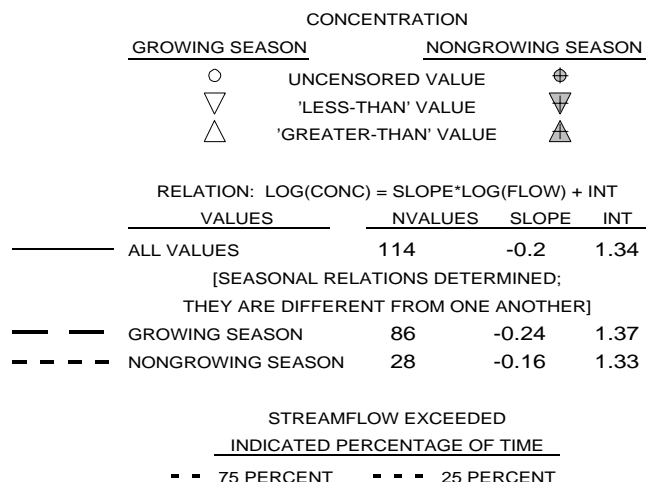
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



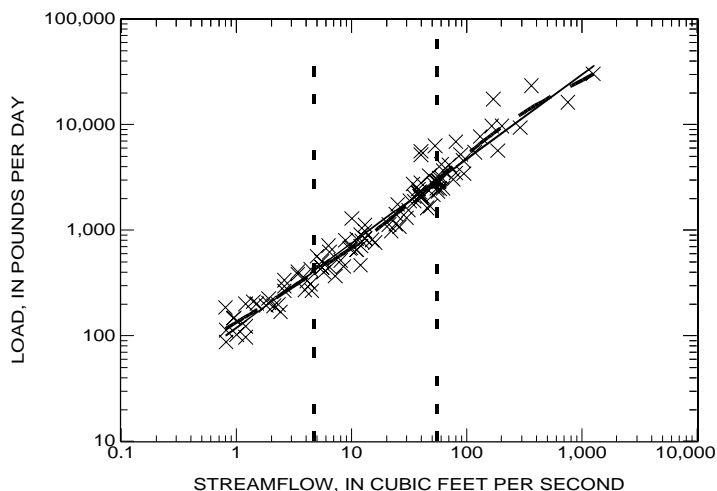
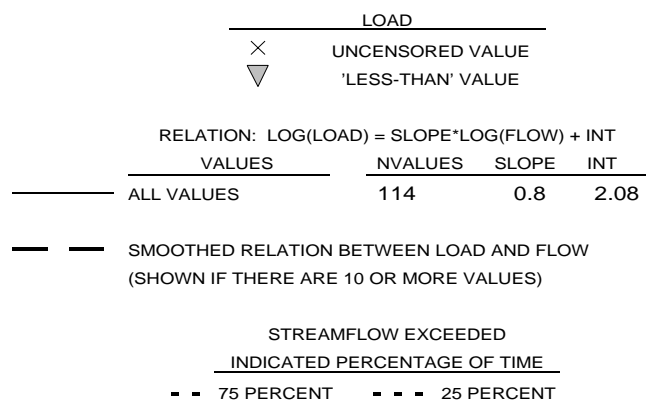
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

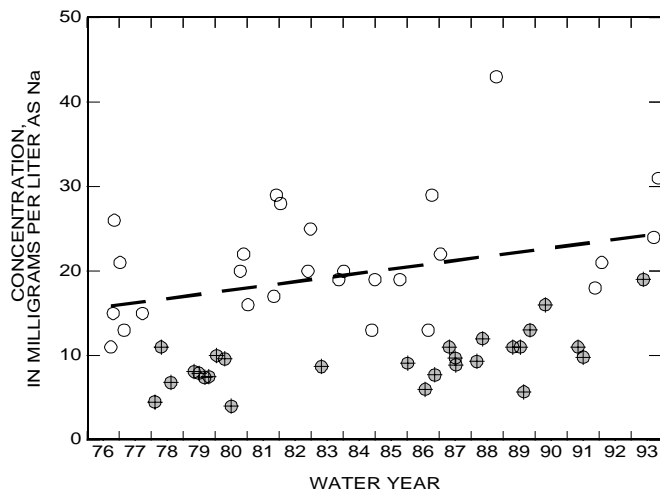
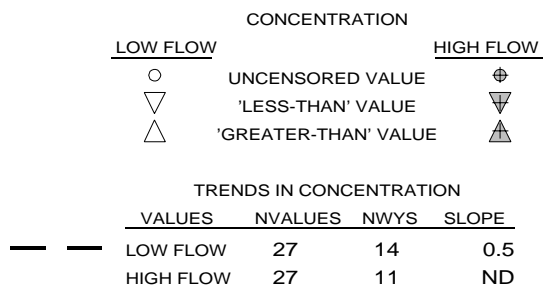
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



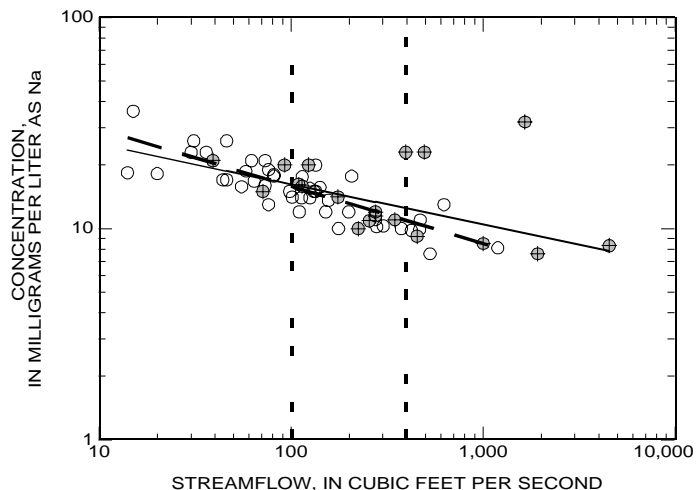
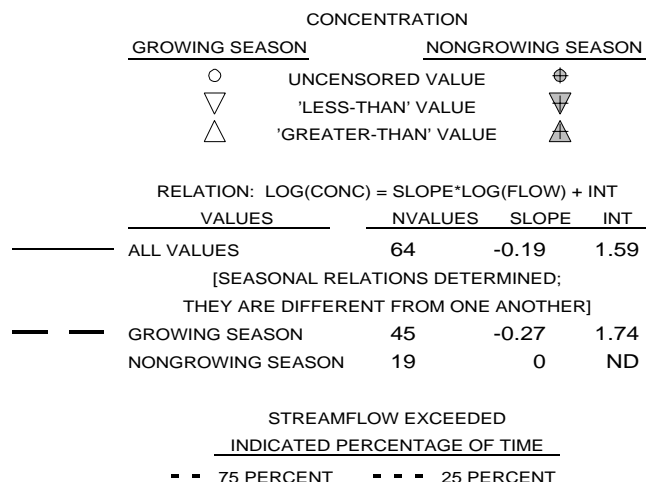
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



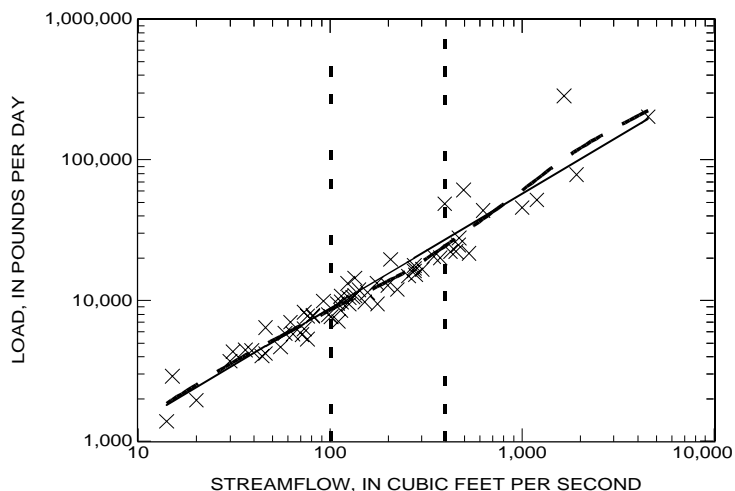
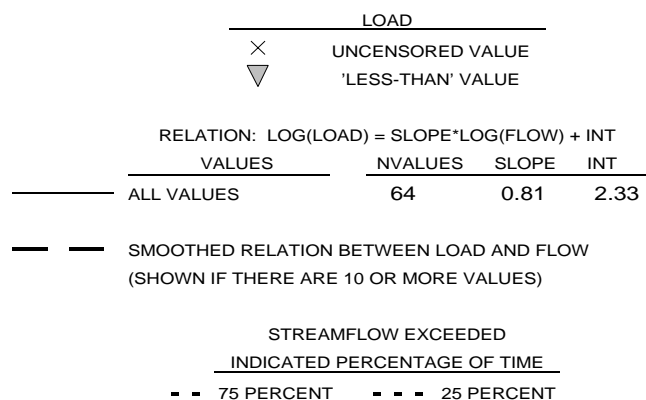
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

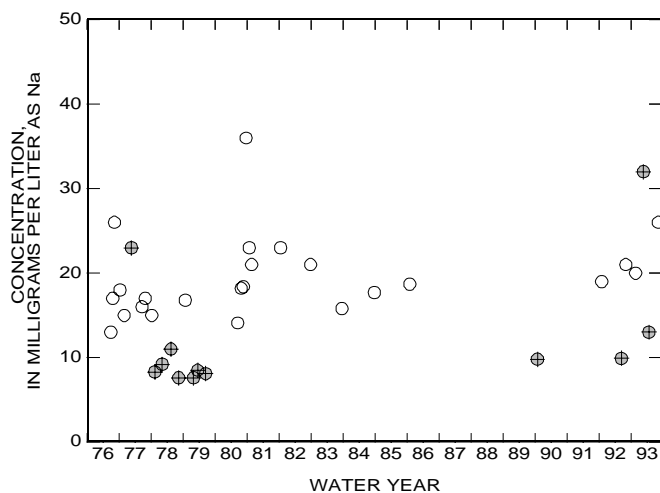
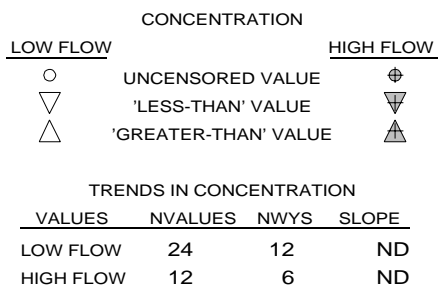
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



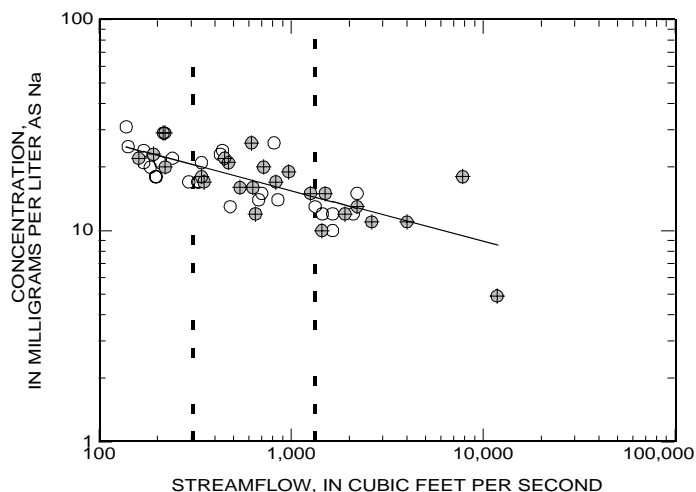
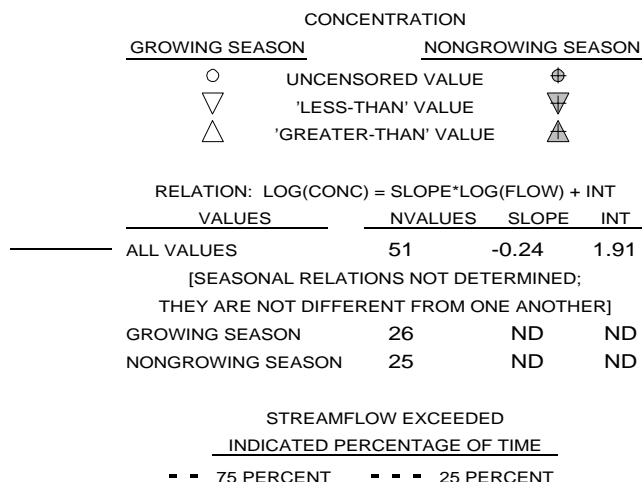
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



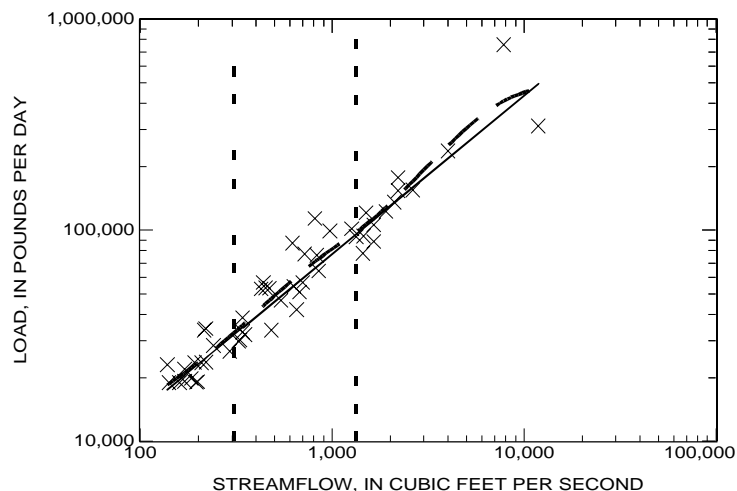
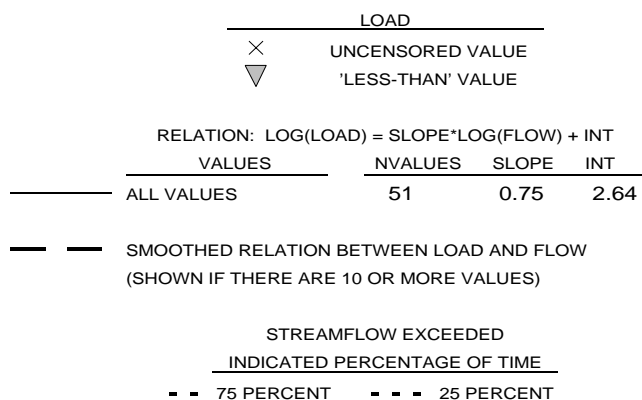
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

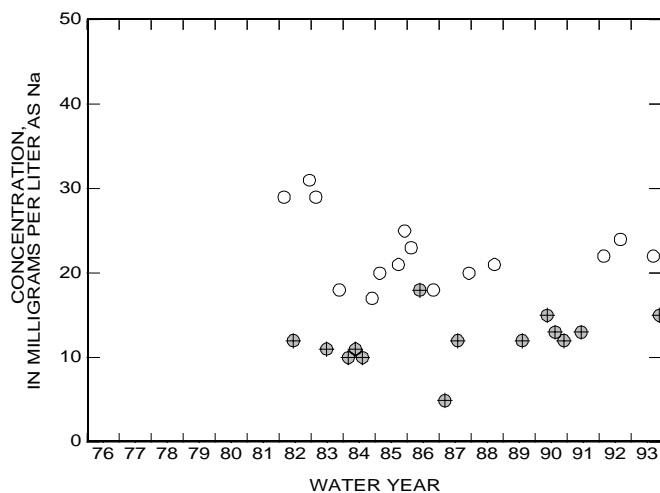
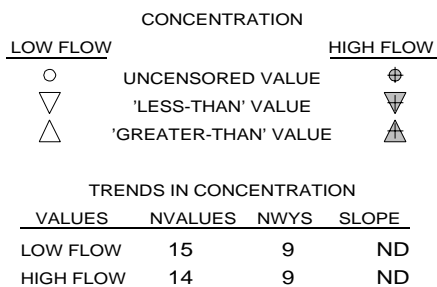
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



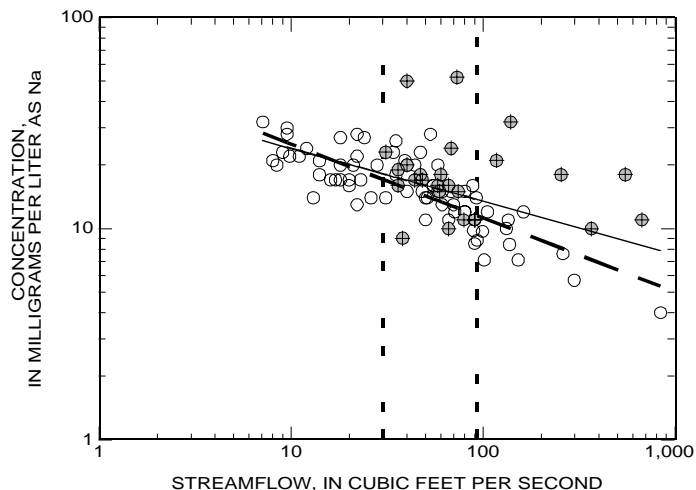
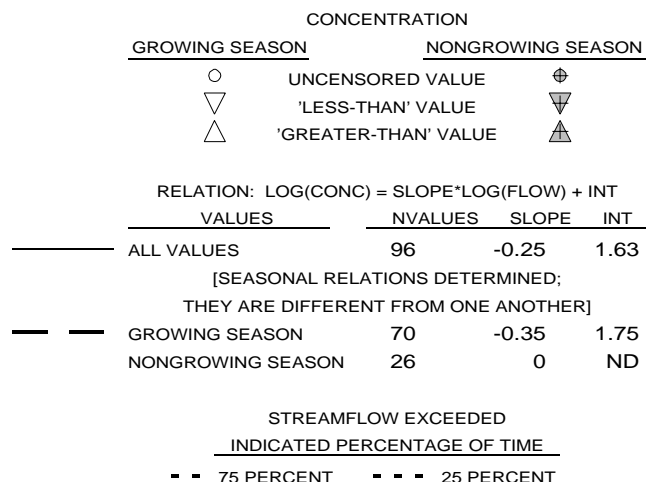
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



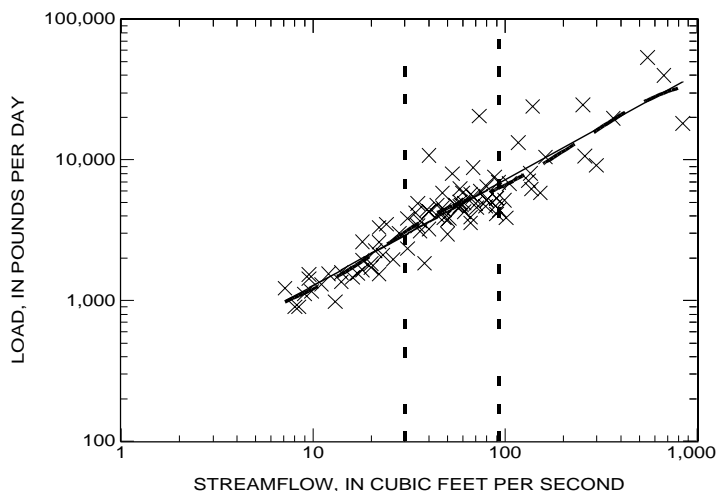
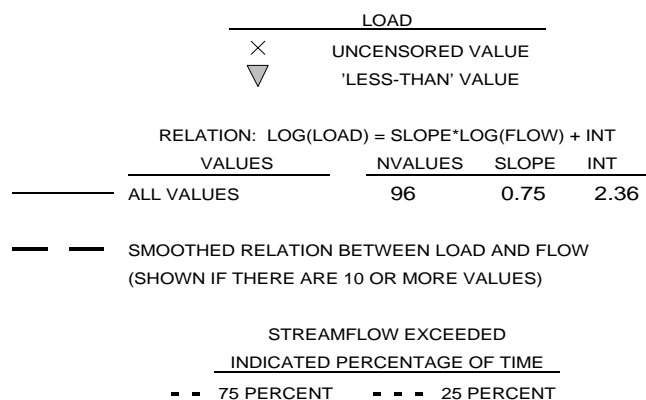
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED SODIUM
 01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

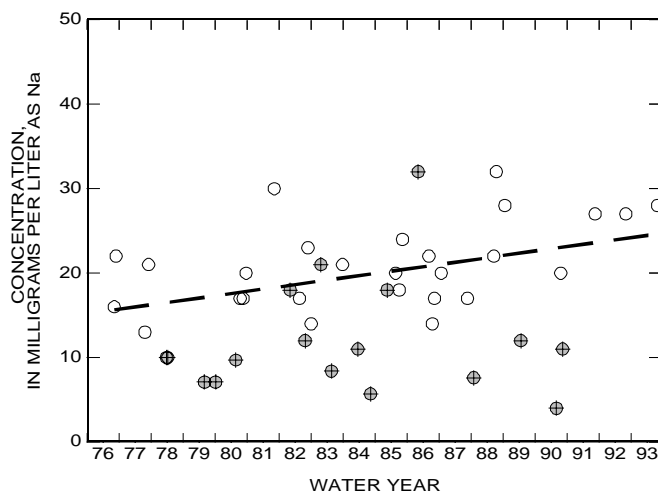
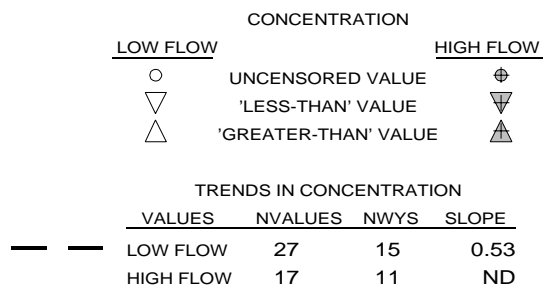
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



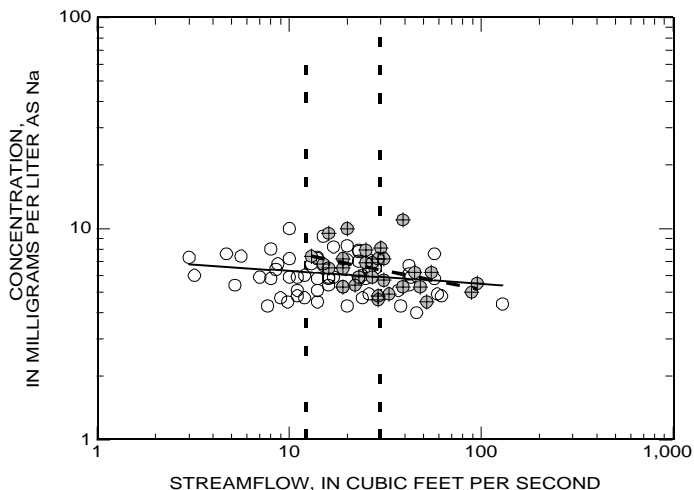
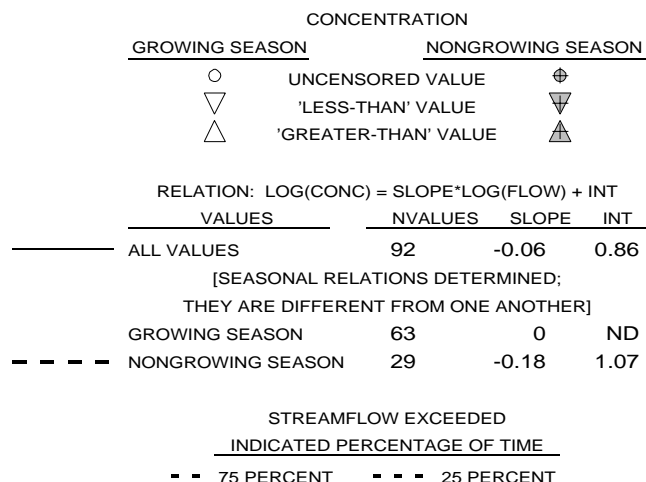
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



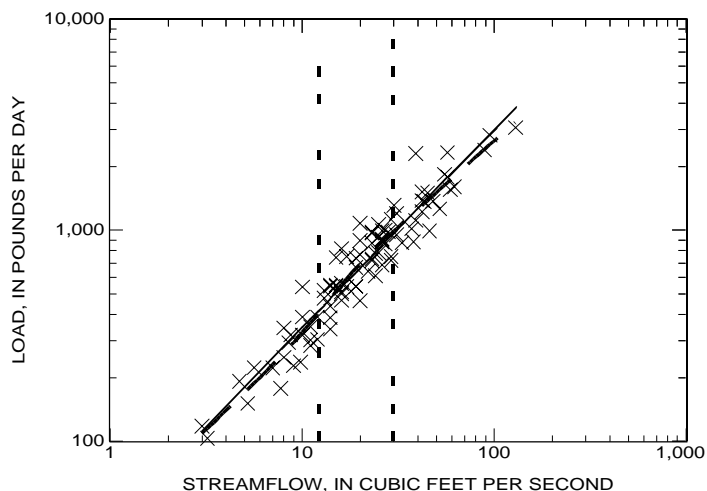
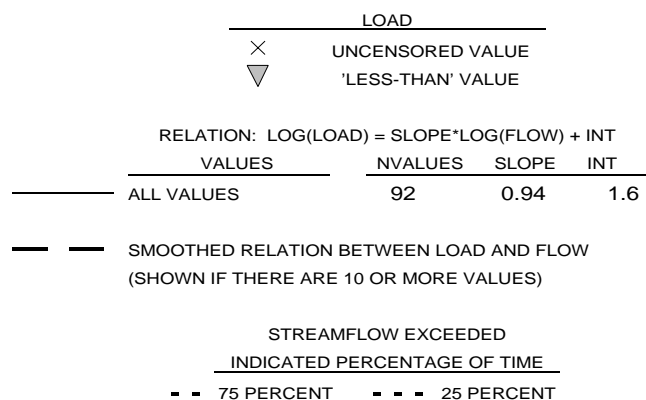
APPENDIX 6. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED SODIUM
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

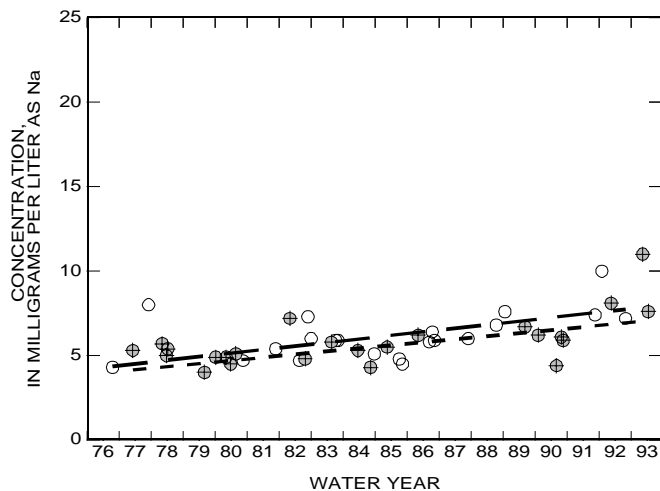
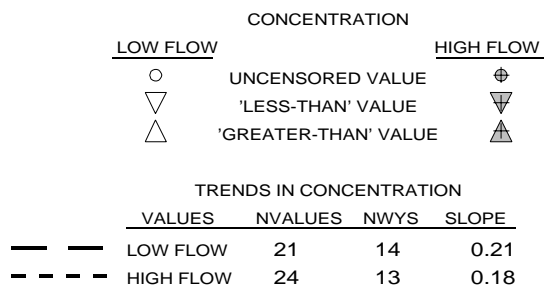
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



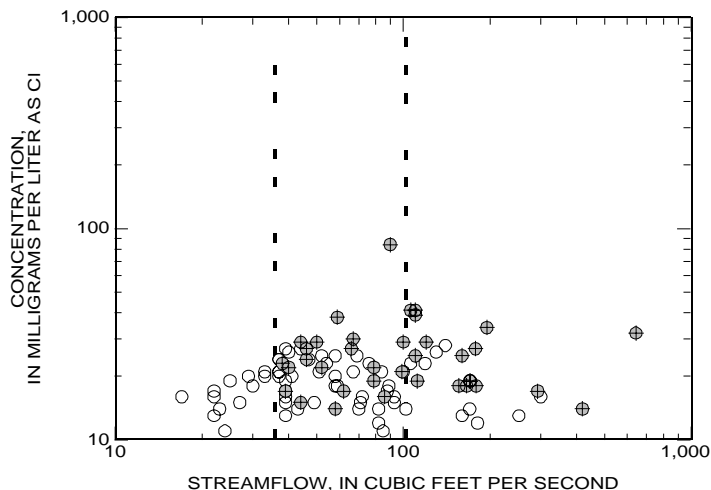
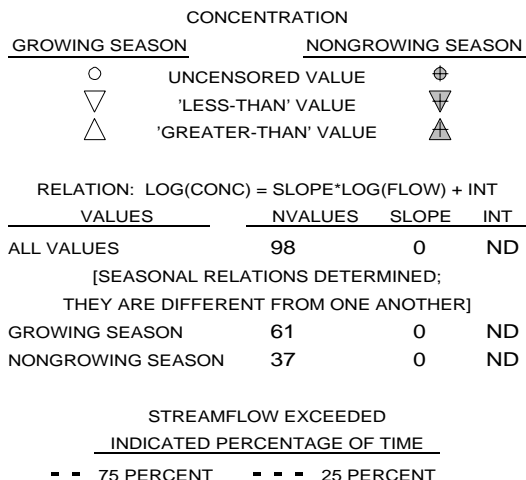
Appendix 7 - Dissolved chloride

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

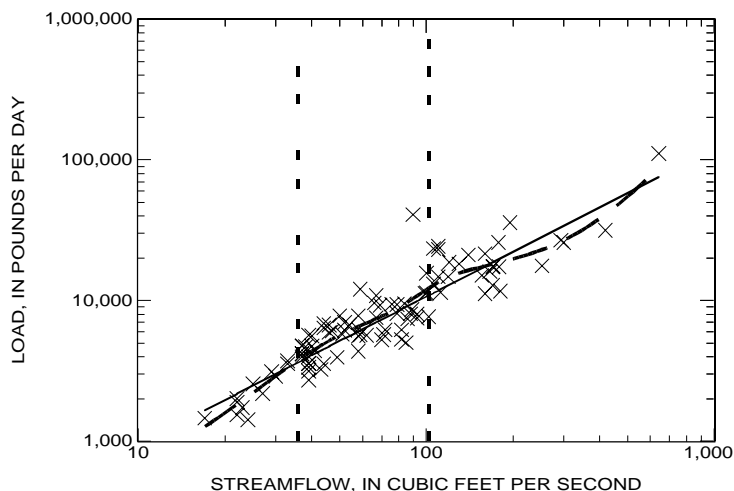
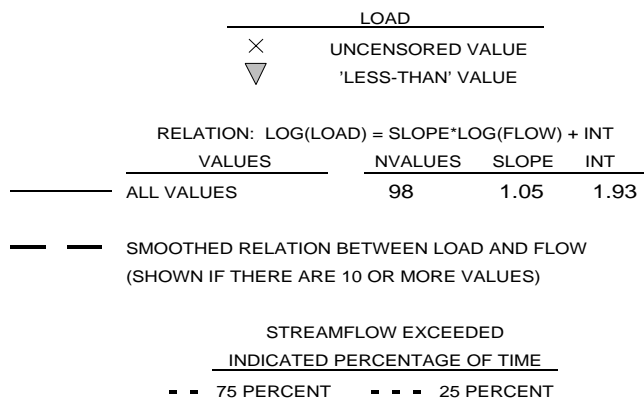
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

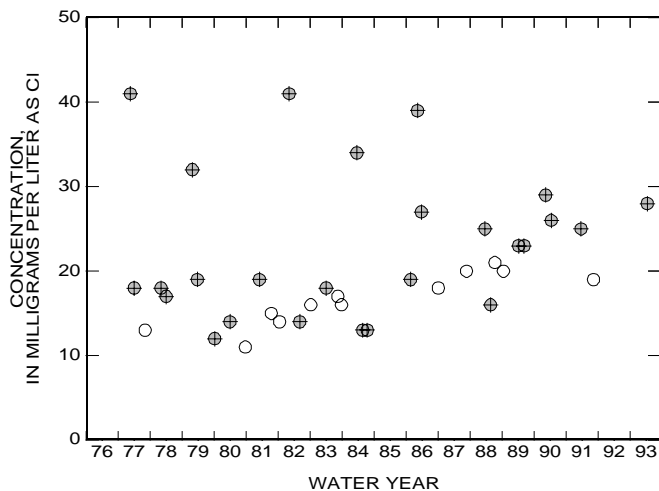
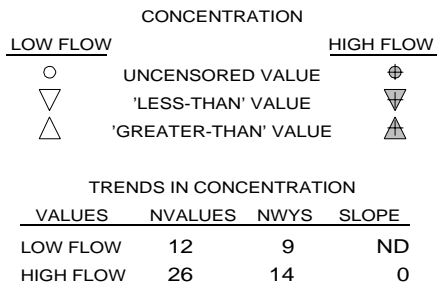
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



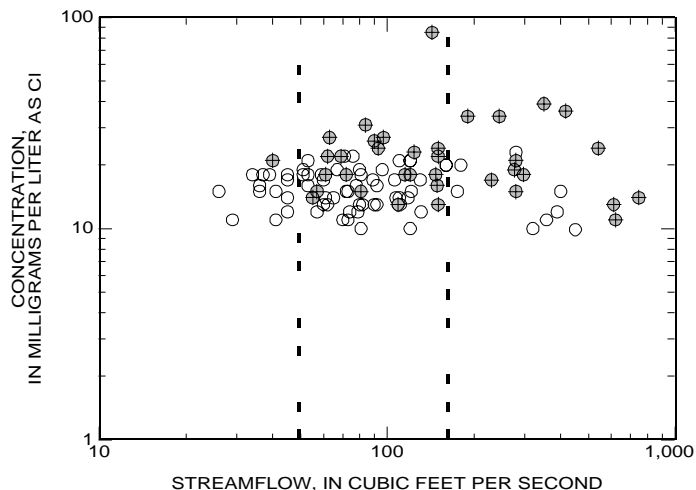
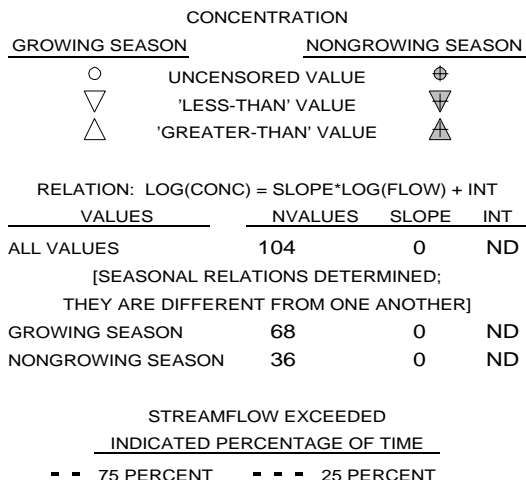
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



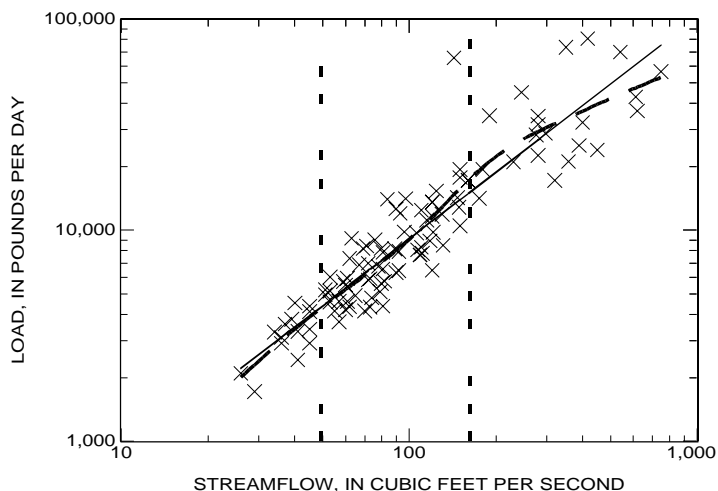
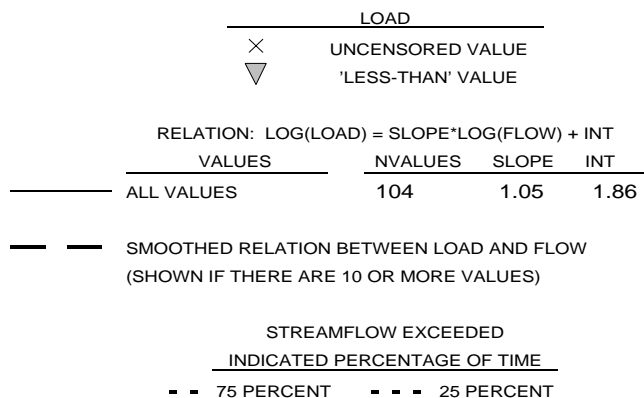
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

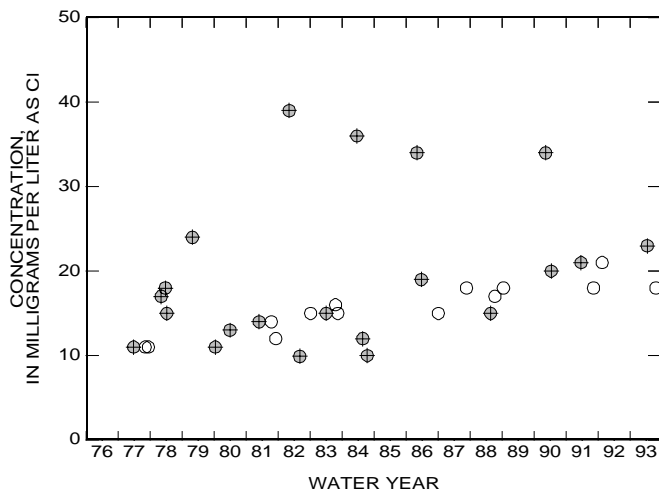
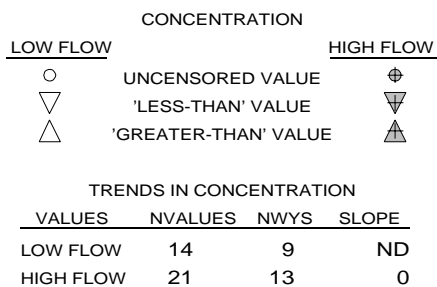
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



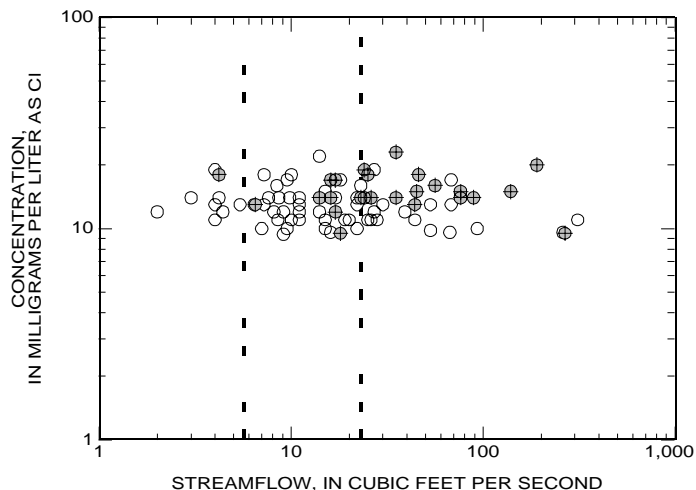
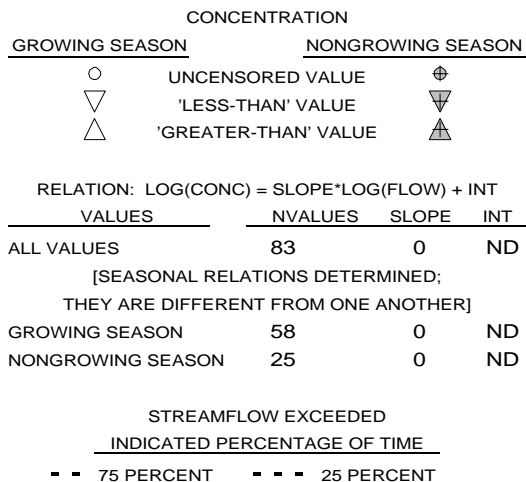
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



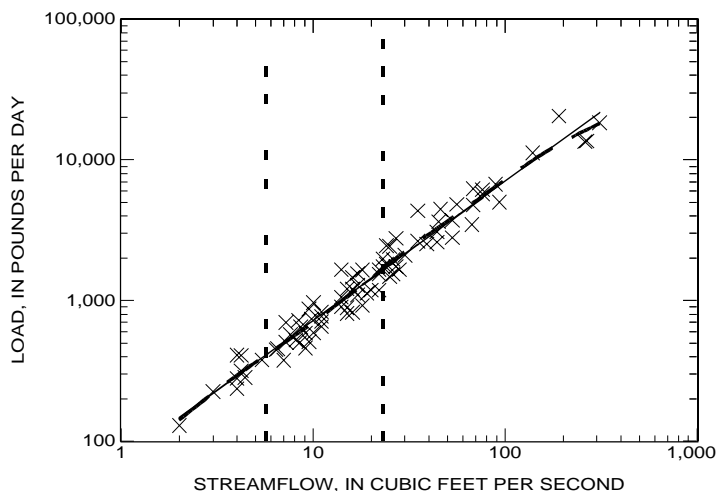
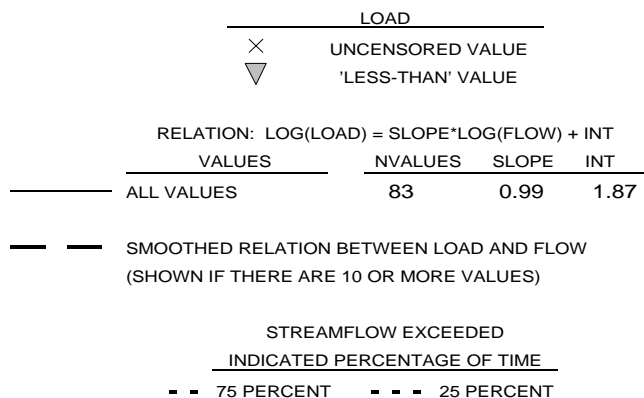
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED CHLORIDE
 01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

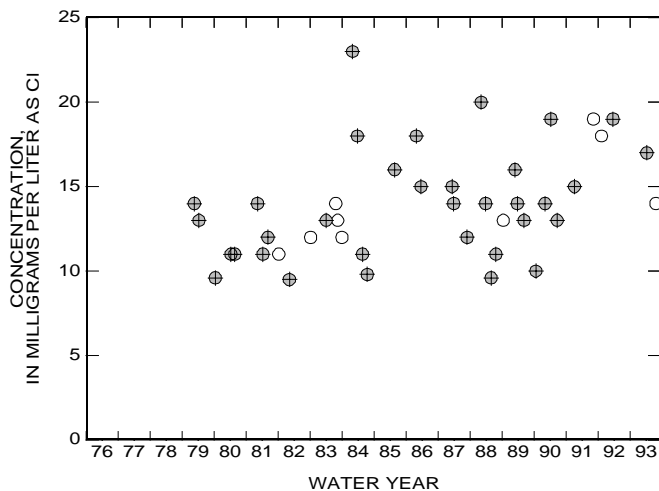
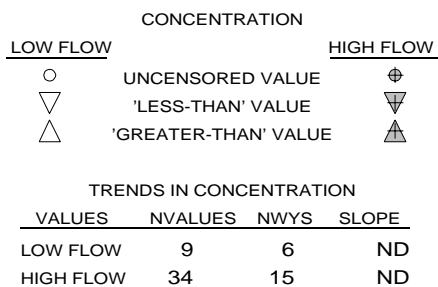
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



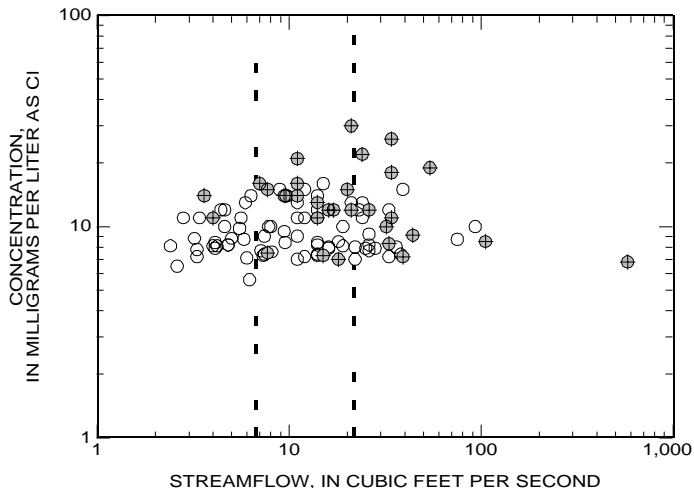
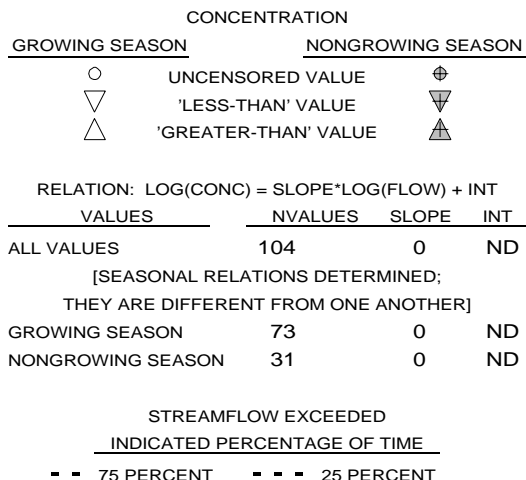
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



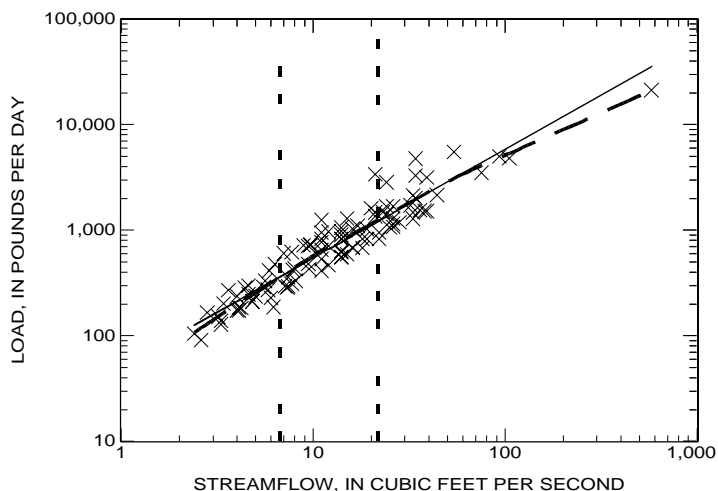
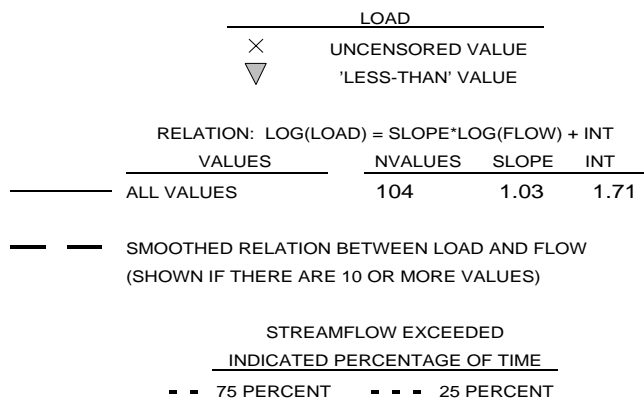
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED CHLORIDE
 01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

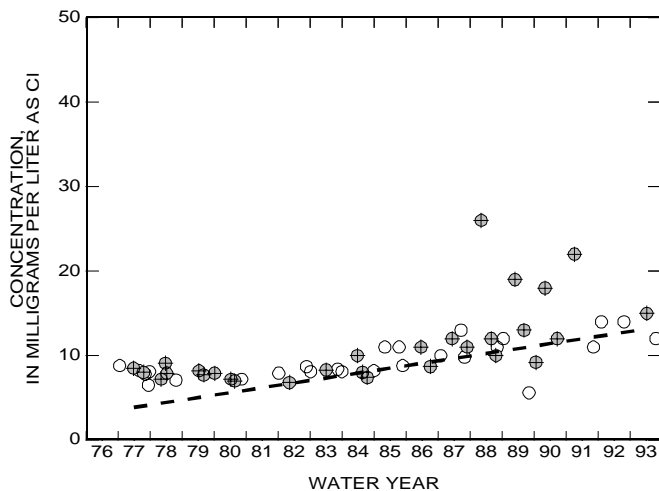
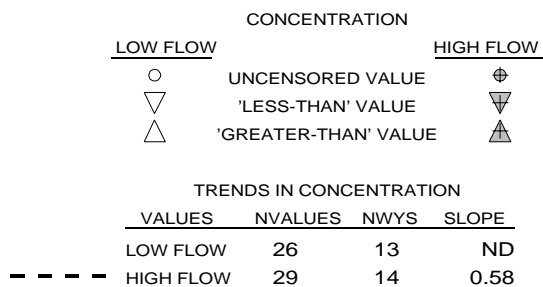
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



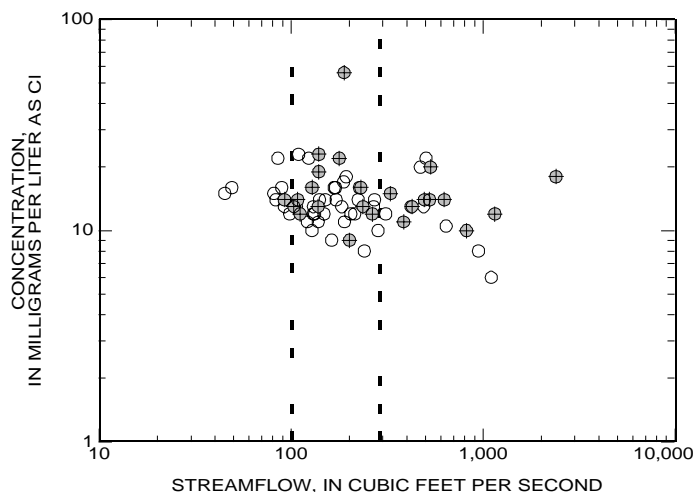
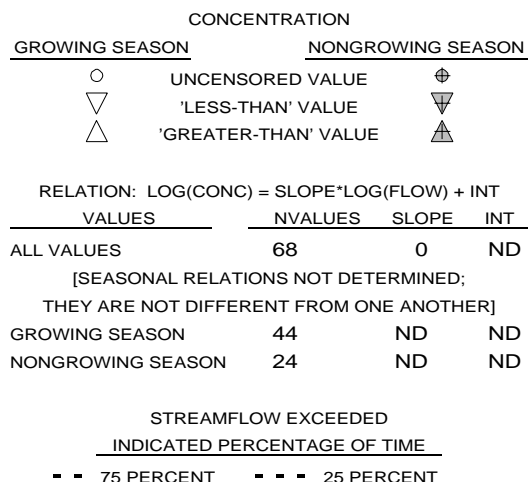
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



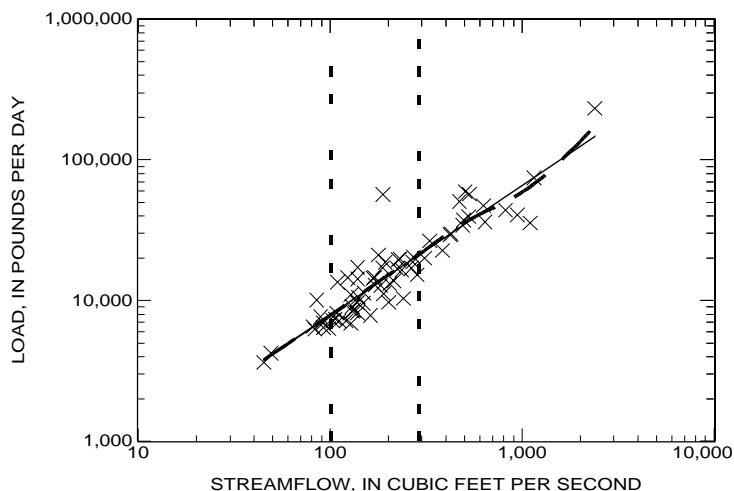
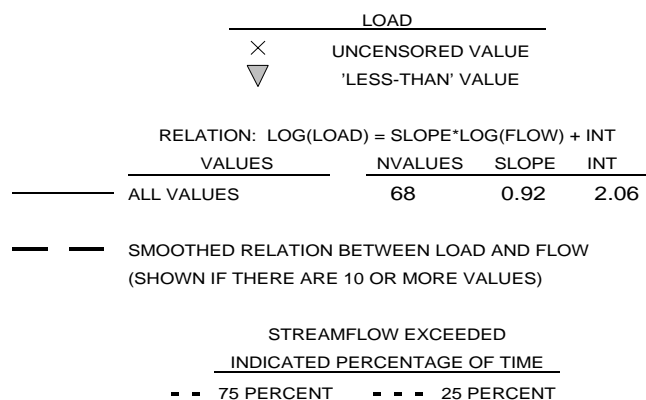
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

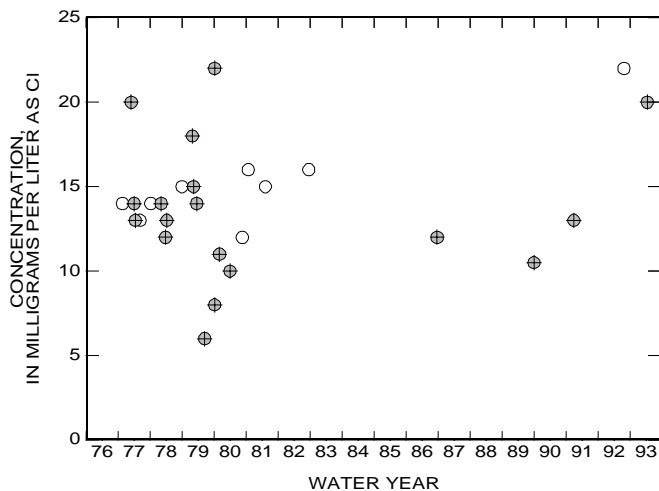
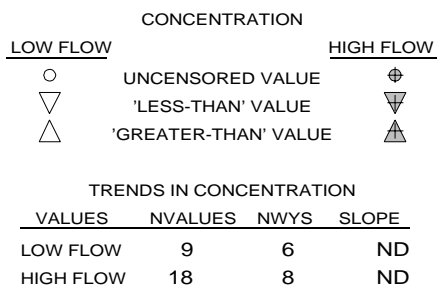
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



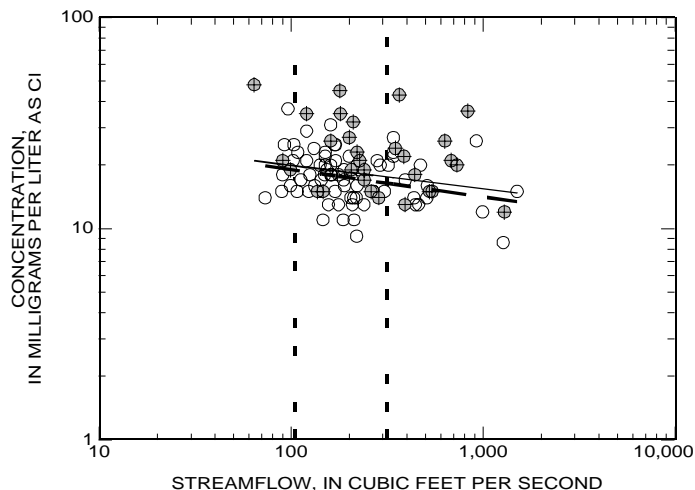
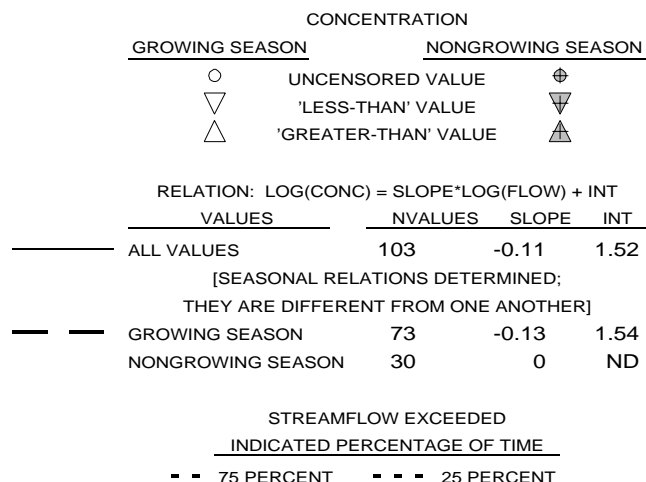
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



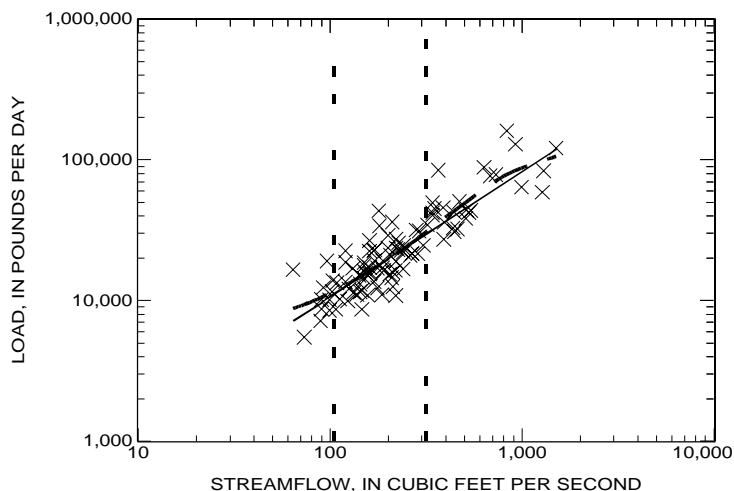
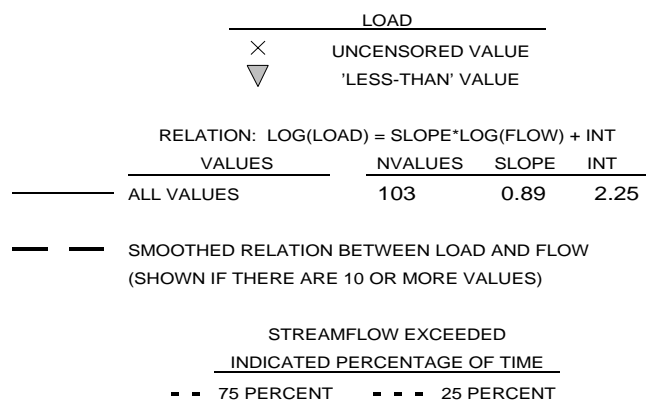
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

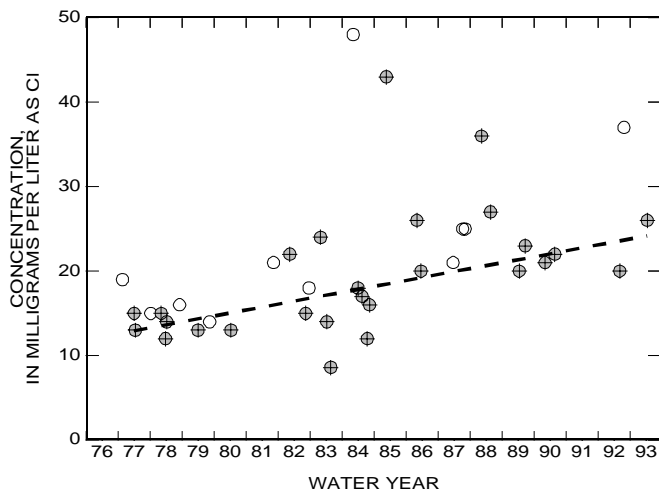
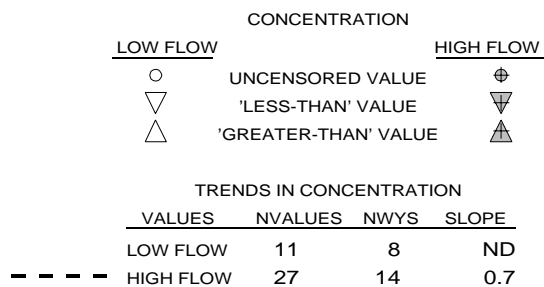
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



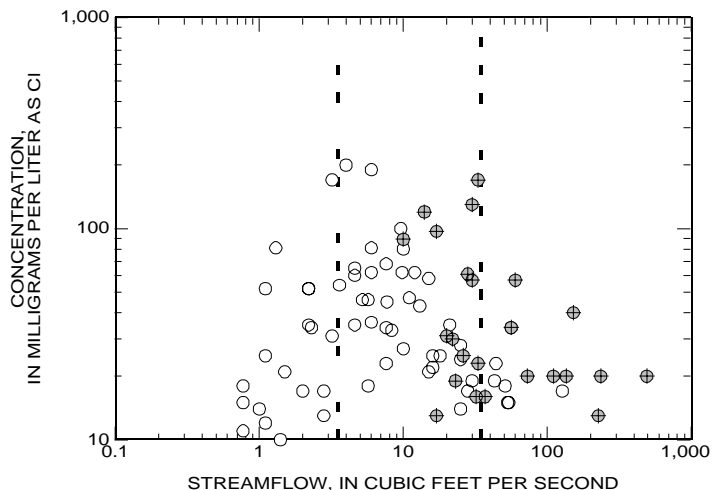
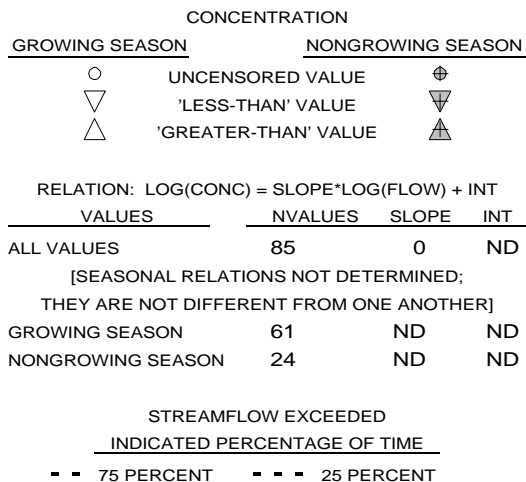
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



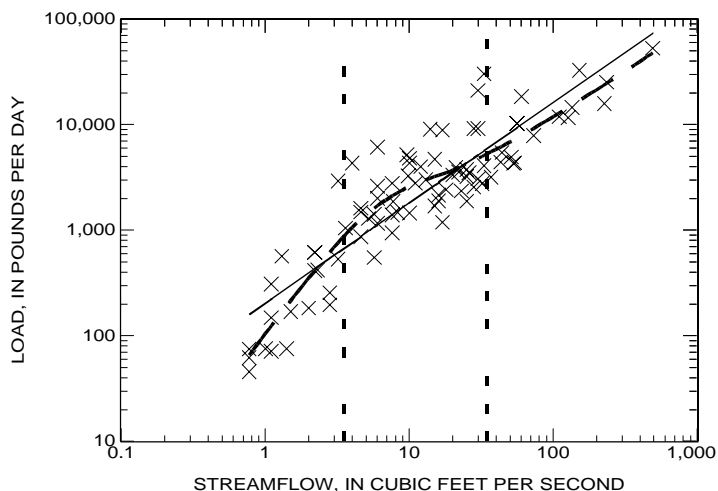
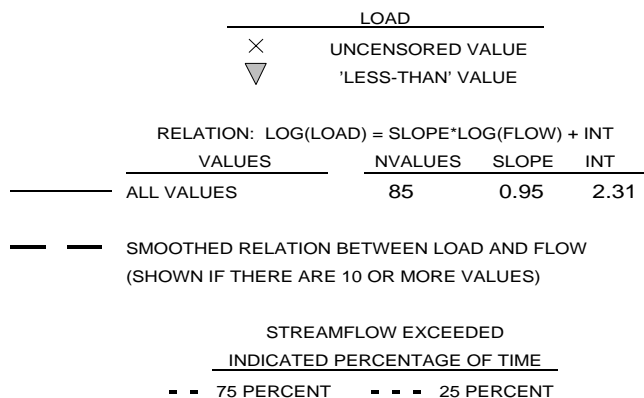
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

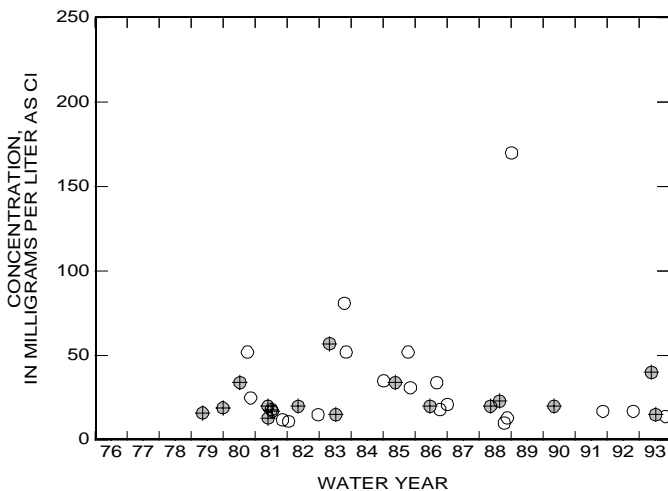
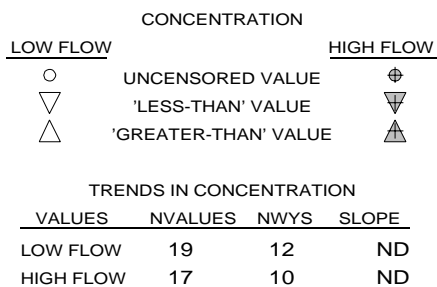
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



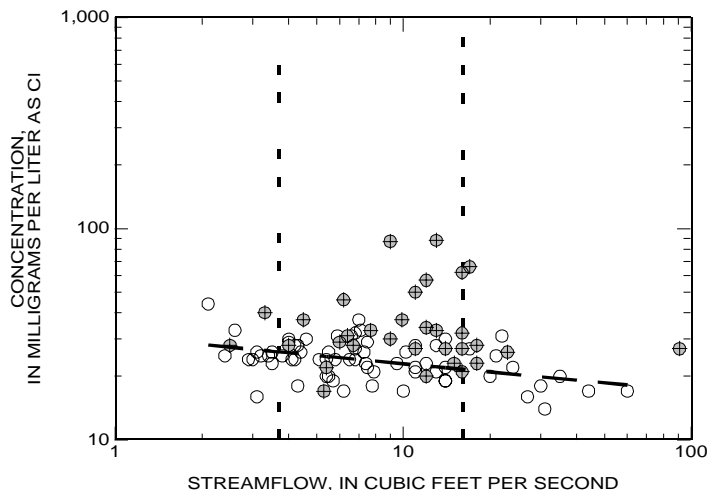
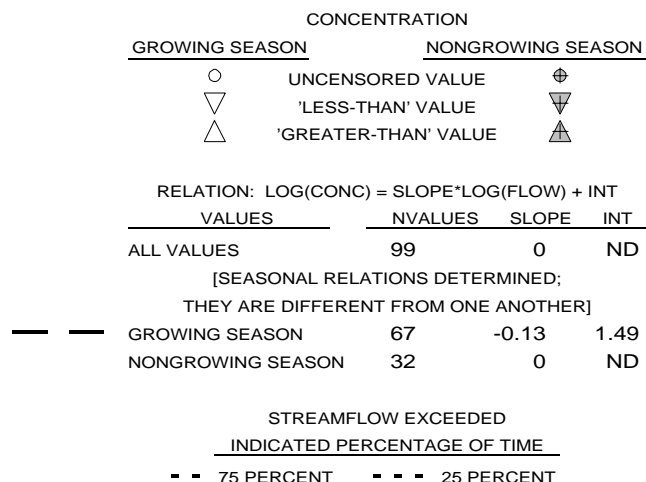
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



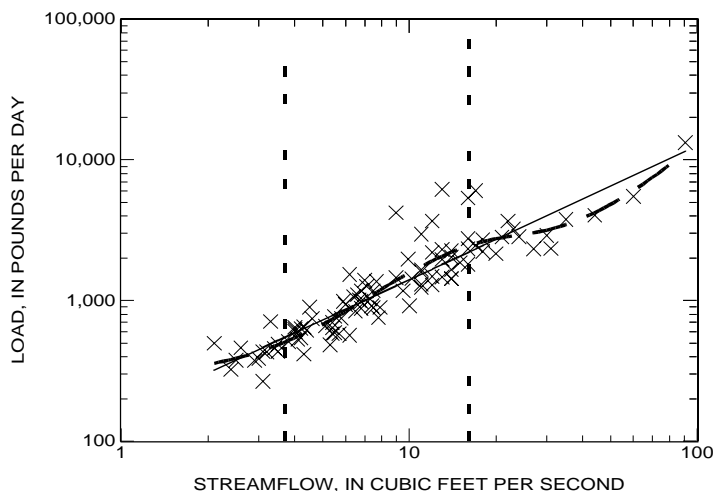
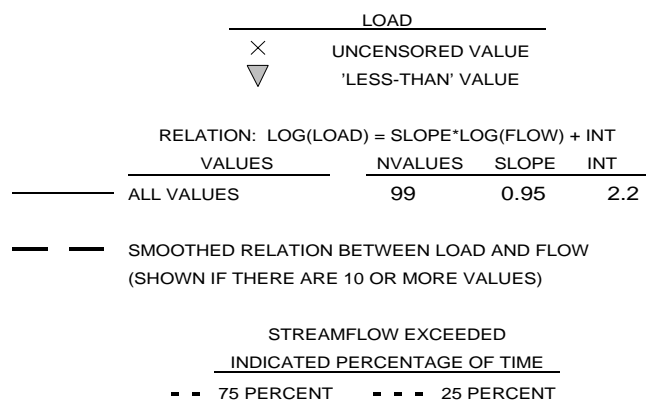
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

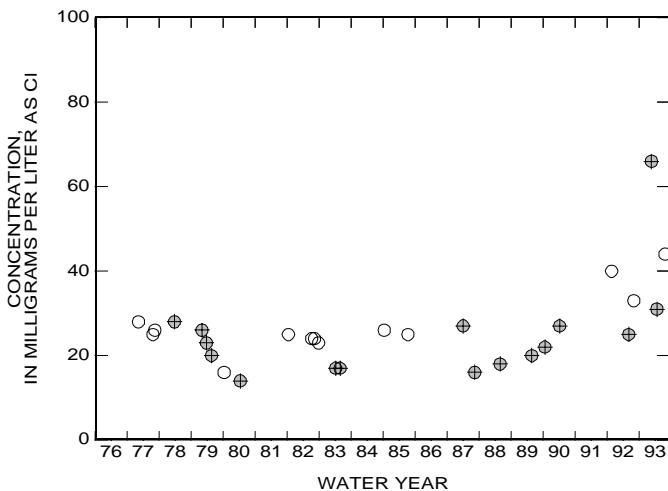
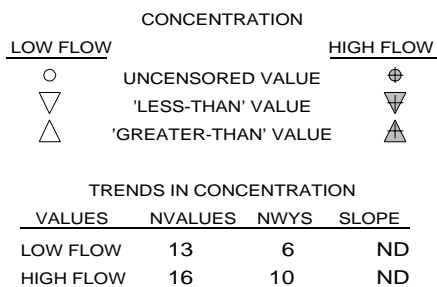
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



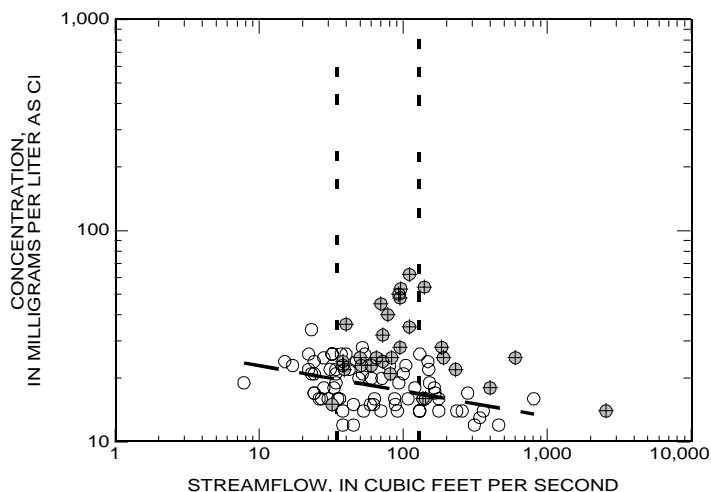
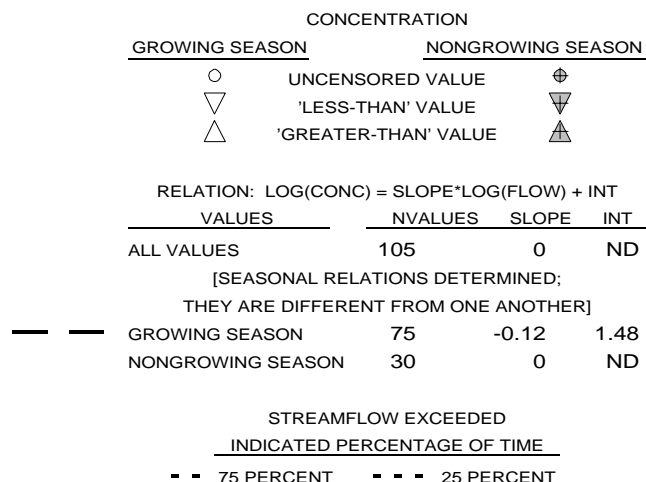
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



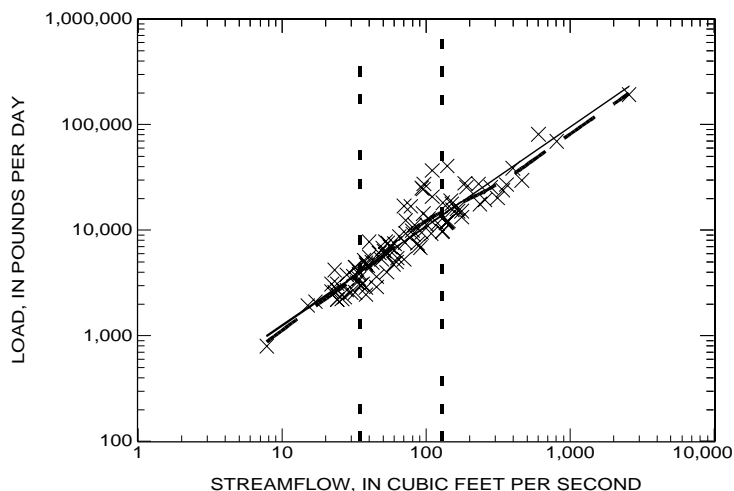
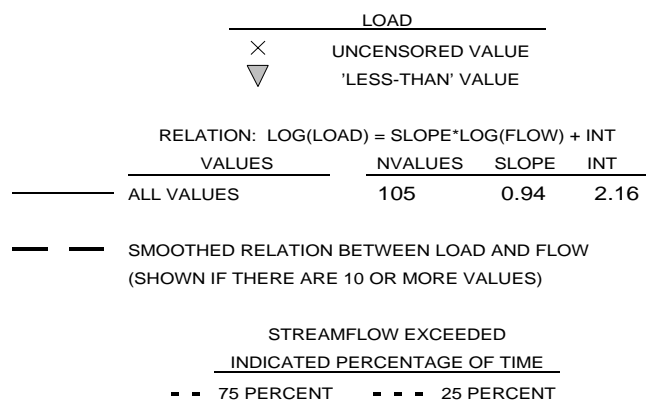
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

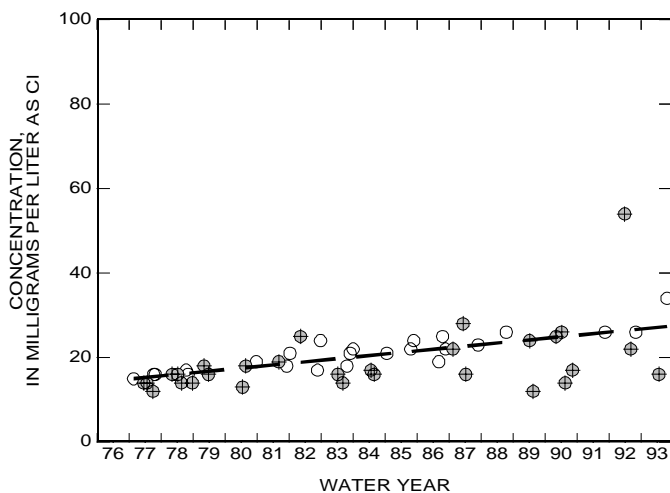
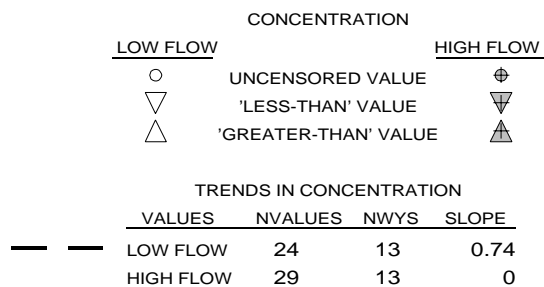
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



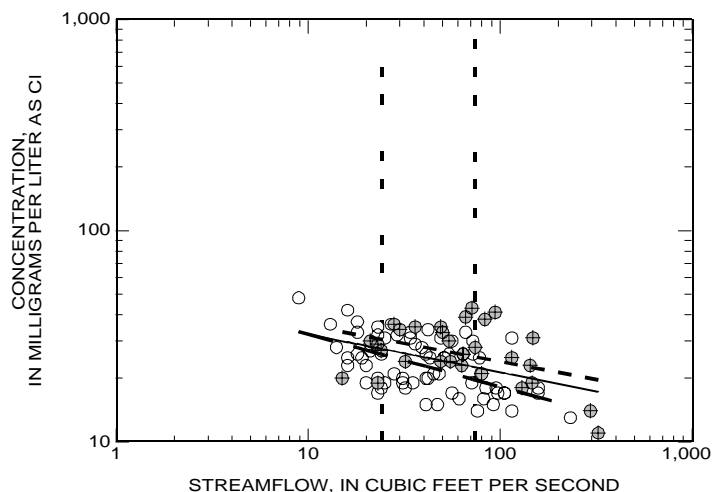
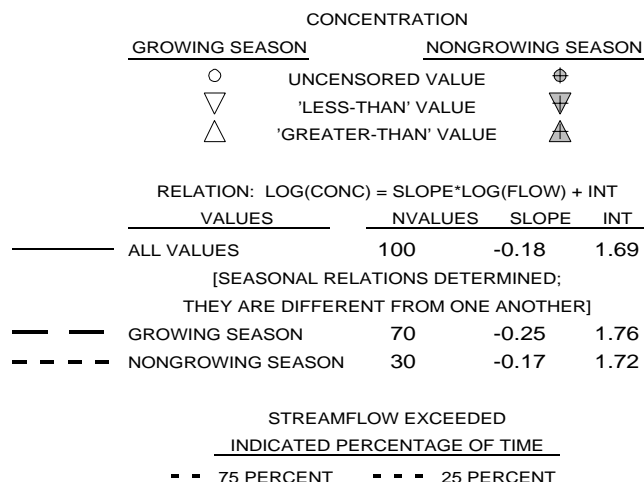
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



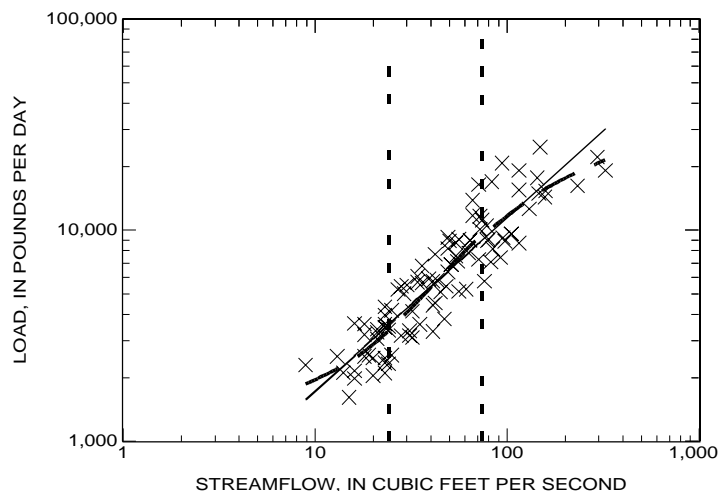
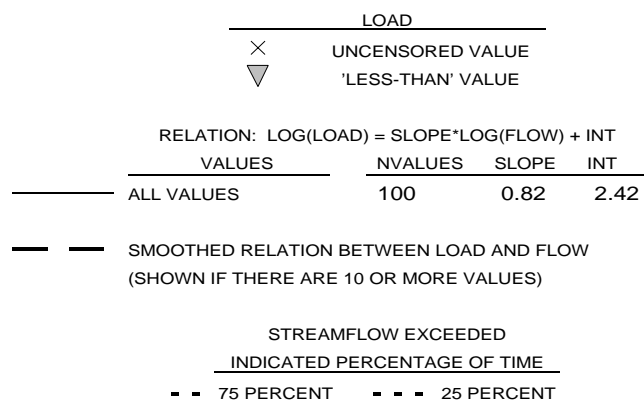
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

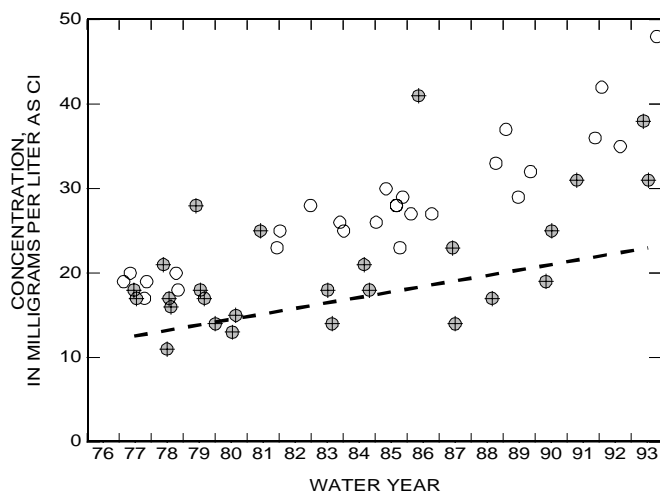
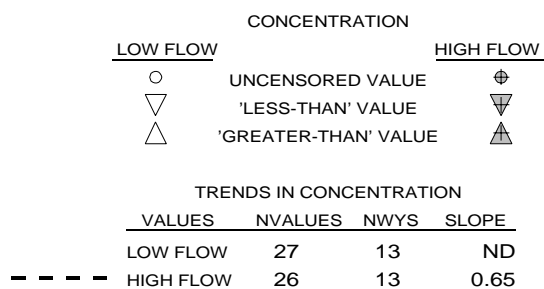
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



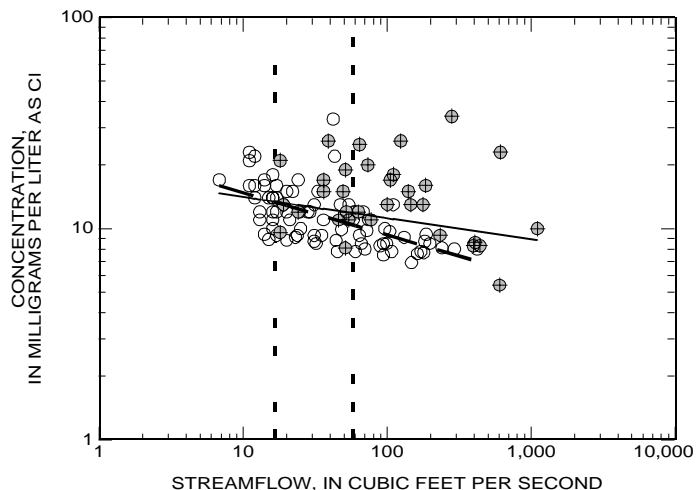
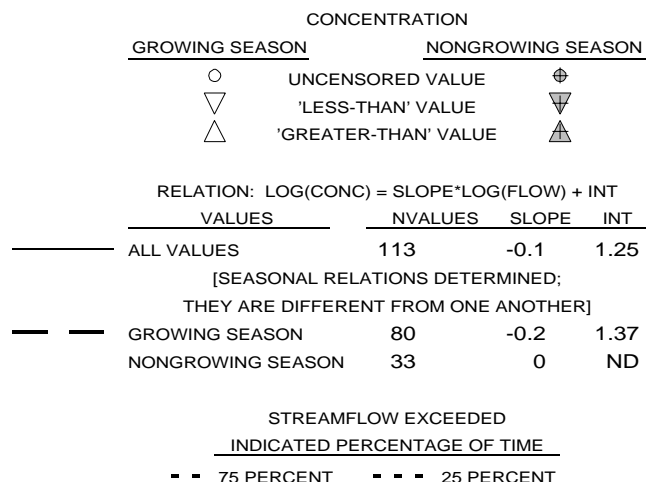
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



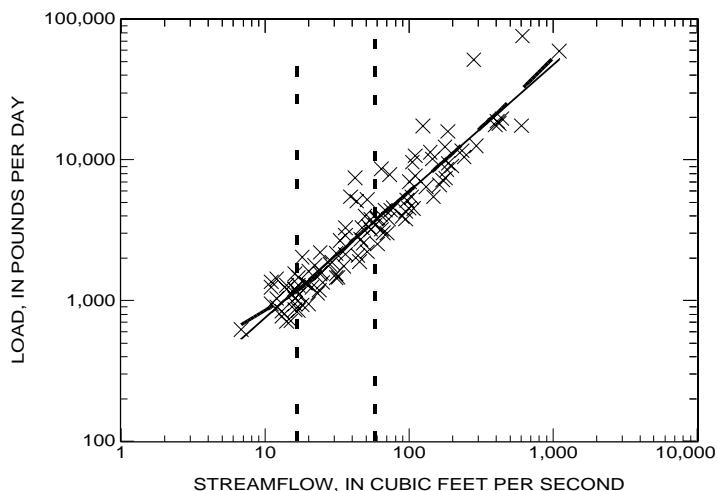
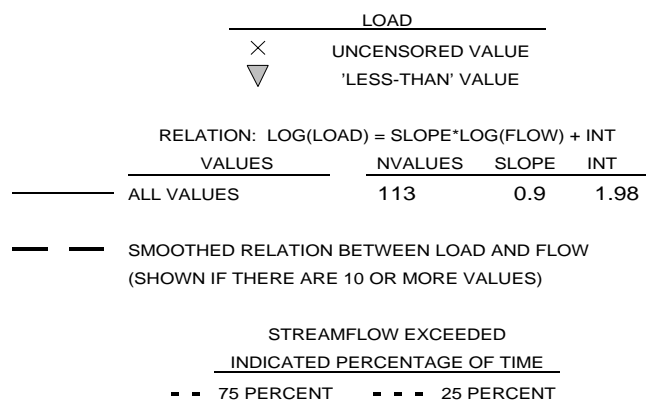
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

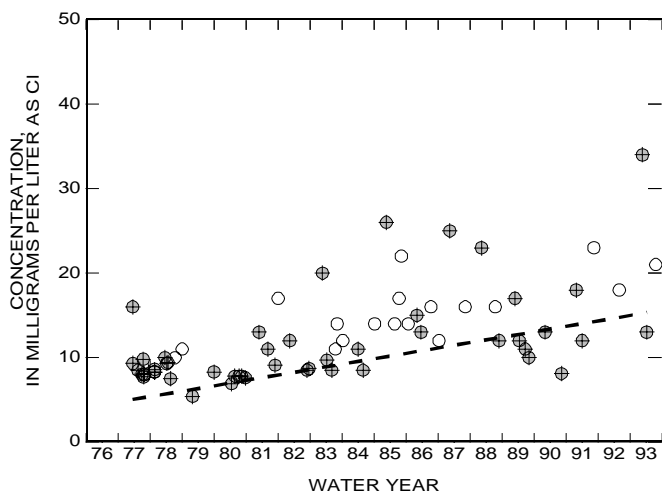
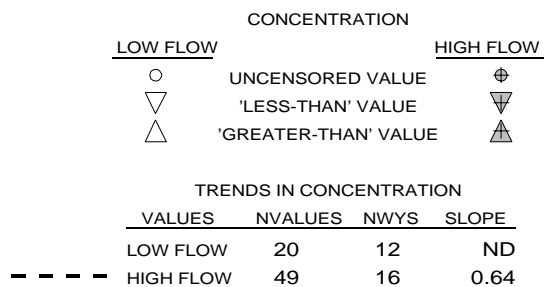
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



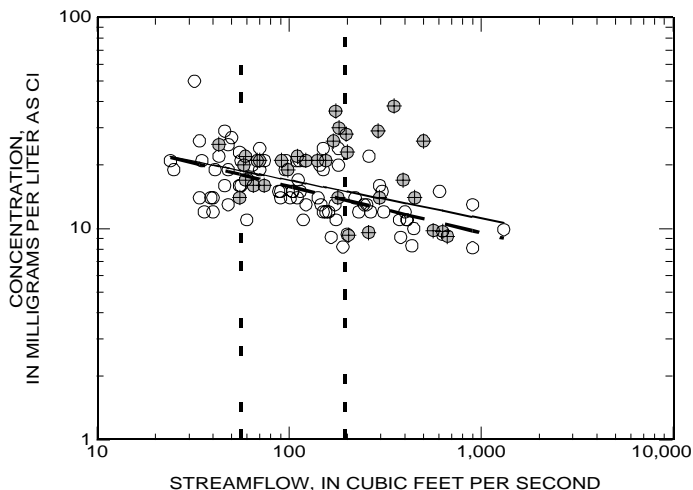
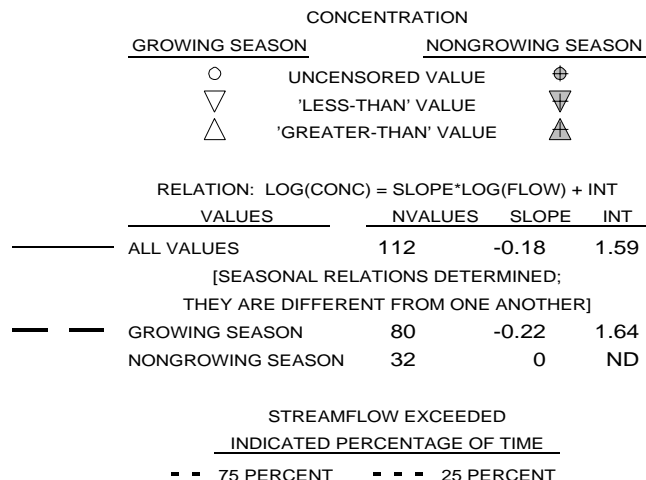
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



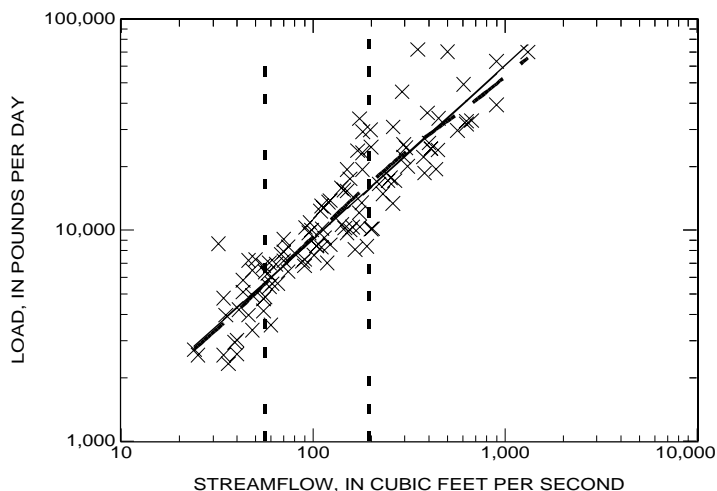
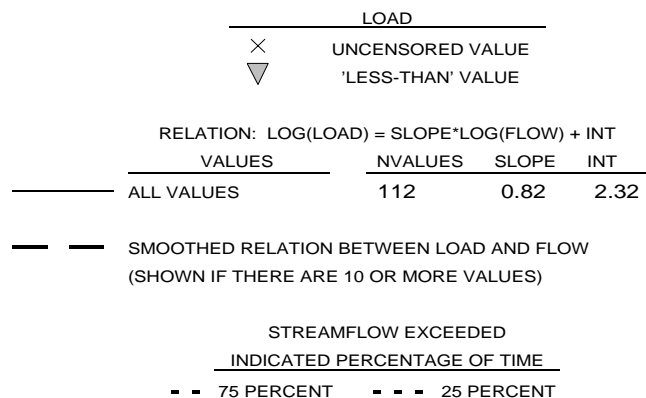
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

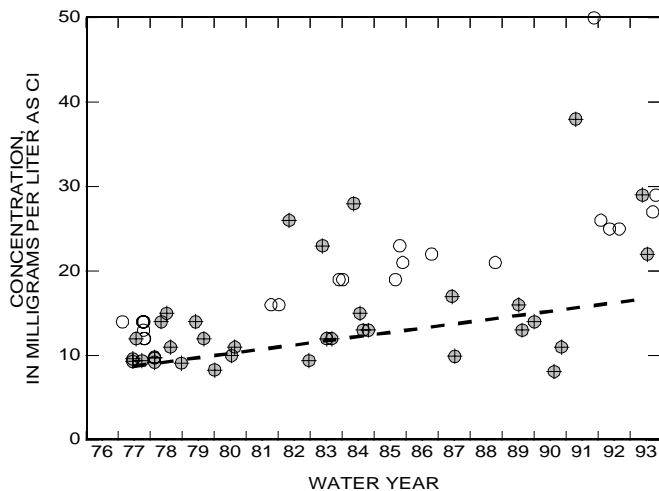
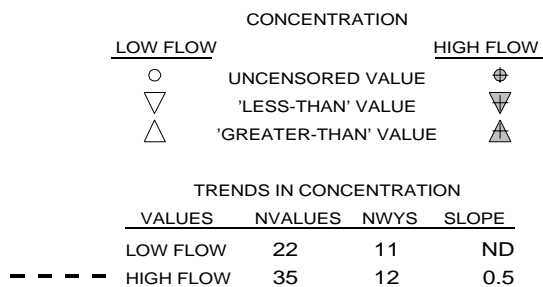
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



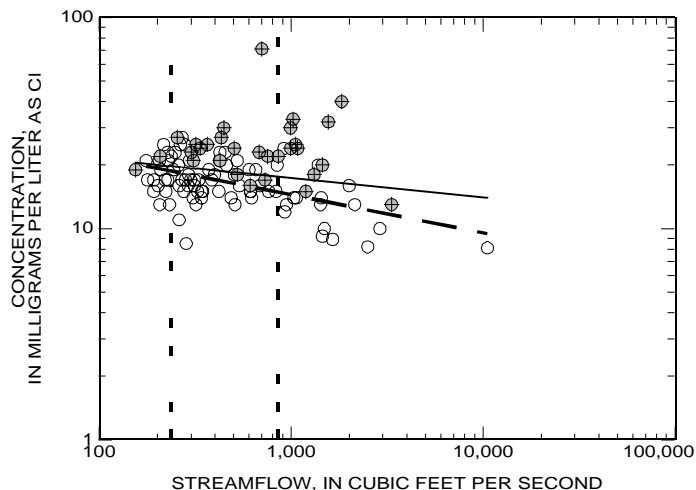
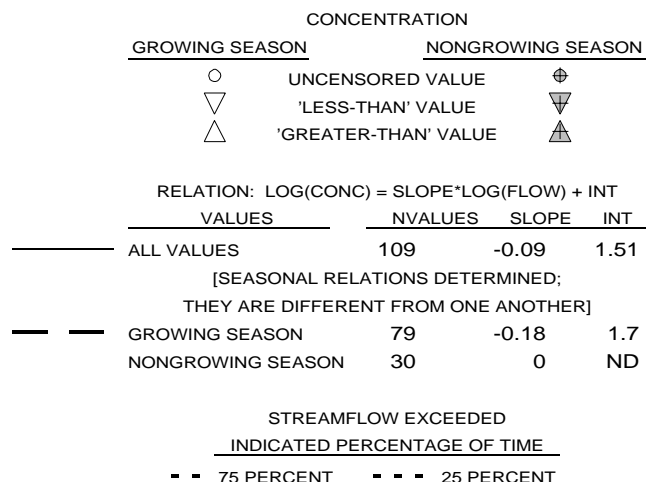
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



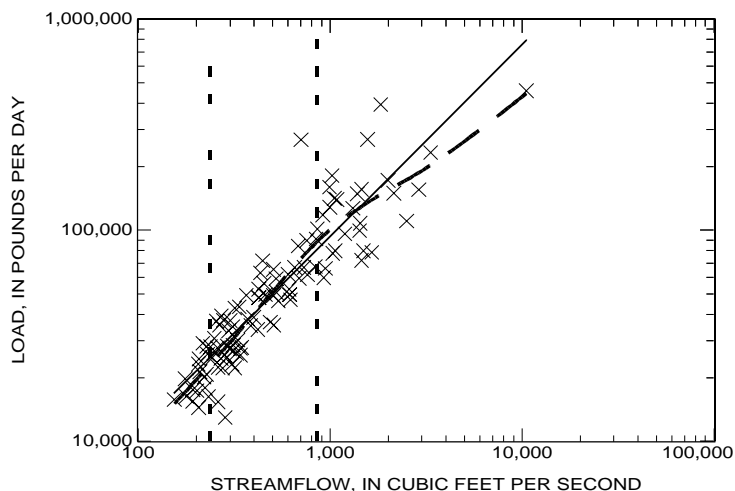
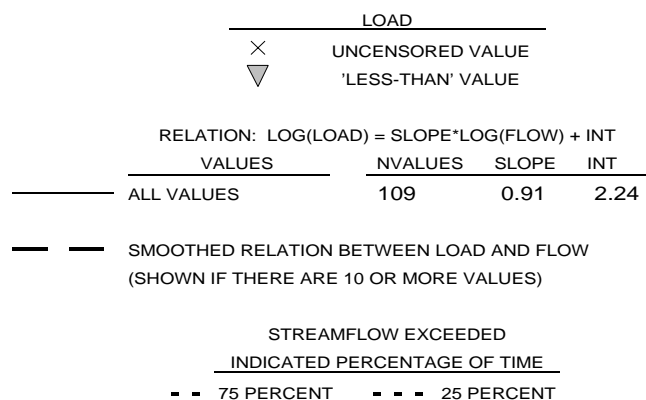
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

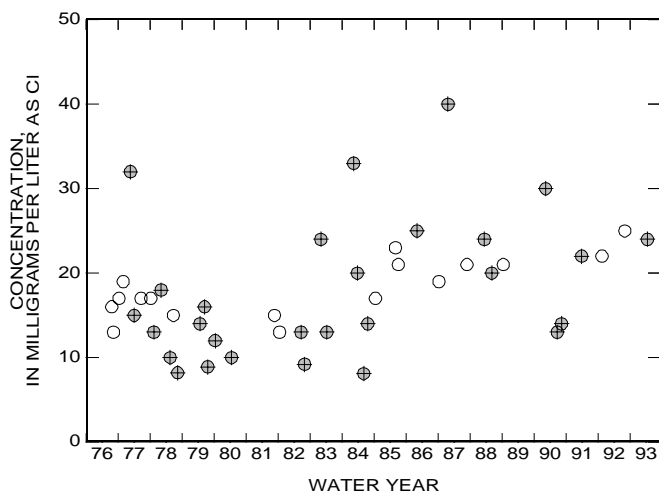
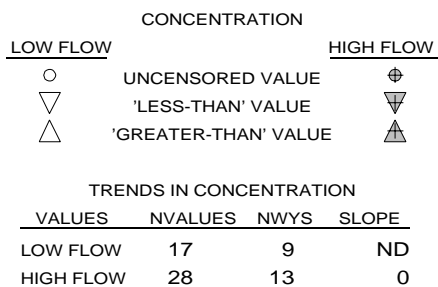
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



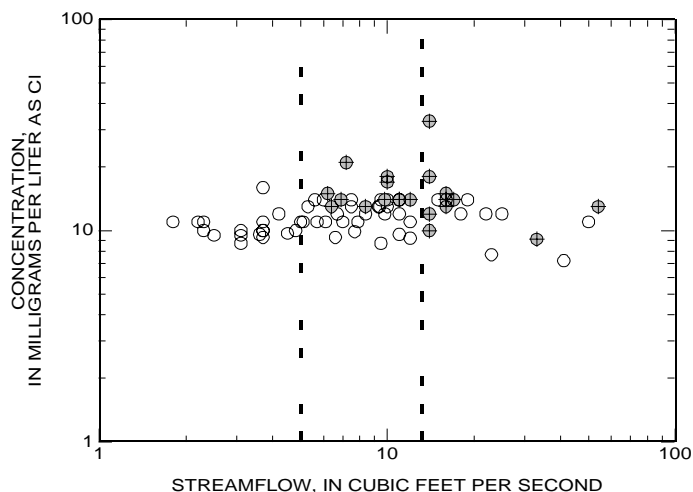
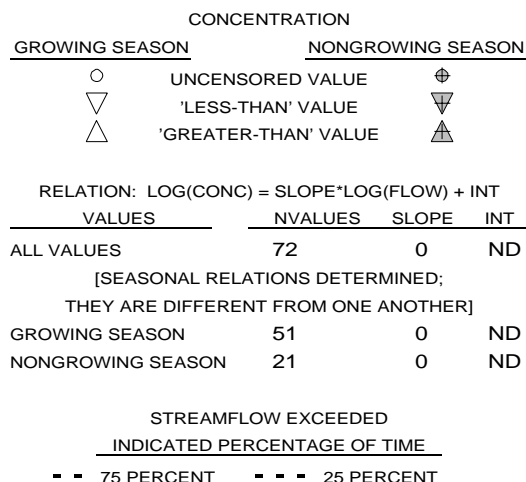
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



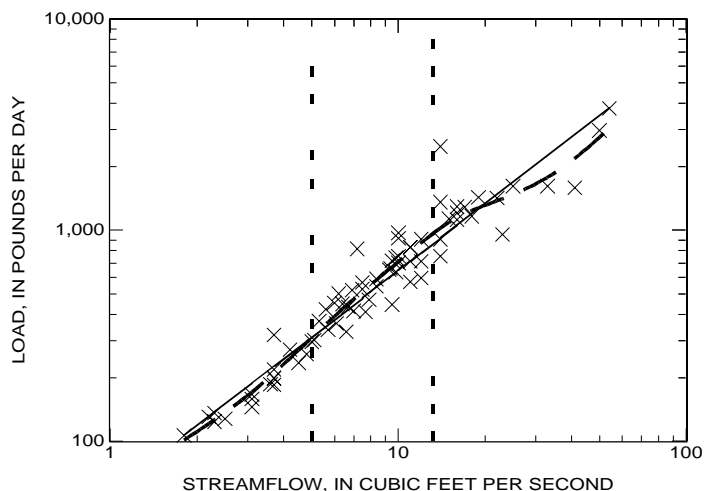
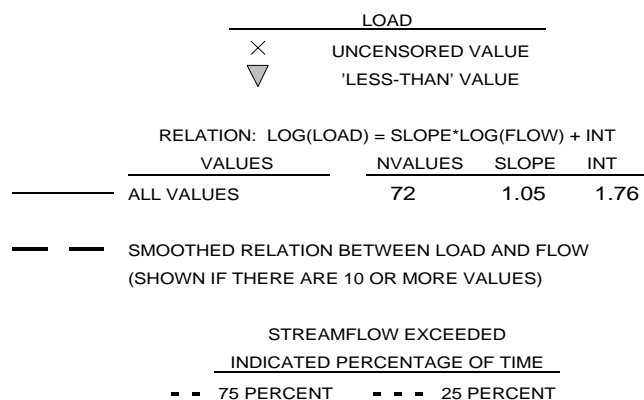
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

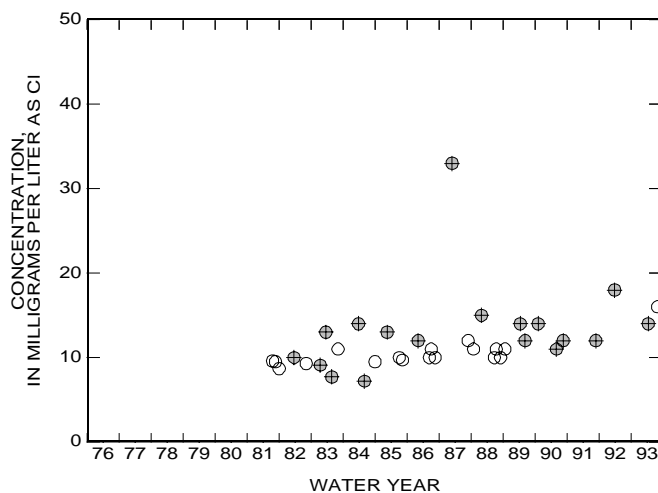
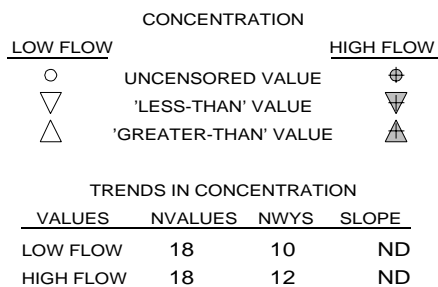
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



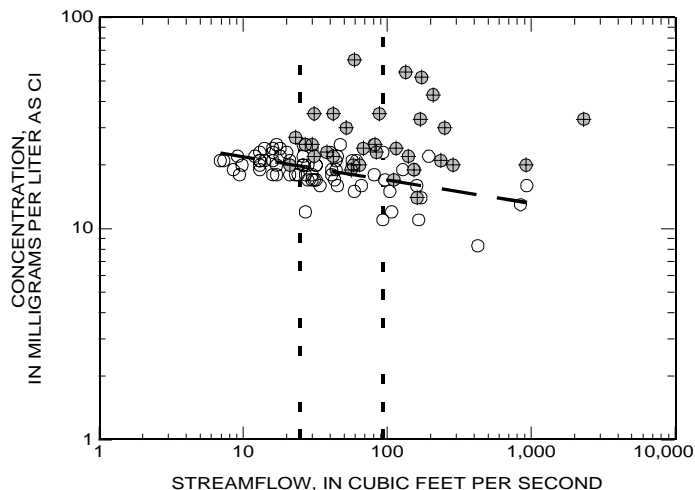
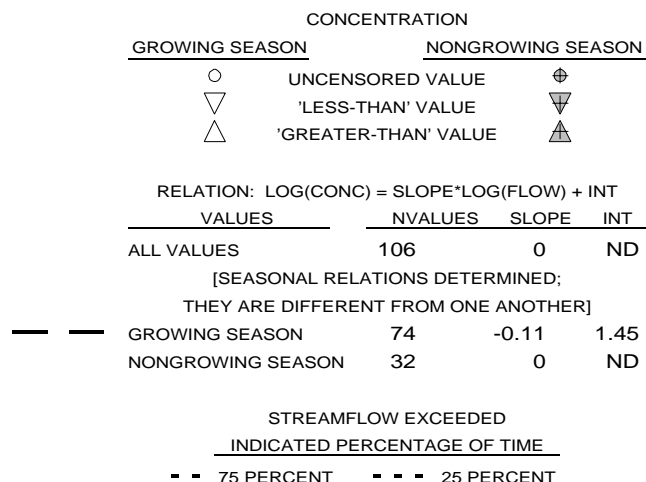
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



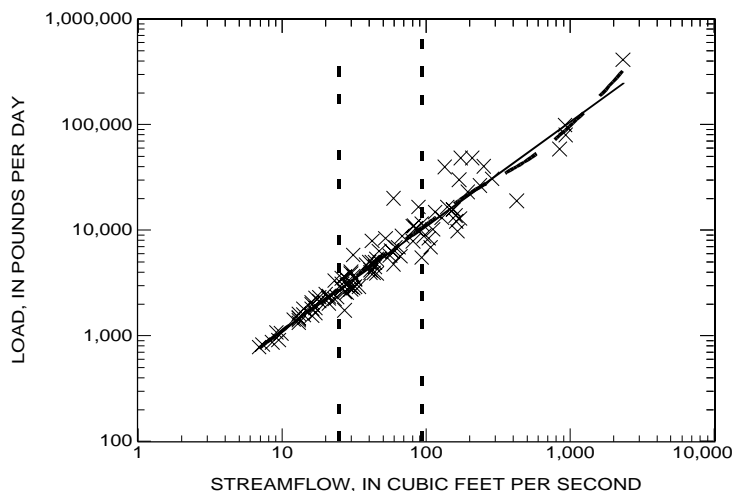
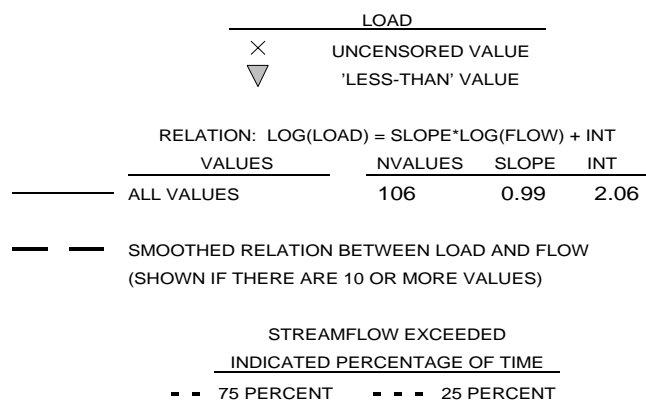
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

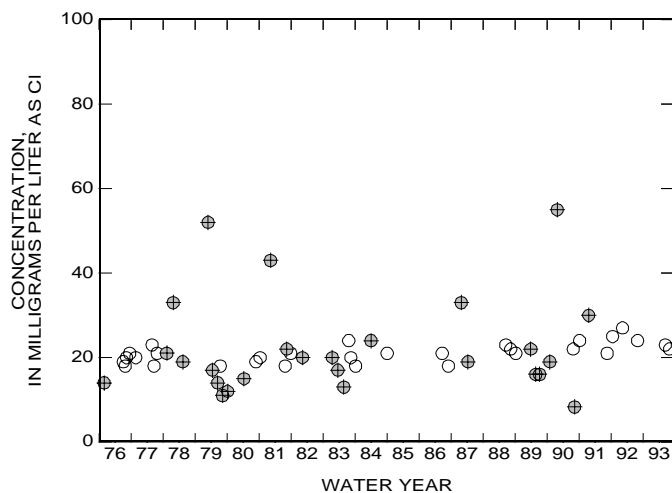
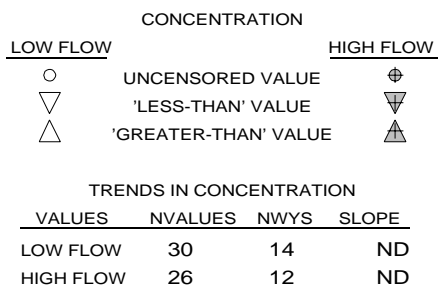
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



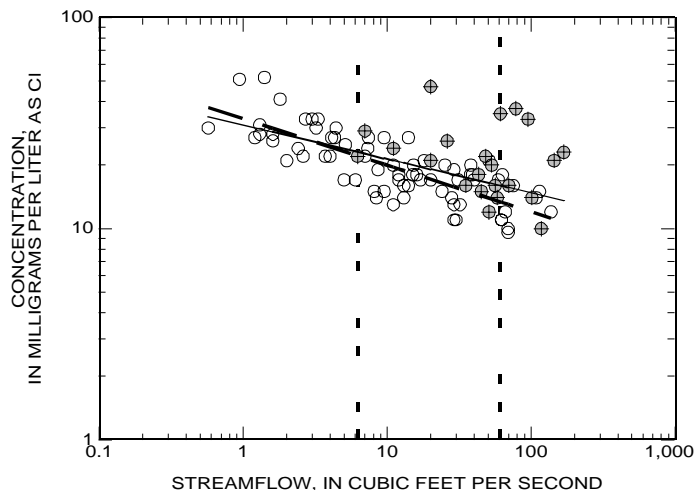
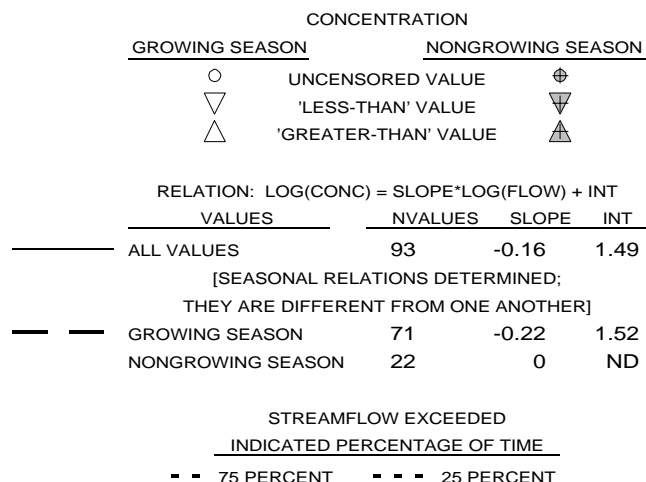
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



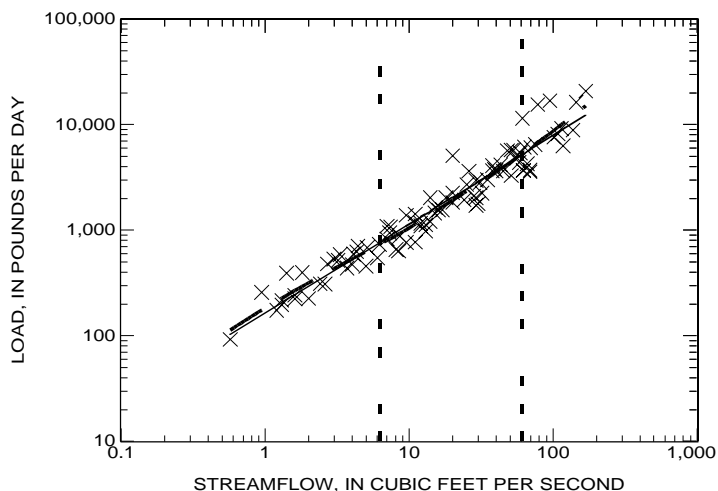
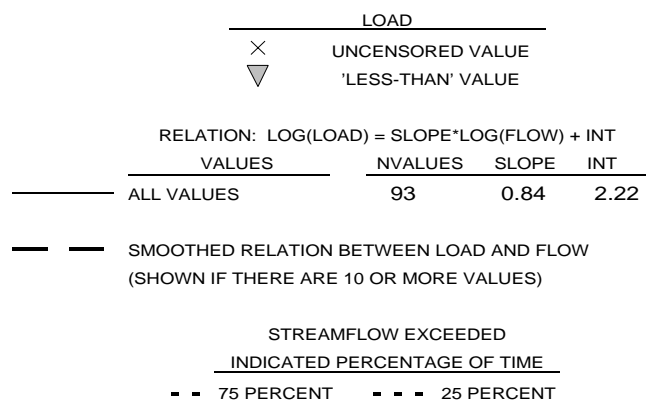
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

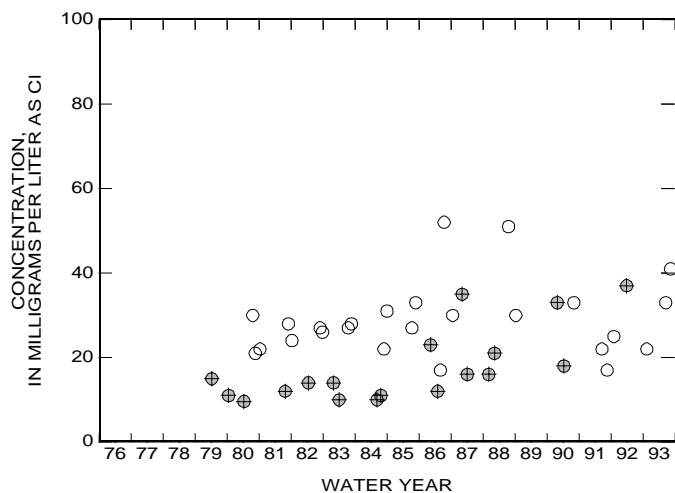
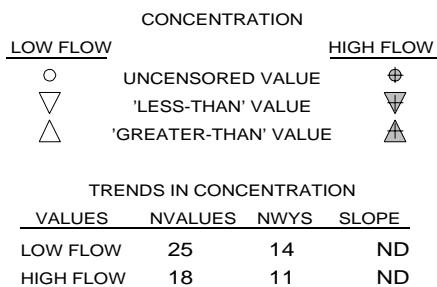
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



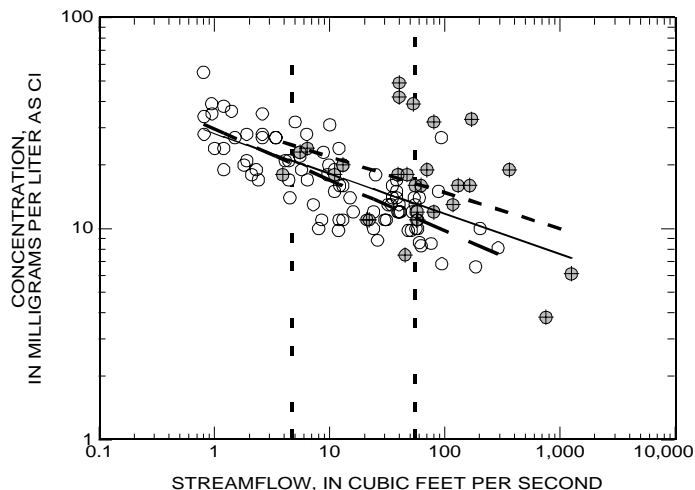
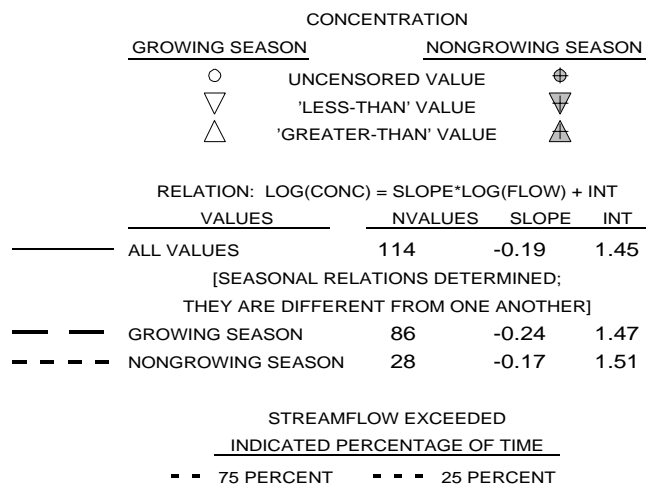
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



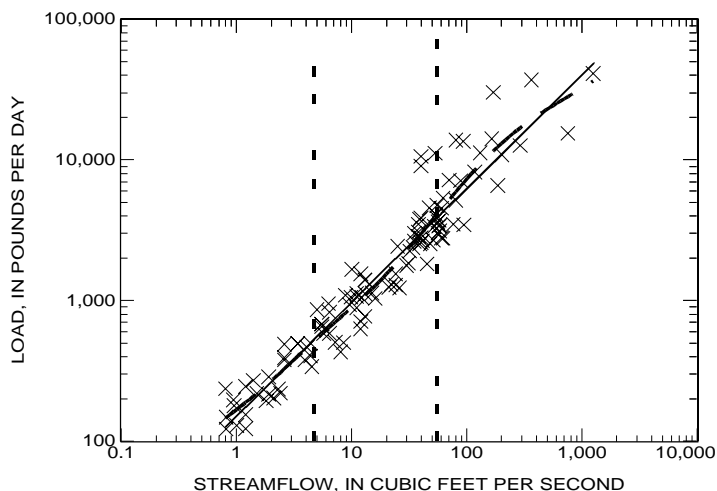
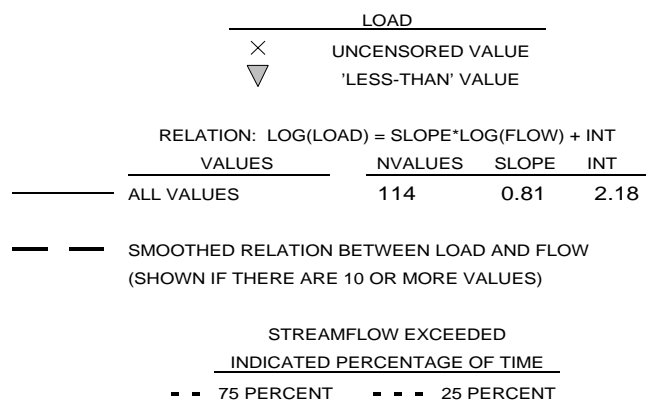
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

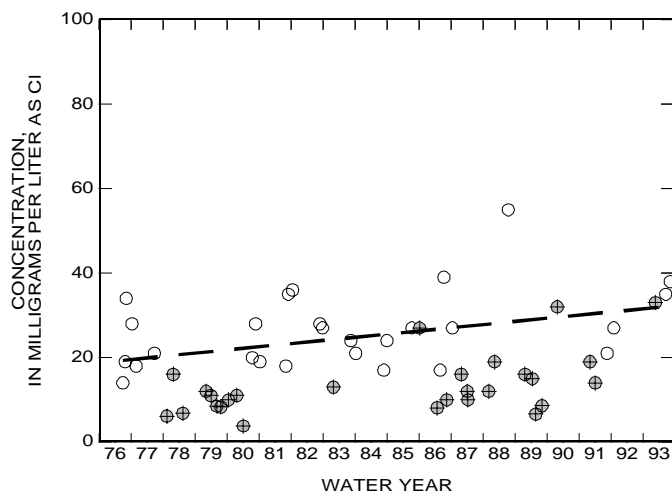
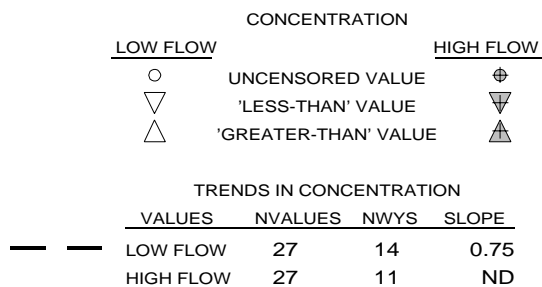
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



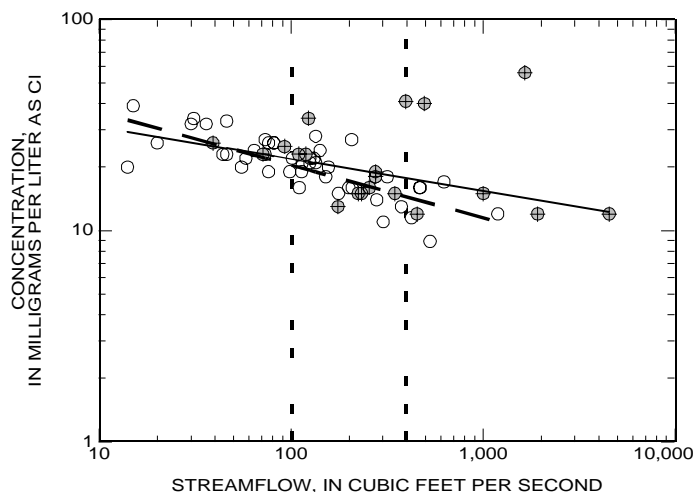
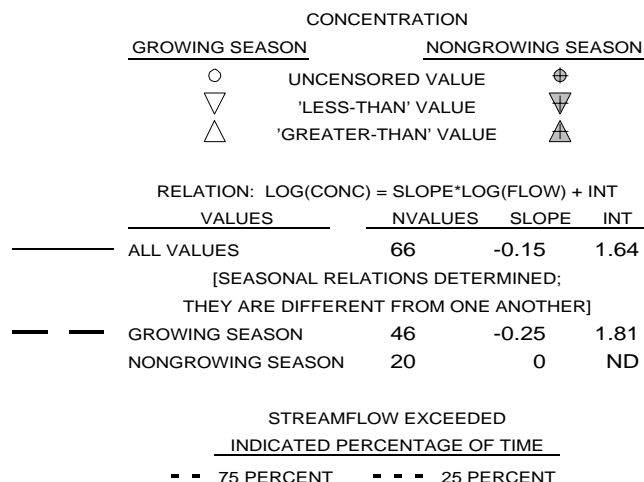
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



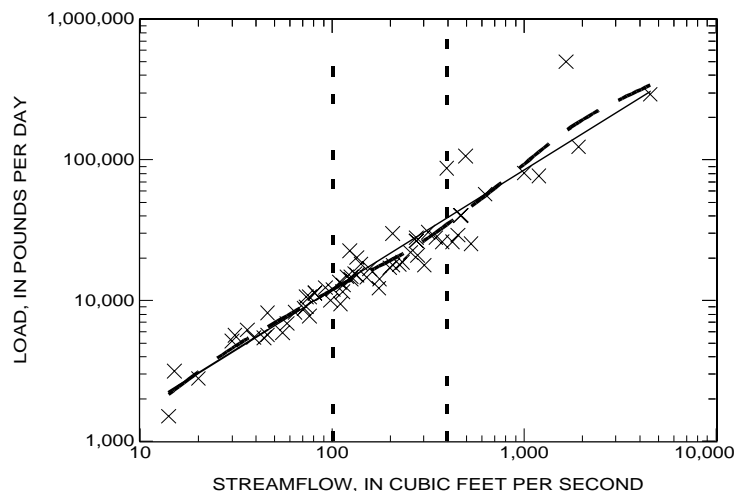
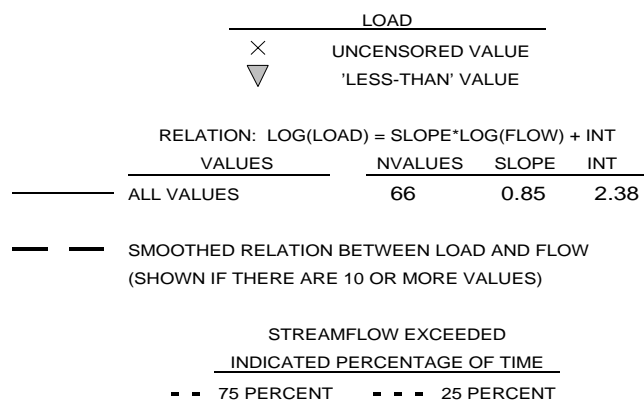
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

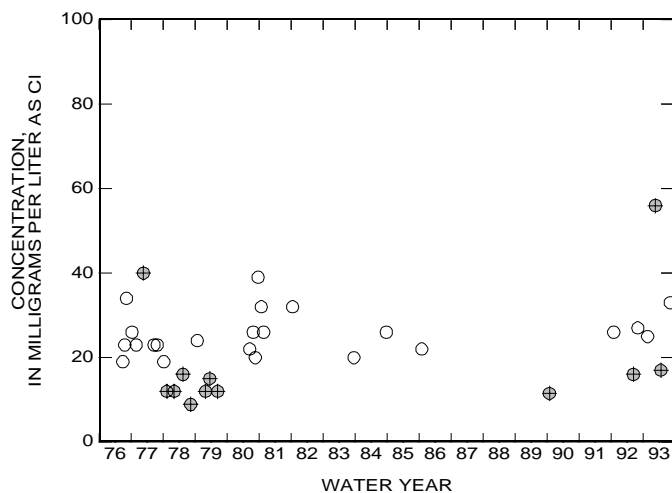
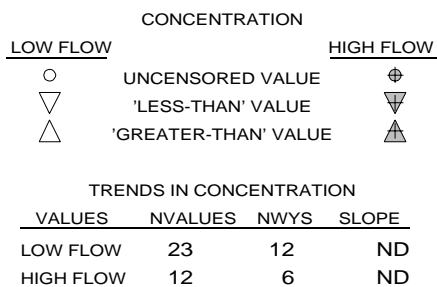
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



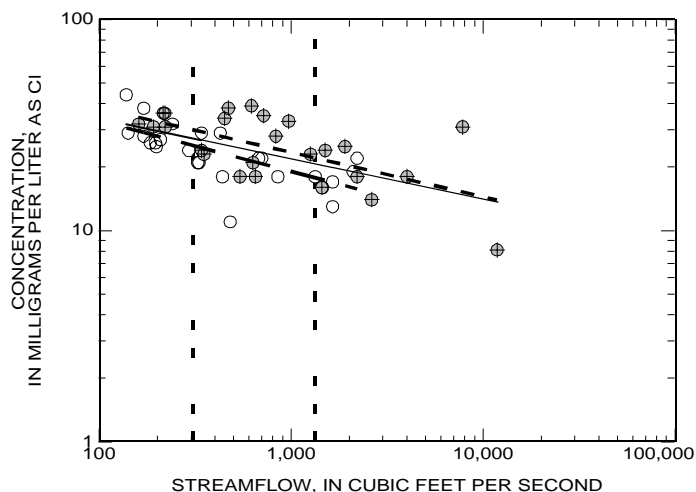
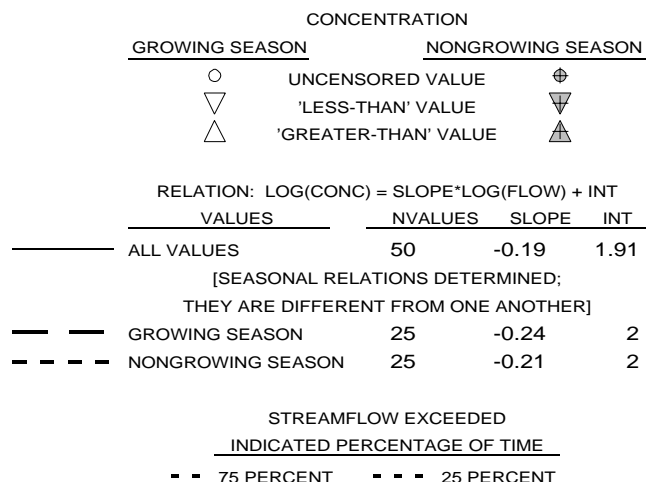
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



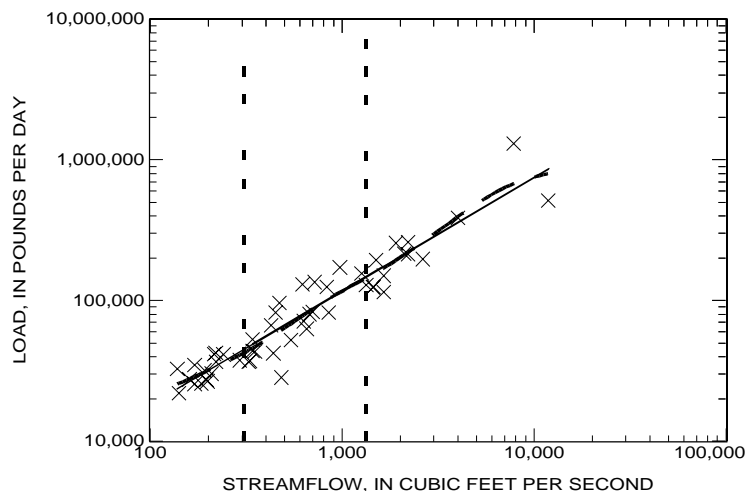
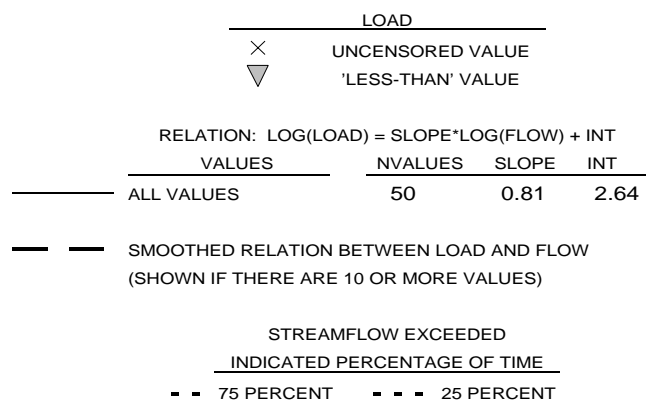
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

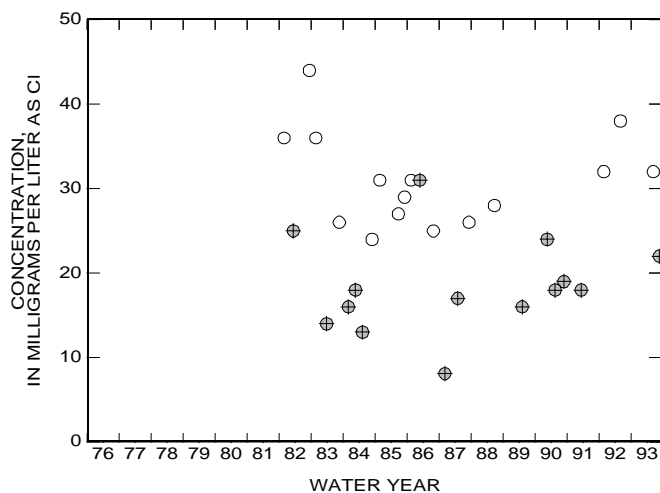
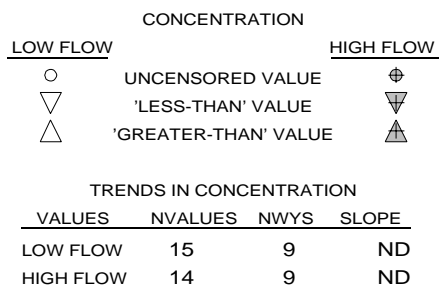
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



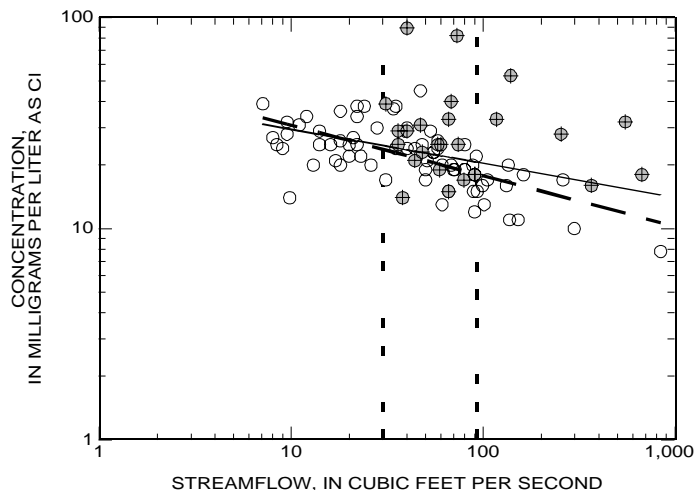
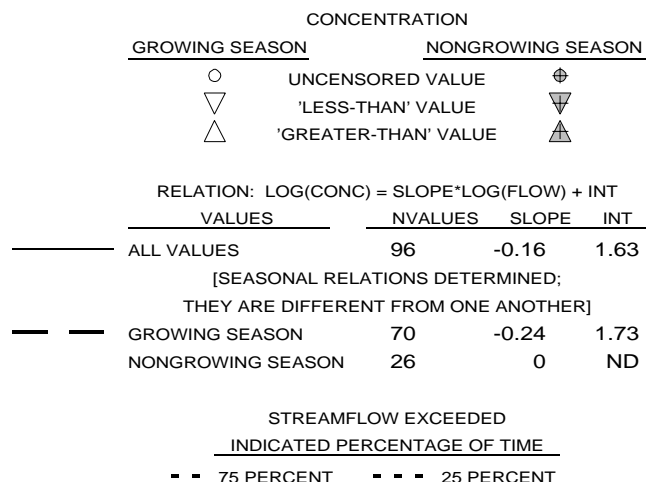
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



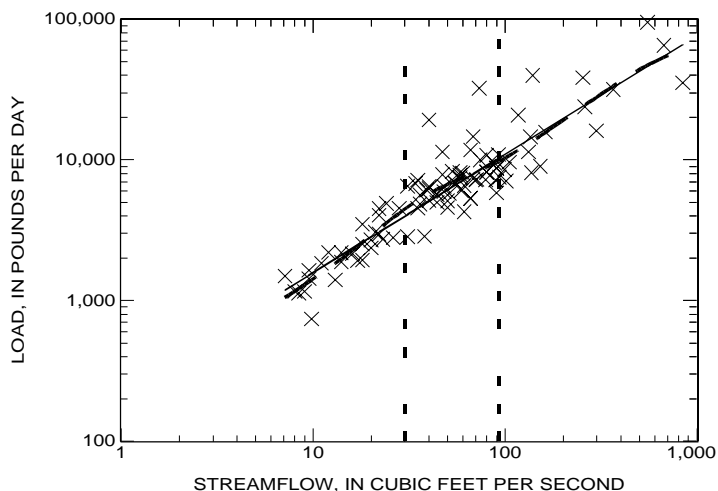
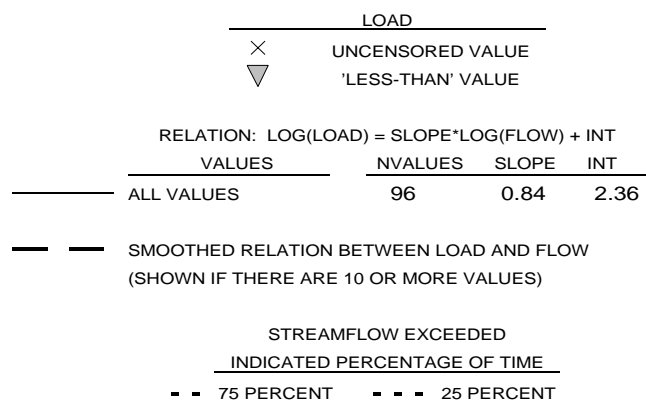
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

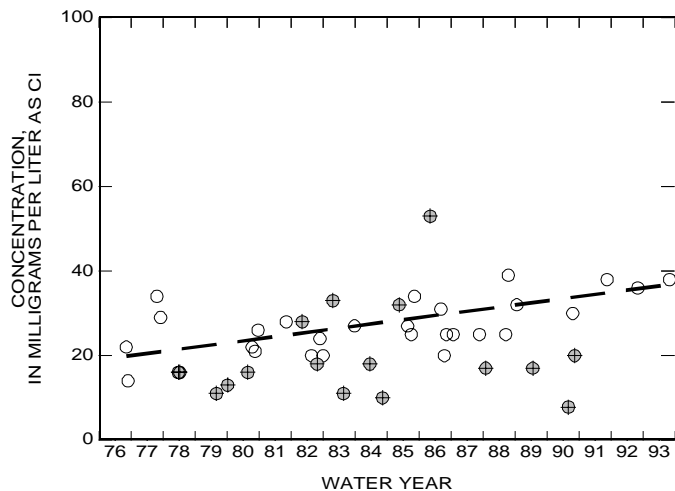
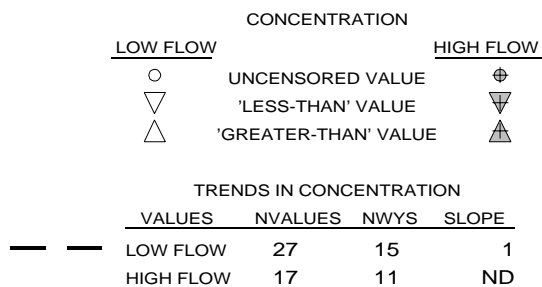
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



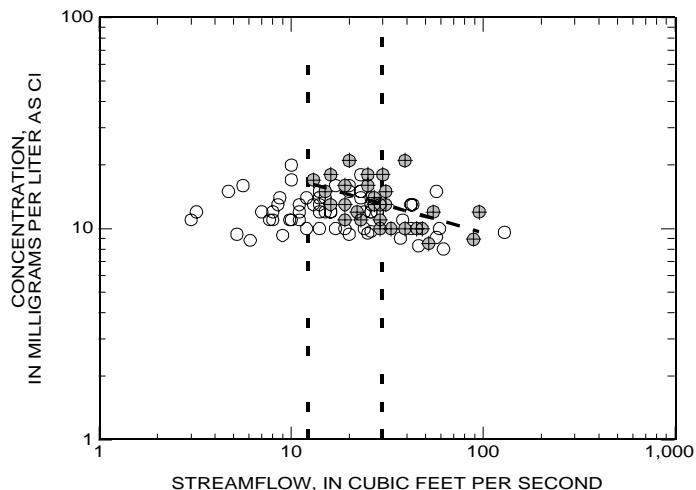
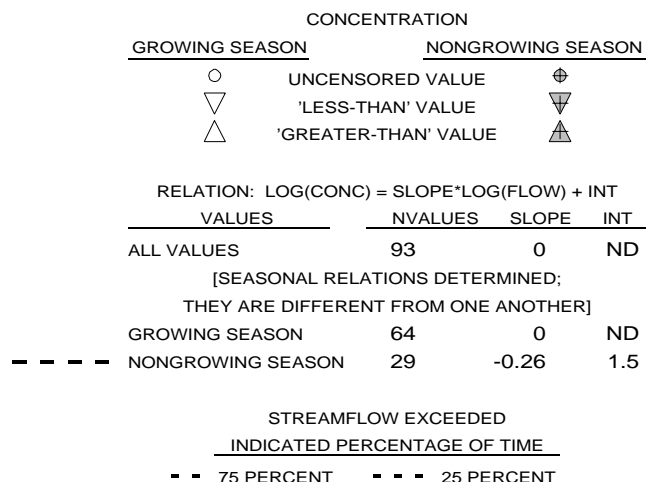
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



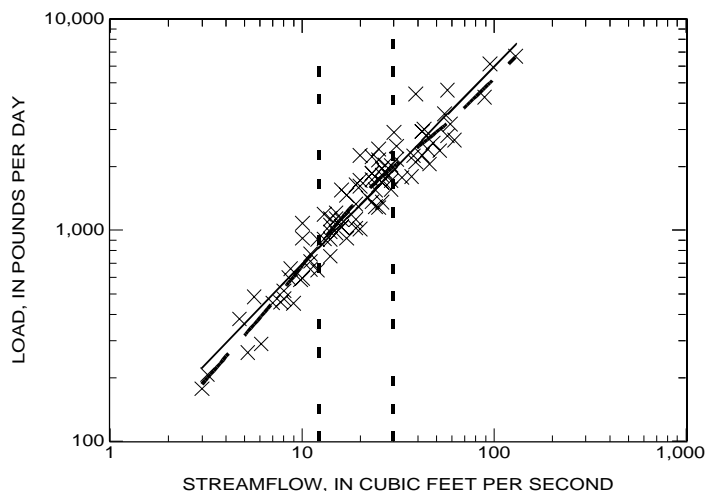
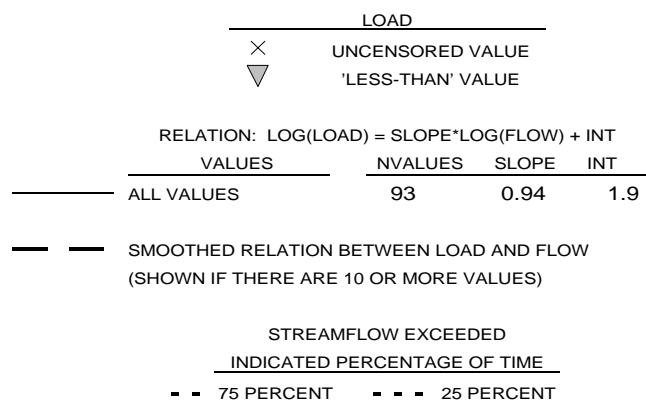
APPENDIX 7. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED CHLORIDE
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

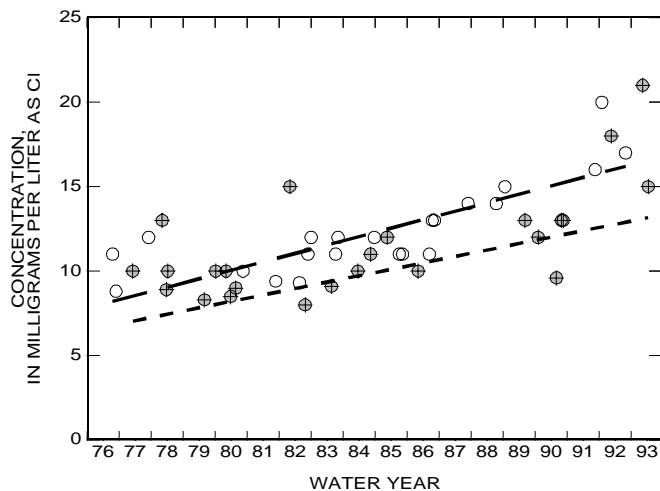
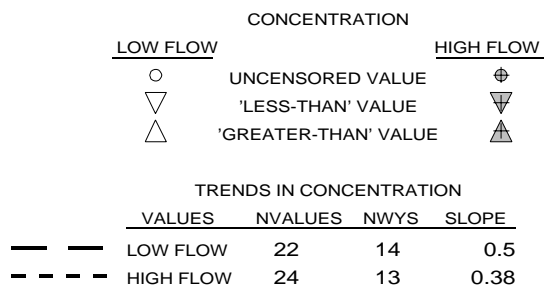
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



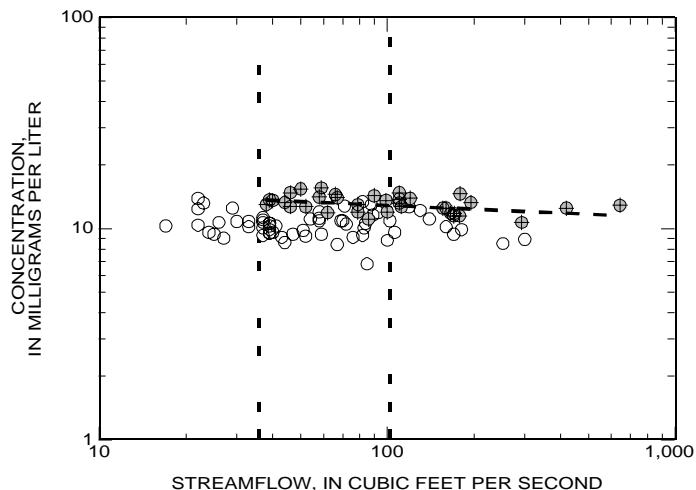
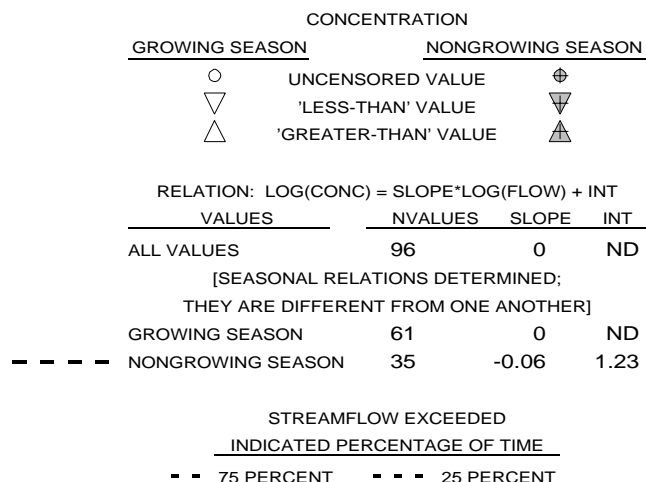
Appendix 8 - Dissolved oxygen

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

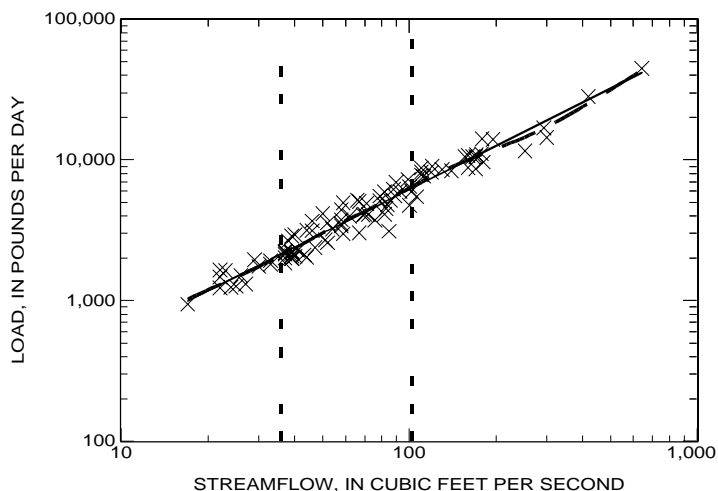
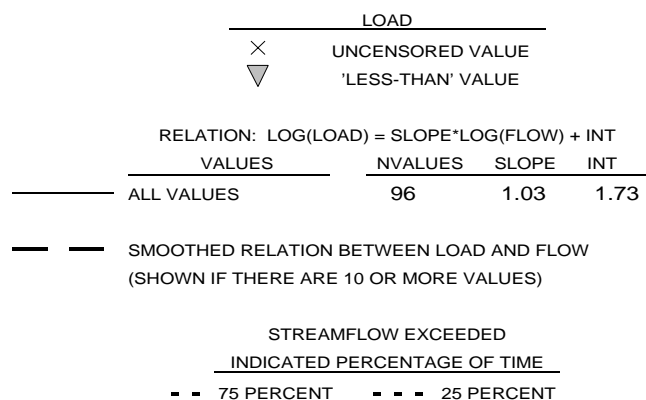
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

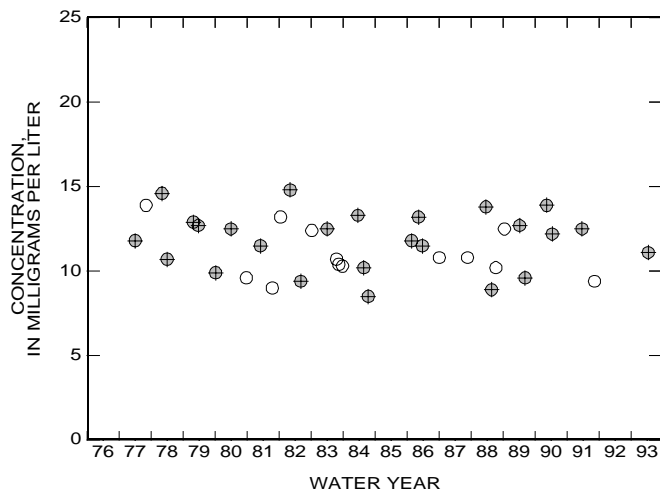
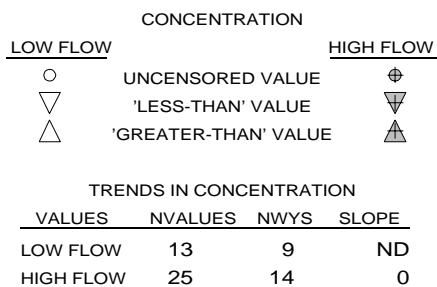
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



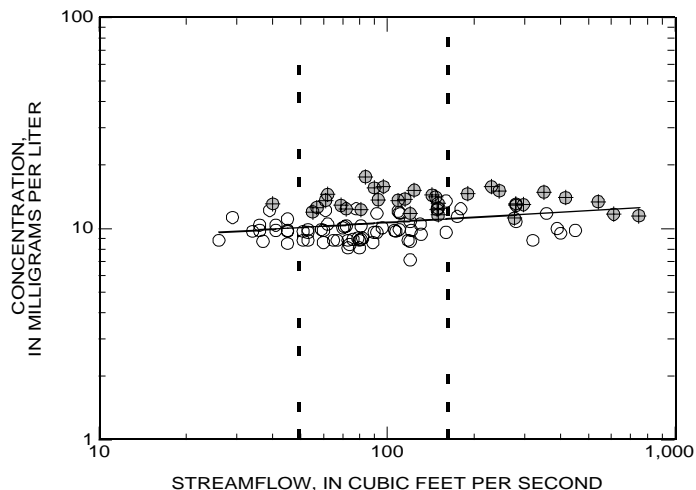
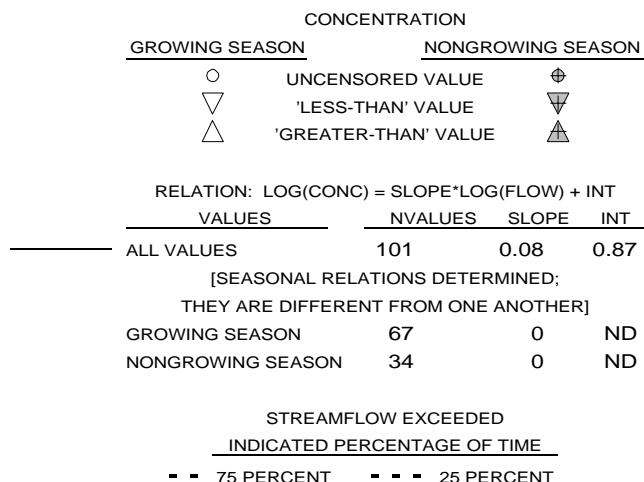
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



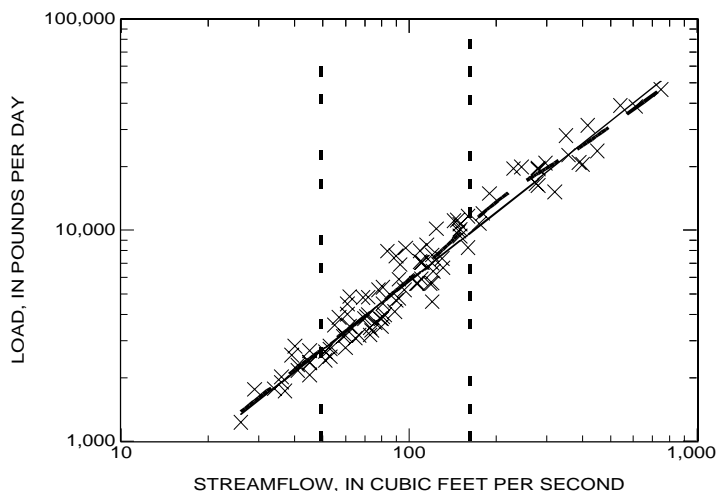
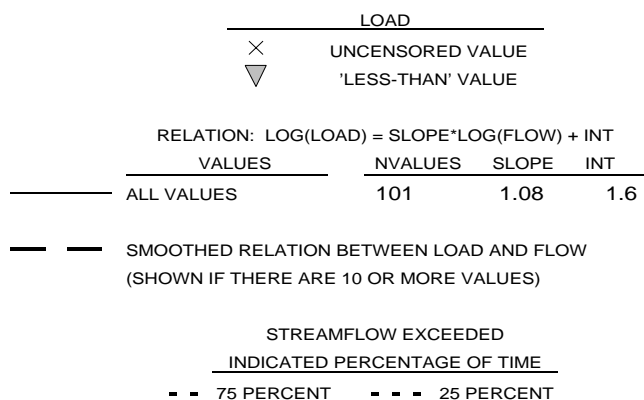
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED OXYGEN
 01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

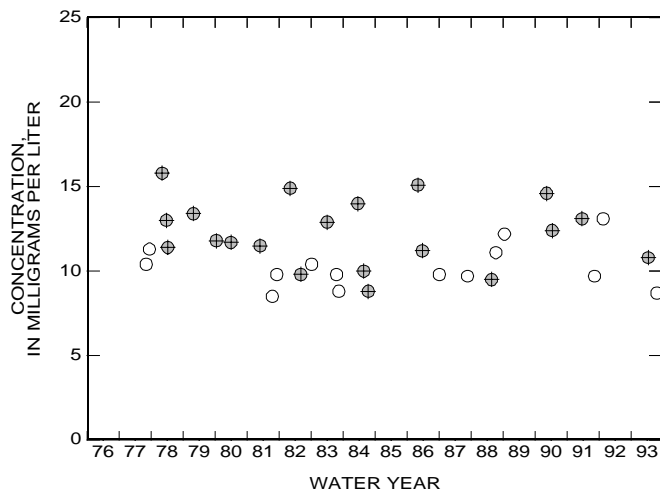
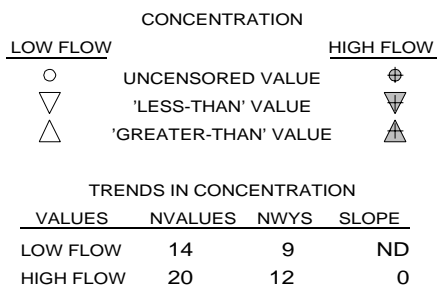
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



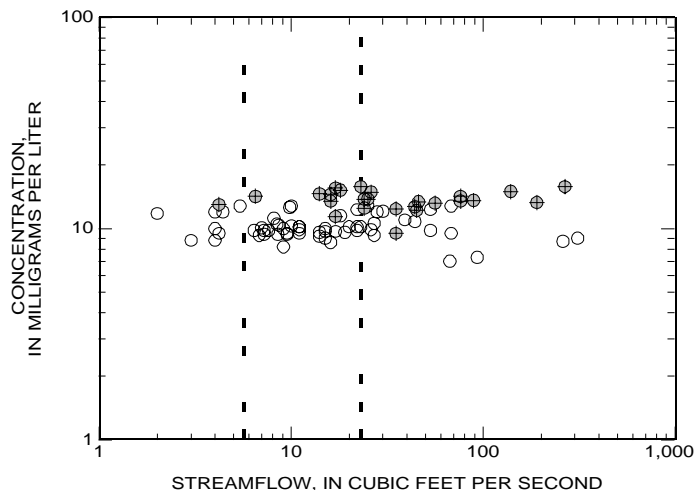
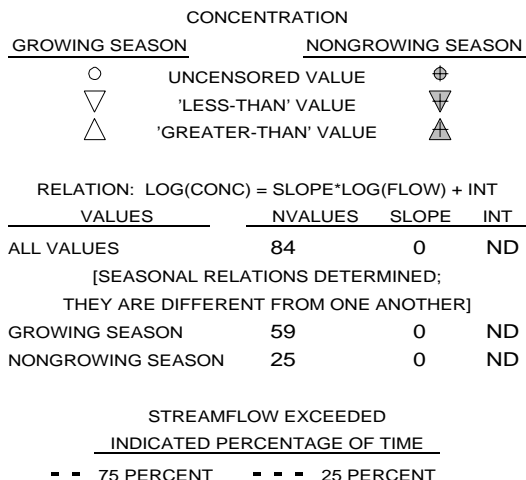
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



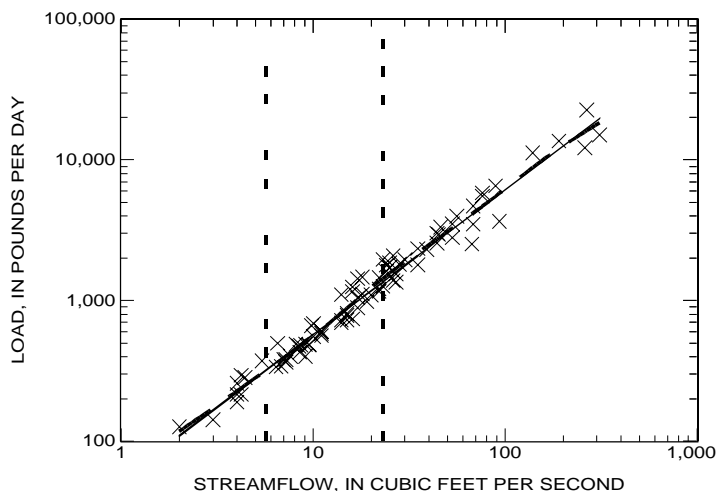
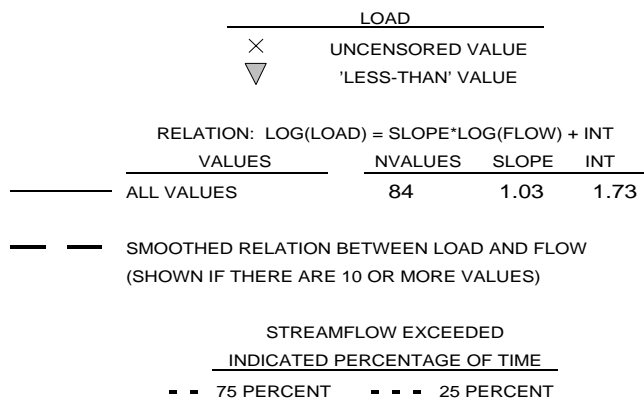
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED OXYGEN
 01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

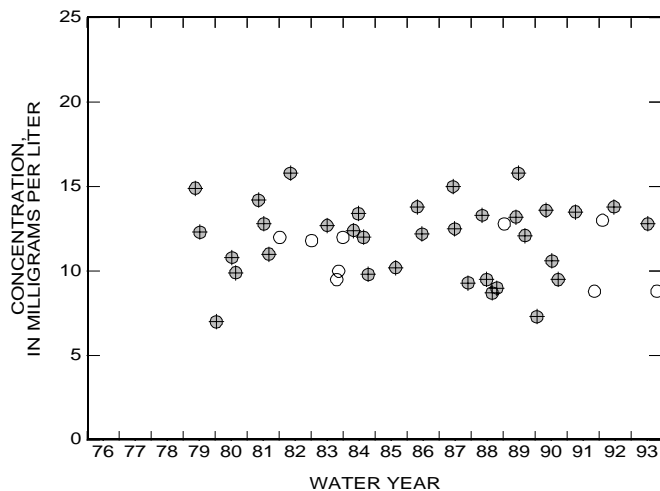
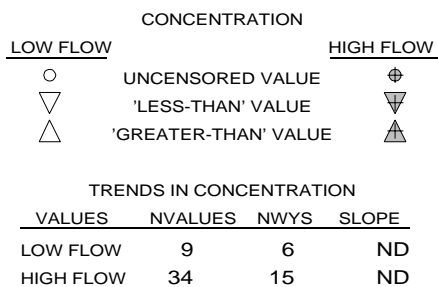
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



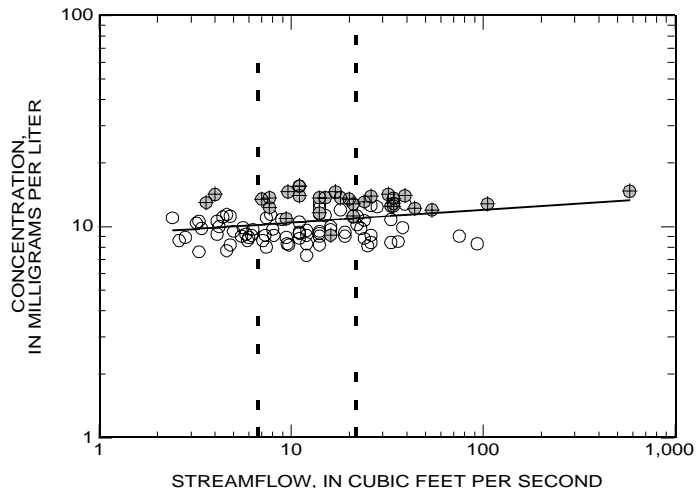
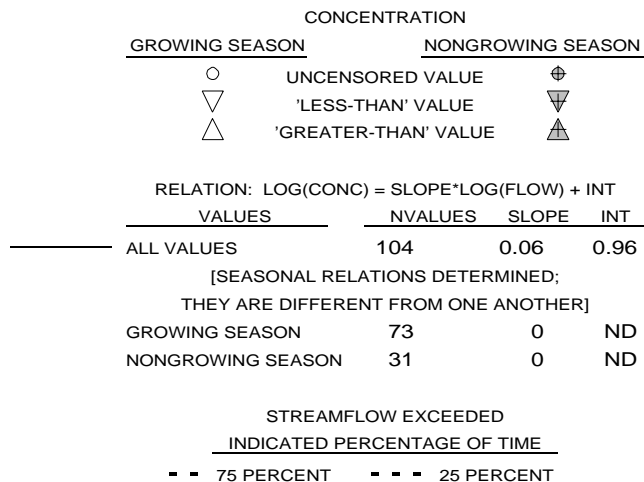
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



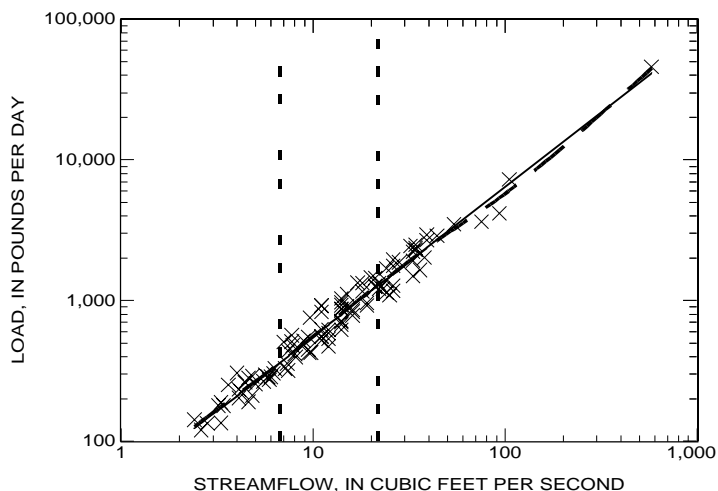
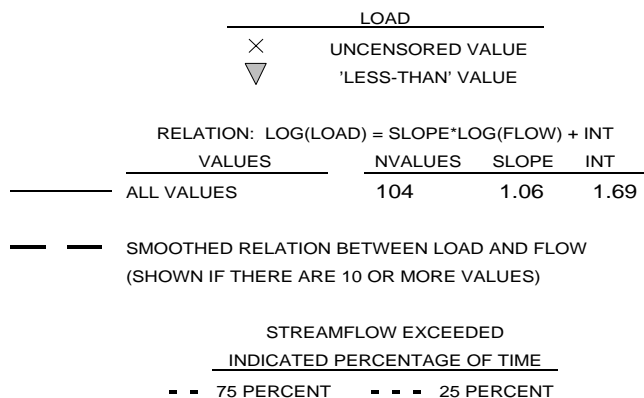
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED OXYGEN
 01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

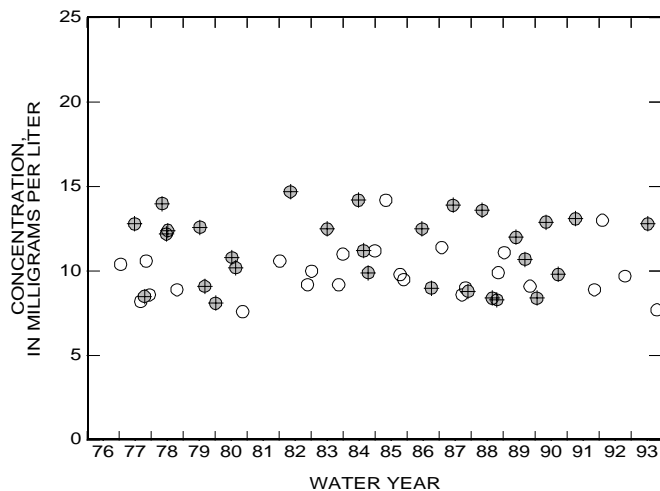
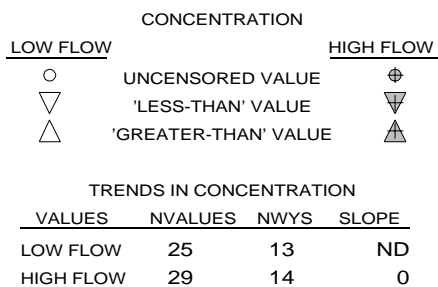
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



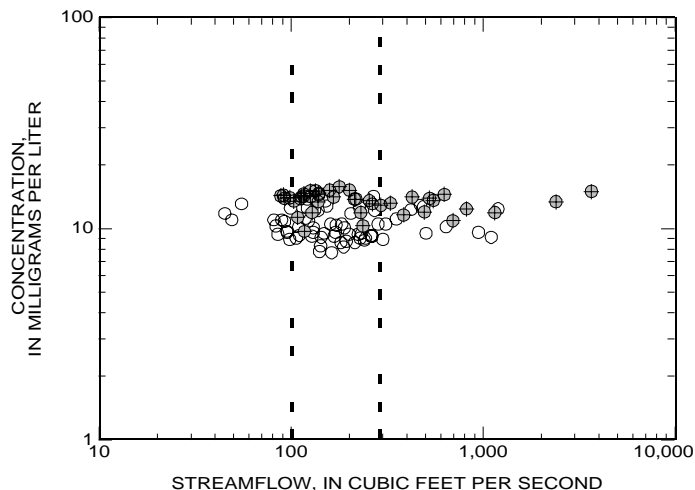
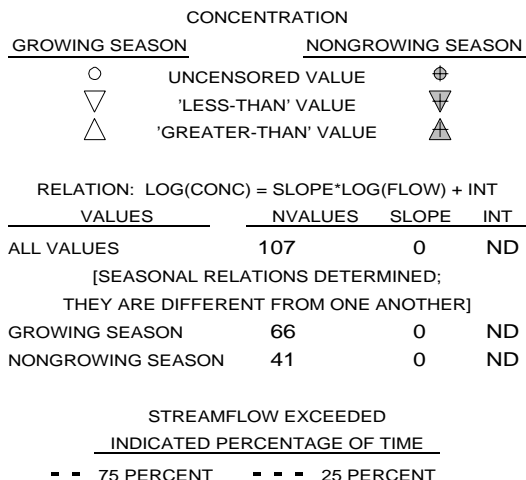
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



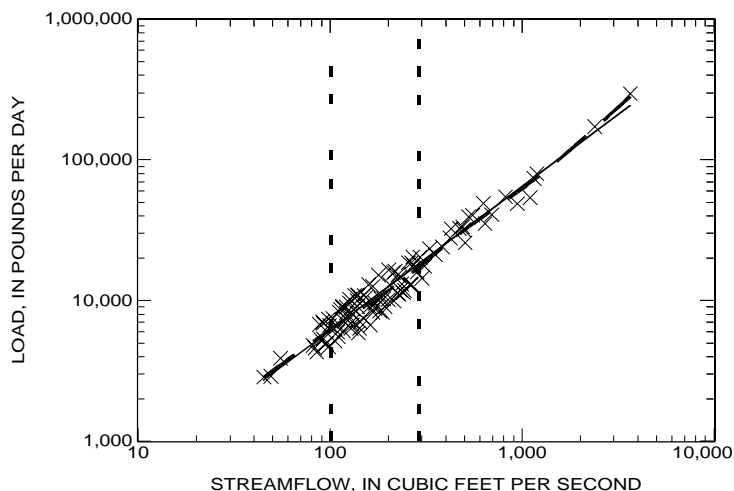
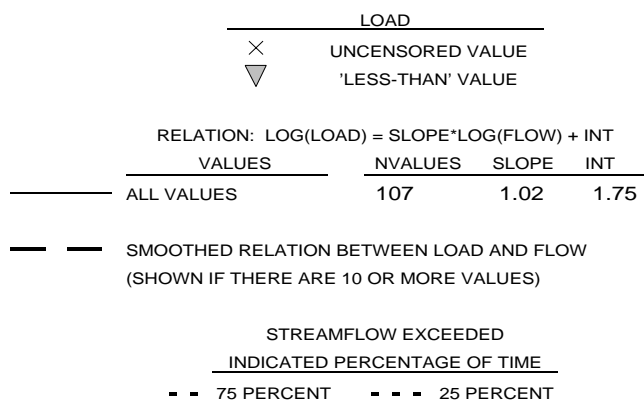
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

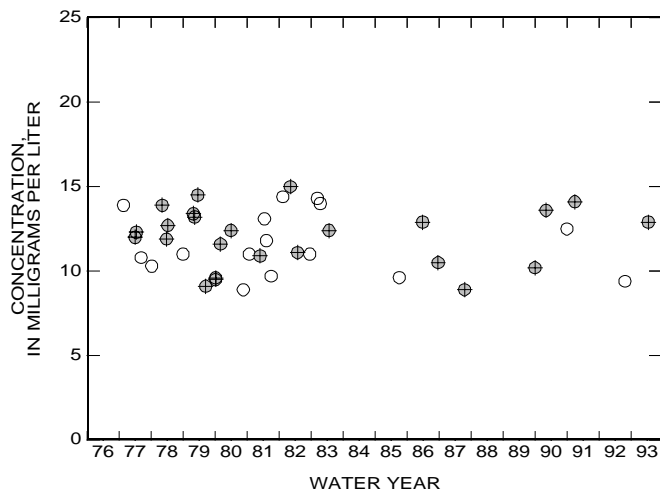
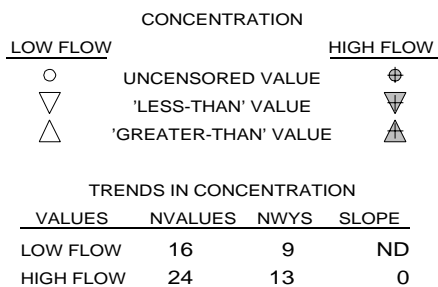
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



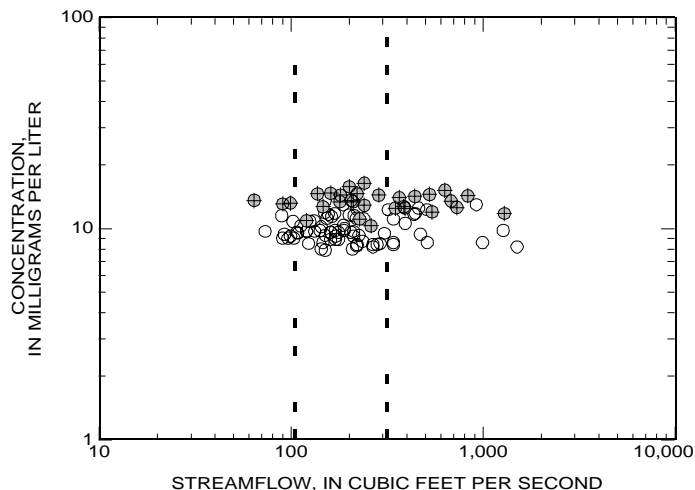
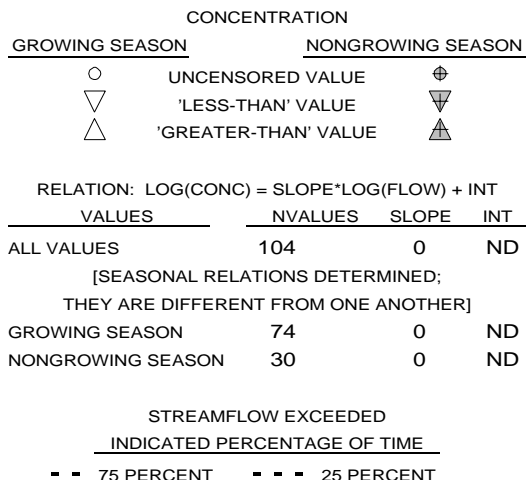
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



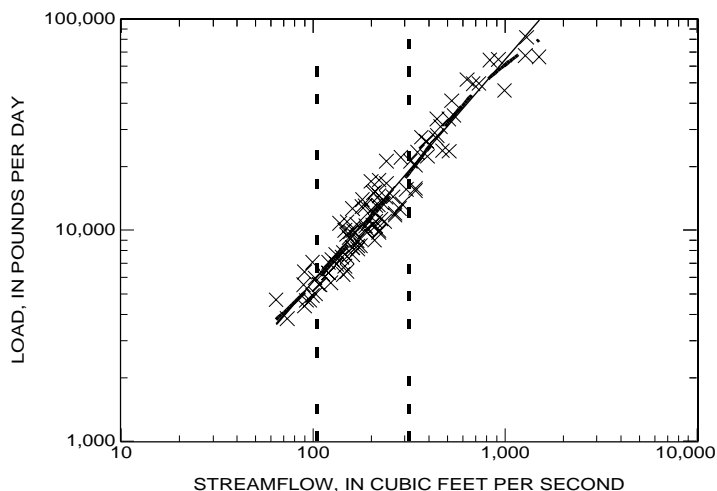
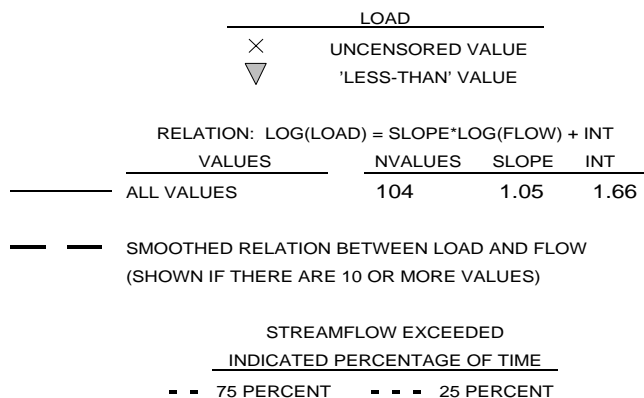
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

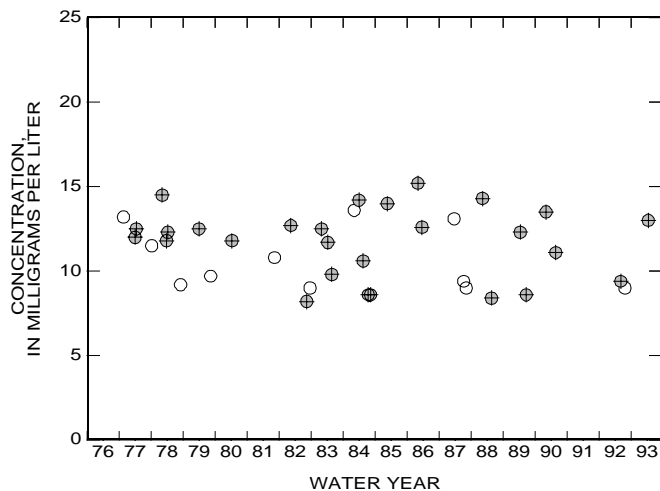
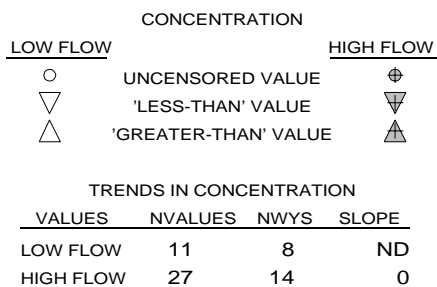
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



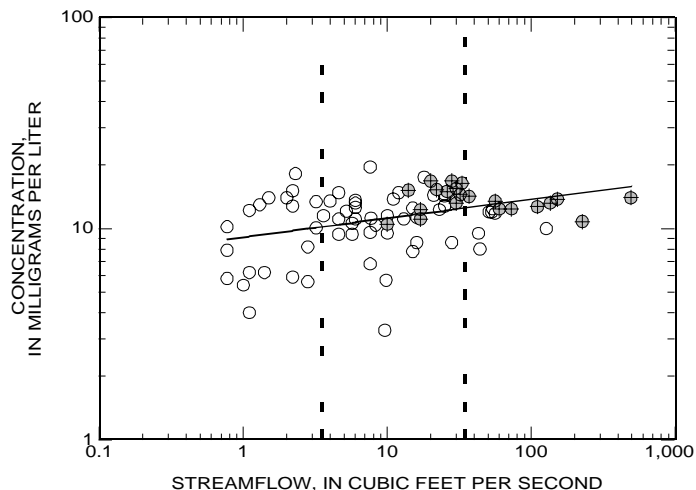
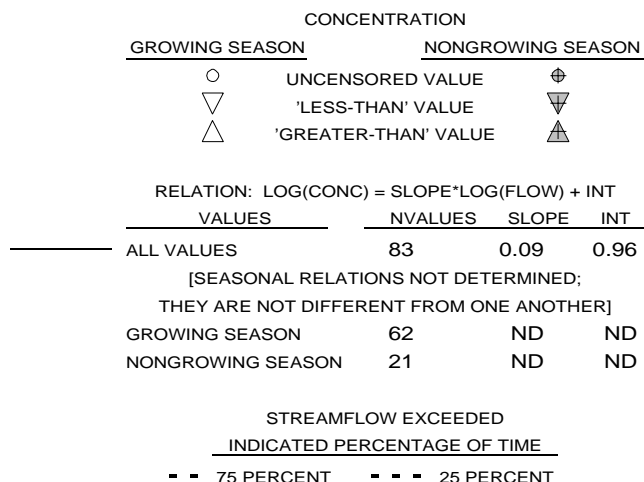
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



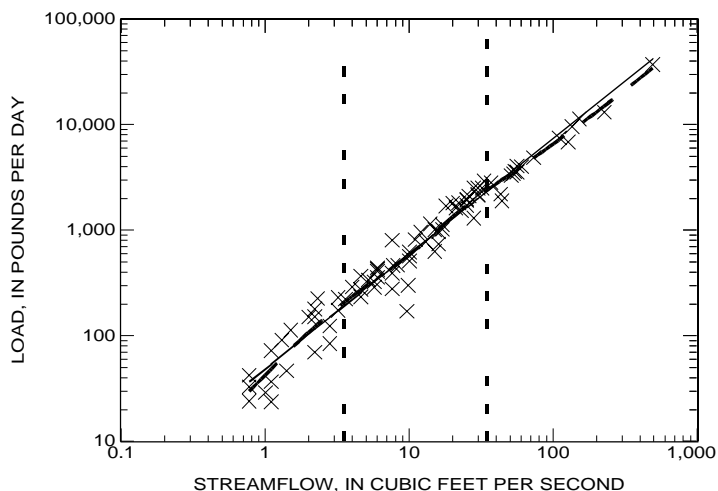
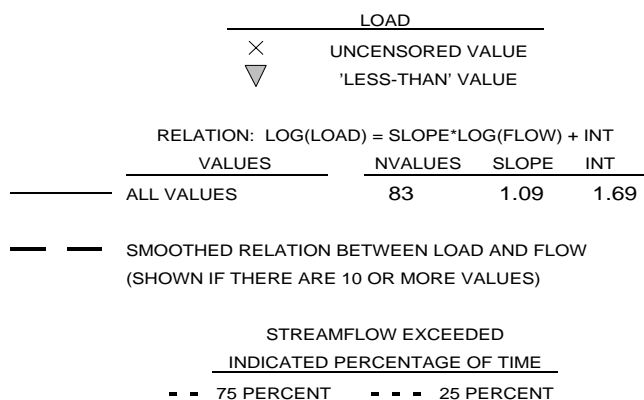
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

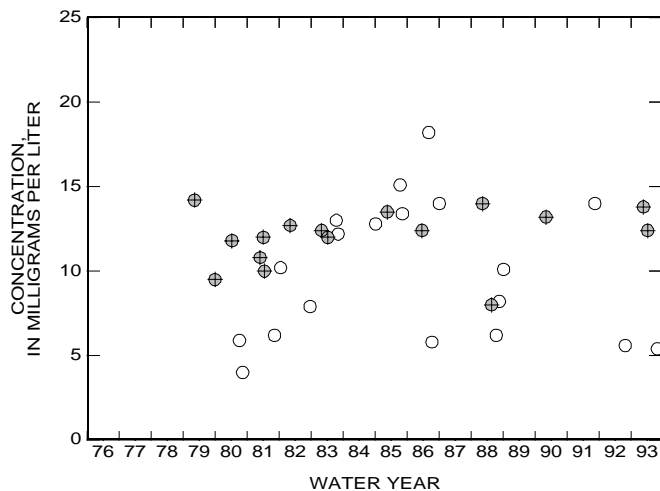
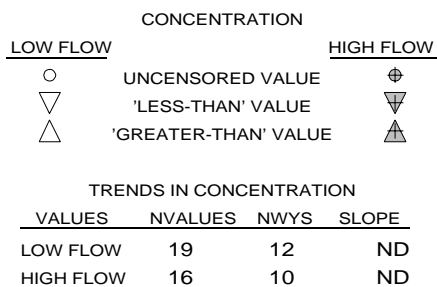
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



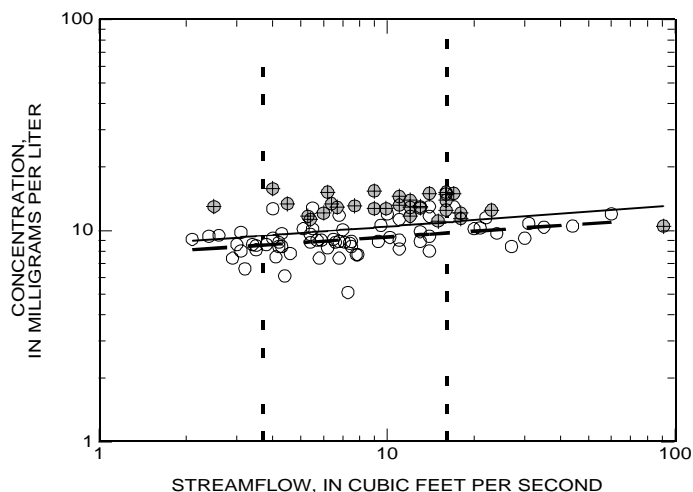
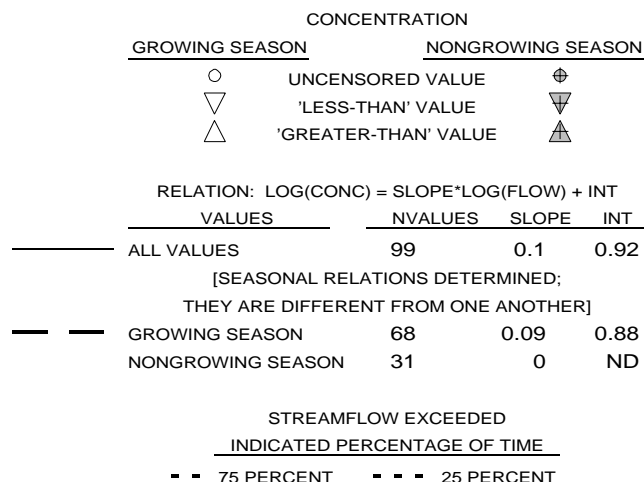
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



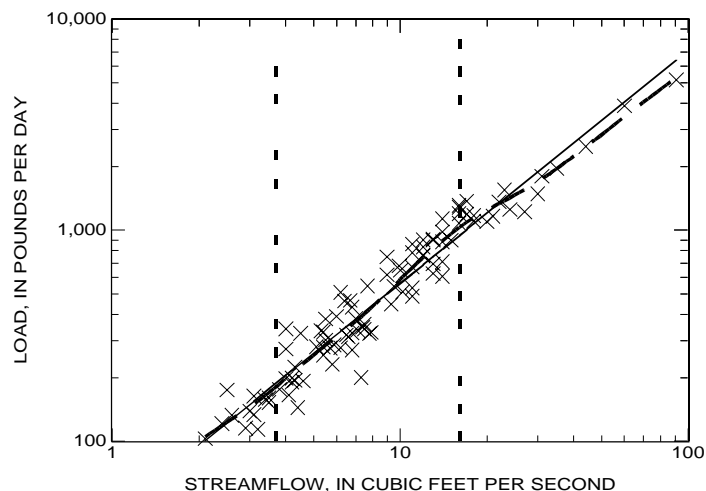
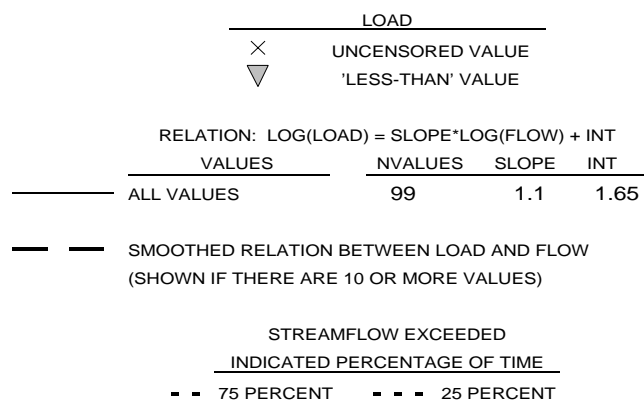
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

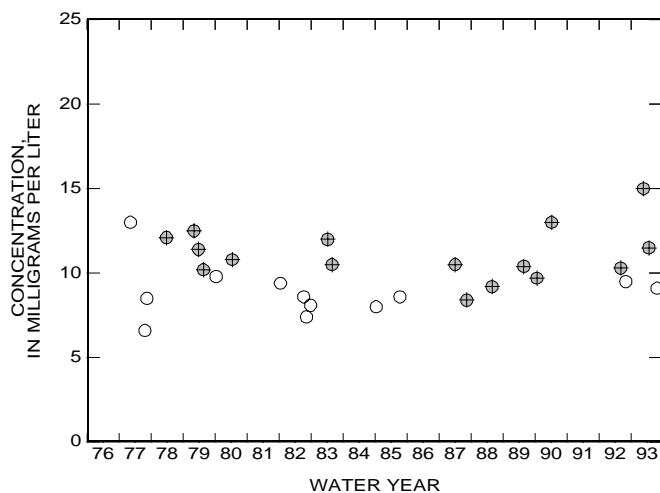
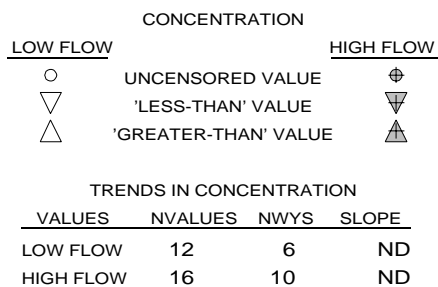
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



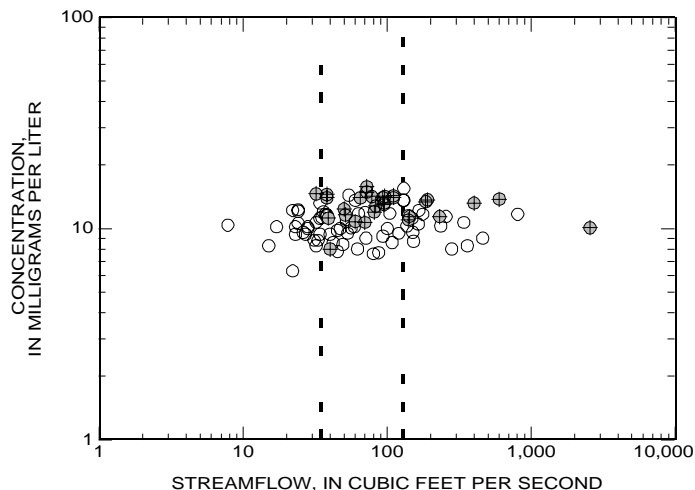
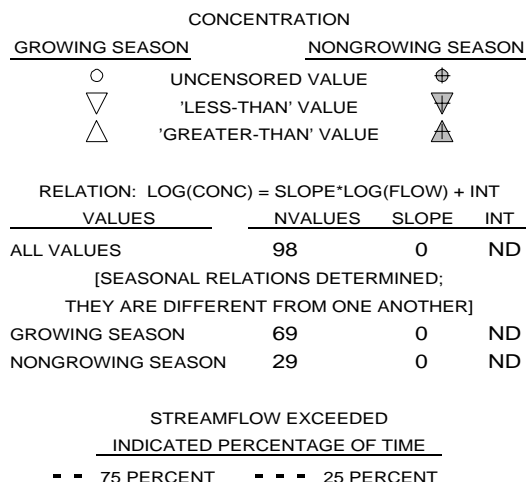
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



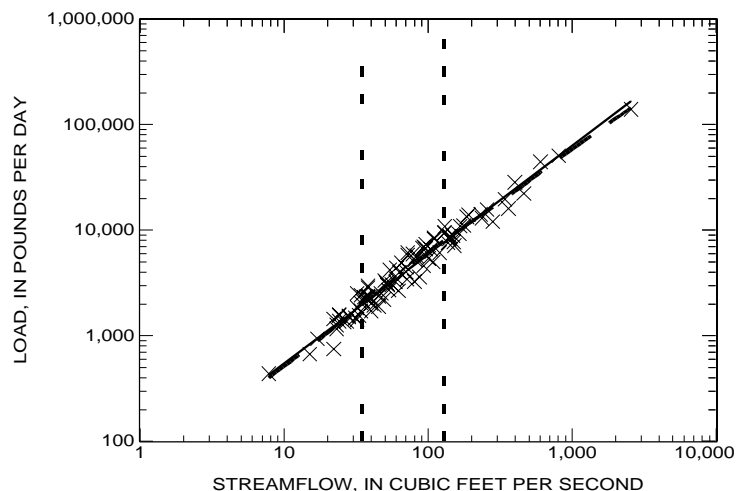
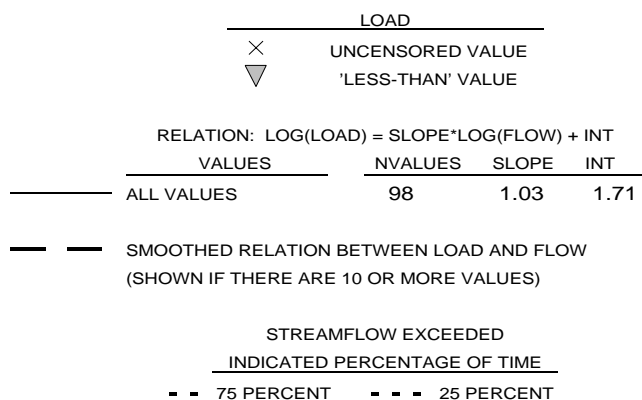
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

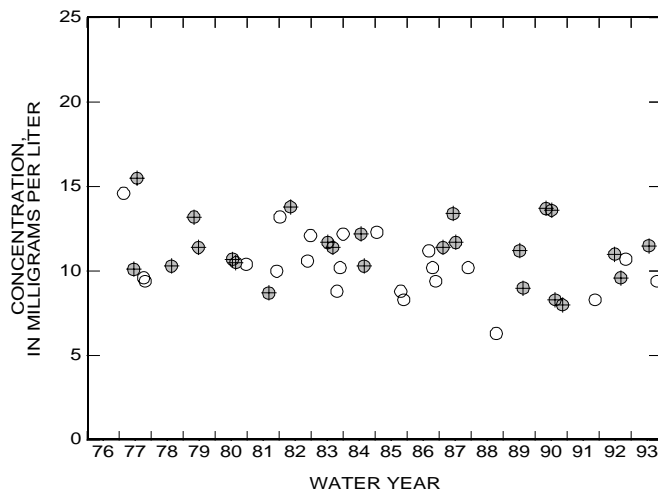
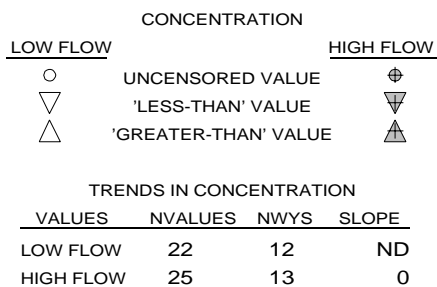
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



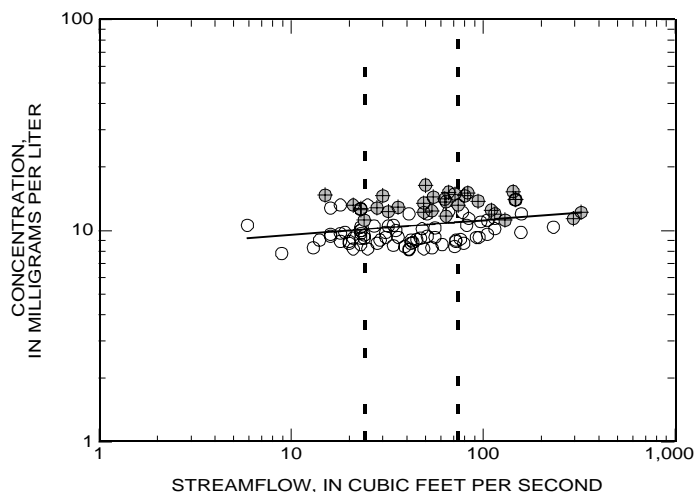
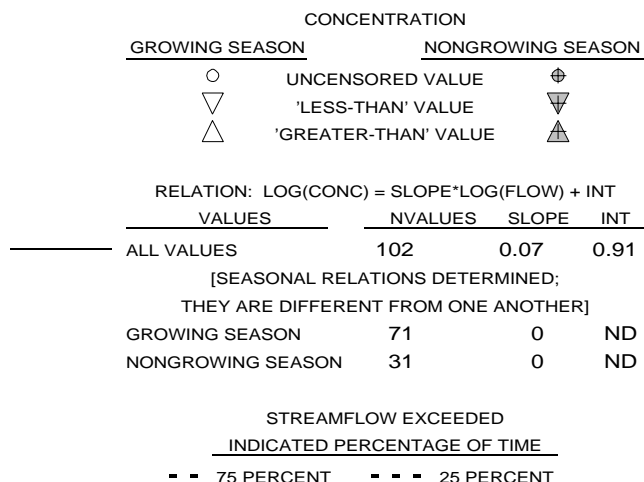
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



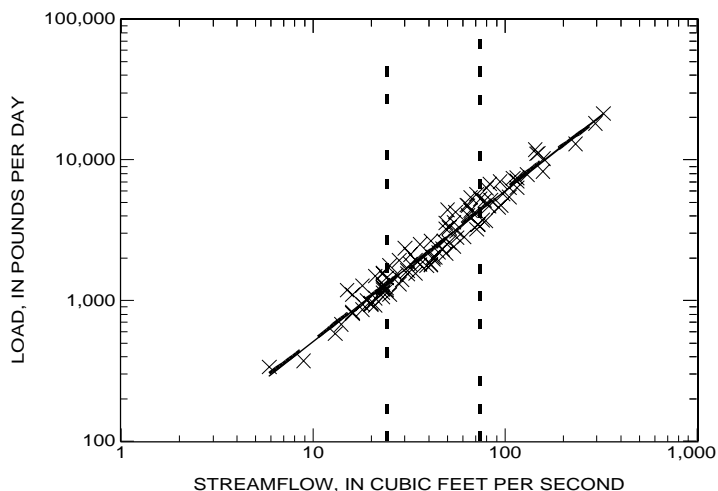
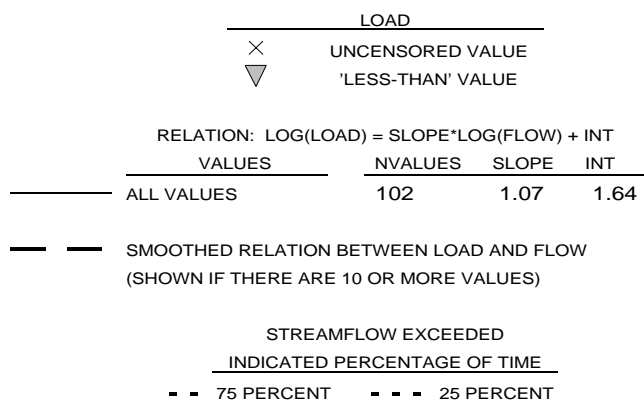
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED OXYGEN
 01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

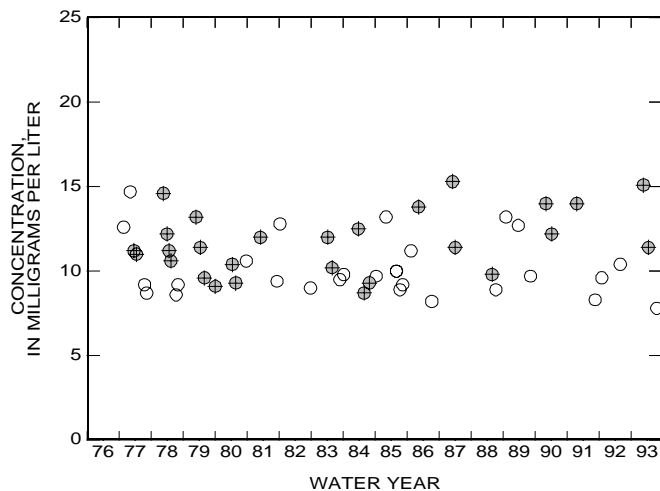
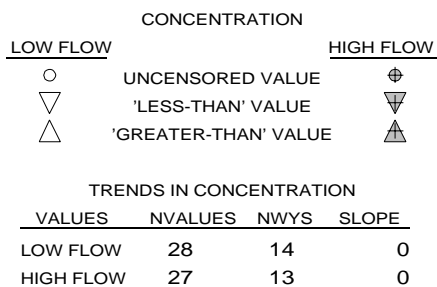
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



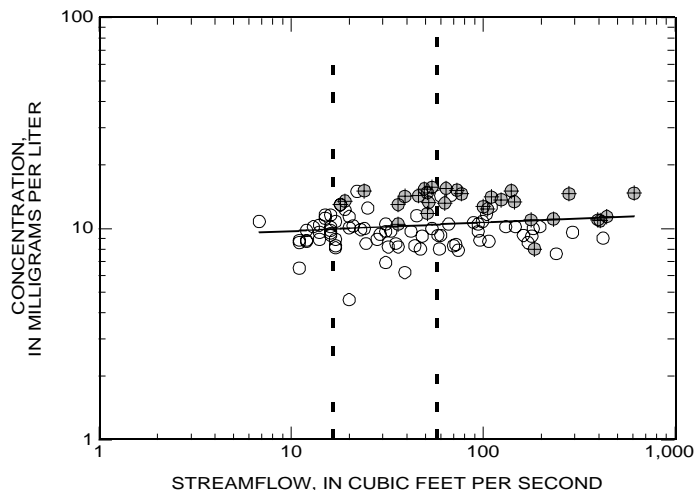
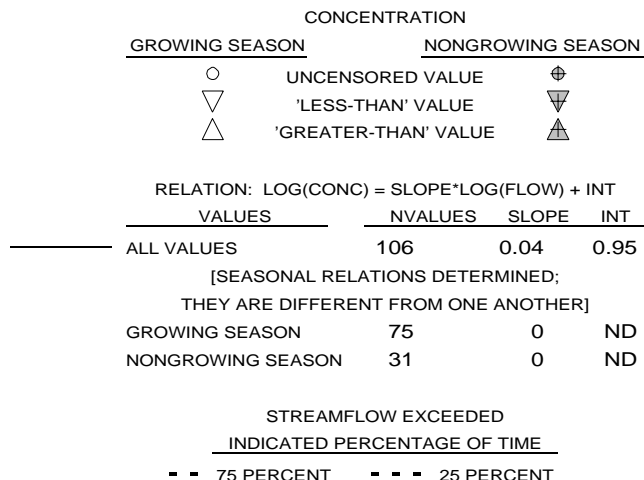
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



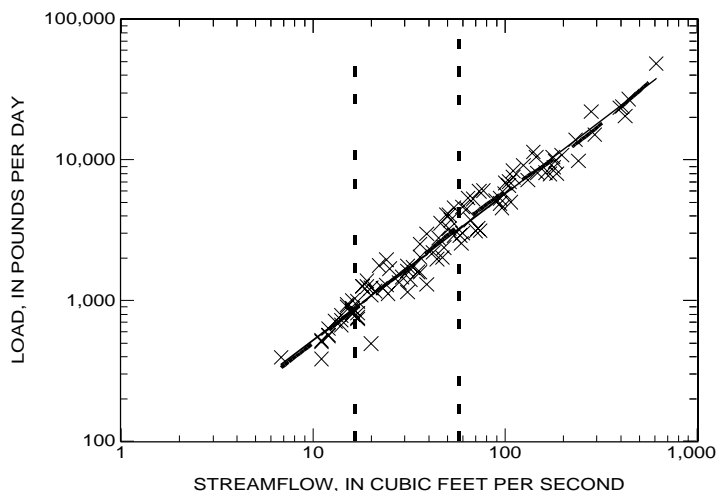
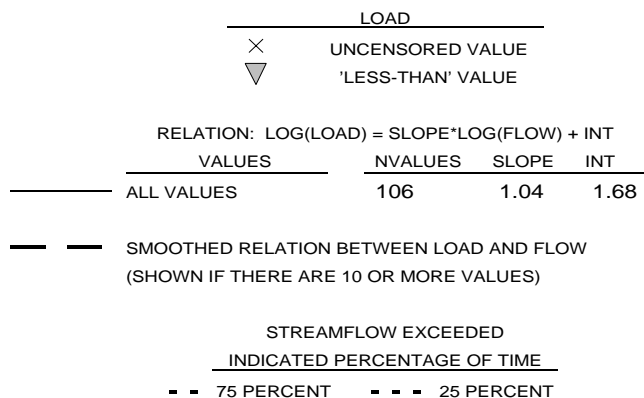
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

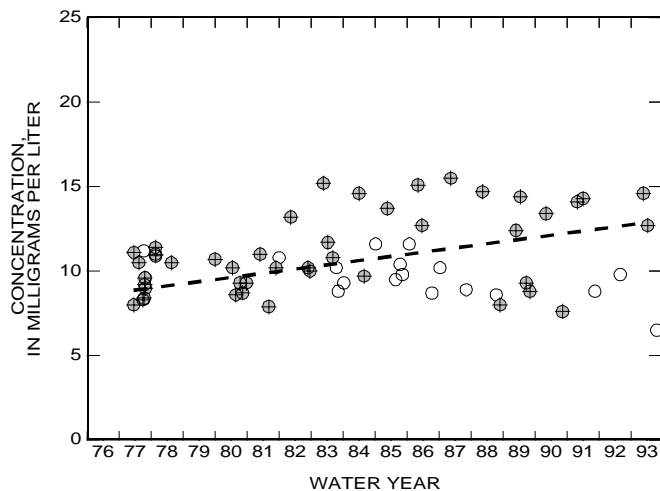
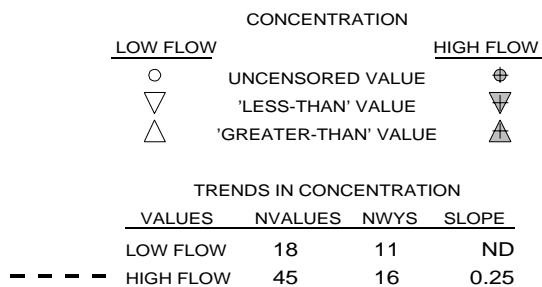
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



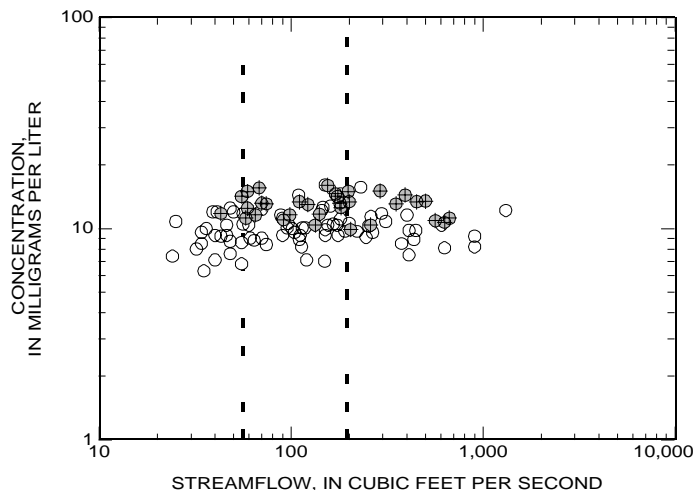
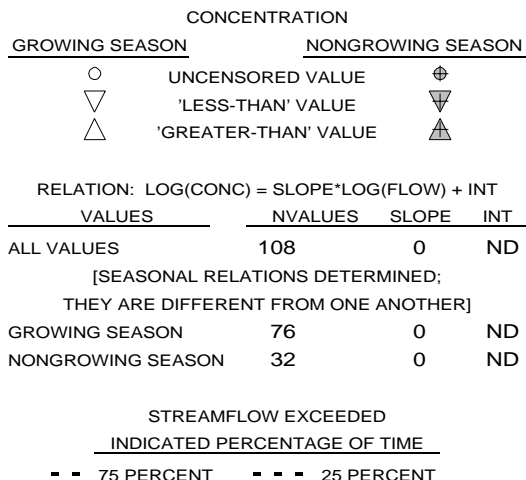
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



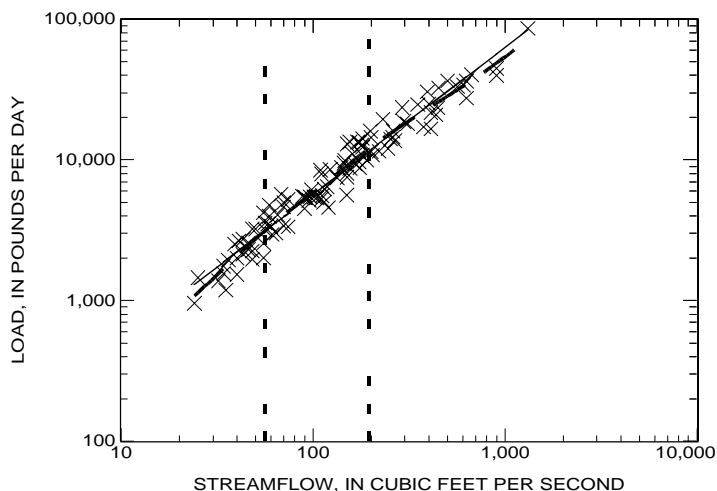
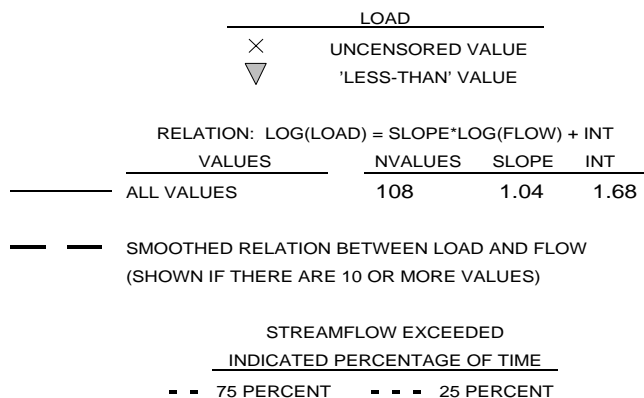
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

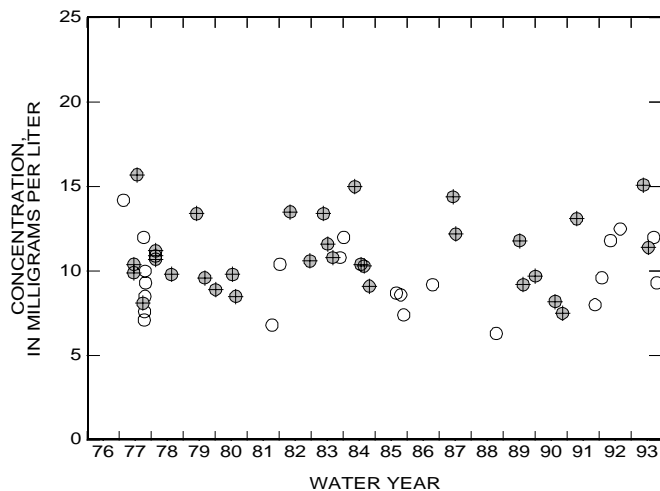
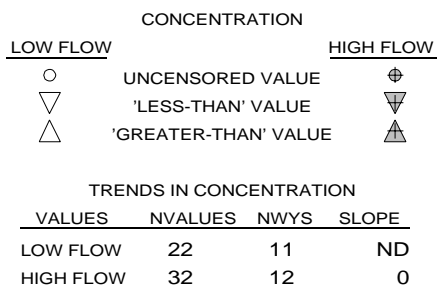
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



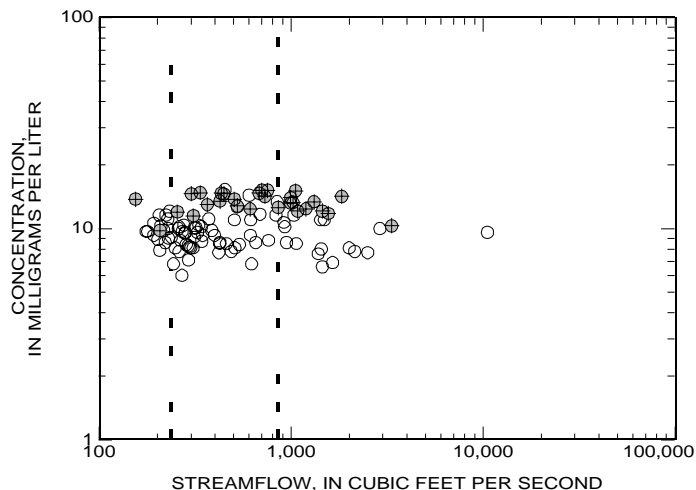
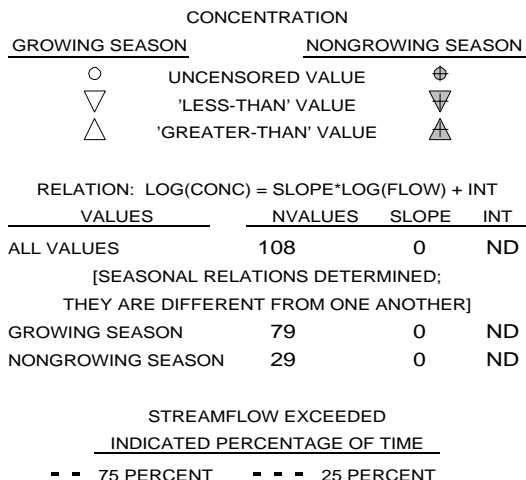
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



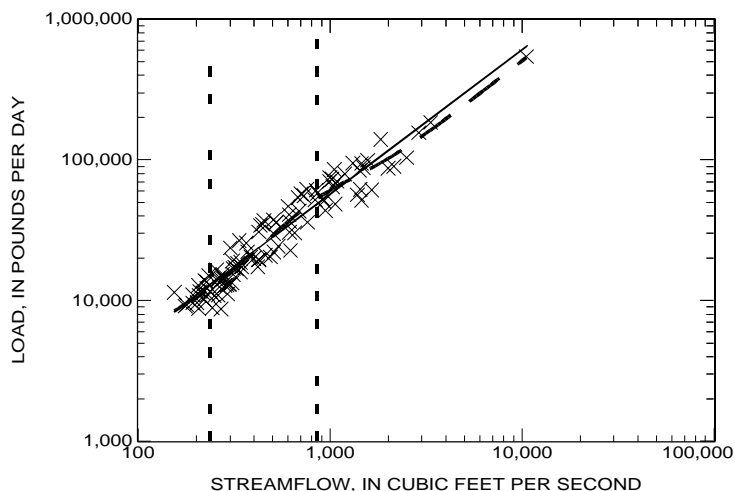
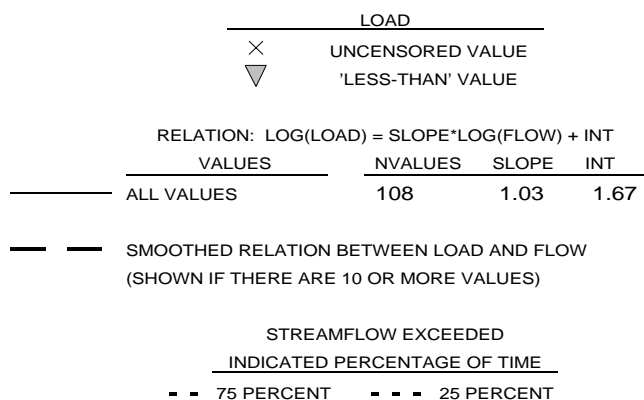
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

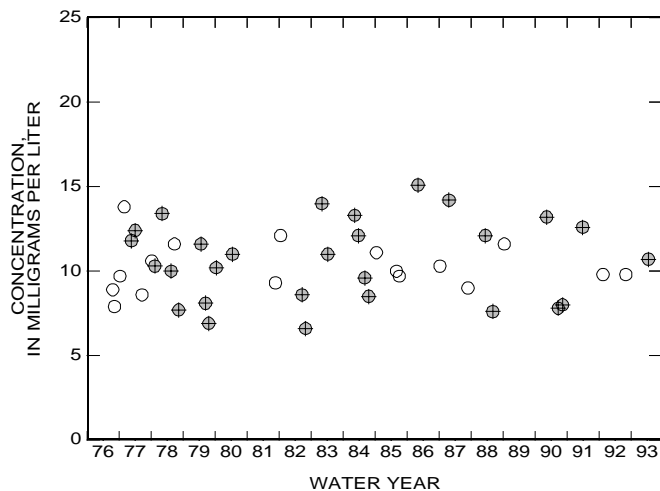
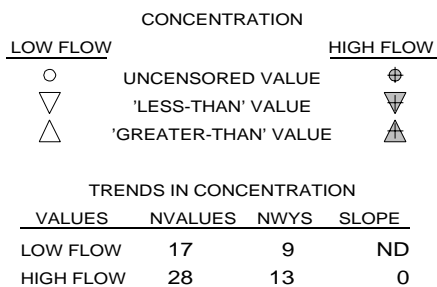
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



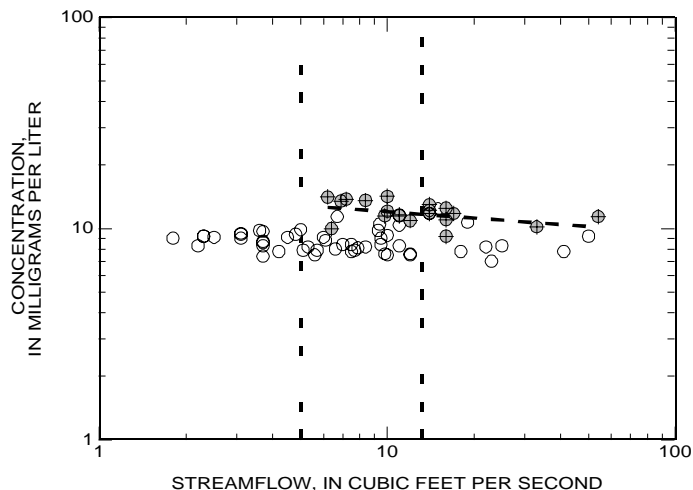
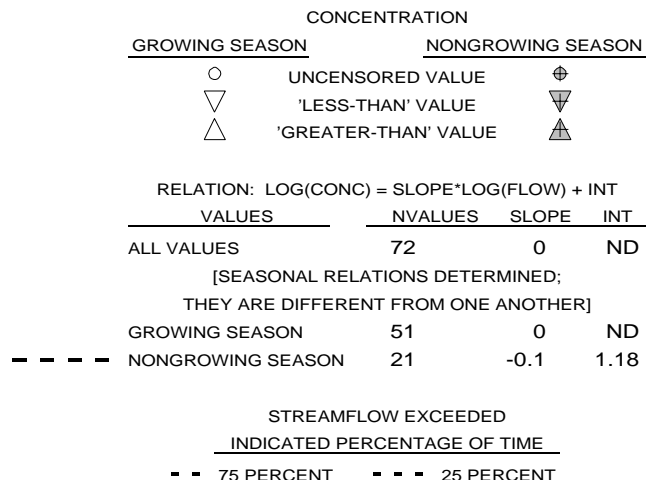
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



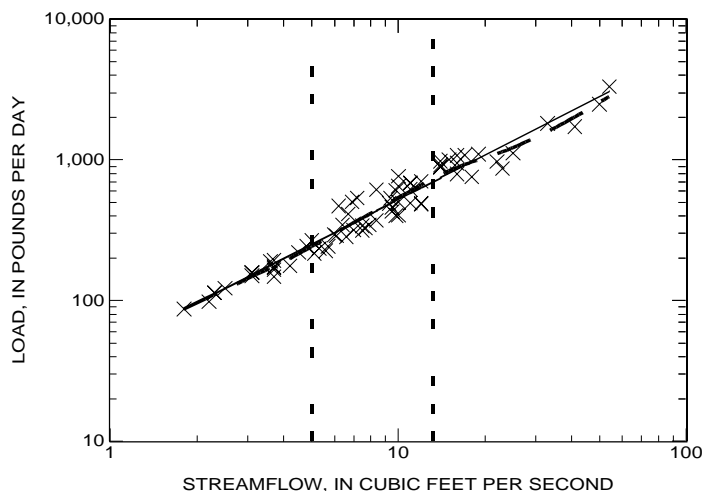
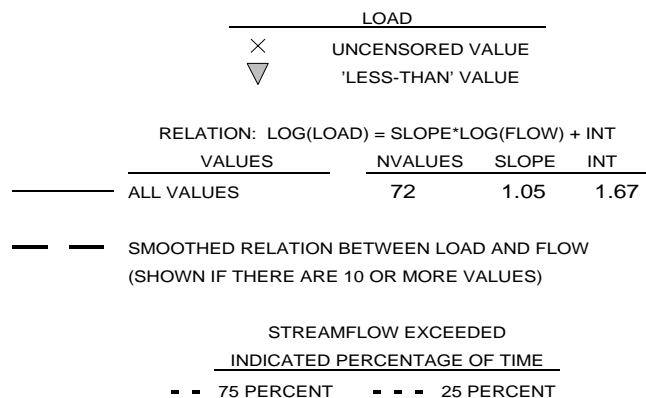
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

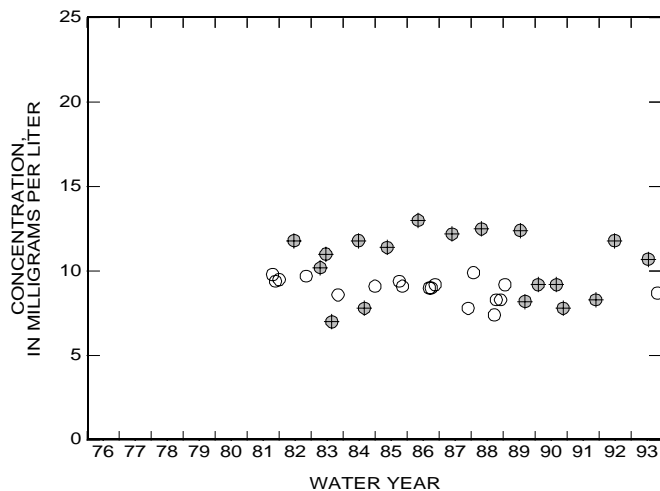
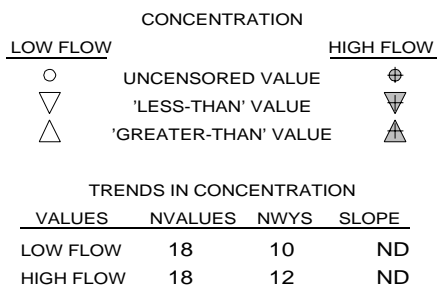
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



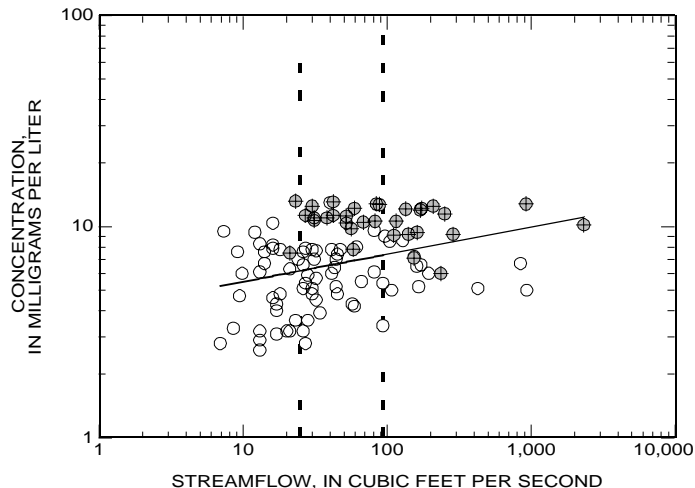
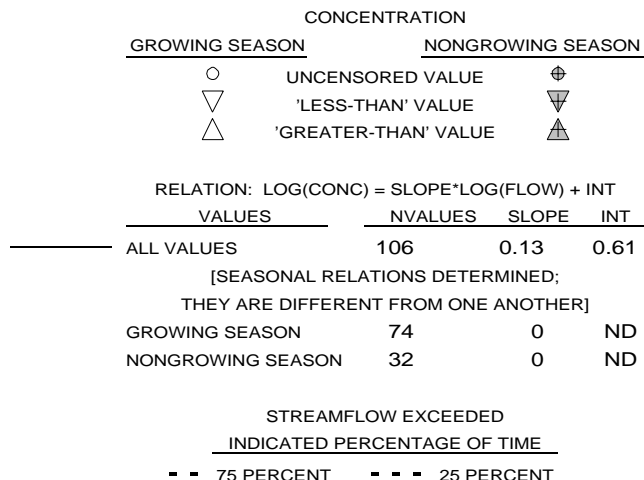
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



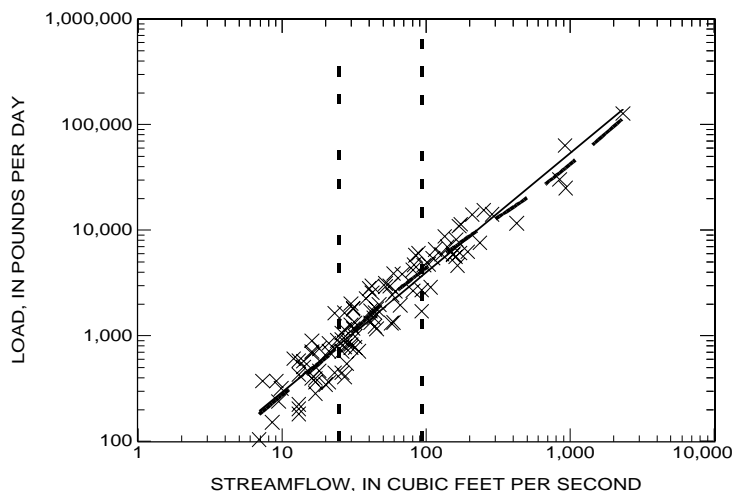
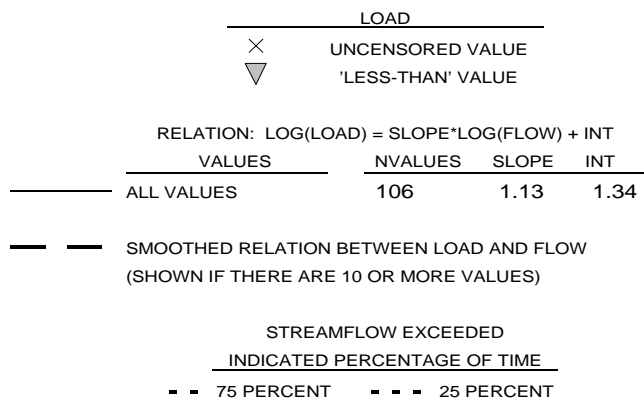
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

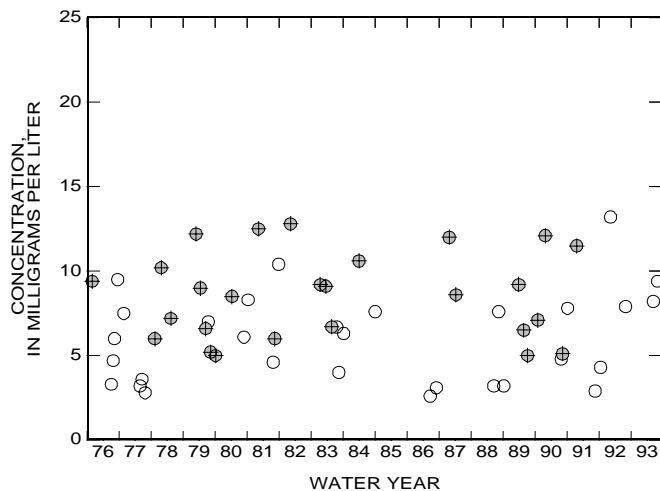
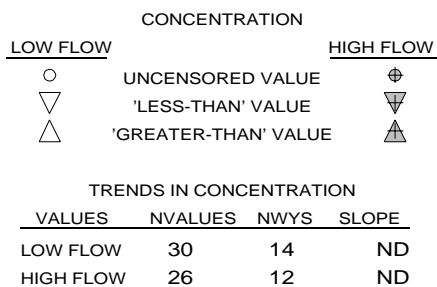
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



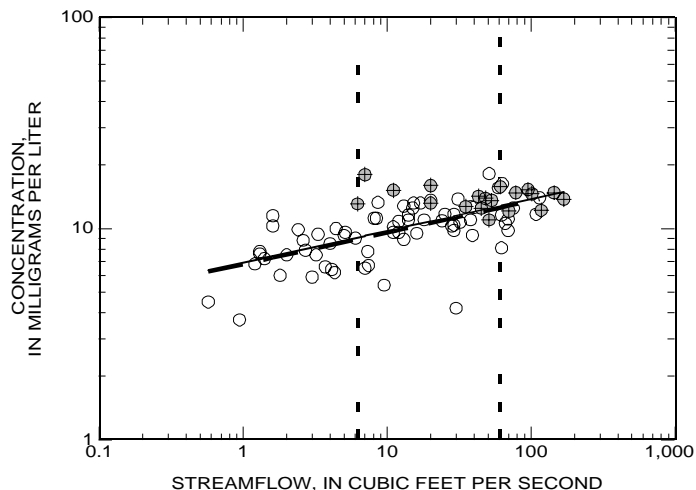
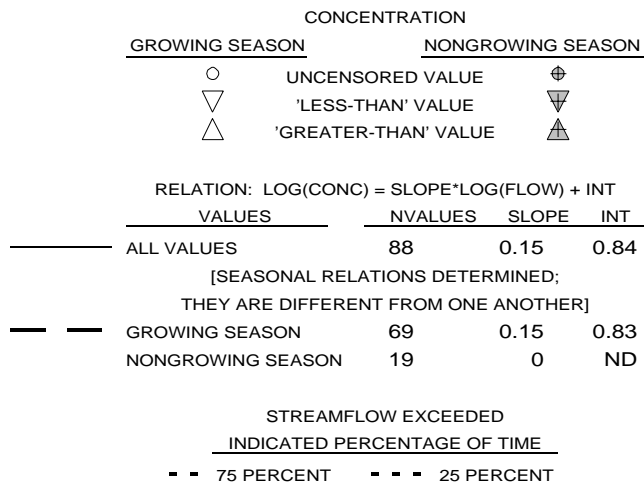
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



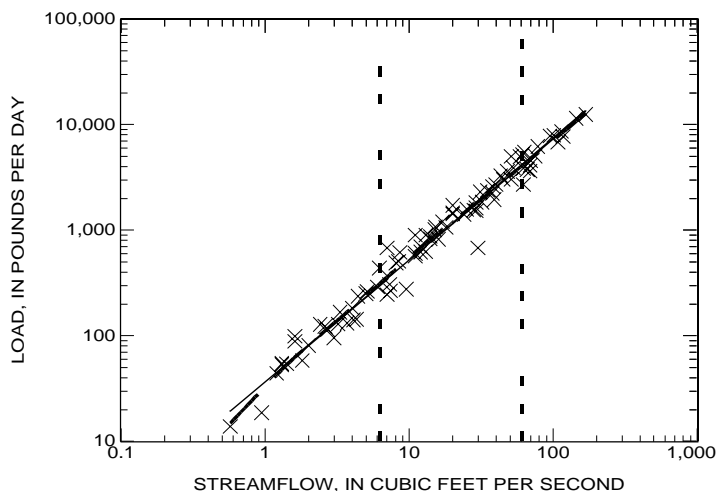
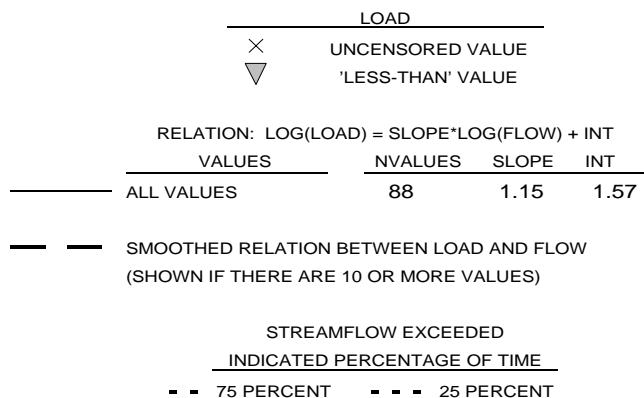
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

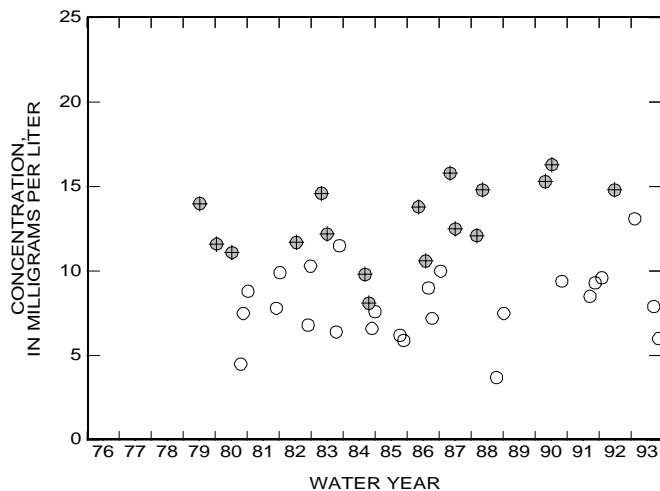
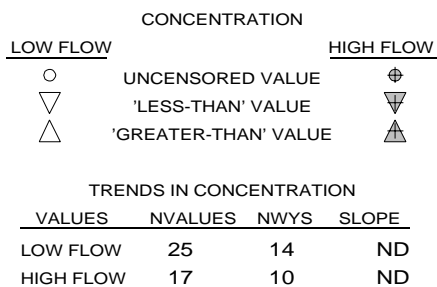
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



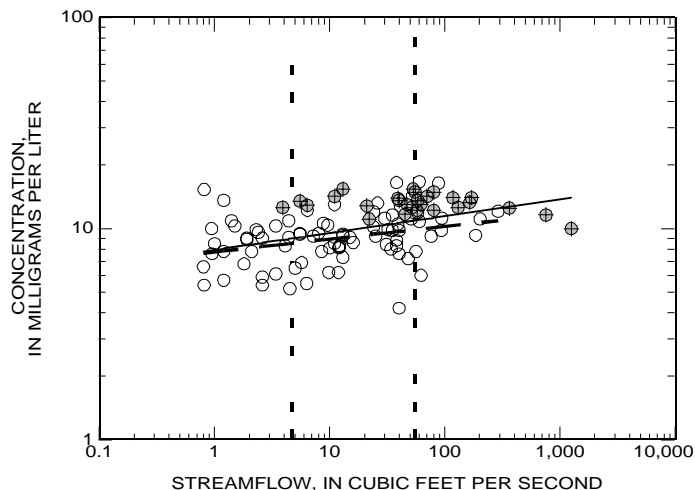
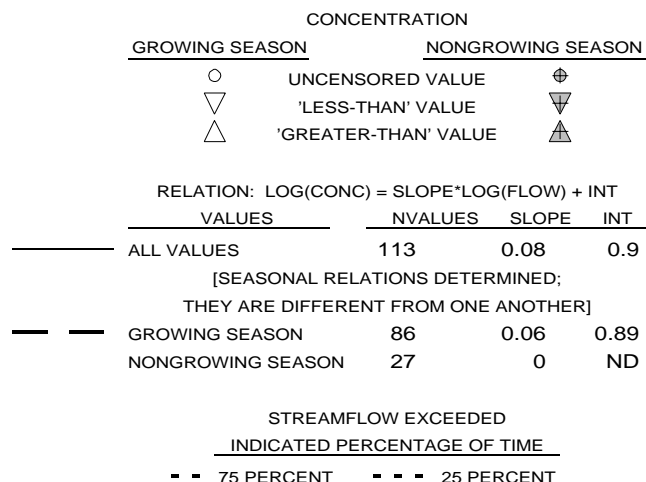
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



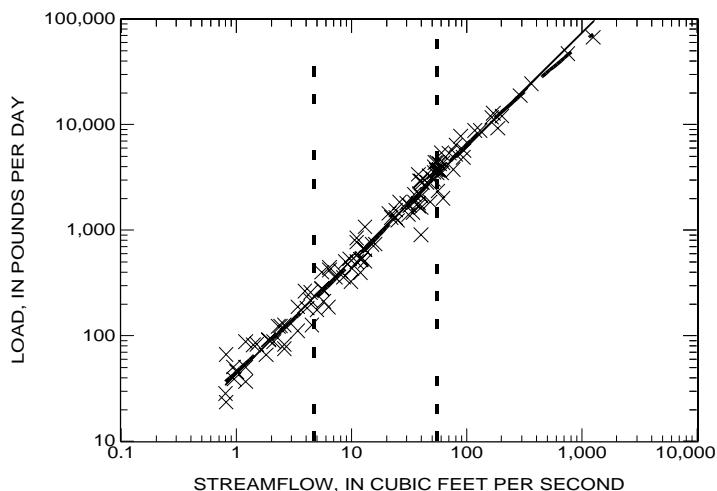
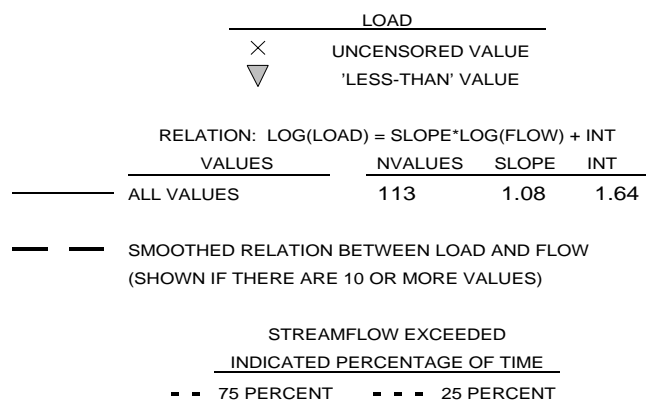
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

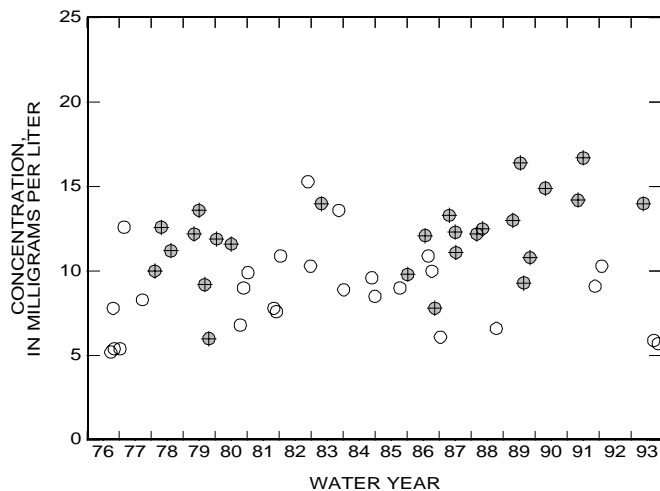
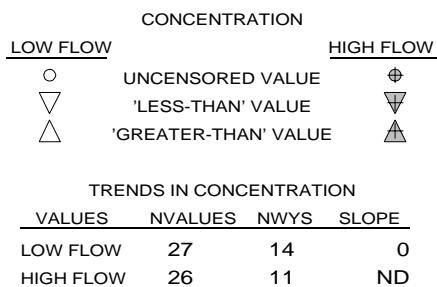
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



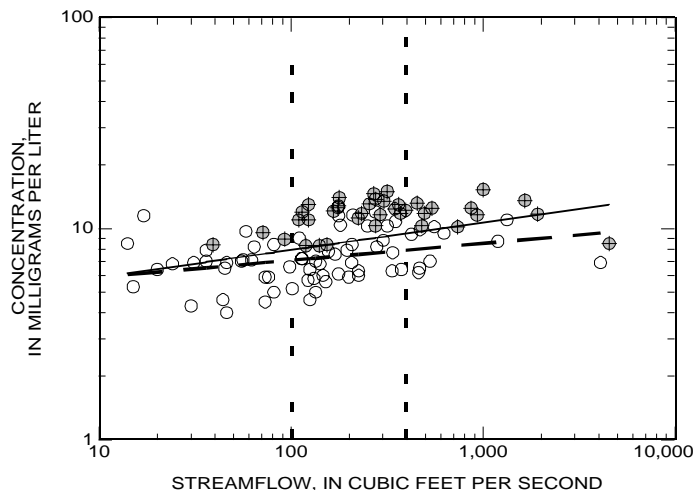
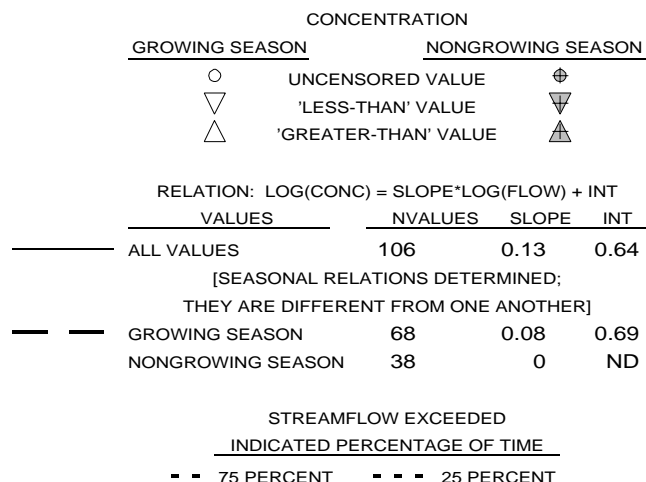
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



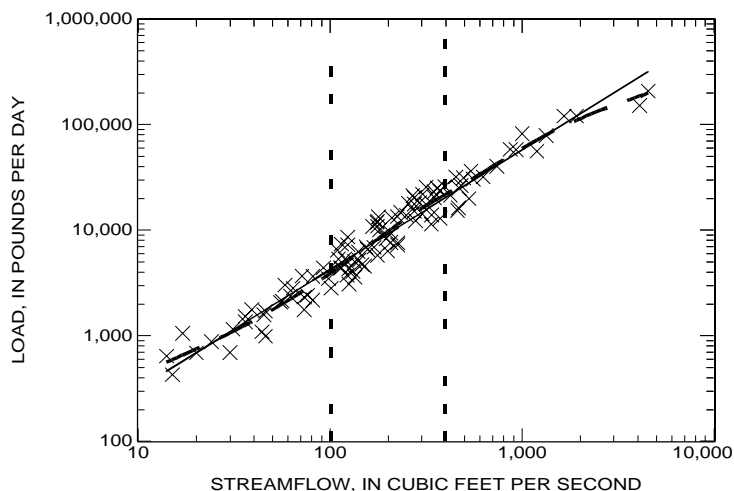
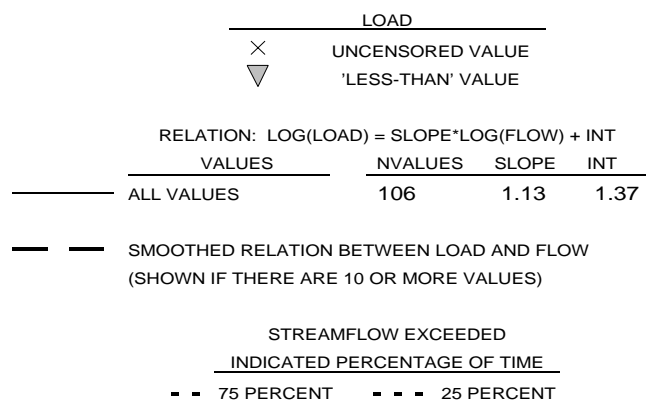
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

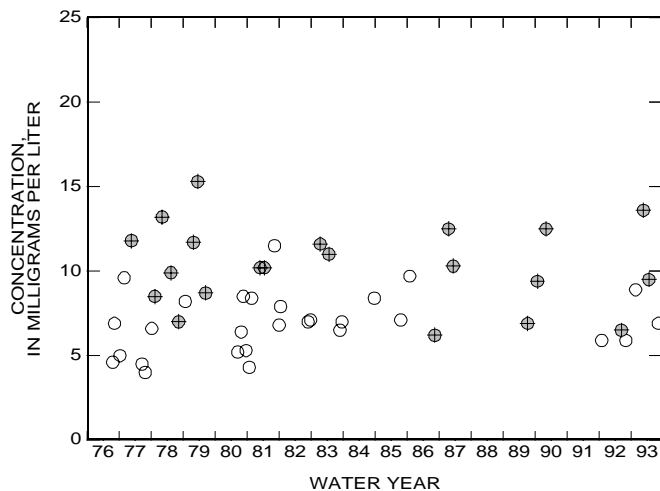
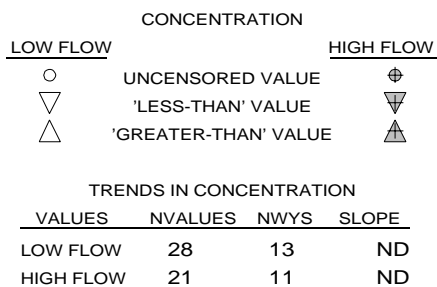
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



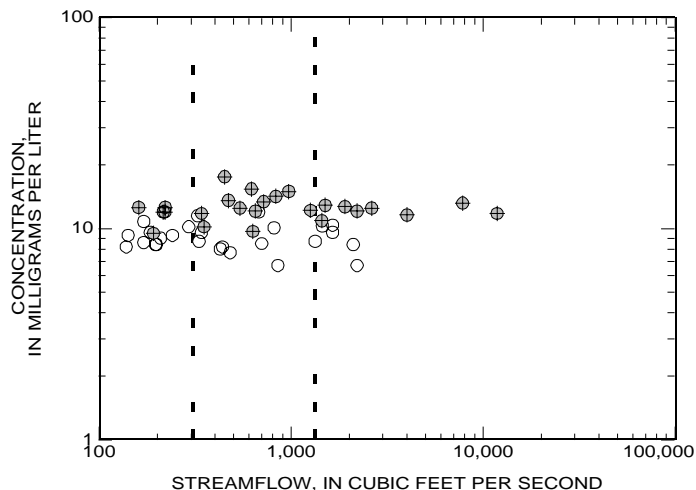
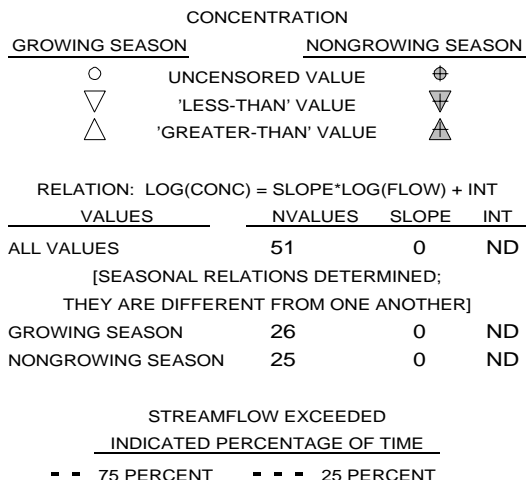
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



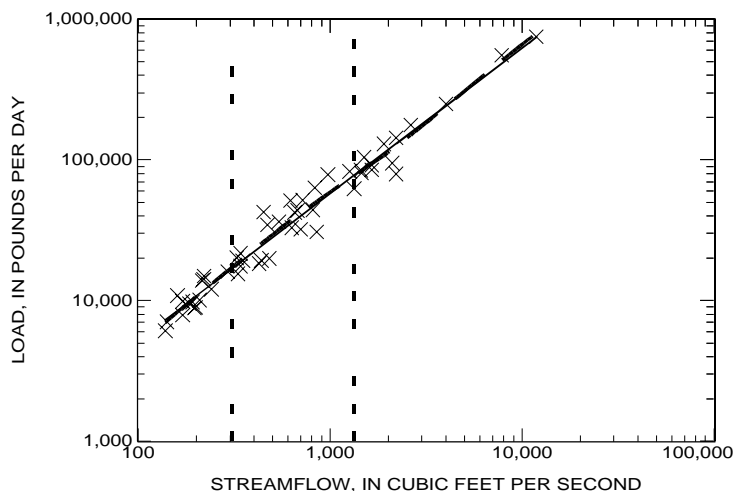
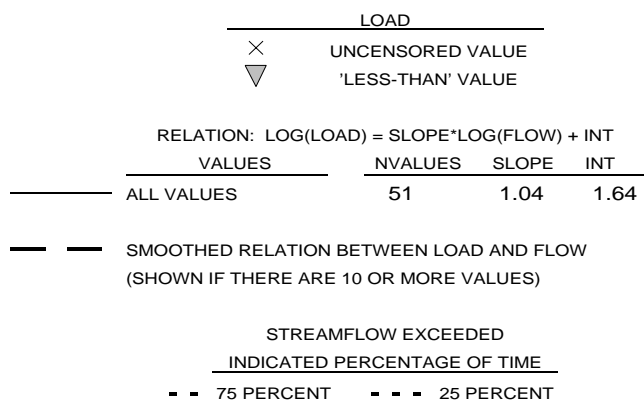
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

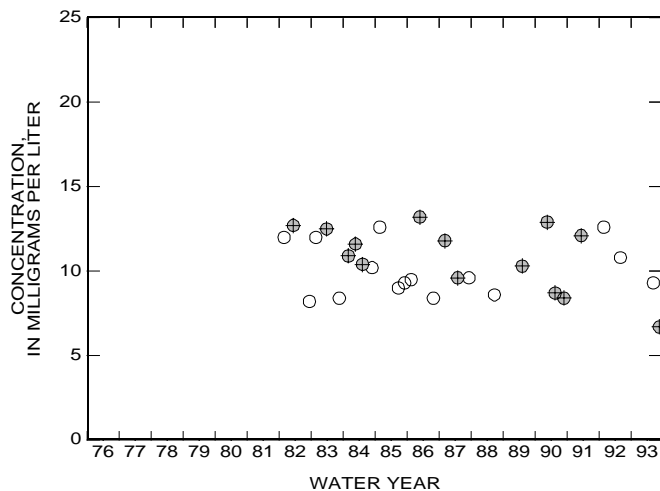
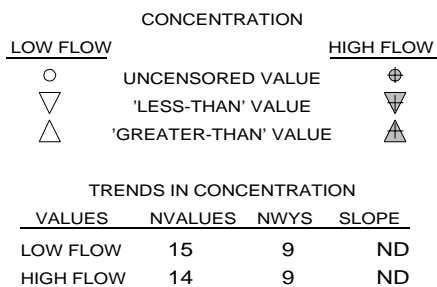
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



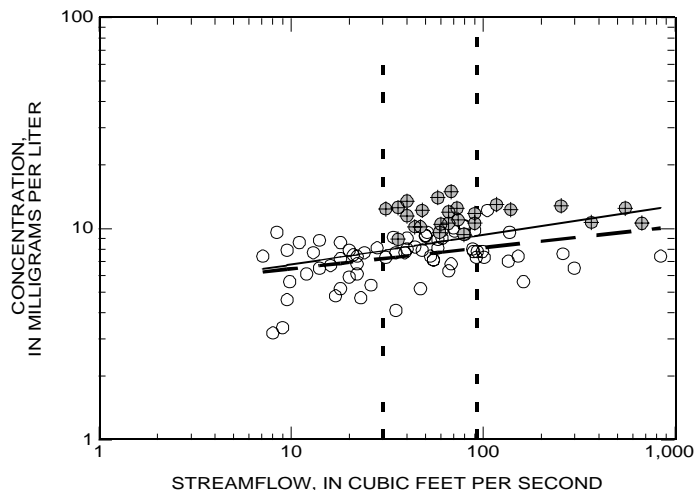
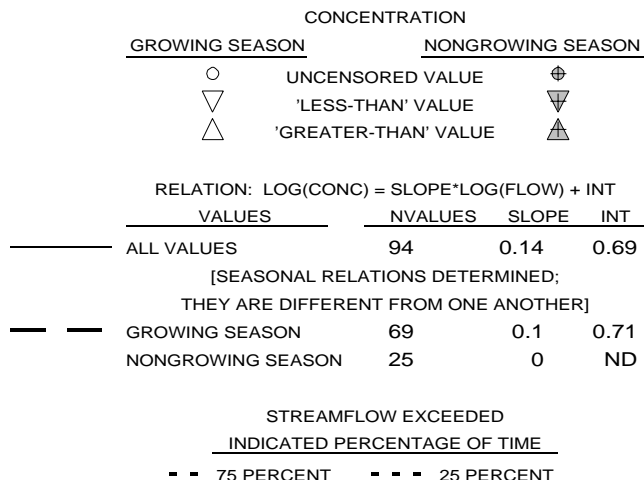
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



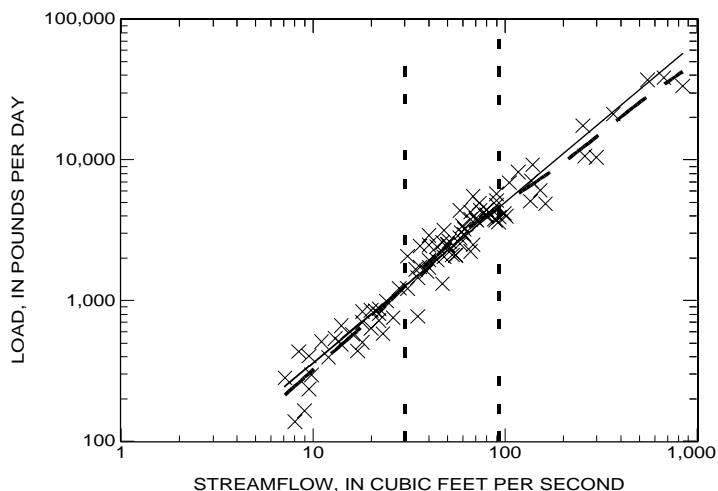
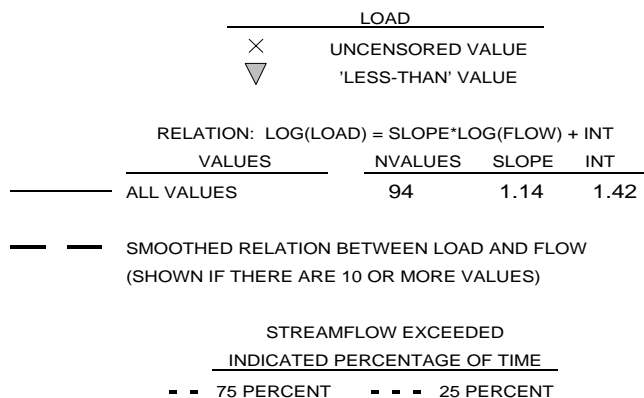
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
 DISSOLVED OXYGEN
 01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

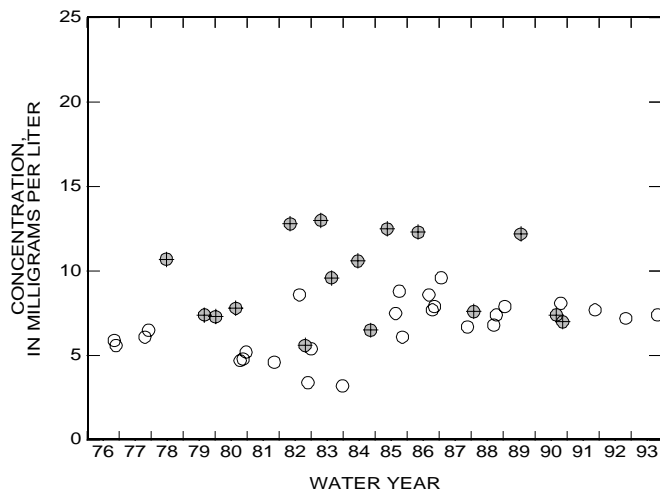
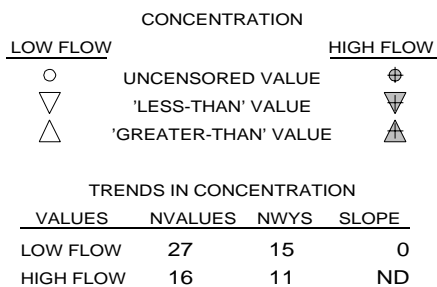
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



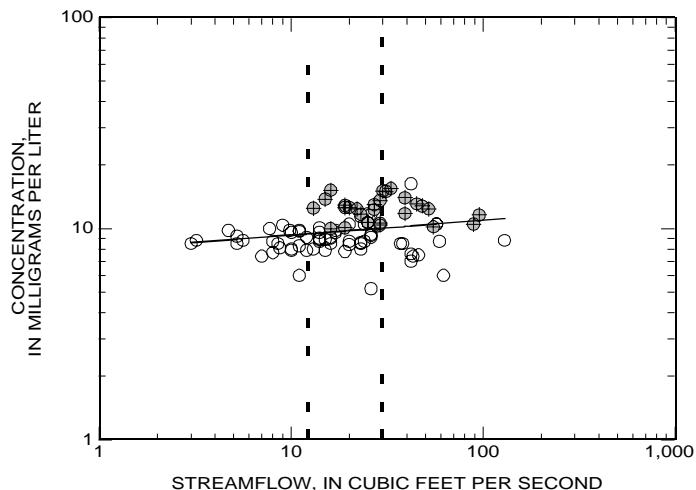
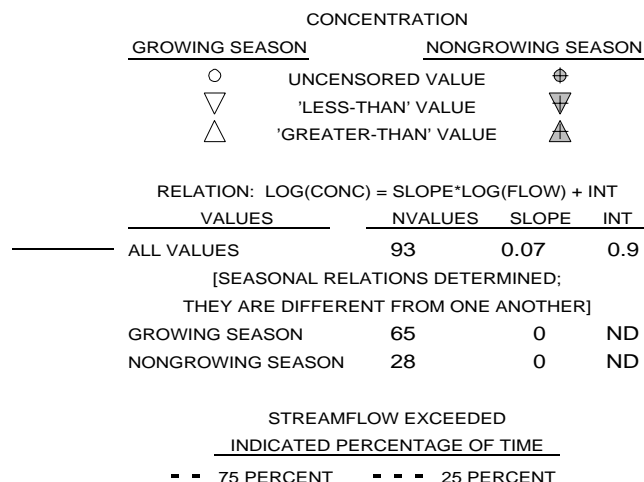
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



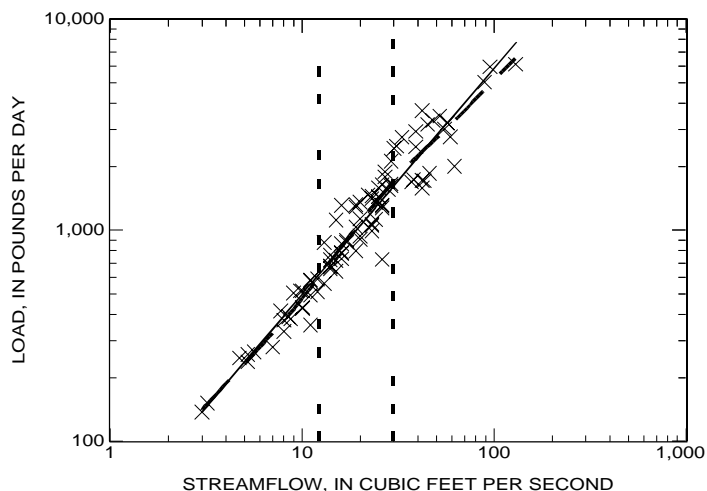
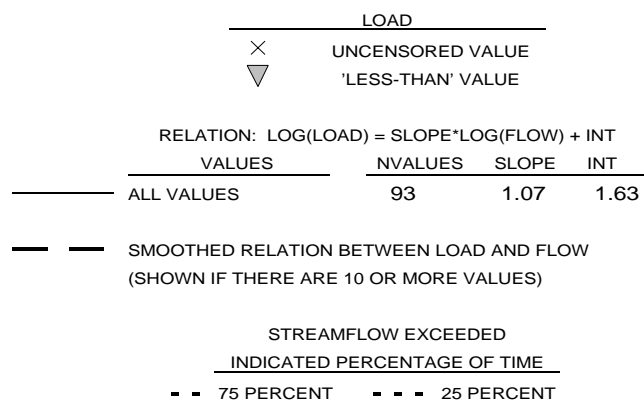
APPENDIX 8. Relations of constituent concentration and load to streamflow and trends in concentration with time
DISSOLVED OXYGEN
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

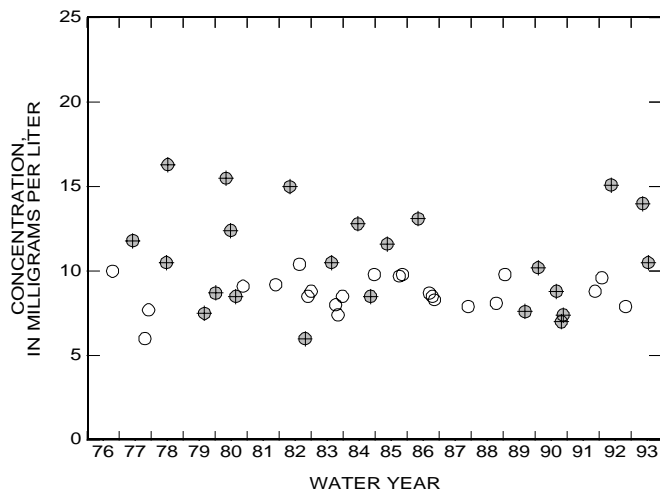
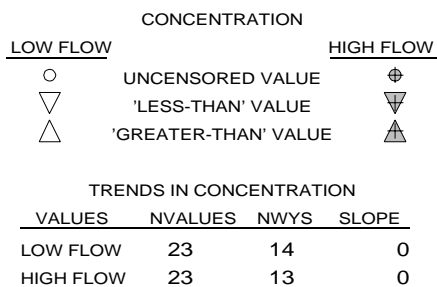
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



Appendix 9 - Fraction of dissolved oxygen at saturation

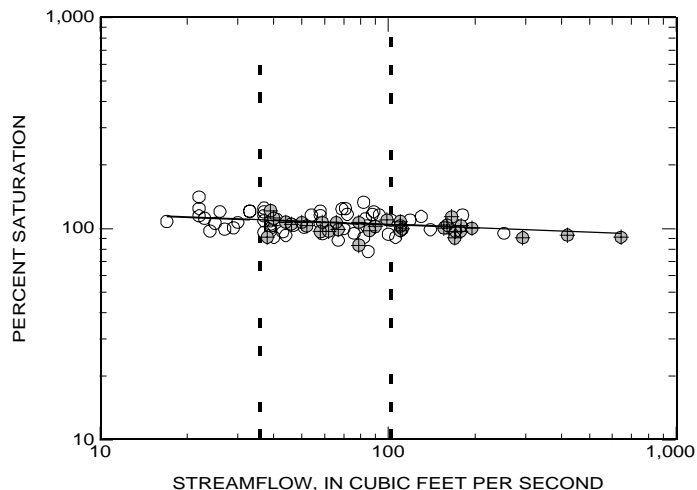
<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

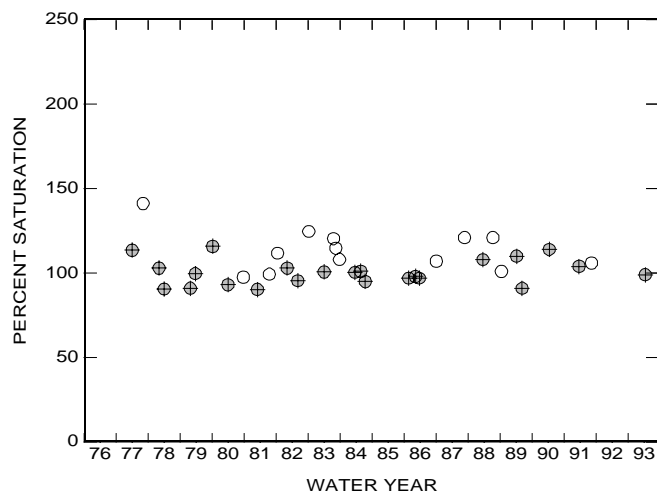
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	91	-0.05	2.12
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	59	ND	ND
NONGROWING SEASON	32	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	13	9	ND
HIGH FLOW	23	14	0

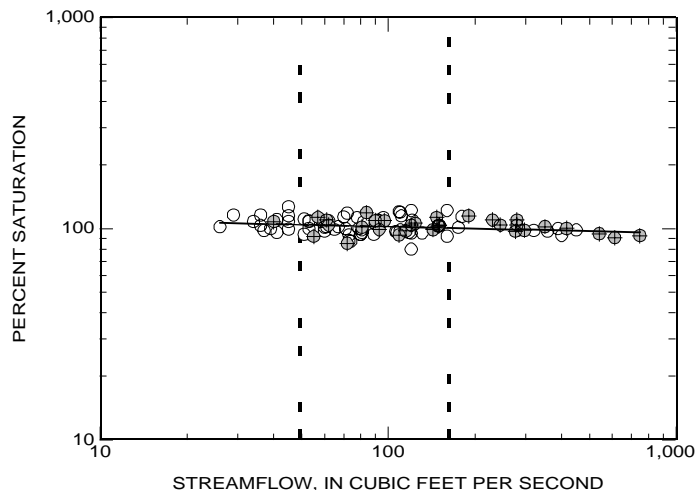


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FRACTION OF DISSOLVED OXYGEN AT SATURATION
 01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

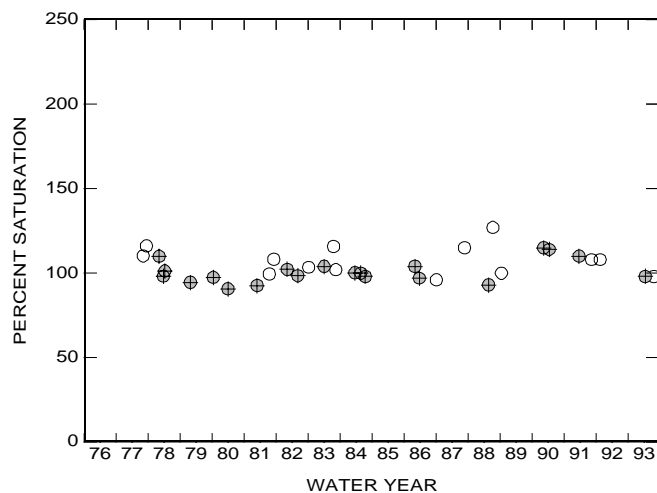
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	97	-0.03	2.07
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	65	ND	ND
NONGROWING SEASON	32	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	14	9	ND
HIGH FLOW	20	12	0

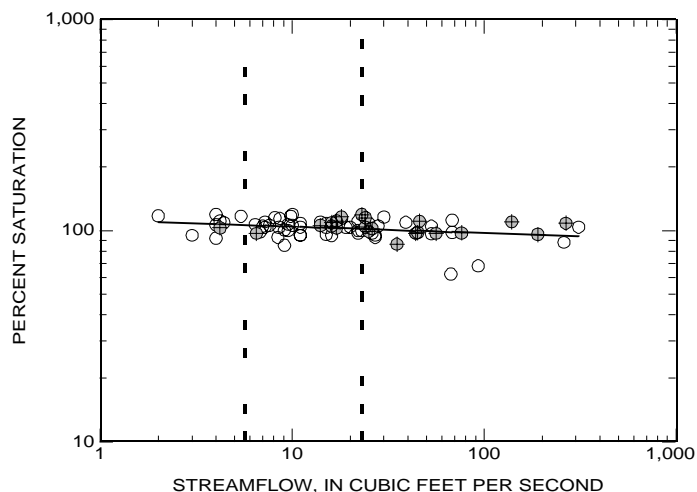


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

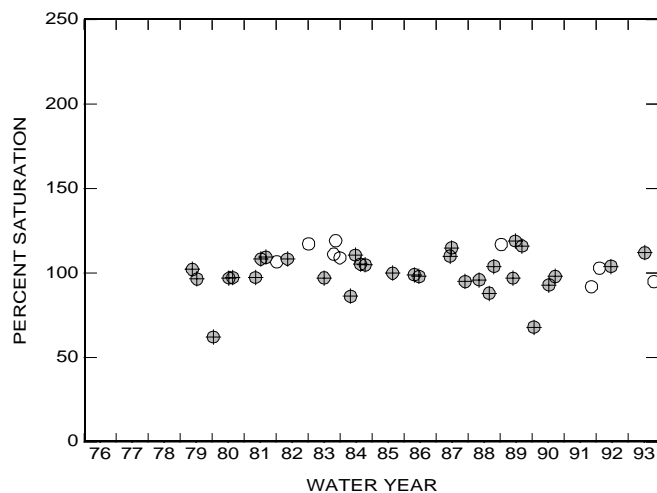
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	80	-0.03	2.05
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	58	ND	ND
NONGROWING SEASON	22	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	9	6	ND
HIGH FLOW	31	14	ND

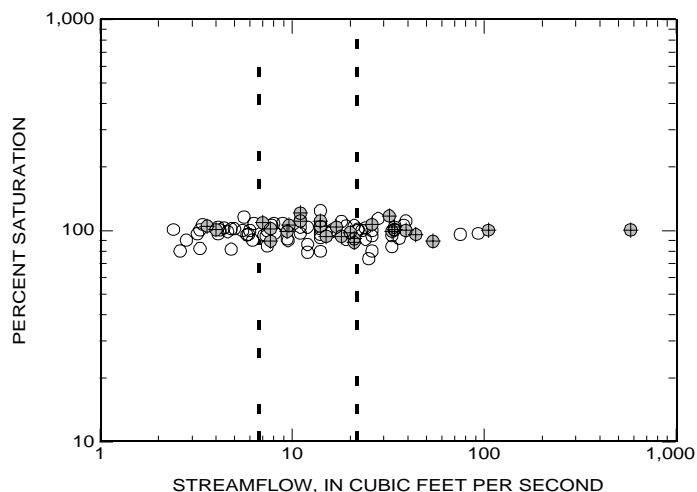


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

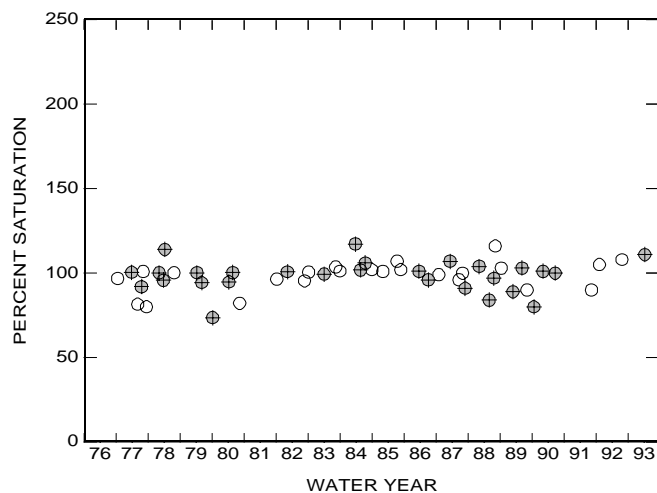
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: $\text{LOG}(\text{CONC}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	97	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	69	ND	ND
NONGROWING SEASON	28	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	24	12	ND
HIGH FLOW	28	13	0

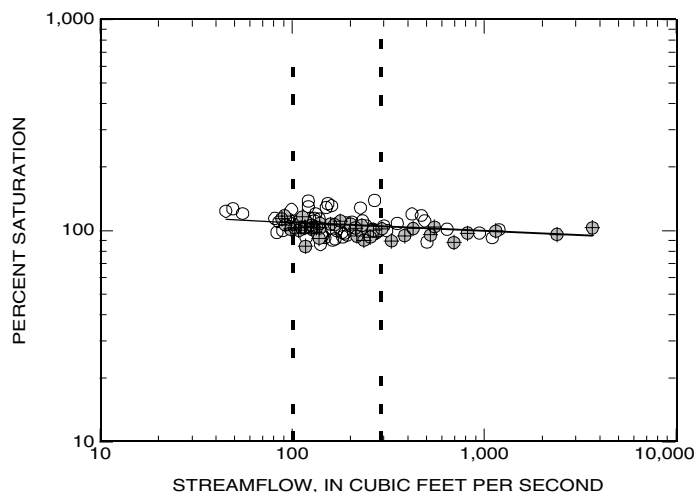


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

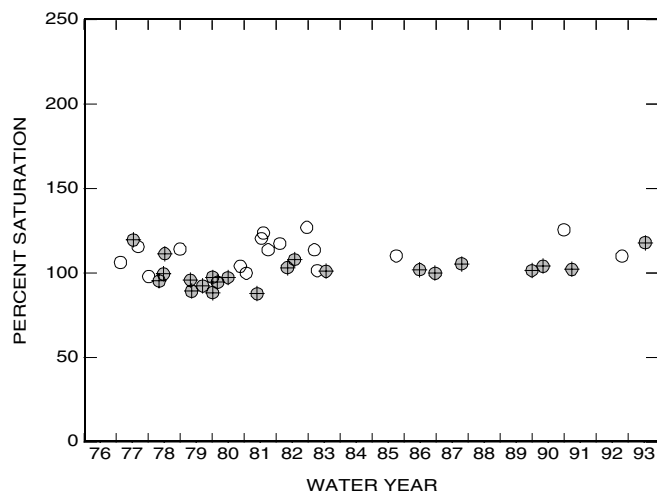
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	103	-0.04	2.12	
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	64	ND	ND	
NONGROWING SEASON	39	ND	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	16	9	ND	
HIGH FLOW	22	13	0	

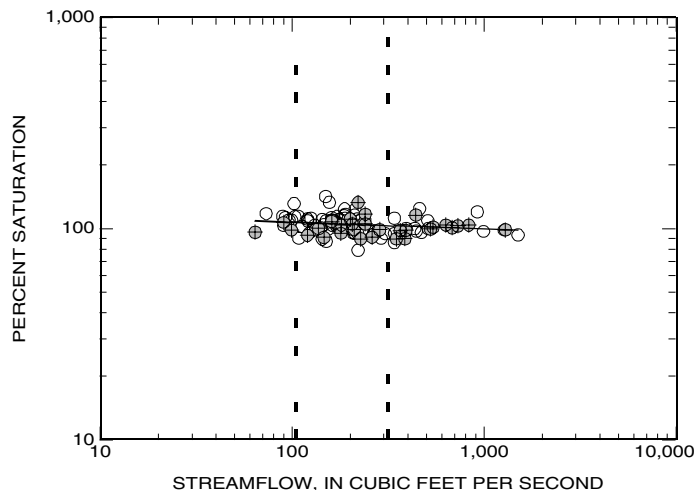


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

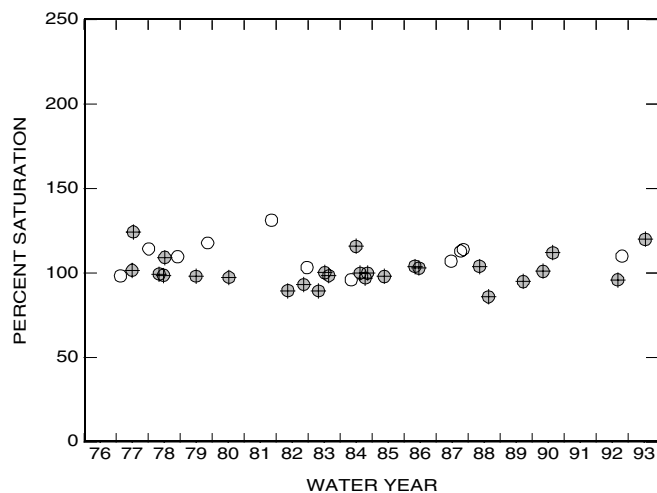
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	101	-0.03	2.09
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	71	ND	ND
NONGROWING SEASON	30	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	11	8	ND
HIGH FLOW	26	14	0

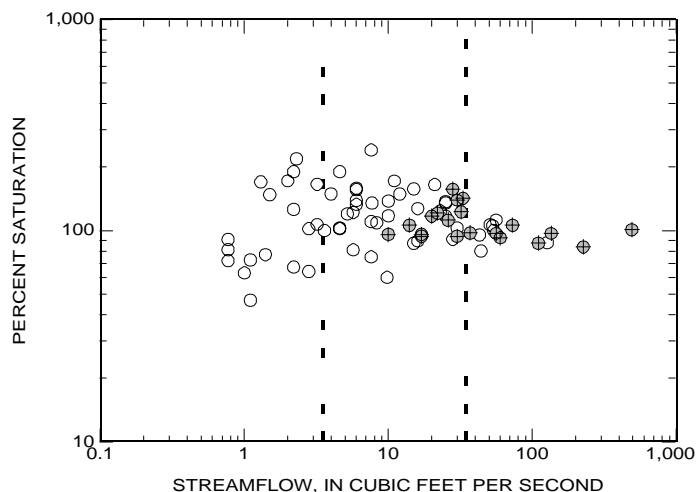


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

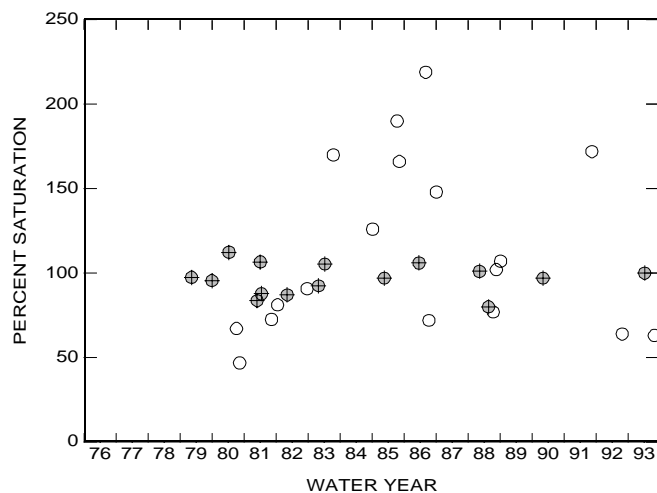
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	78	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	58	ND	ND
NONGROWING SEASON	20	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	18	12	ND
HIGH FLOW	15	10	ND

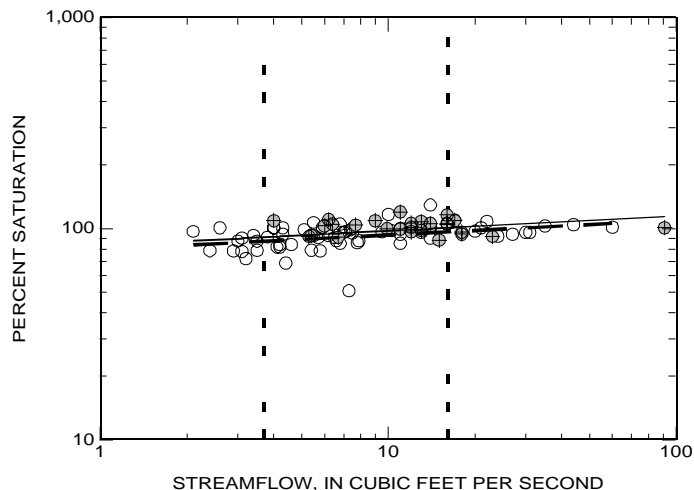


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

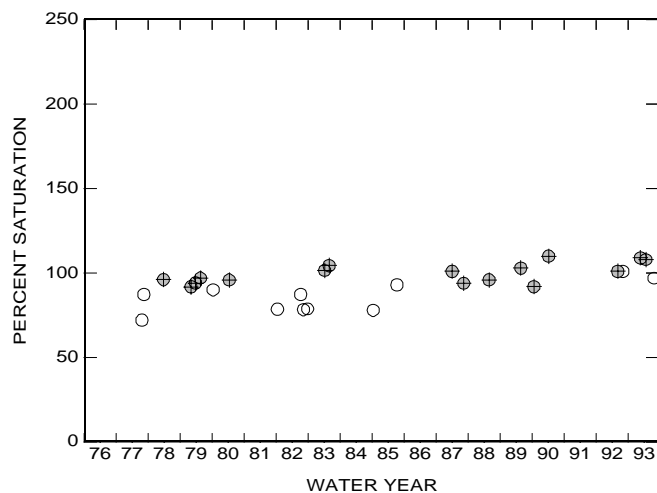
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	94	0.07	1.92	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	67	0.07	1.9	
NONGROWING SEASON	27	0	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
— —	75 PERCENT	— —	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	11	6	ND	
HIGH FLOW	16	10	ND	

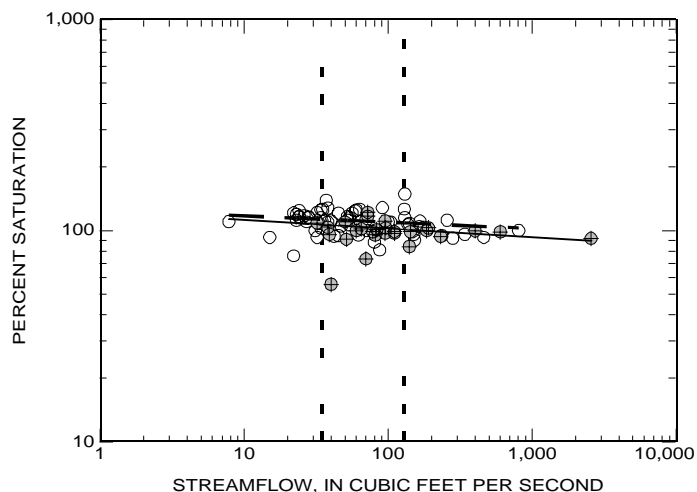


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

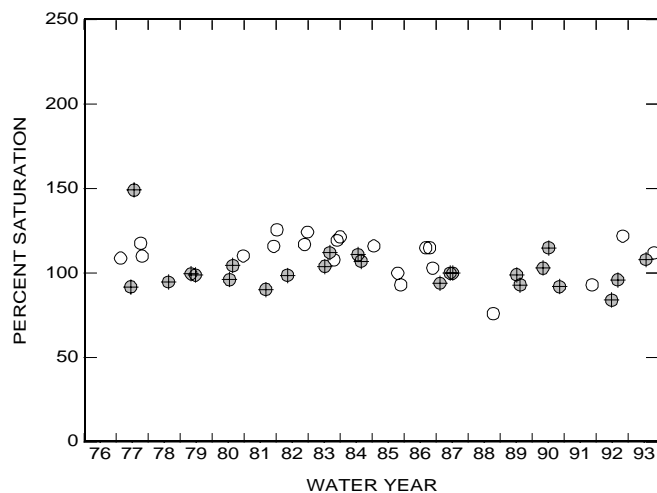
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	92	-0.04	2.09	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	65	-0.03	2.1	
NONGROWING SEASON	27	0	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
— —	75 PERCENT	— —	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	21	11	ND	
HIGH FLOW	24	13	0	

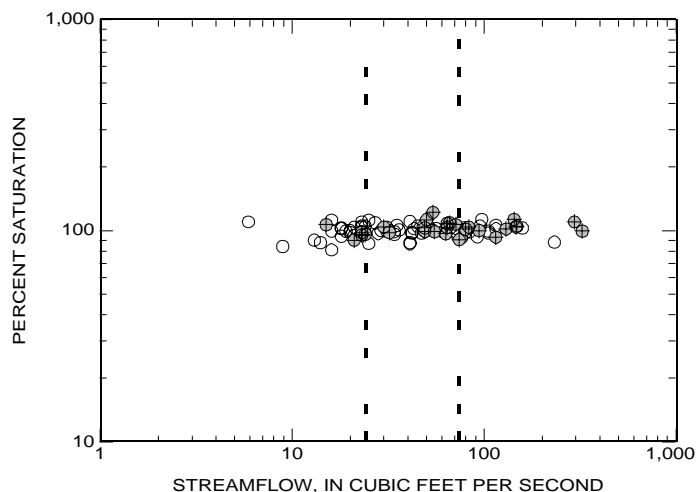


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

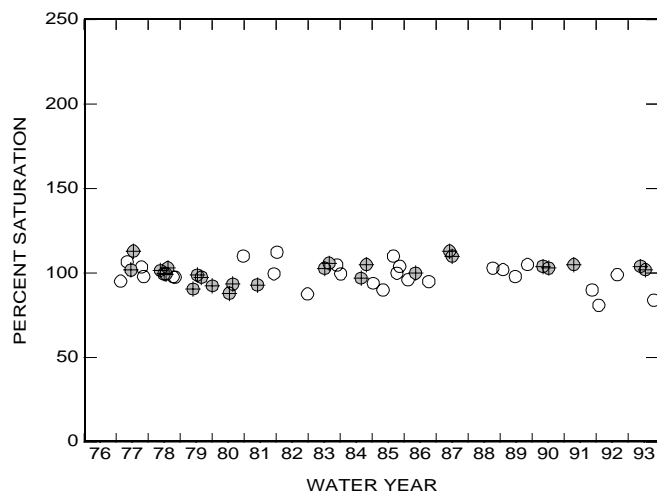
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	95	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	67	ND	ND
NONGROWING SEASON	28	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	27	14	0
HIGH FLOW	25	12	ND

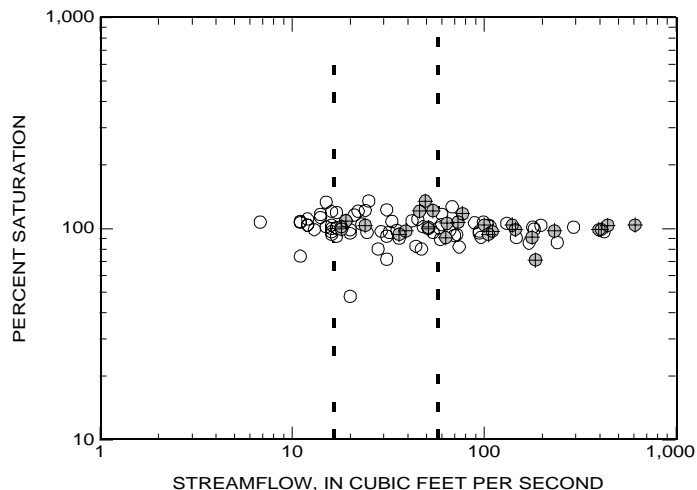


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

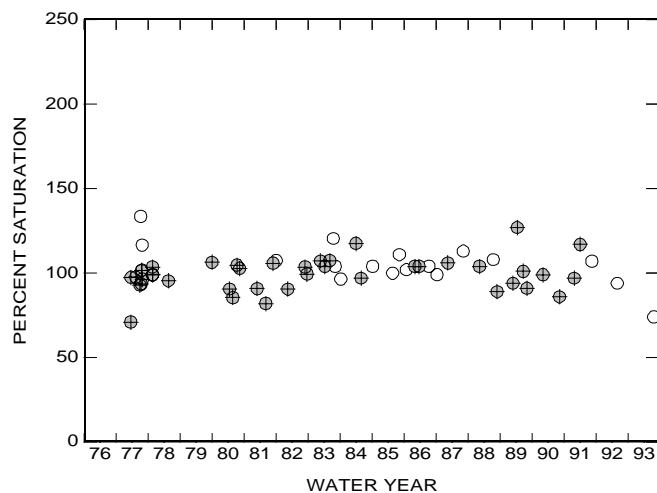
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	98	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	71	ND	ND
NONGROWING SEASON	27	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	17	11	ND
HIGH FLOW	41	14	0

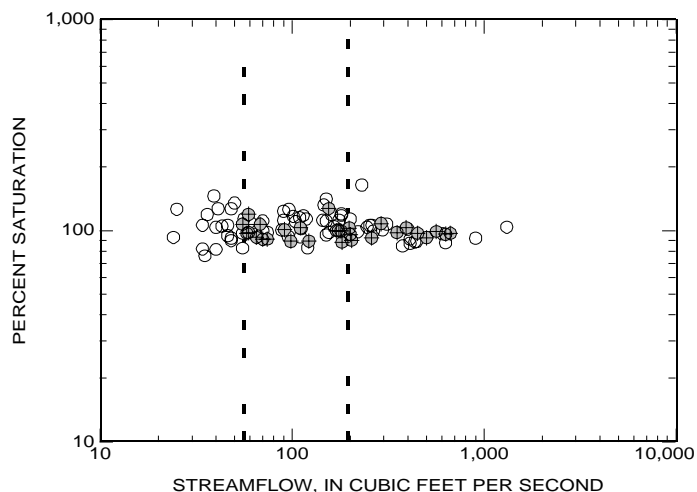


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

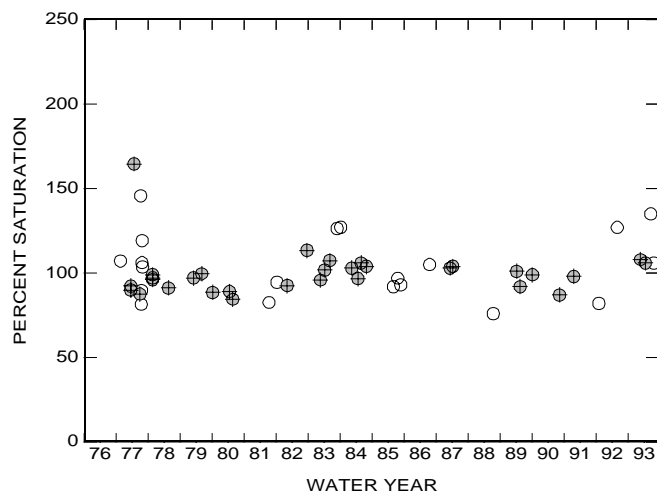
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	99	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	70	ND	ND
NONGROWING SEASON	29	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	20	10	ND
HIGH FLOW	31	12	0

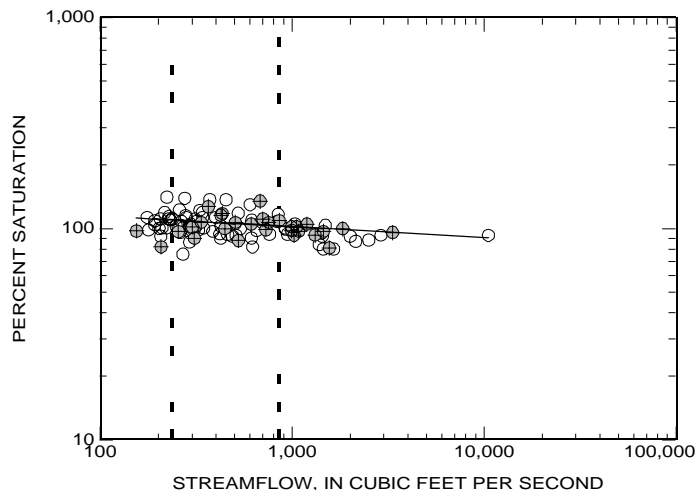


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

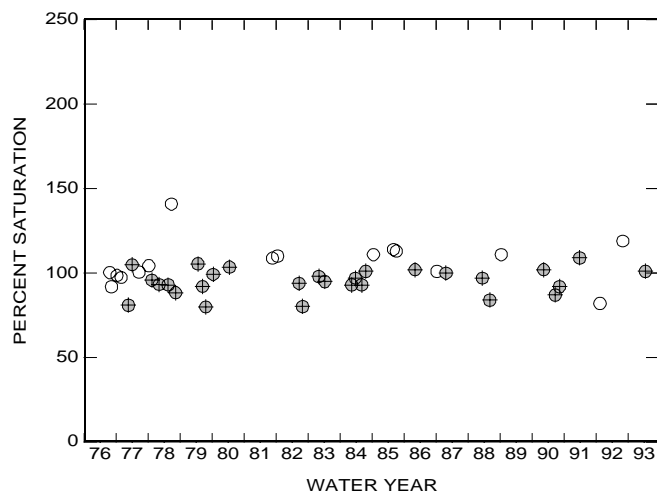
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	106	-0.05	2.16	
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	77	ND	ND	
NONGROWING SEASON	29	ND	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
— —	75 PERCENT	— —	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	16	9	ND	
HIGH FLOW	28	13	0	

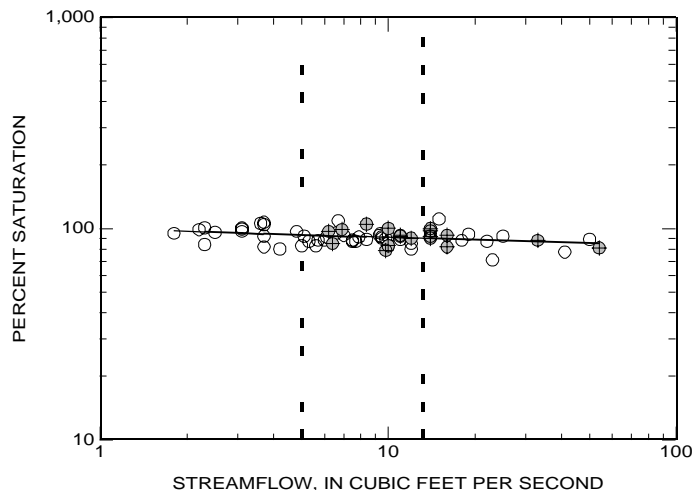


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

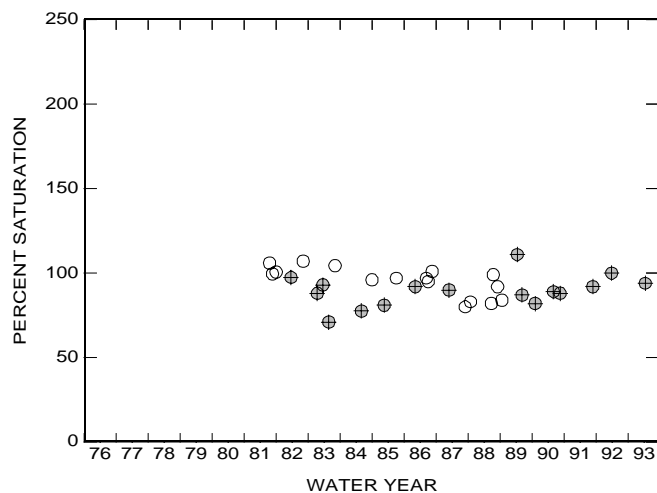
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	66	-0.04	2
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	48	ND	ND
NONGROWING SEASON	18	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	16	9	ND
HIGH FLOW	16	11	ND

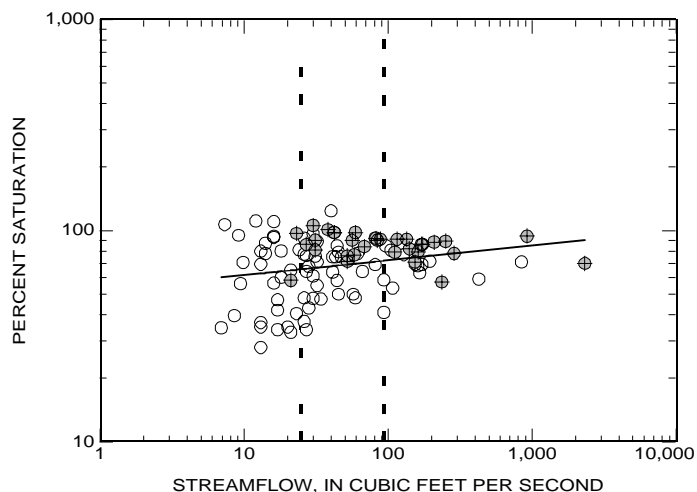


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

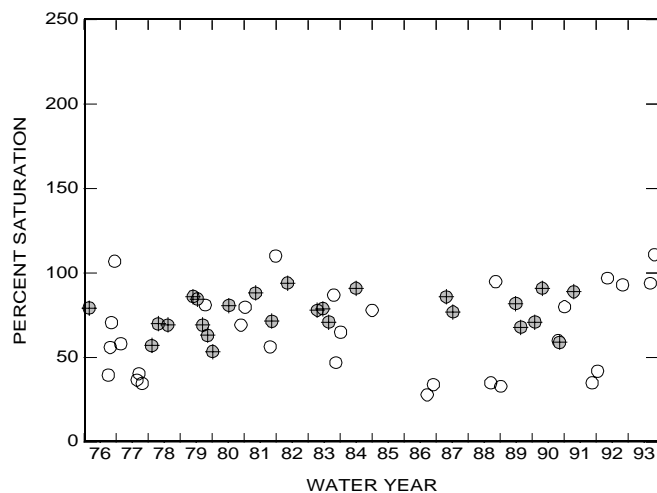
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
<u>GROWING SEASON</u>		<u>NONGROWING SEASON</u>	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
<u>VALUES</u>	<u>NVALUES</u>	<u>SLOPE</u>	<u>INT</u>
ALL VALUES	105	0.07	1.72
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	73	0	ND
NONGROWING SEASON	32	0	ND
STREAMFLOW EXCEEDED			
<u>INDICATED PERCENTAGE OF TIME</u>			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
<u>LOW FLOW</u>		<u>HIGH FLOW</u>	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
<u>VALUES</u>	<u>NVALUES</u>	<u>NWYS</u>	<u>SLOPE</u>
LOW FLOW	30	14	ND
HIGH FLOW	25	12	ND

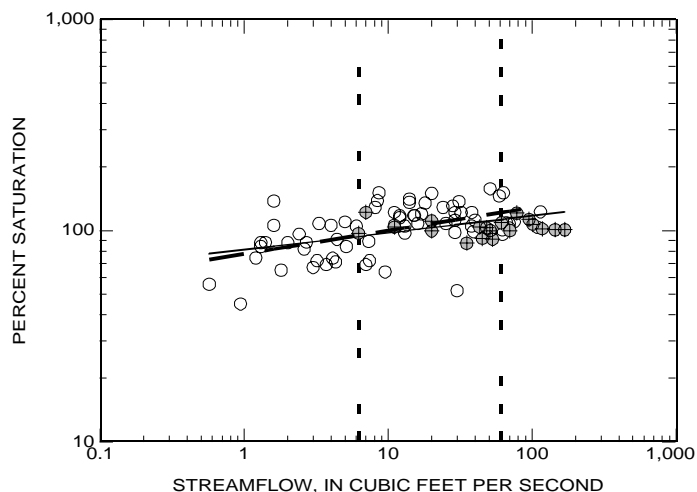


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

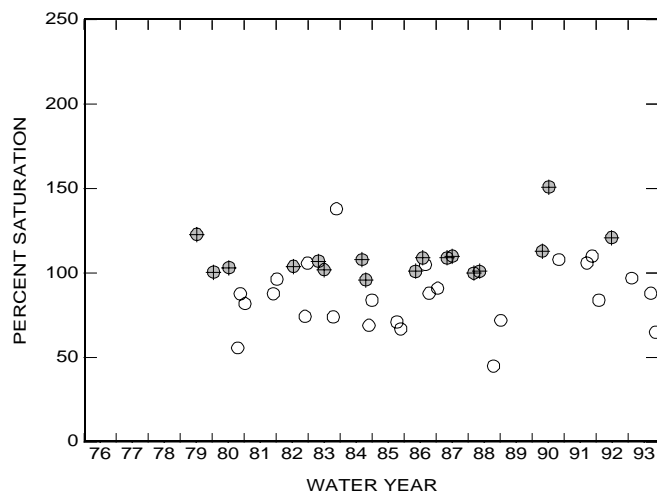
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	88	0.08	1.91	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	69	0.11	1.89	
NONGROWING SEASON	19	0	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	25	14	ND	
HIGH FLOW	17	10	ND	

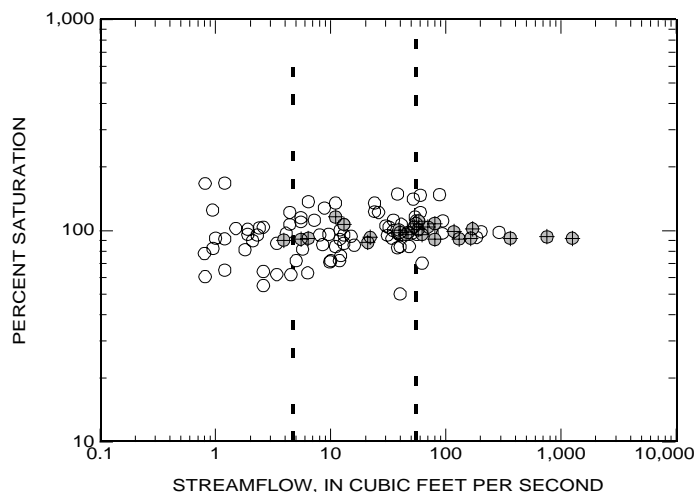


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

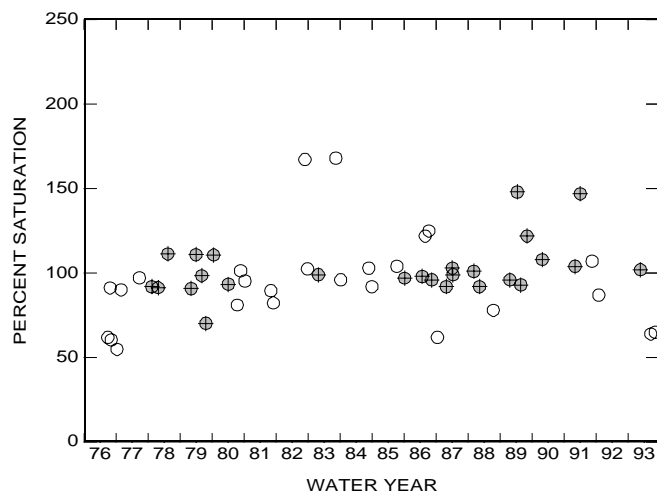
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	110	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	84	ND	ND
NONGROWING SEASON	26	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	26	14	0
HIGH FLOW	26	11	ND

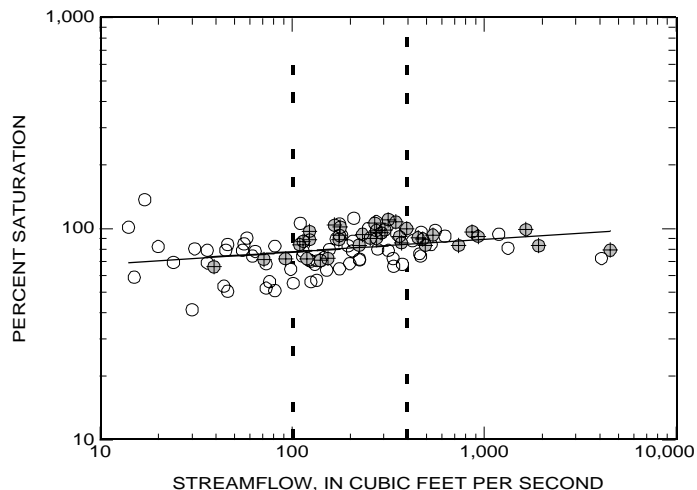


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

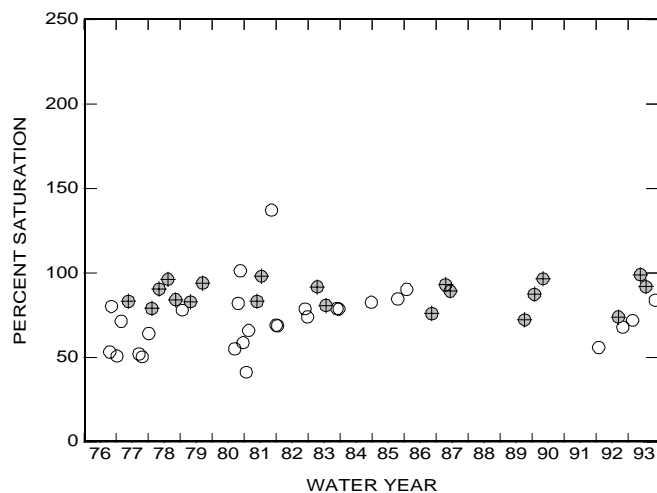
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	104	0.06	1.77
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	67	0	ND
NONGROWING SEASON	37	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	28	13	ND
HIGH FLOW	20	11	ND

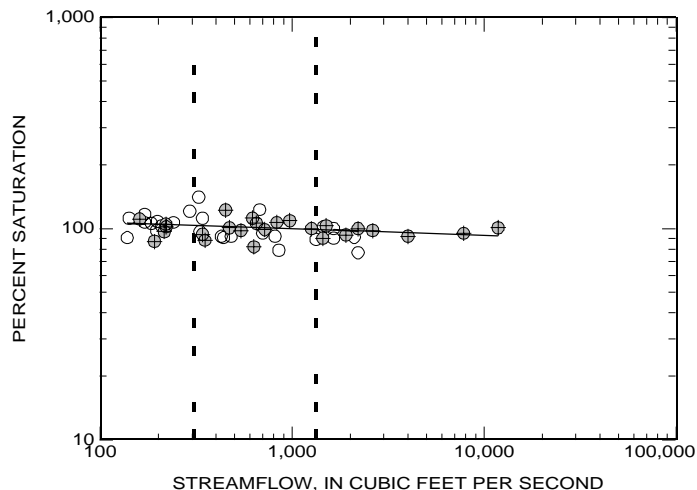


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

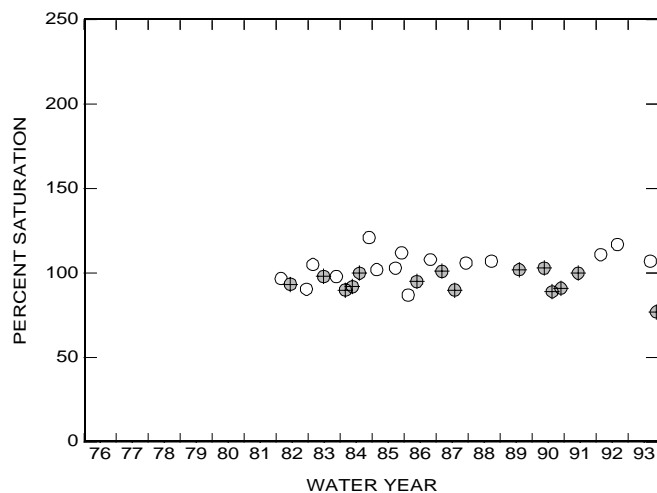
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	51	-0.03	2.09	
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	26	ND	ND	
NONGROWING SEASON	25	ND	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - 75 PERCENT - - - 25 PERCENT				



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	15	9	ND	
HIGH FLOW	14	9	ND	

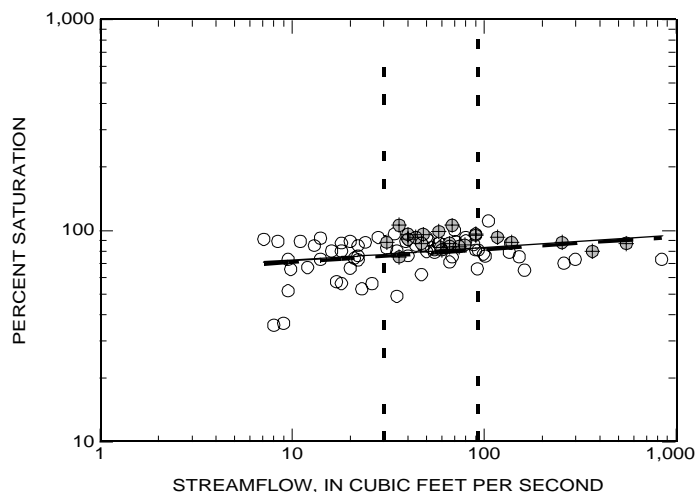


APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FRACTION OF DISSOLVED OXYGEN AT SATURATION
 01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

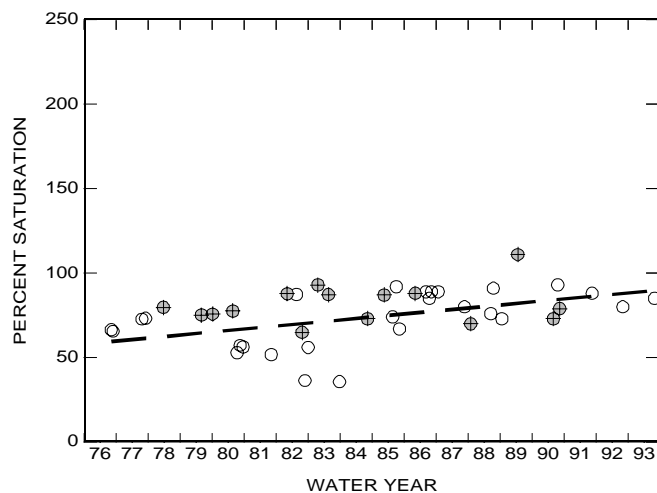
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	89	0.06	1.8	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	66	0.06	1.79	
NONGROWING SEASON	23	0	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
— —	75 PERCENT	— —	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	27	15	1.78	
HIGH FLOW	15	11	ND	



APPENDIX 9. Relations of constituent concentration and load to streamflow and trends in concentration with time
FRACTION OF DISSOLVED OXYGEN AT SATURATION
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

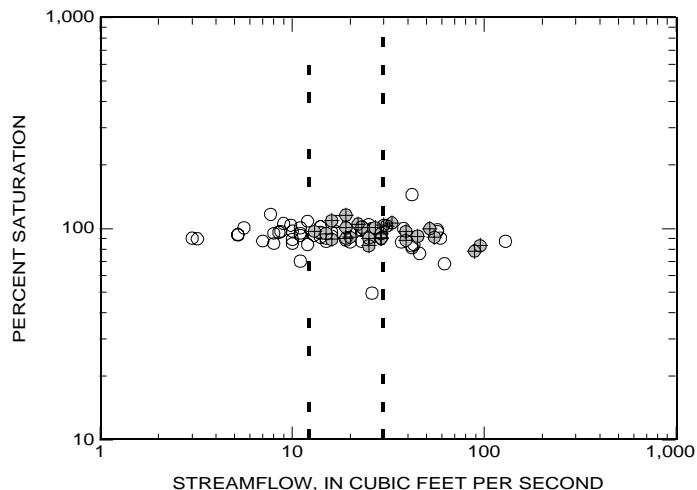
[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	87	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	61	ND	ND
NONGROWING SEASON	26	ND	ND

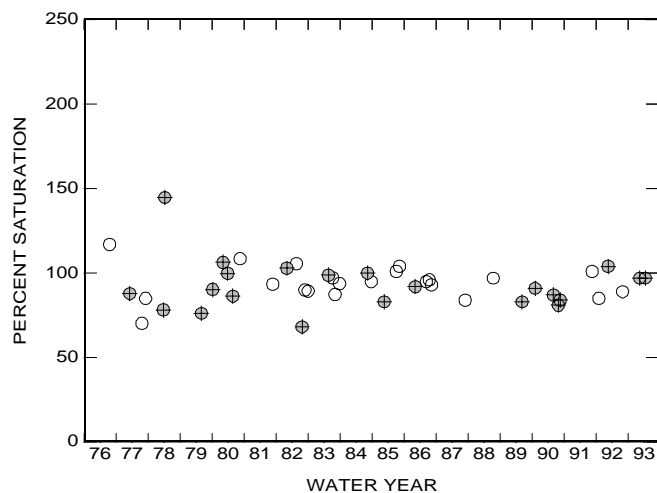
STREAMFLOW EXCEEDED		INDICATED PERCENTAGE OF TIME	
- -	75 PERCENT	- - -	25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	22	13	ND
HIGH FLOW	22	13	0



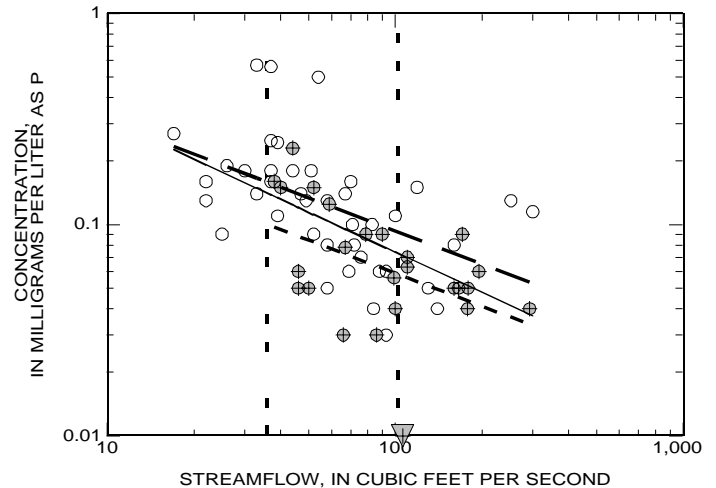
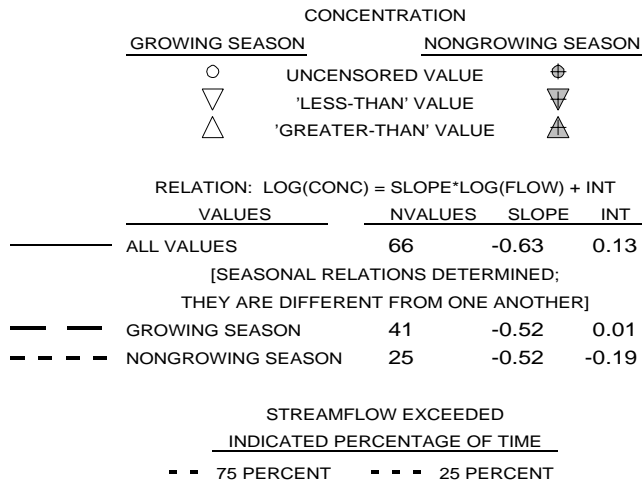
Appendix 10 - Total phosphorous

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

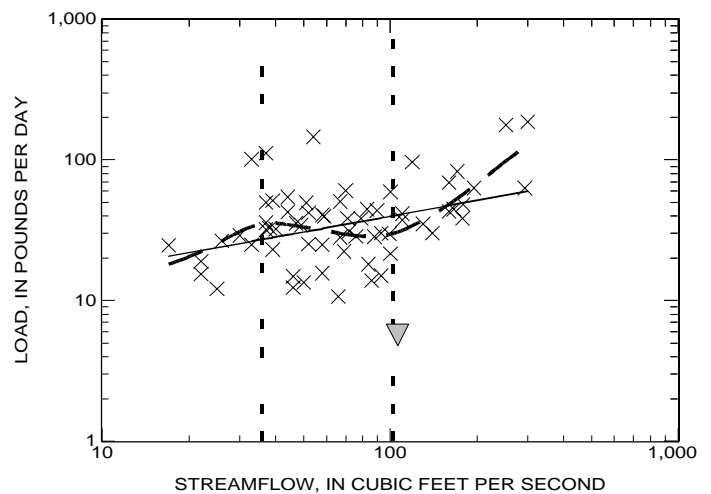
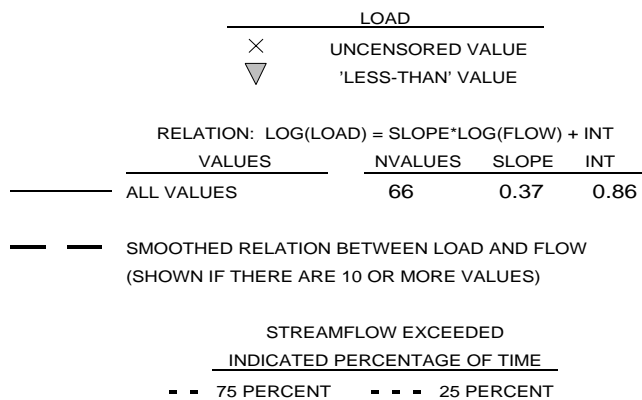
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

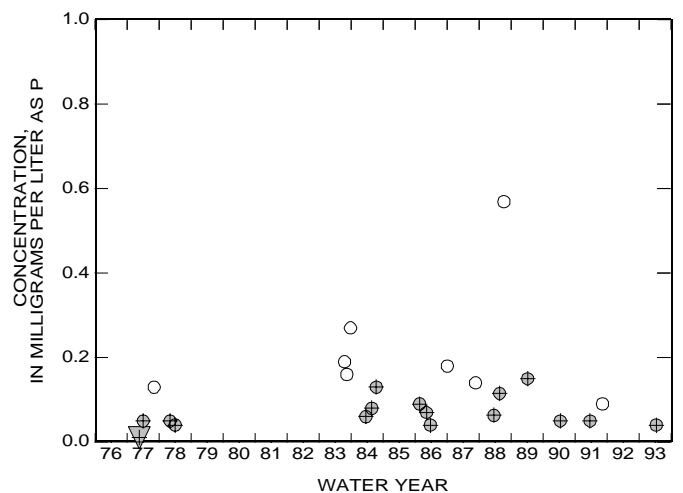
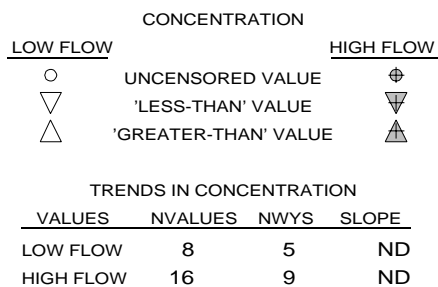
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



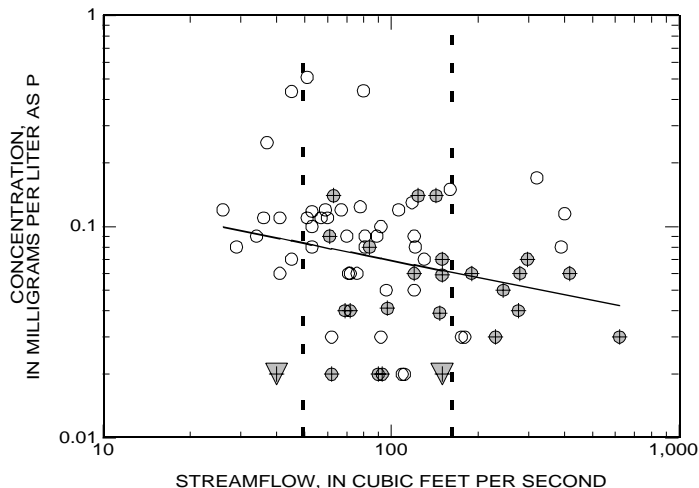
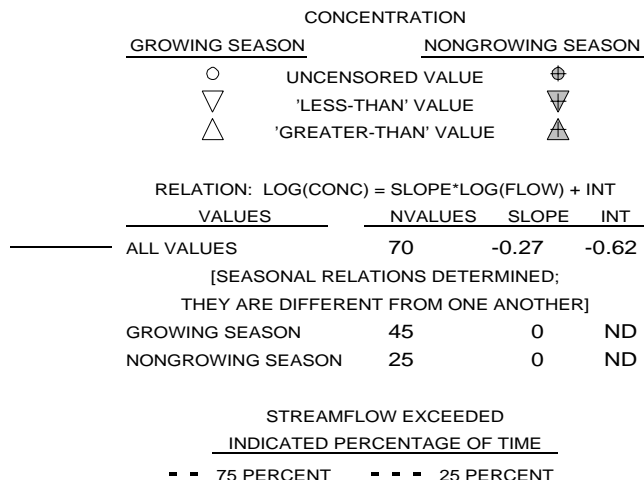
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



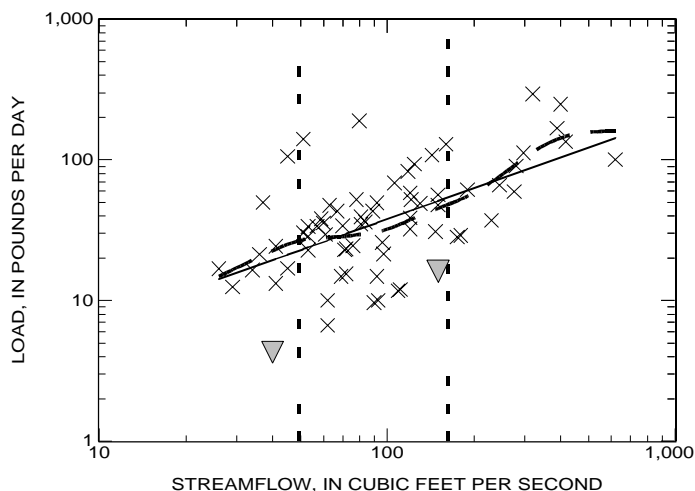
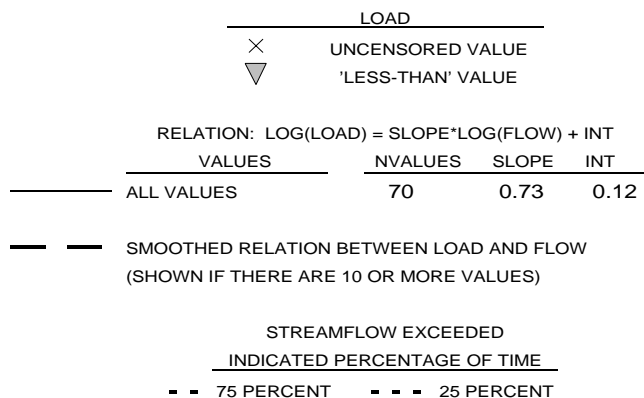
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

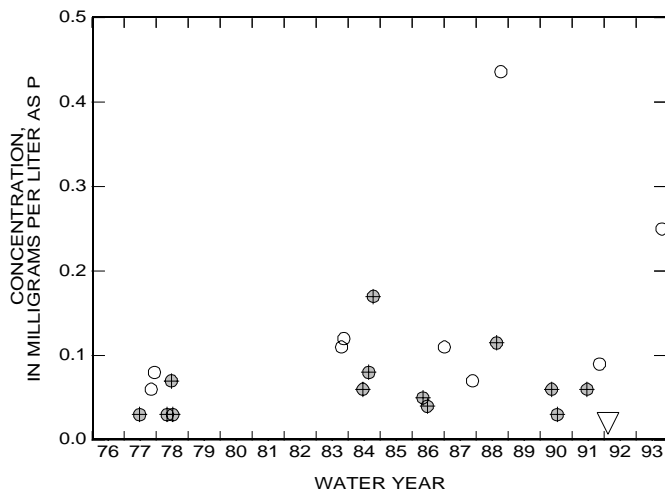
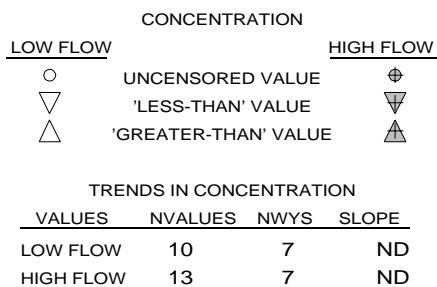
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



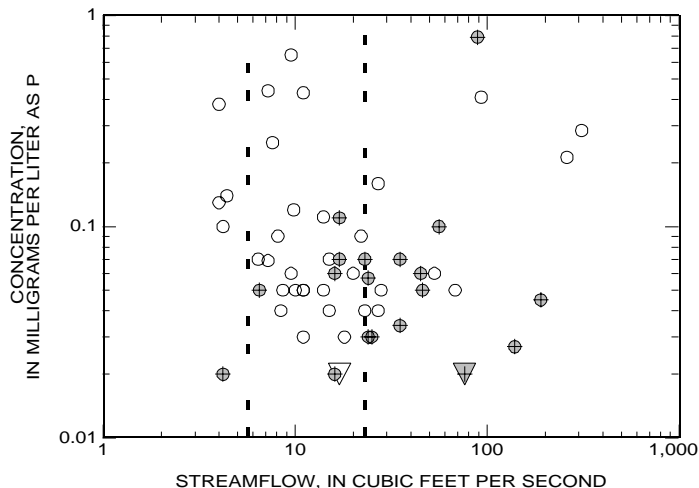
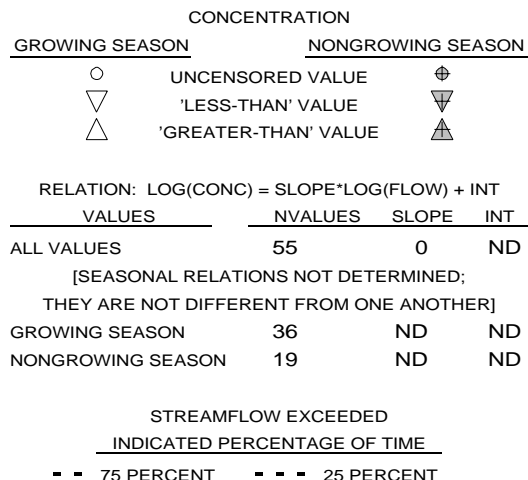
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



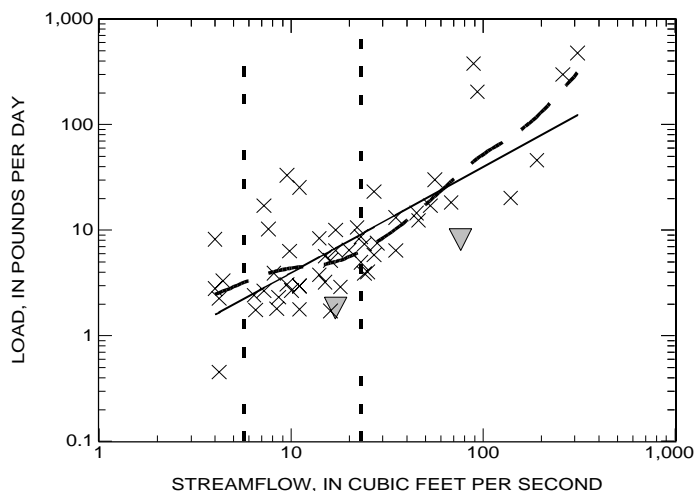
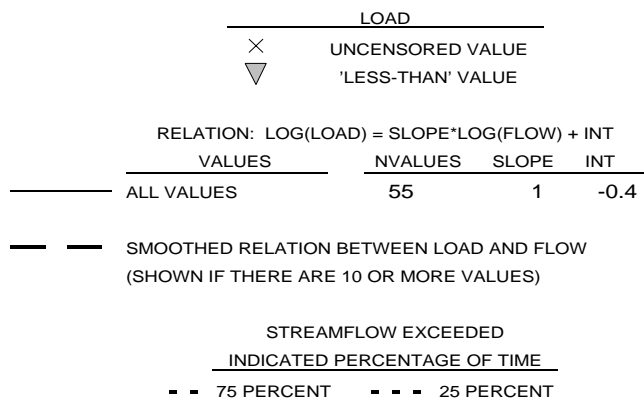
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

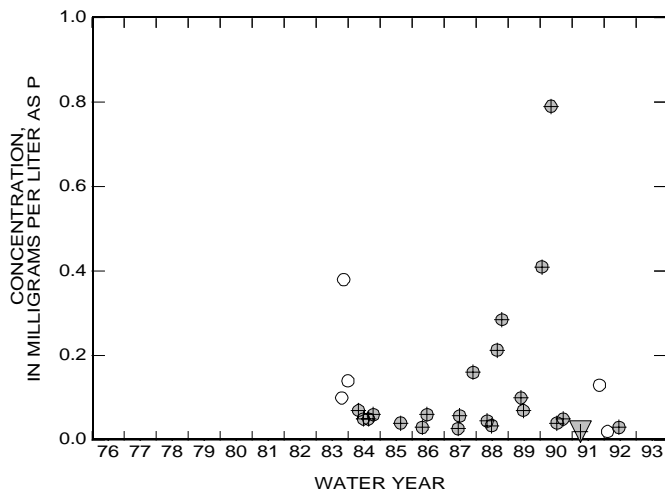
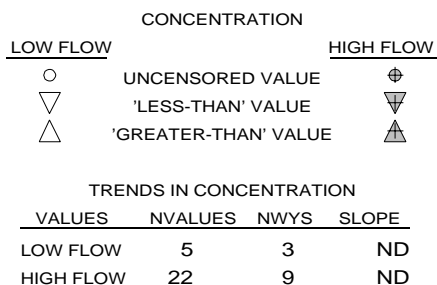
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



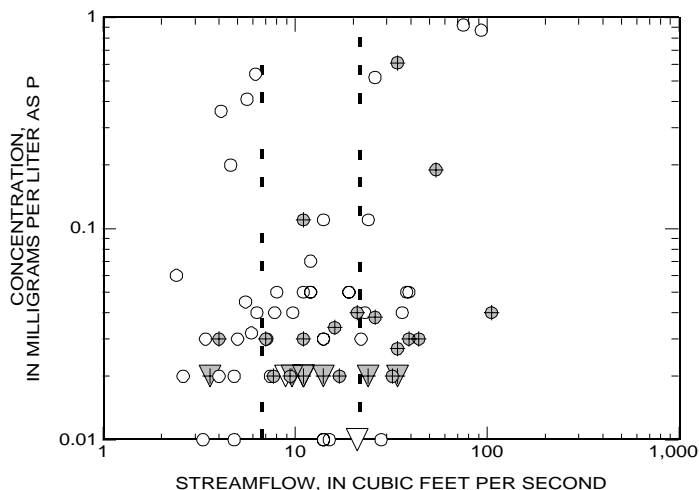
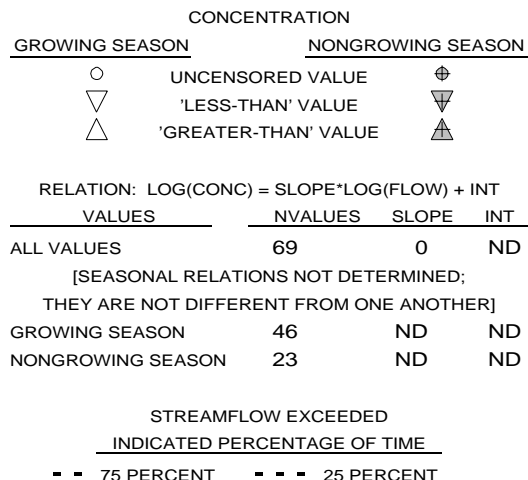
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



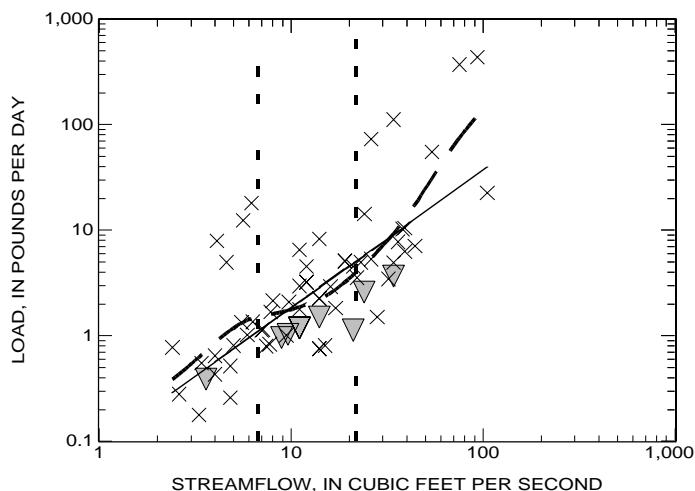
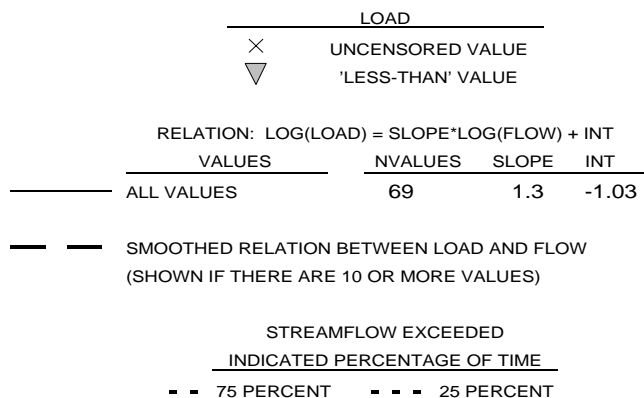
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

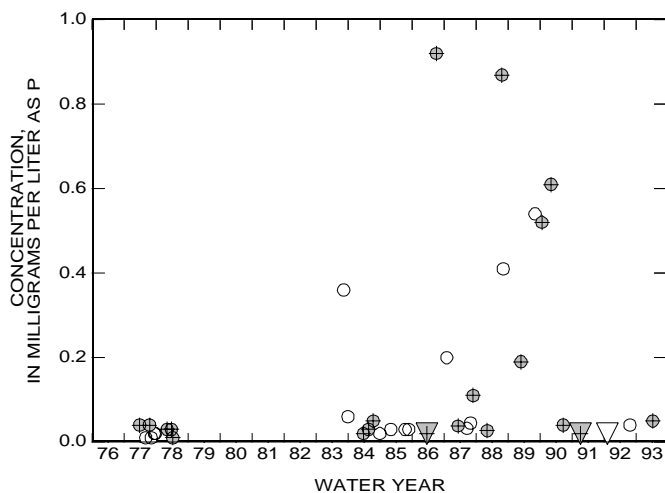
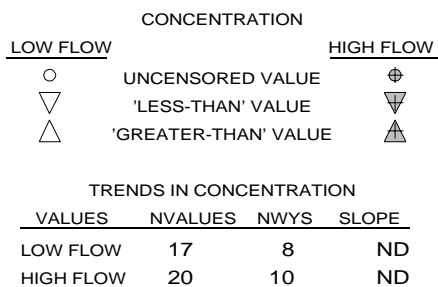
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



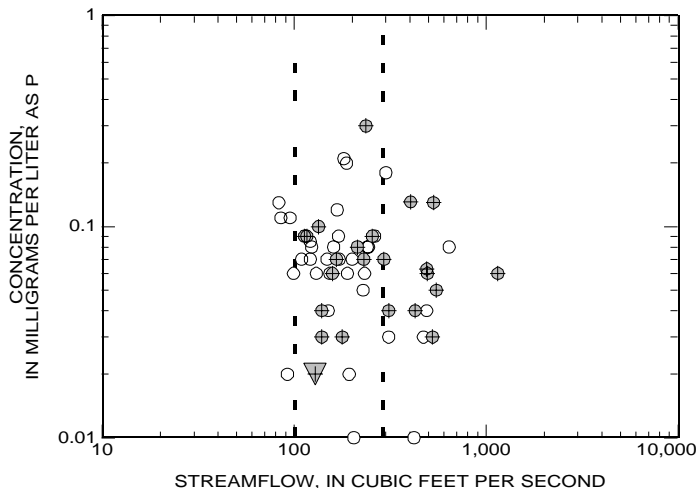
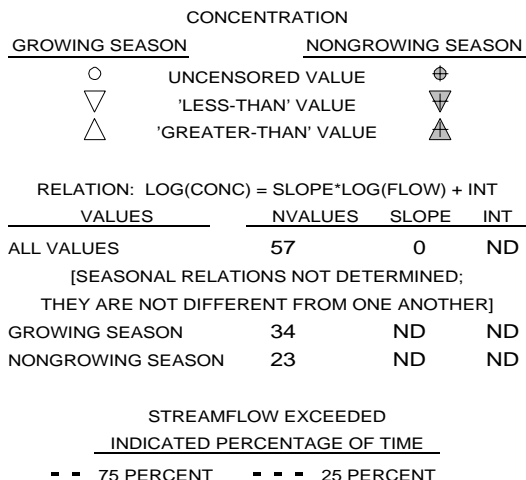
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



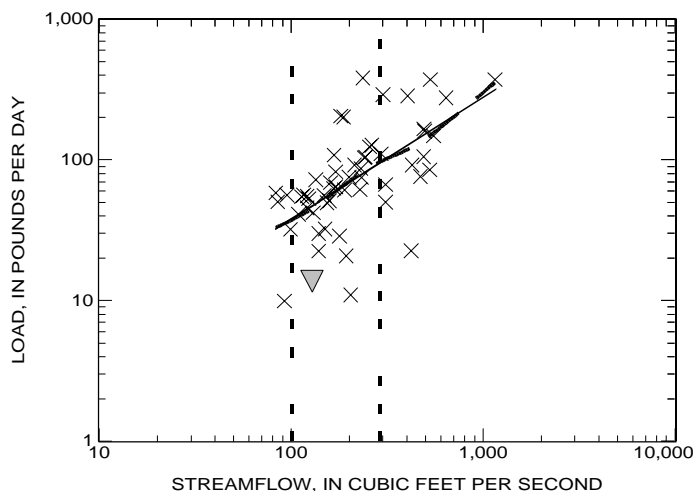
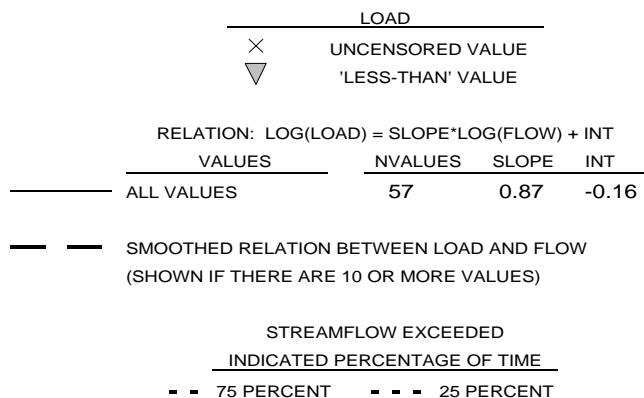
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

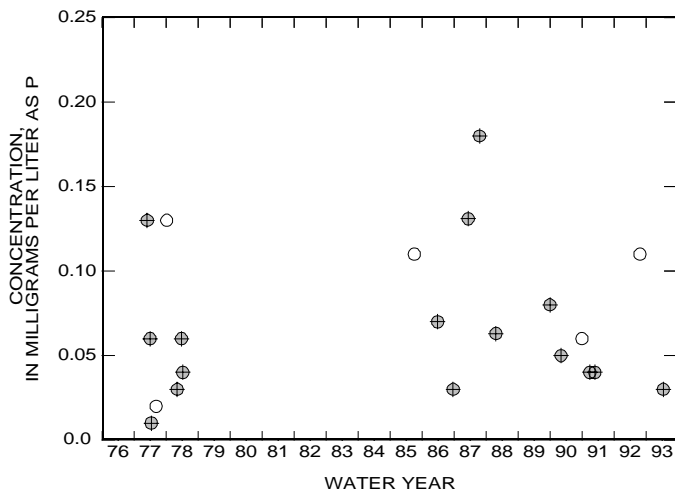
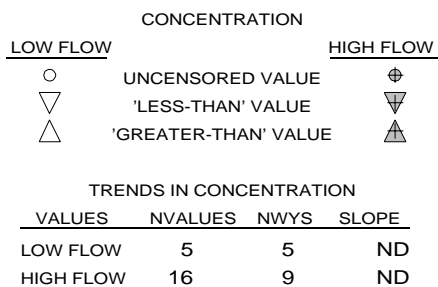
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



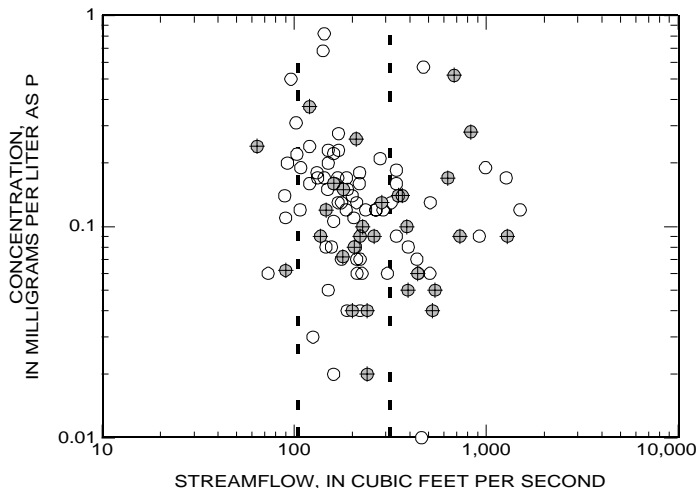
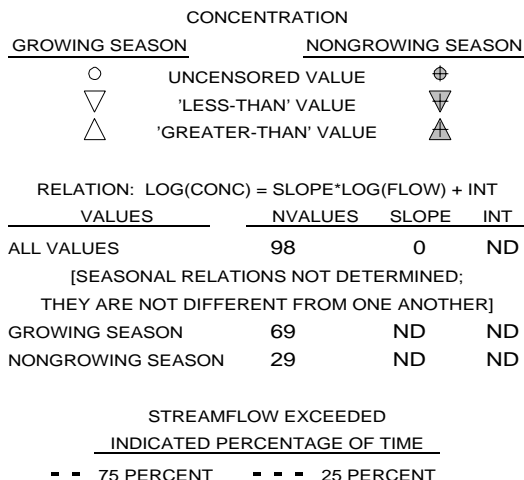
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



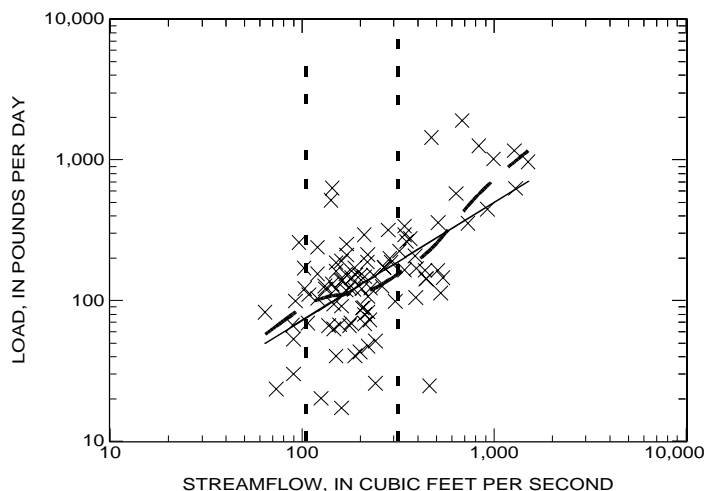
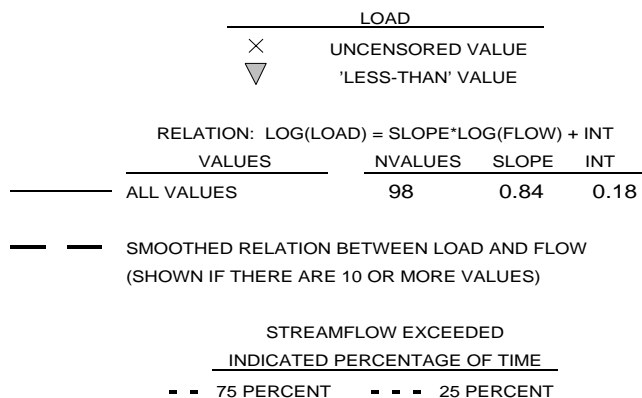
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

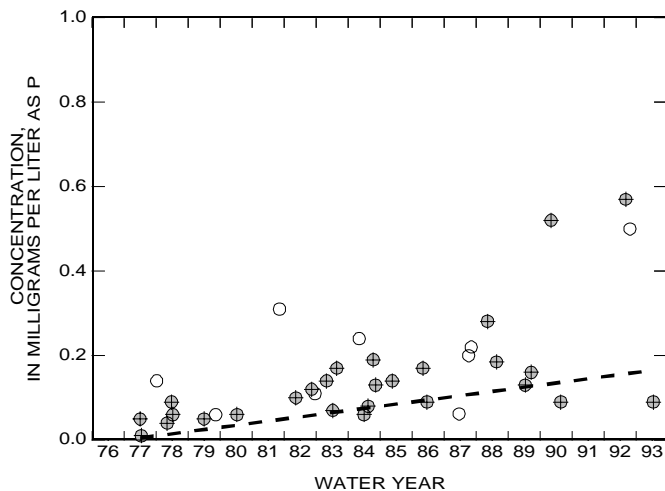
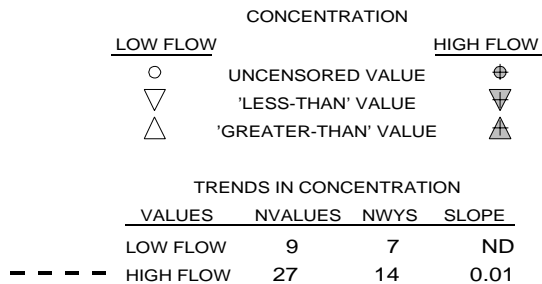
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



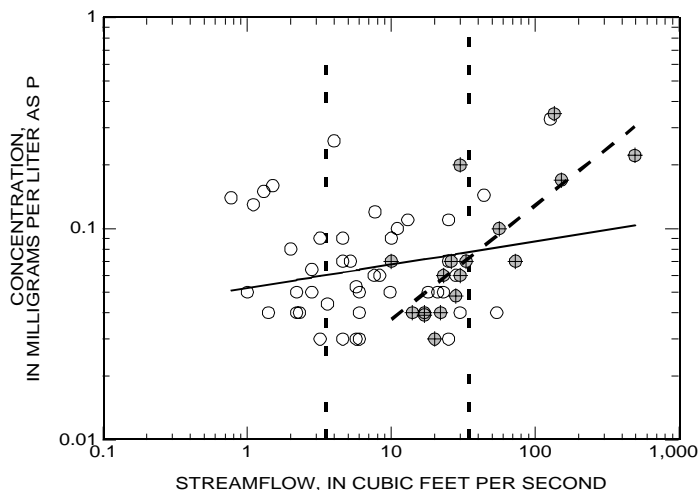
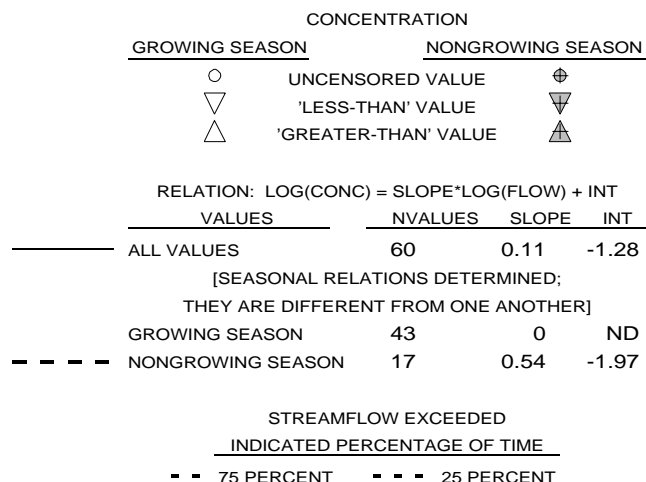
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



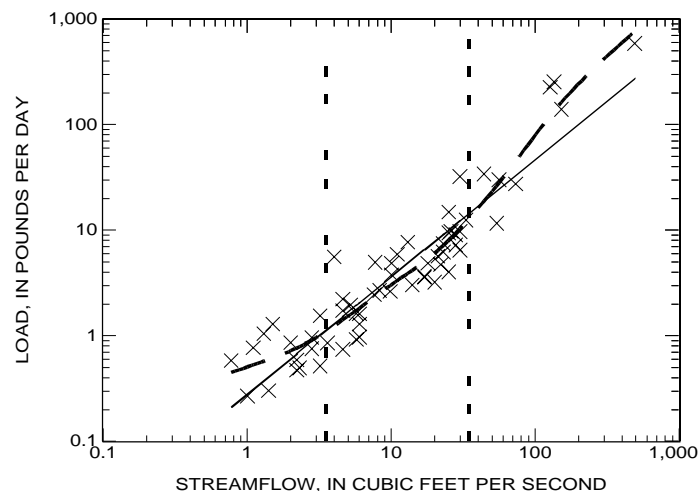
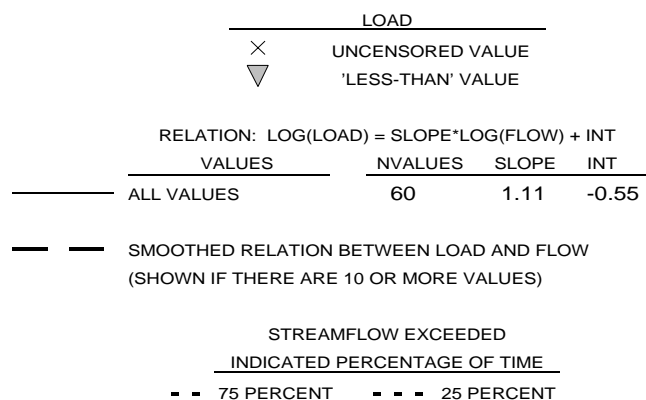
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

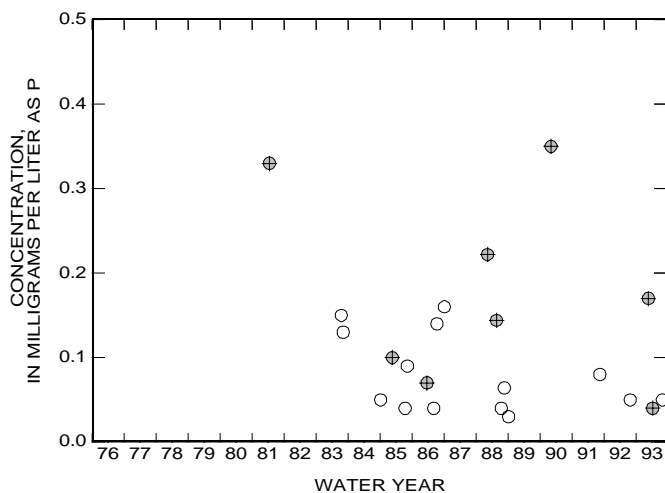
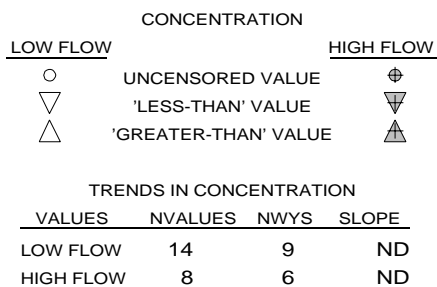
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



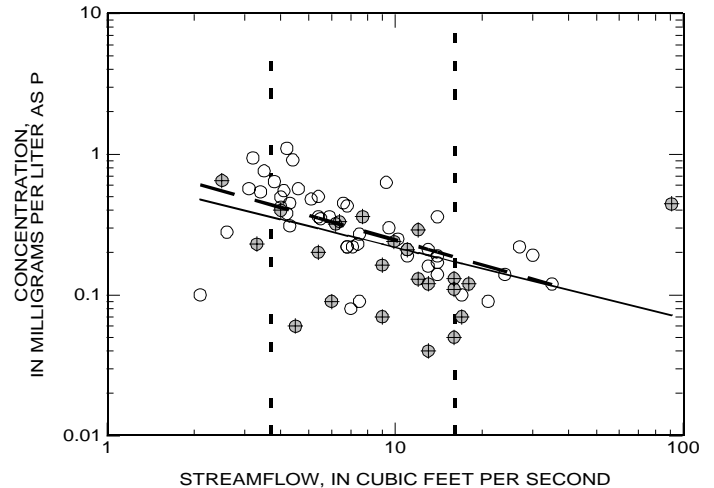
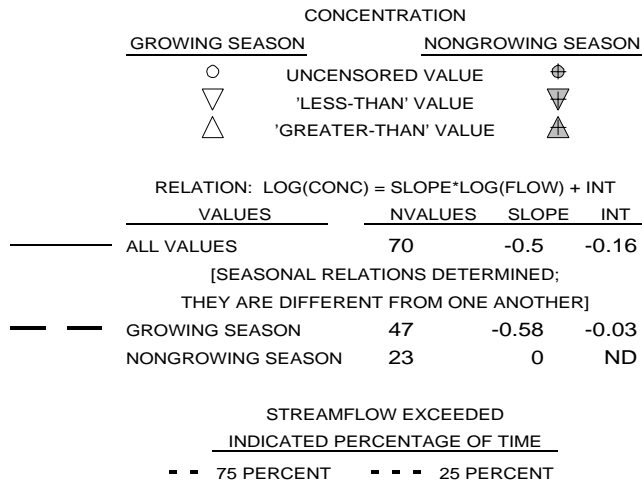
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



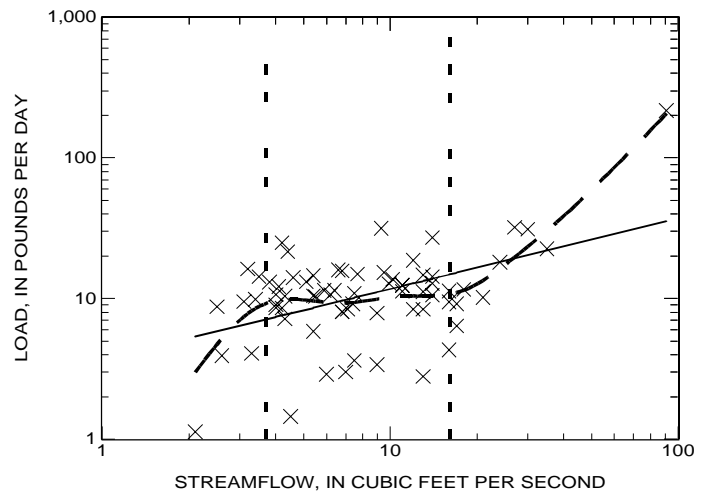
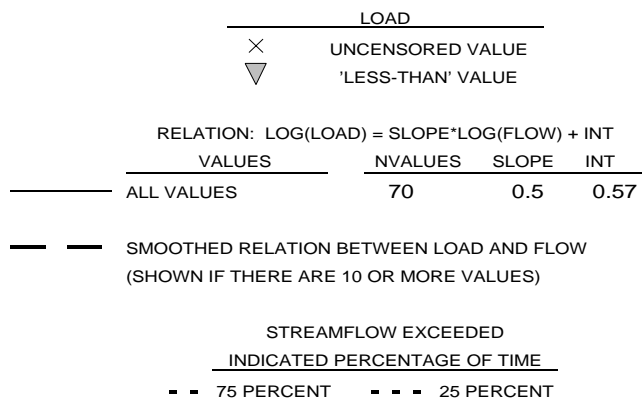
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

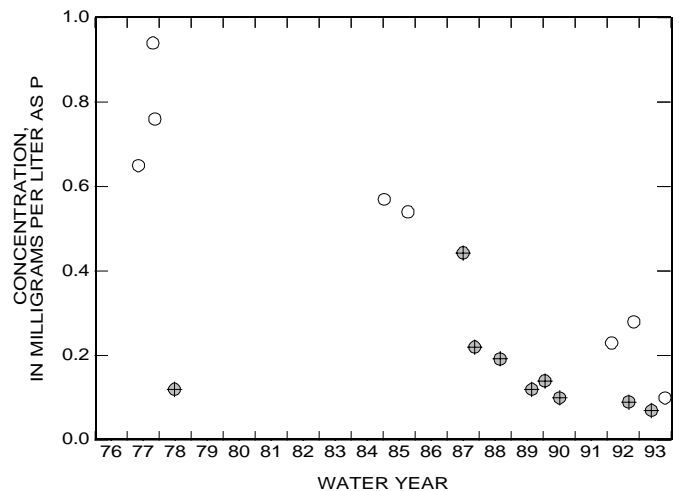
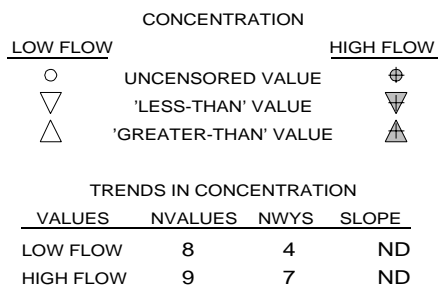
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



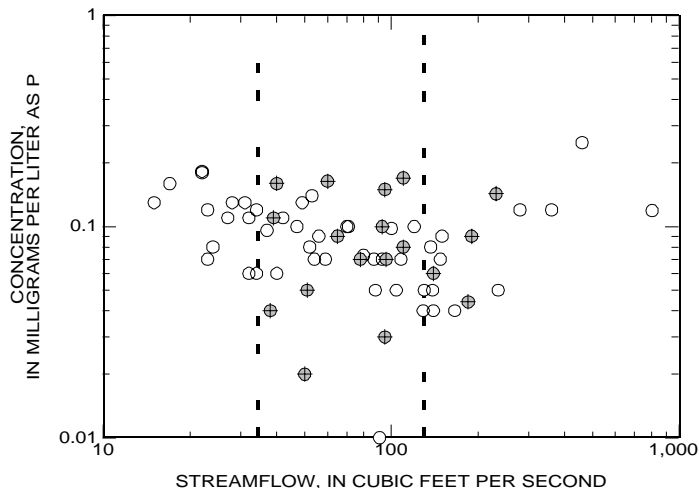
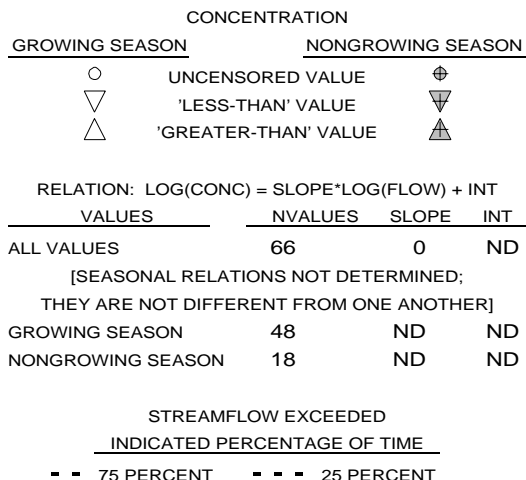
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



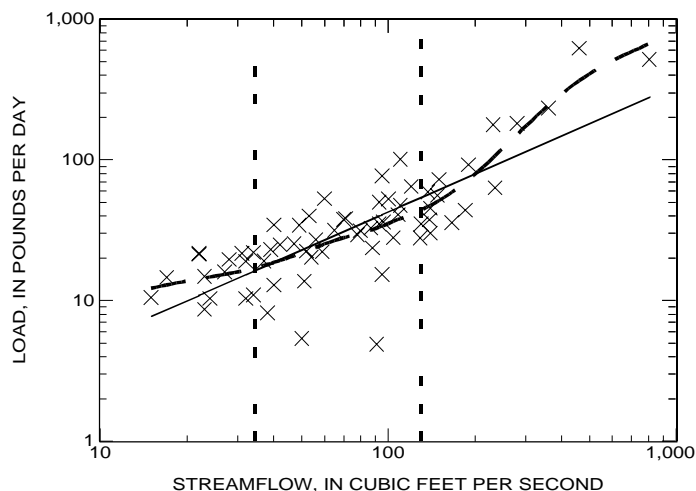
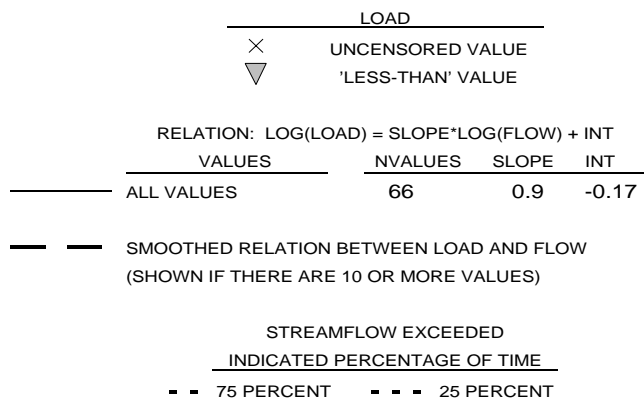
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

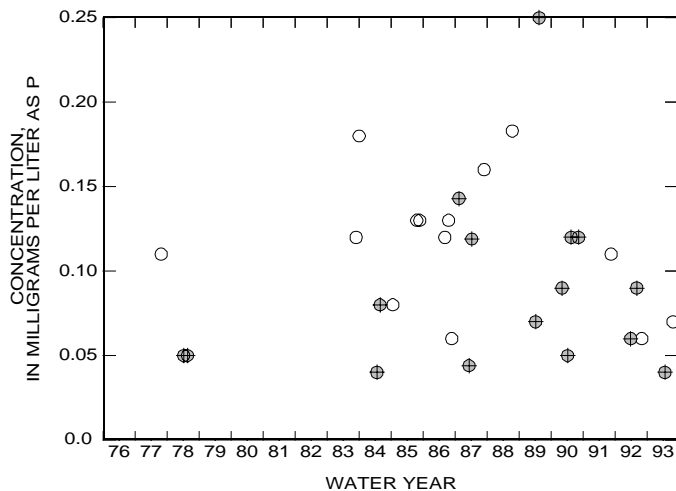
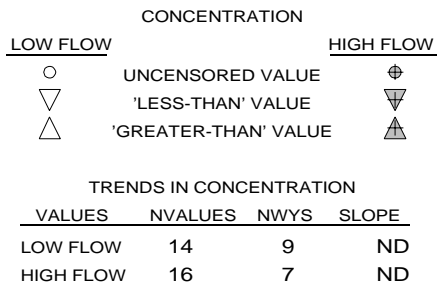
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



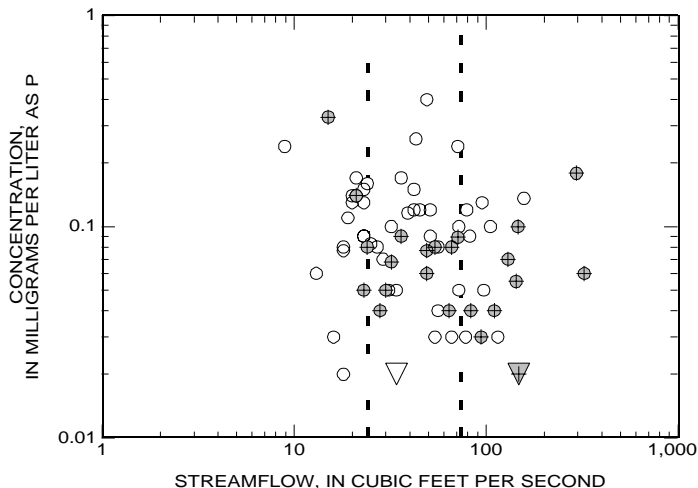
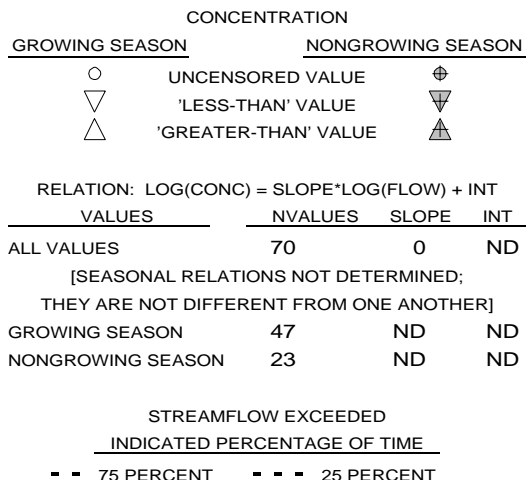
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



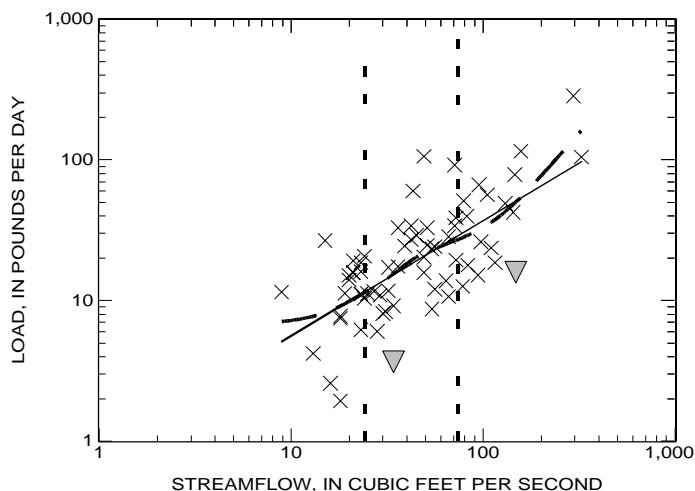
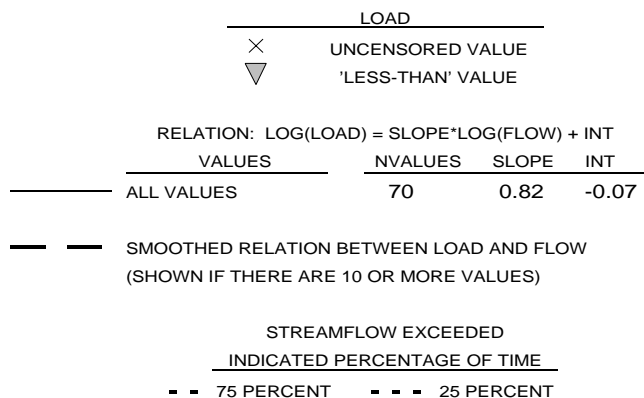
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

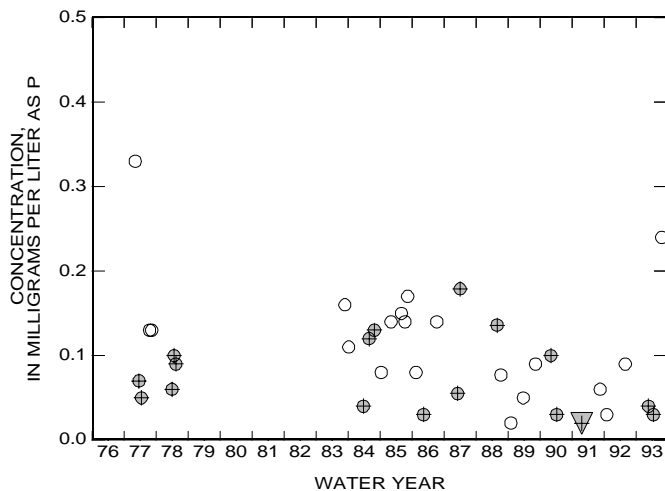
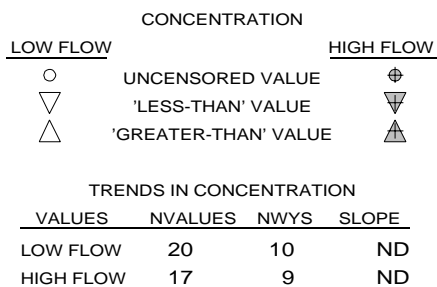
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



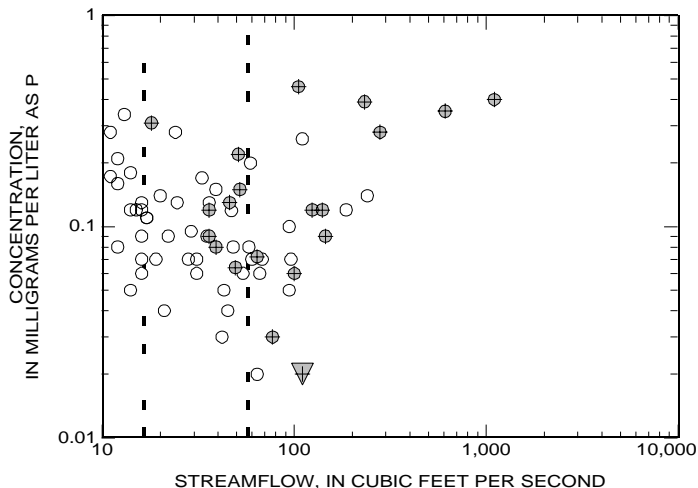
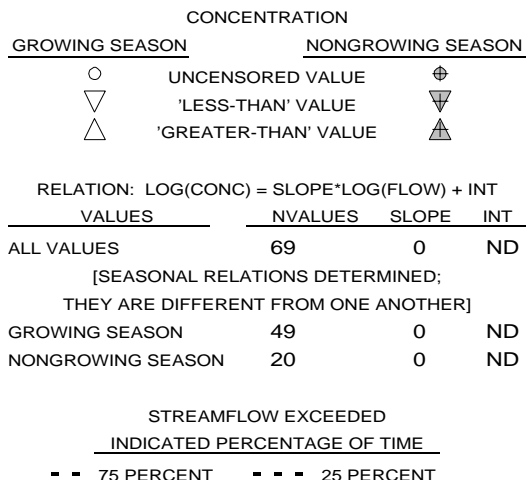
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



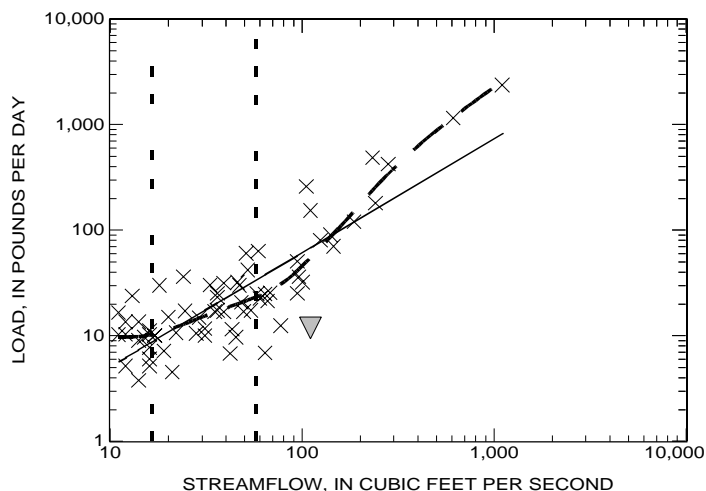
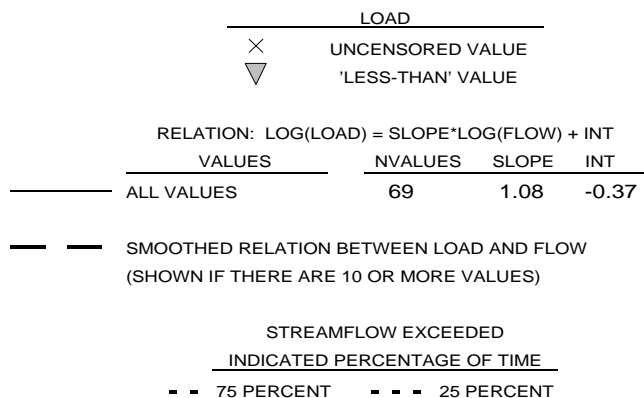
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

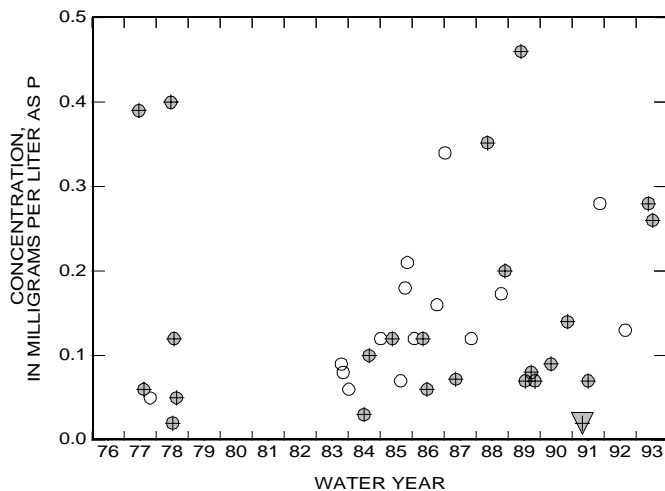
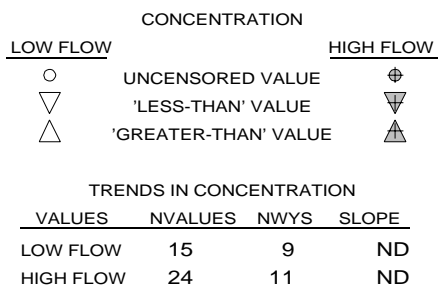
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



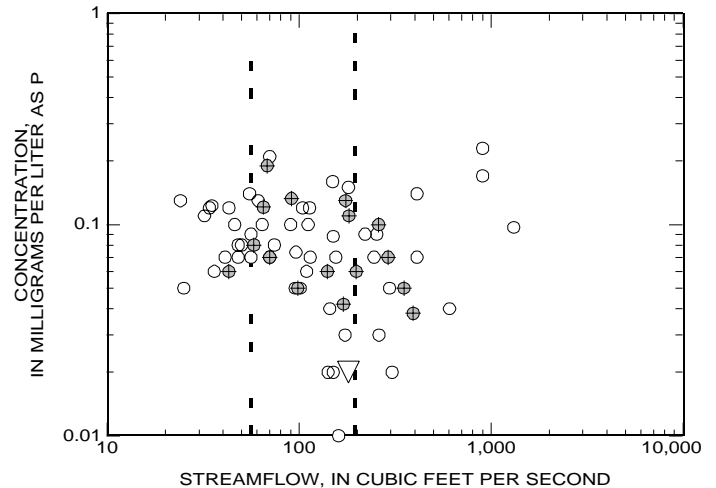
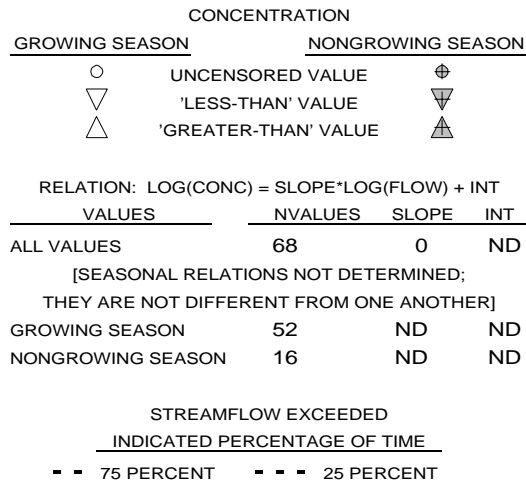
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



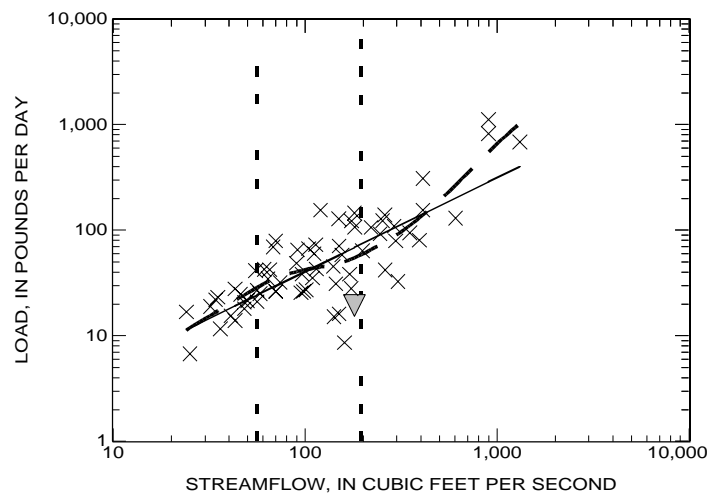
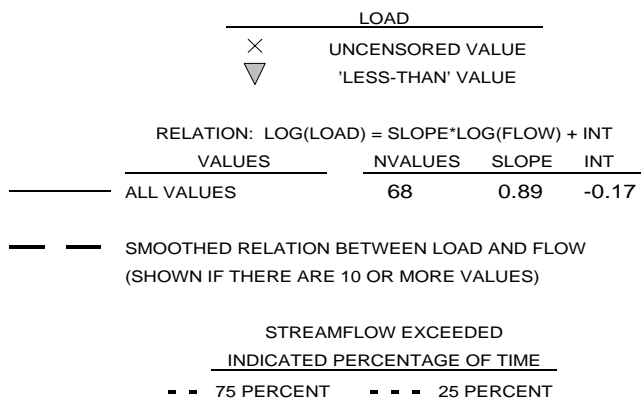
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

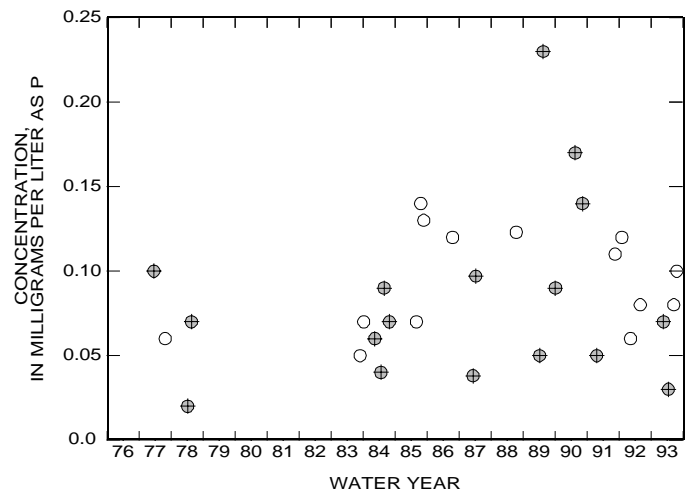
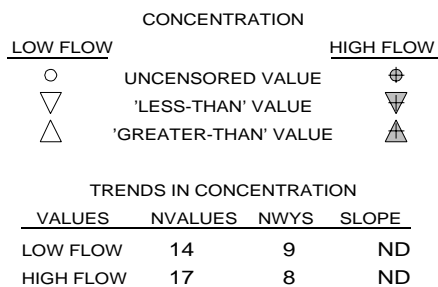
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



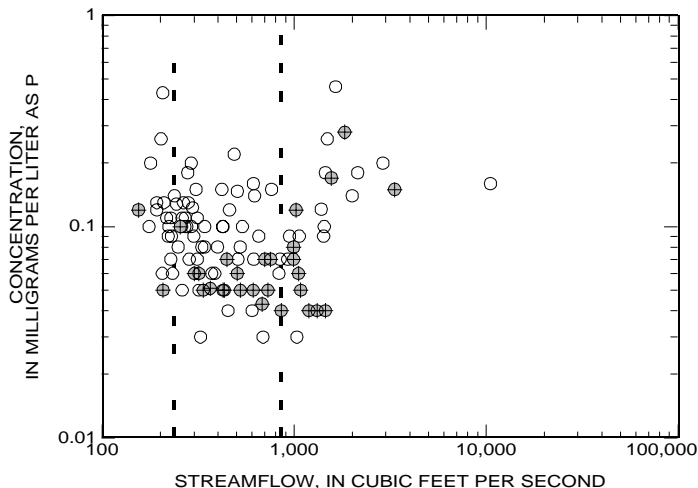
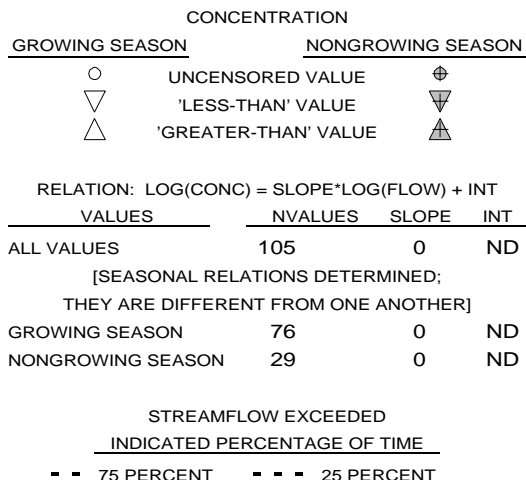
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



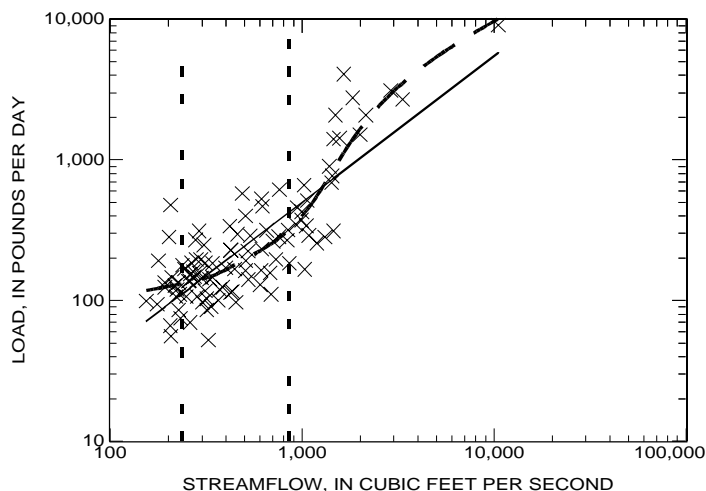
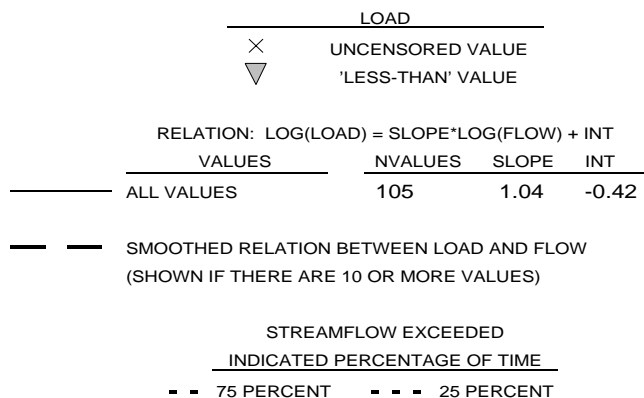
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

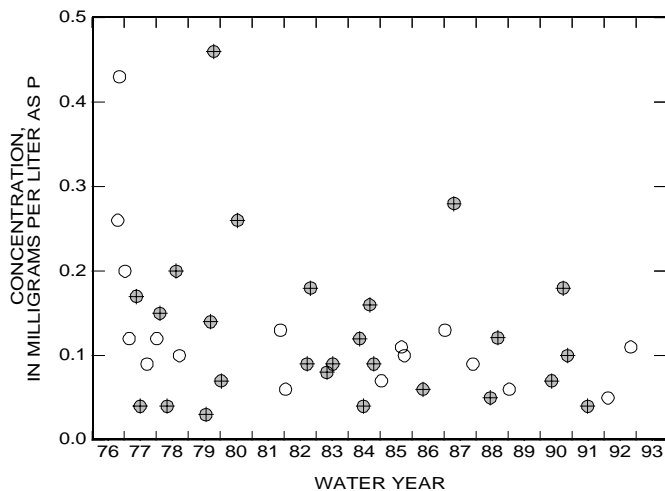
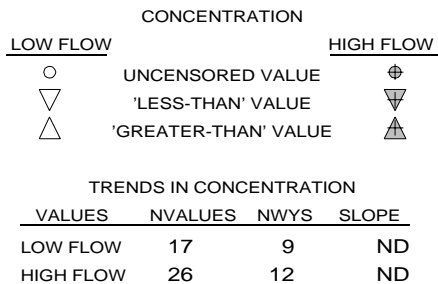
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



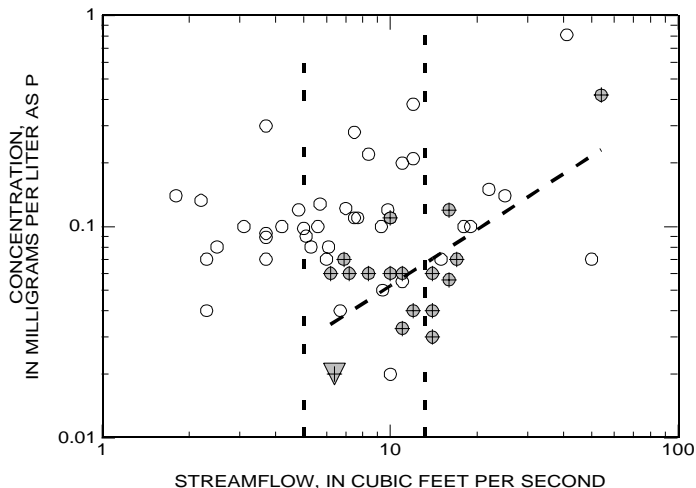
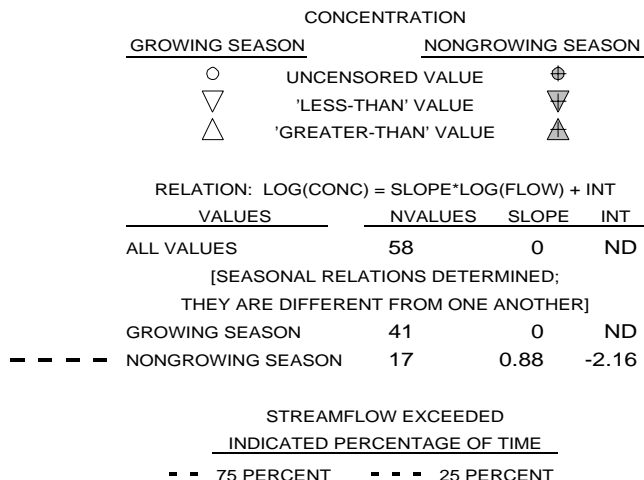
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



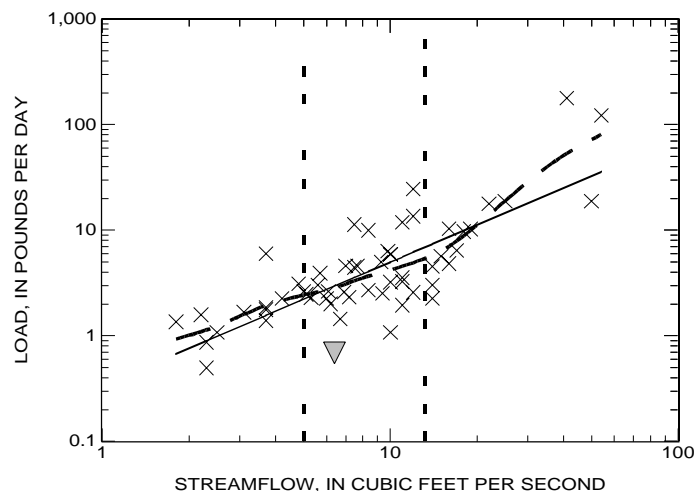
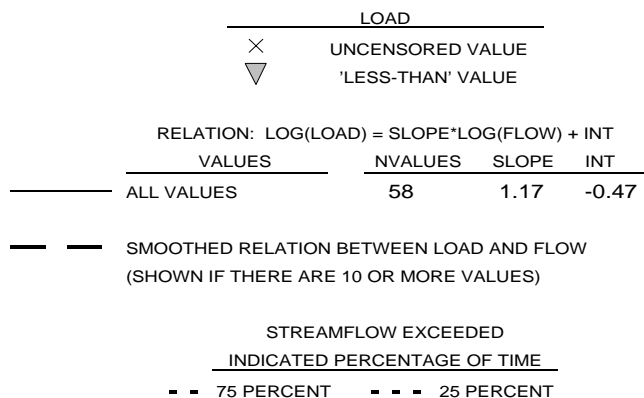
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

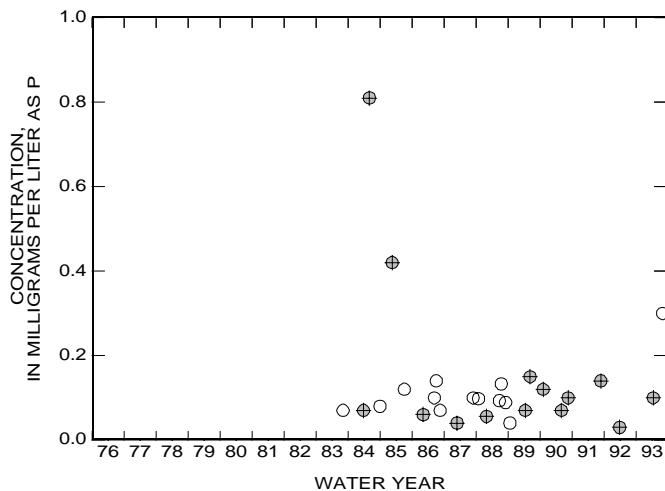
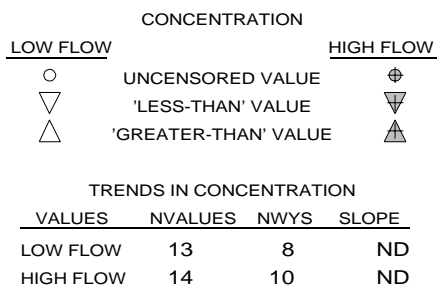
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



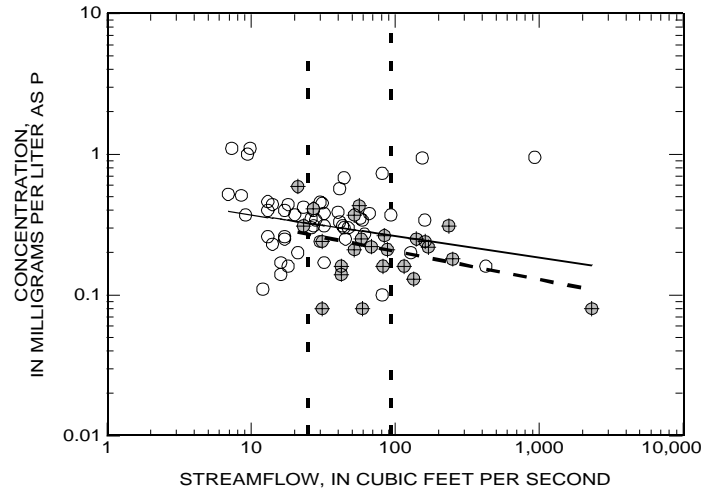
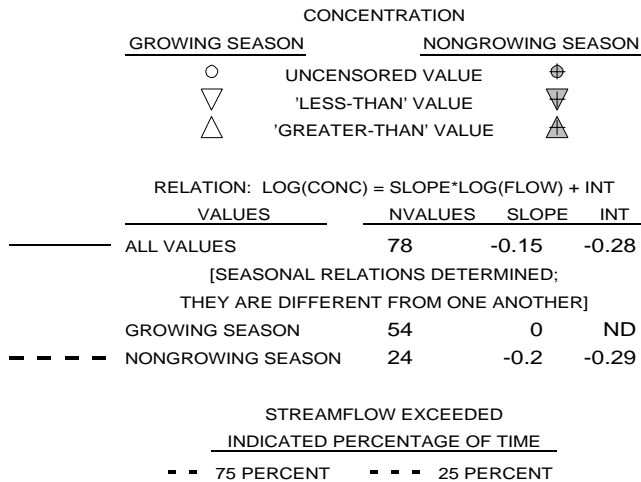
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



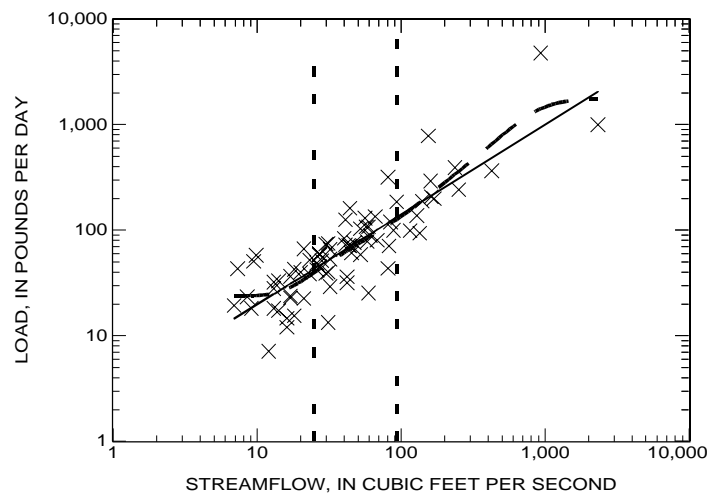
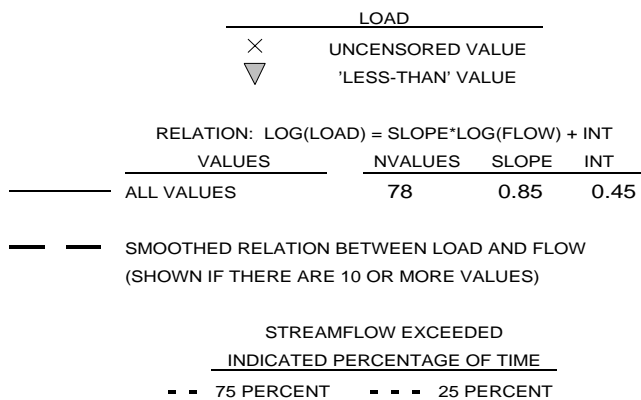
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

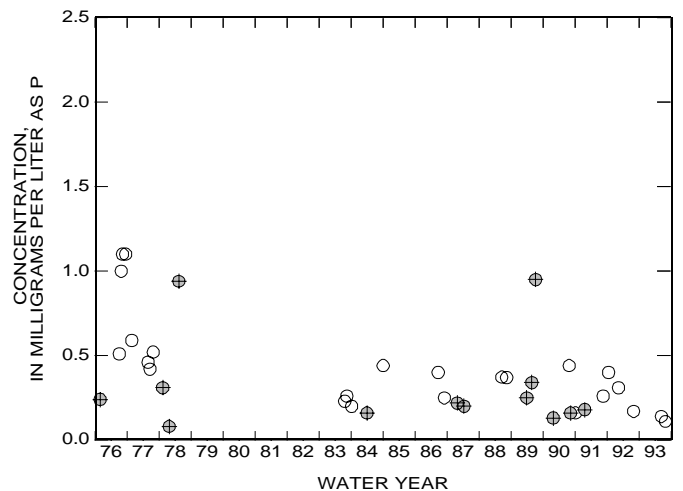
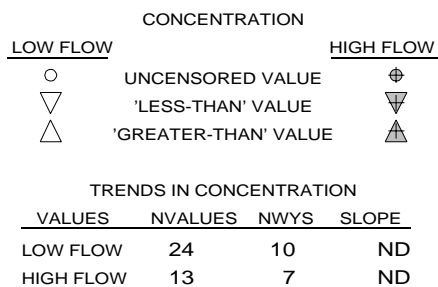
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



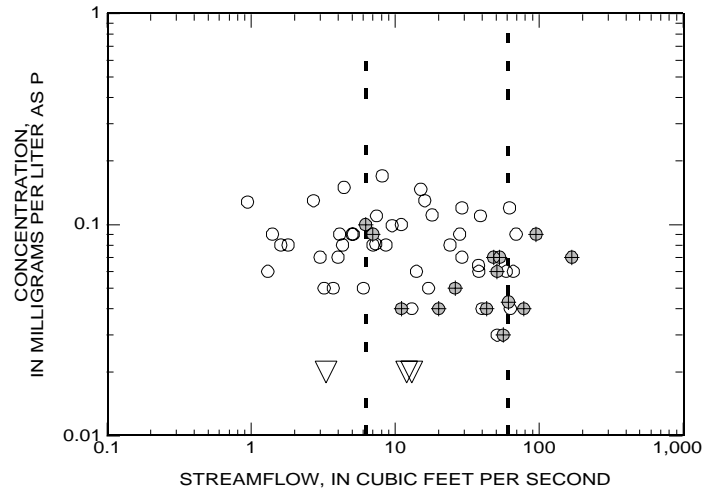
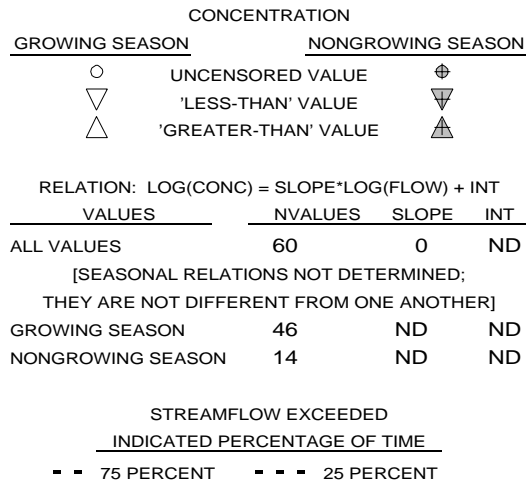
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



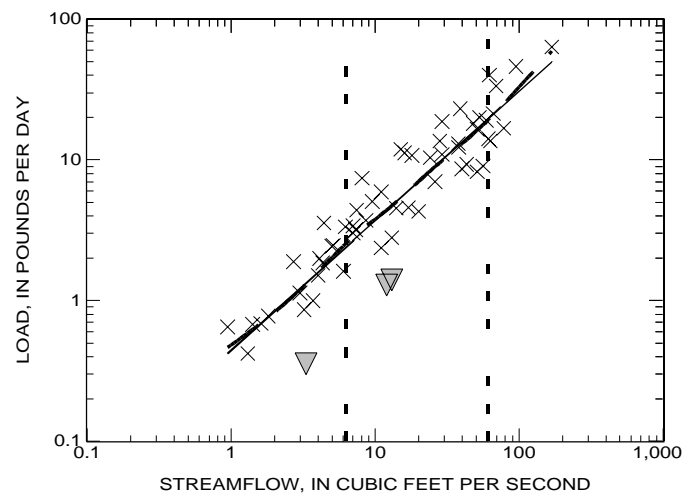
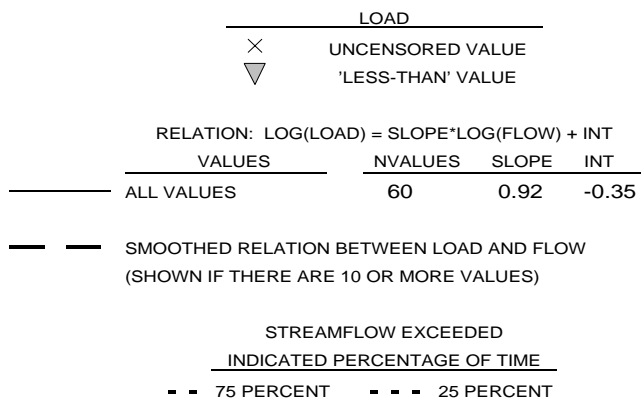
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

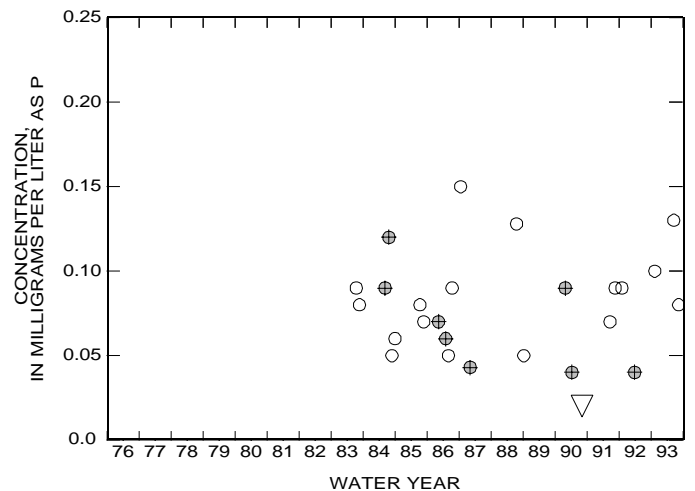
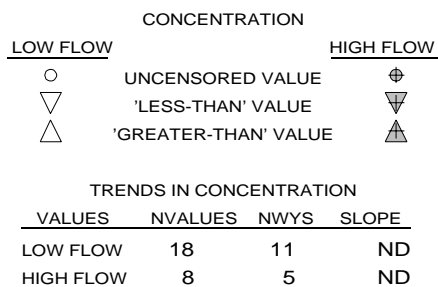
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



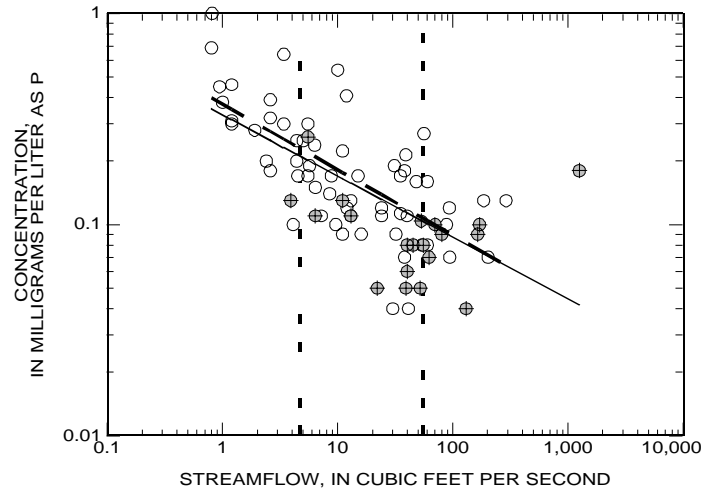
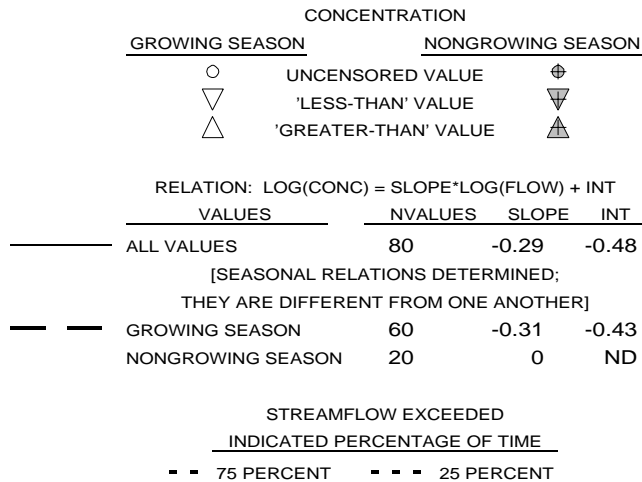
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



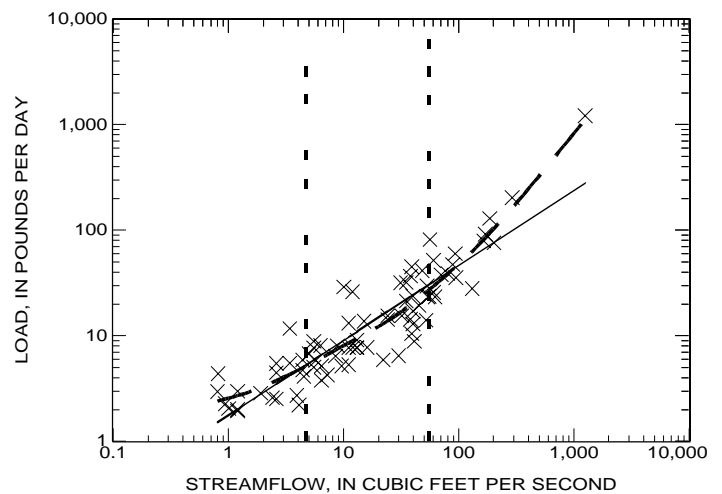
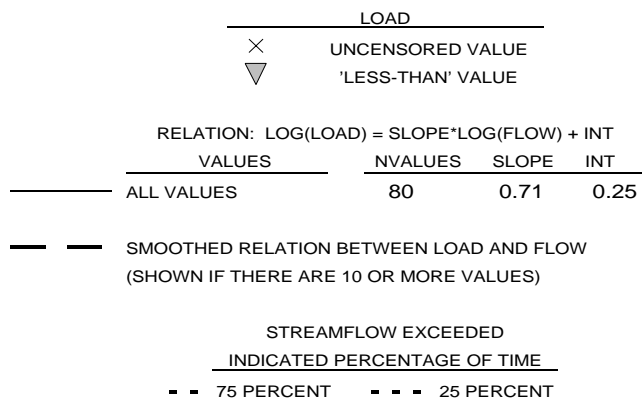
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

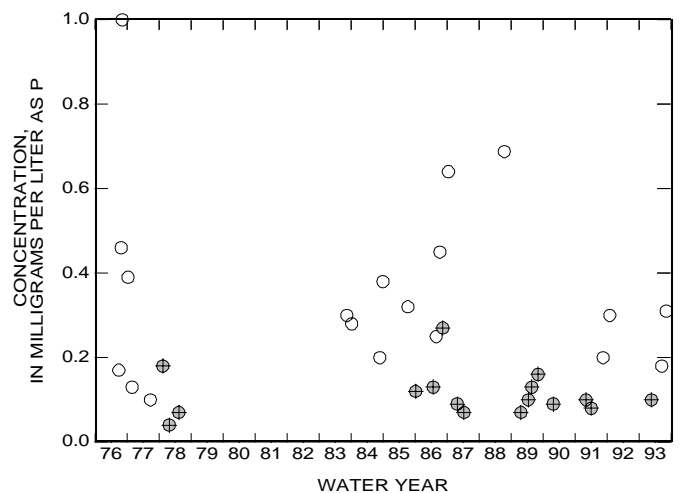
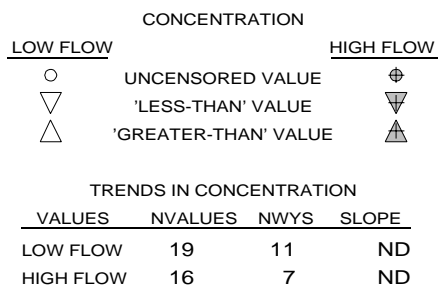
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



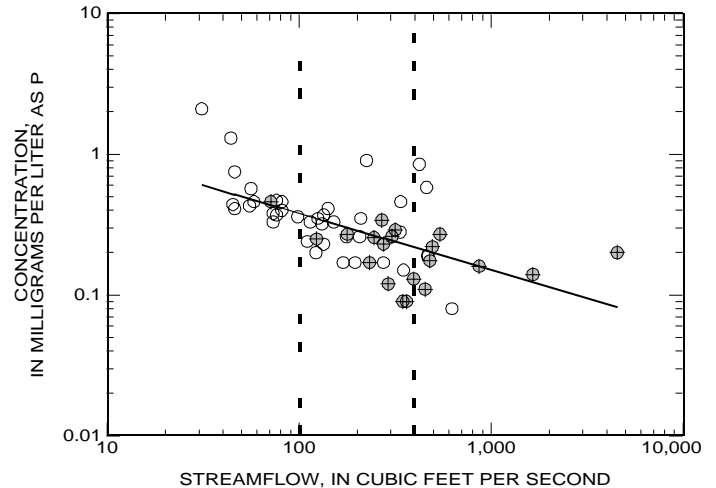
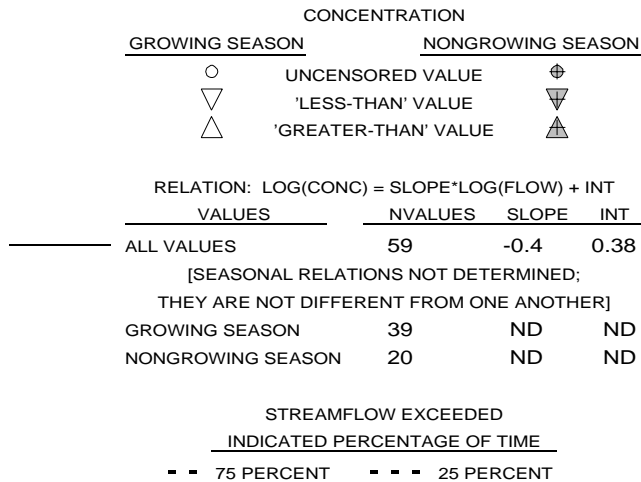
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



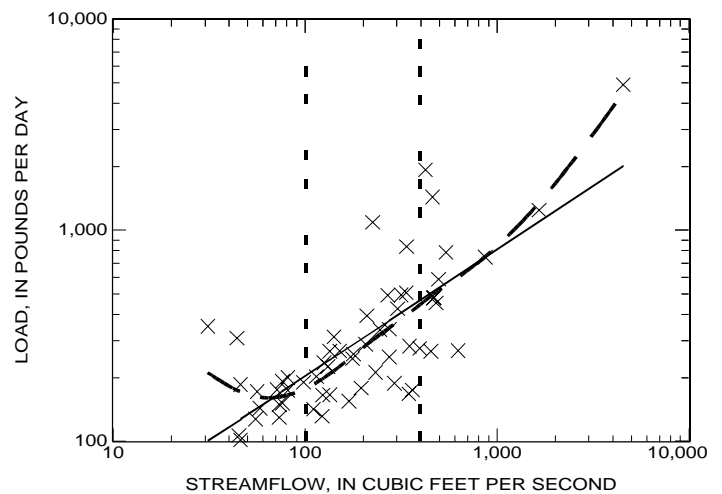
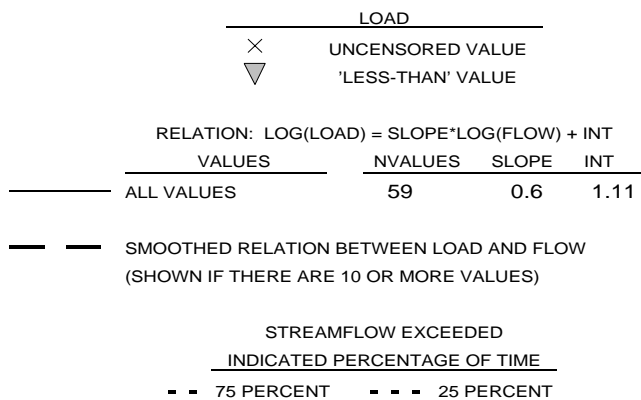
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

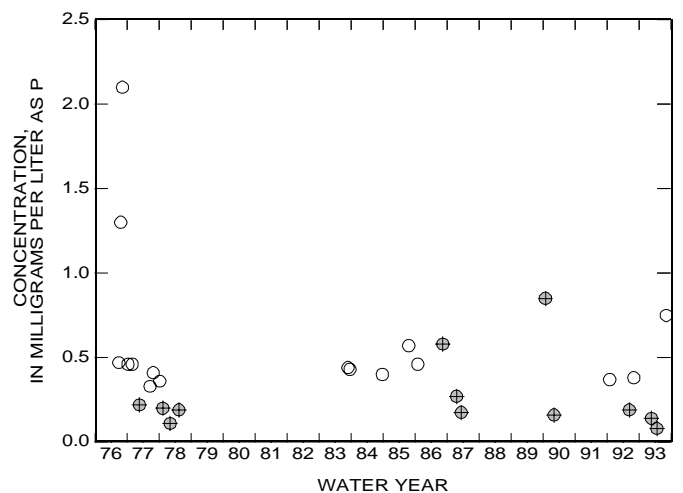
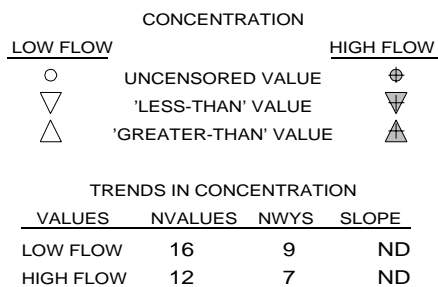
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



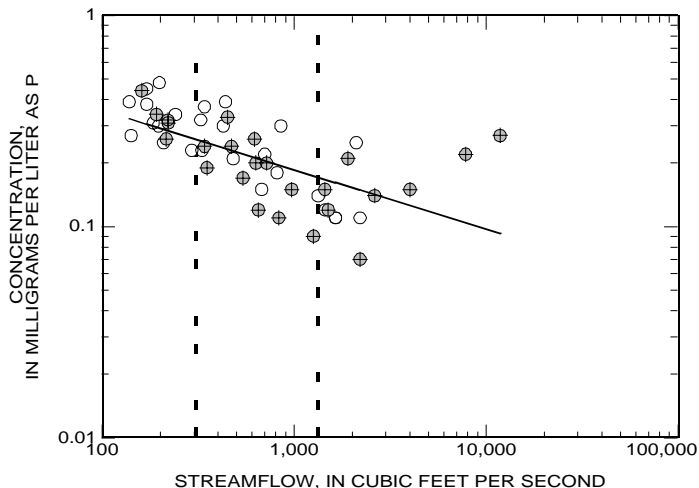
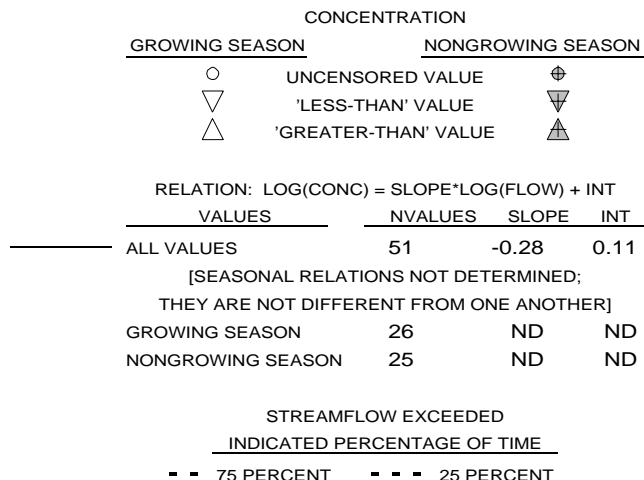
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



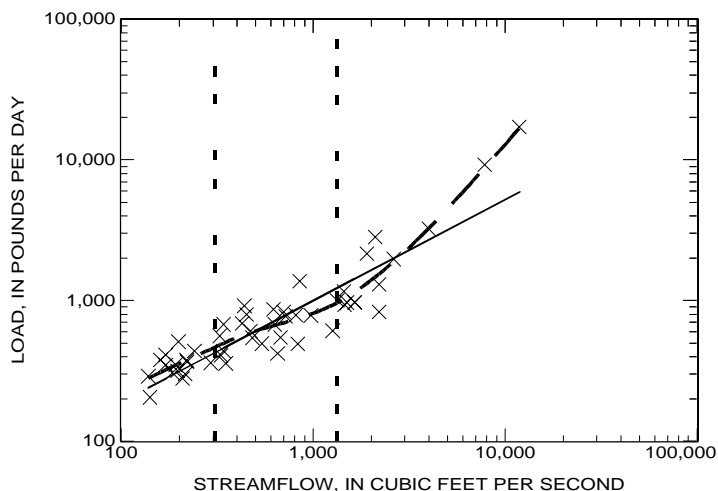
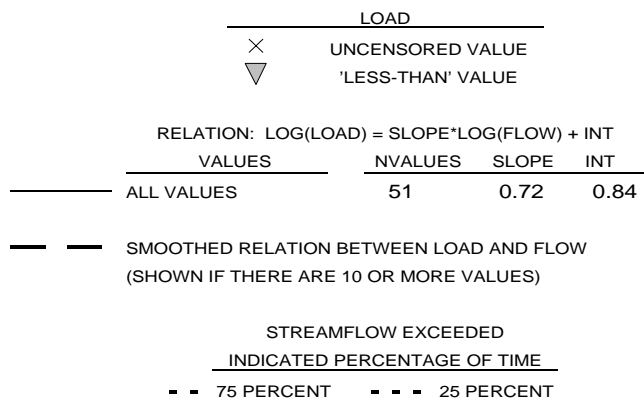
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

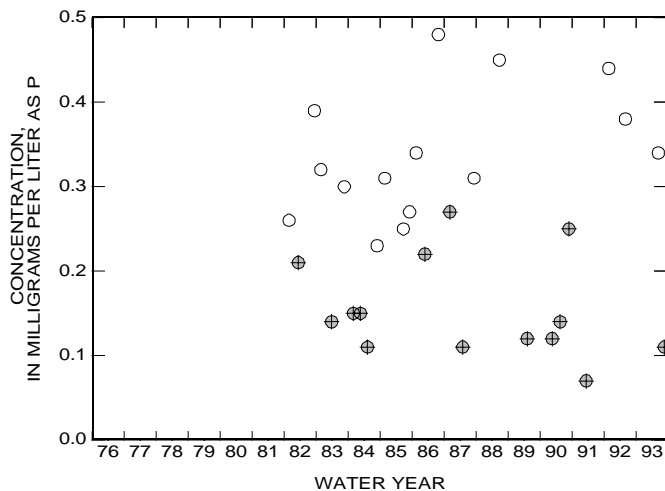
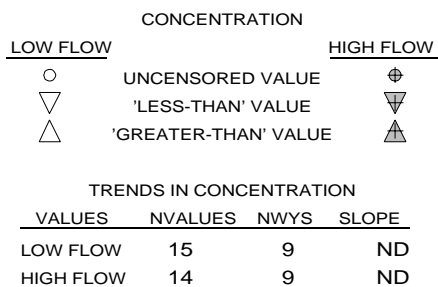
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



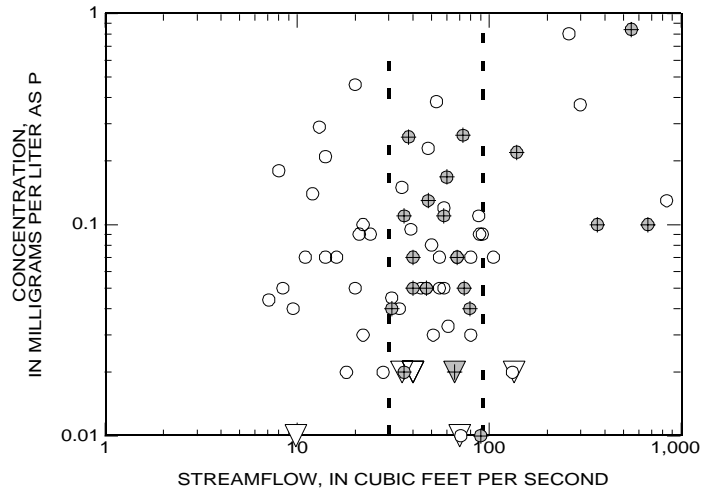
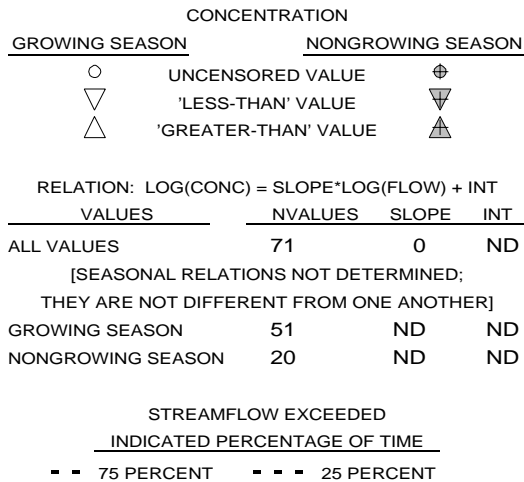
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



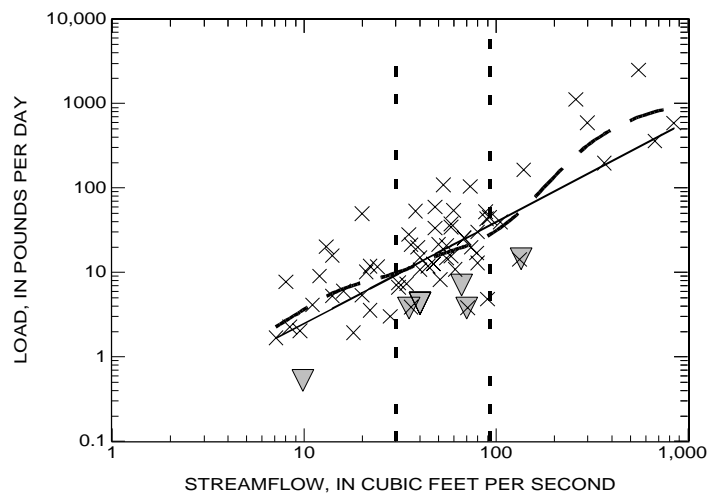
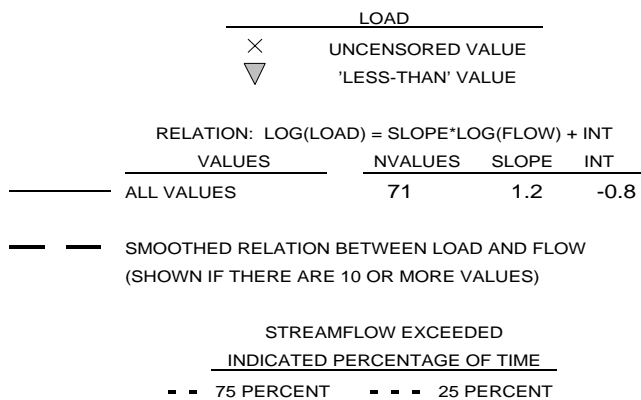
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

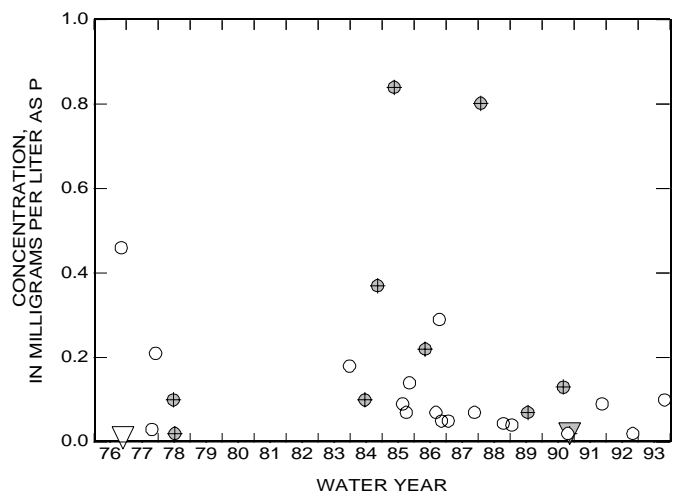
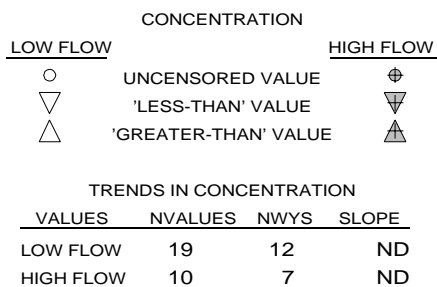
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



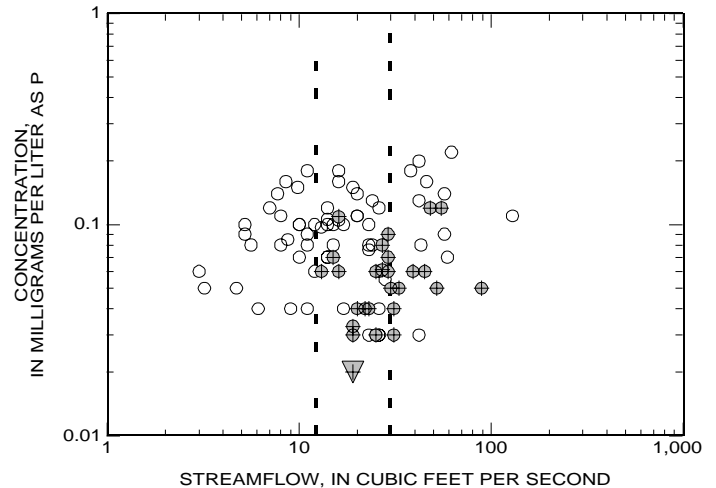
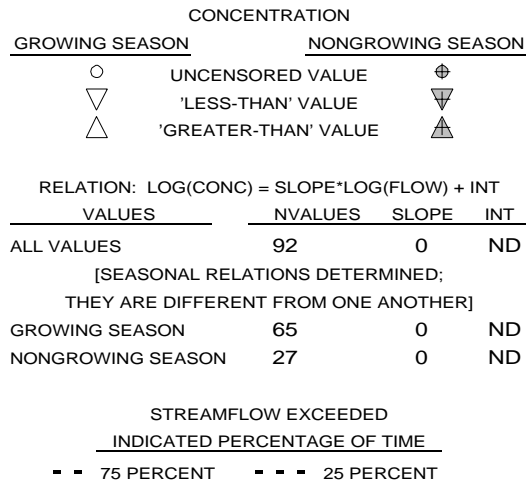
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



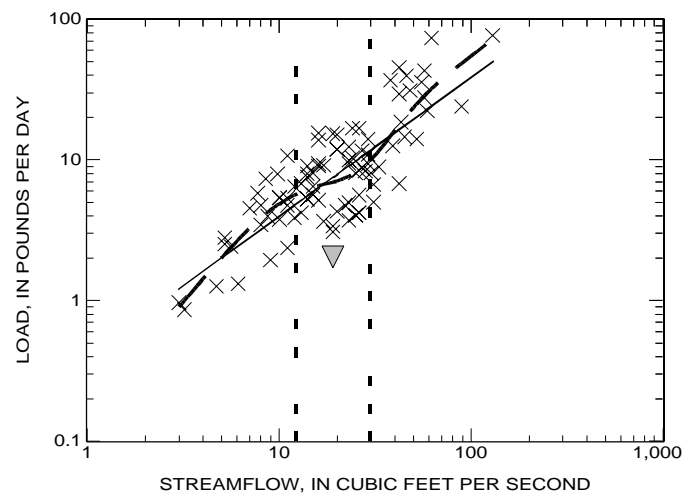
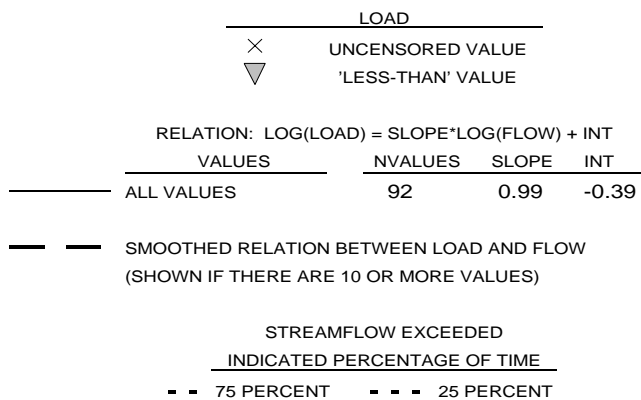
APPENDIX 10. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL PHOSPHORUS
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

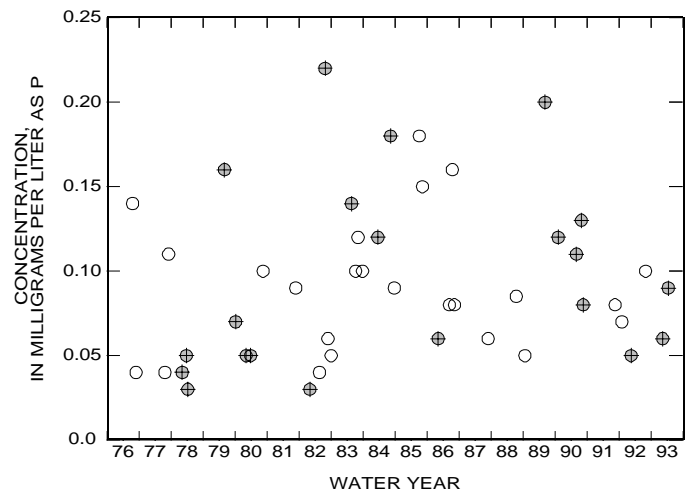
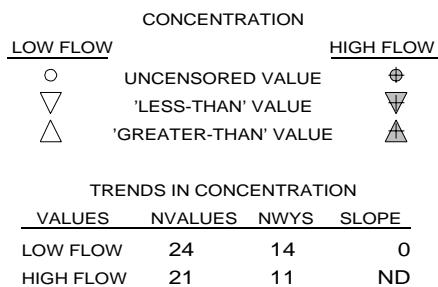
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



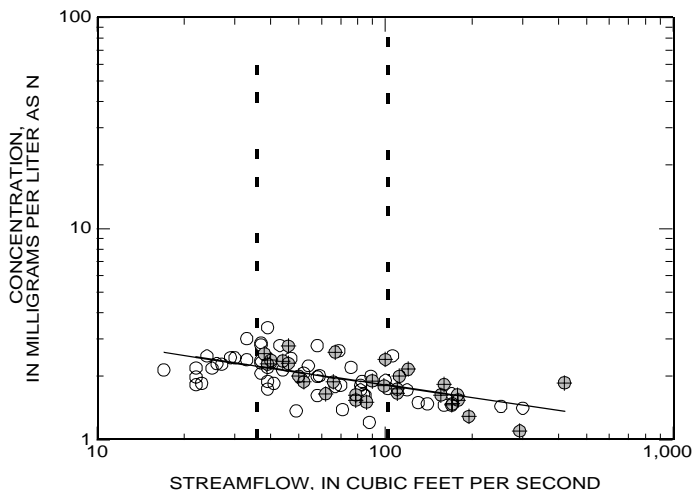
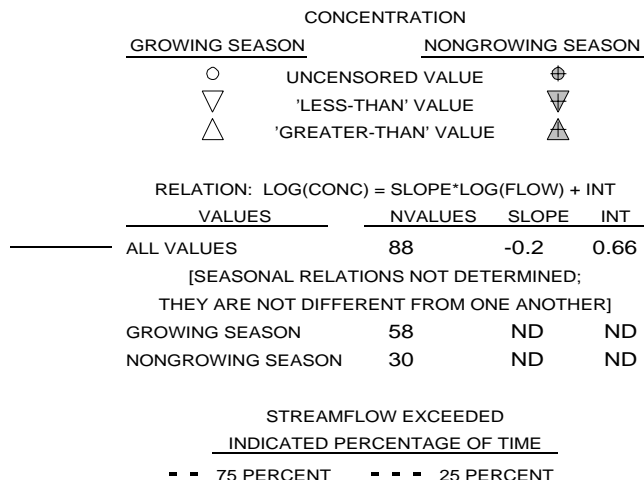
Appendix 11 - Total nitrogen

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

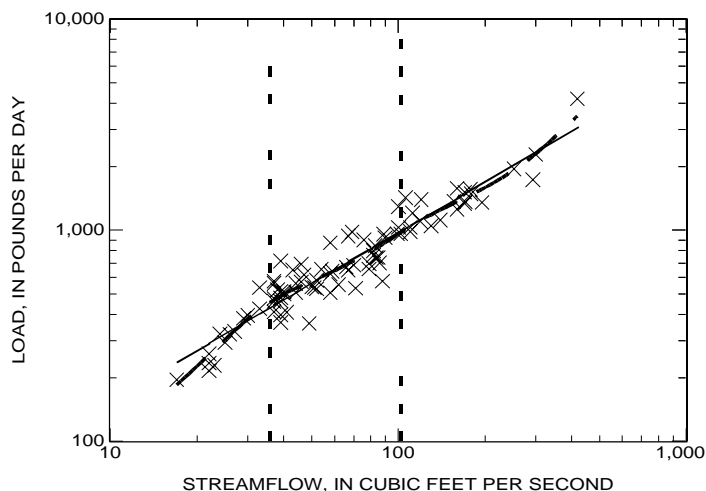
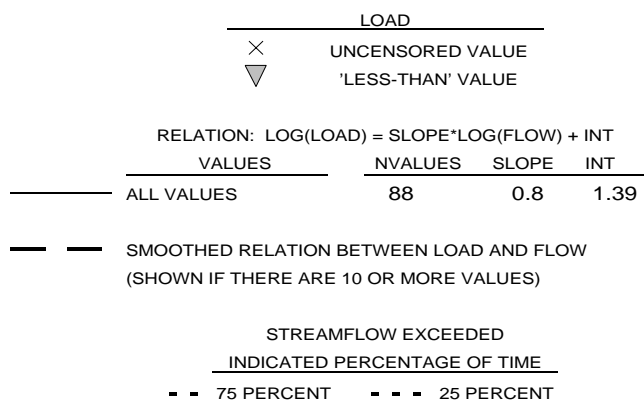
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

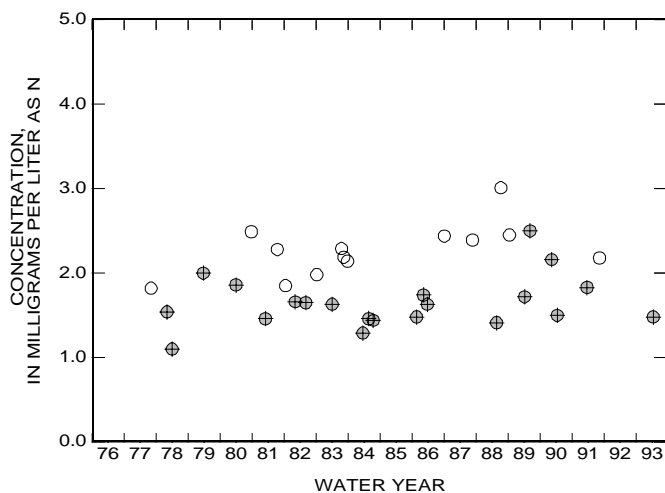
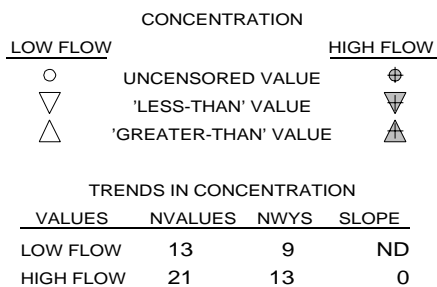
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



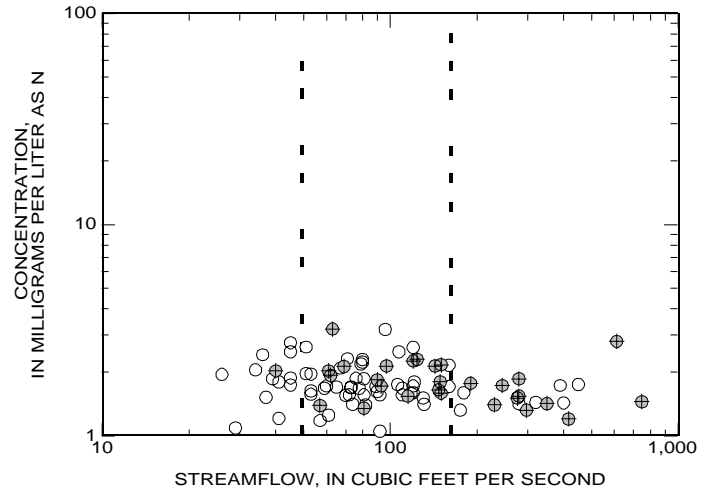
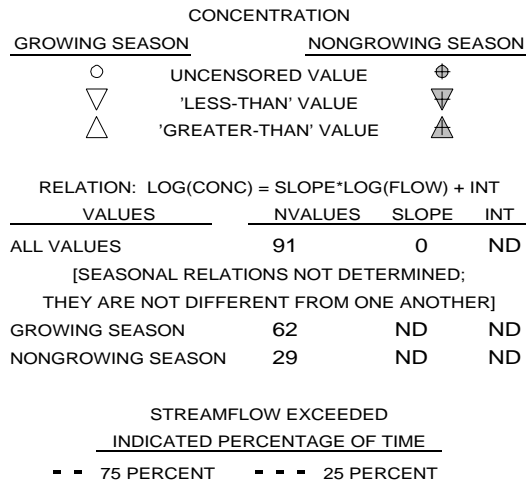
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



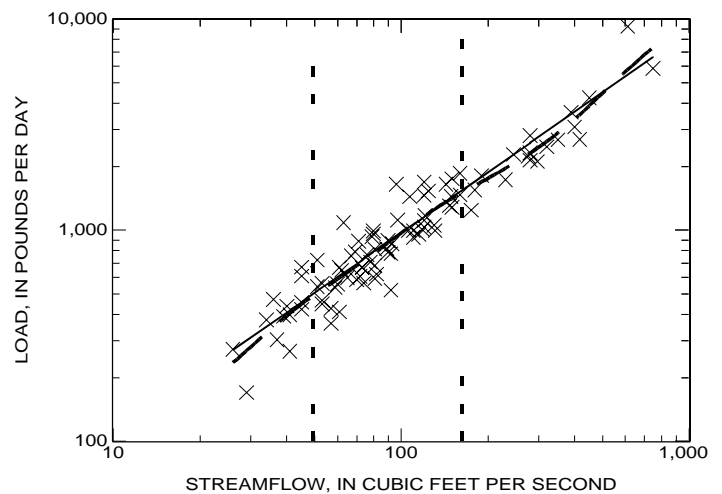
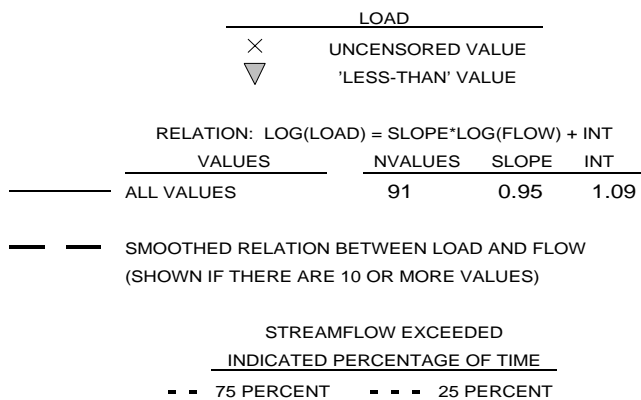
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

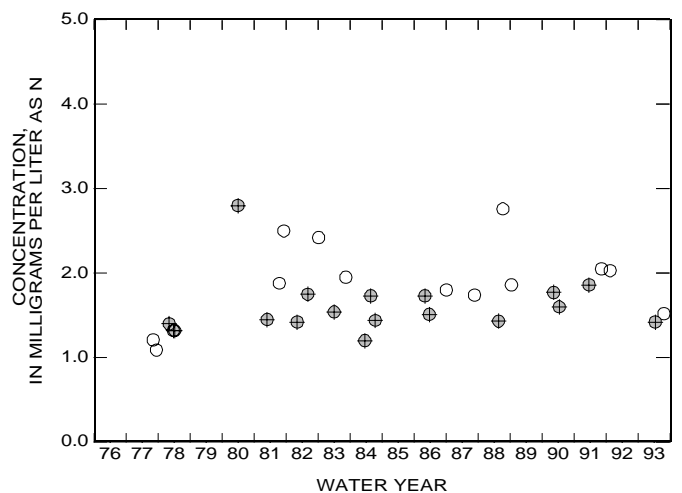
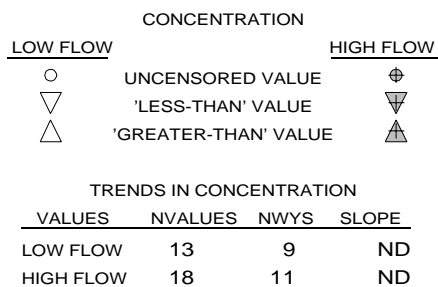
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



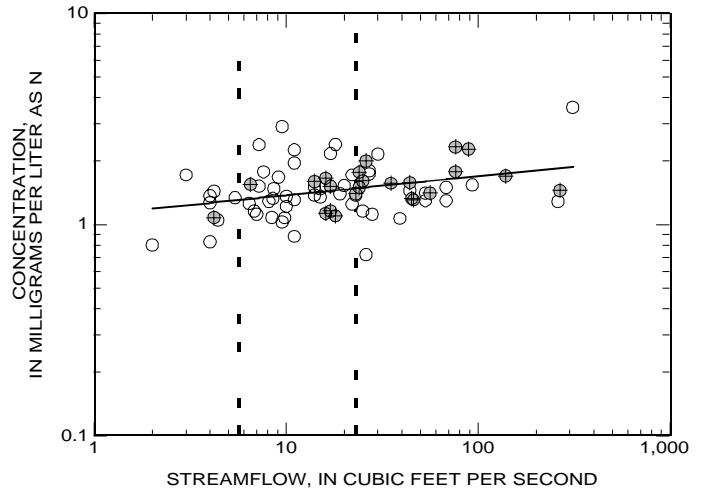
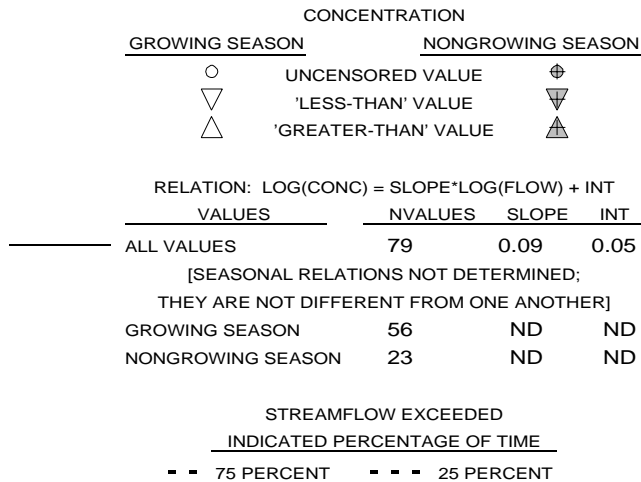
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



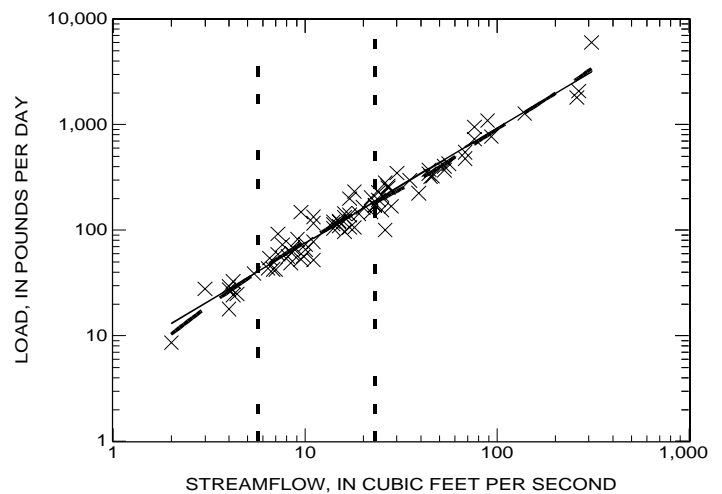
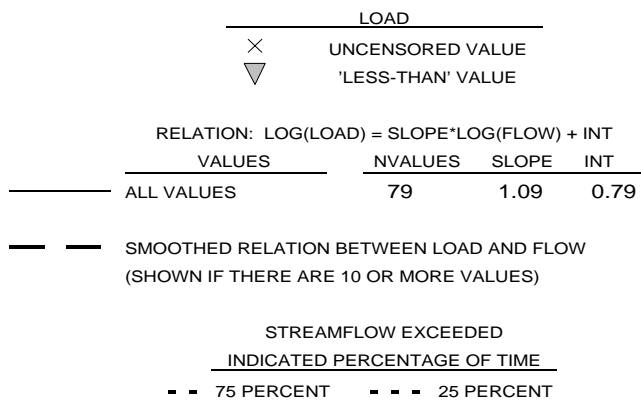
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

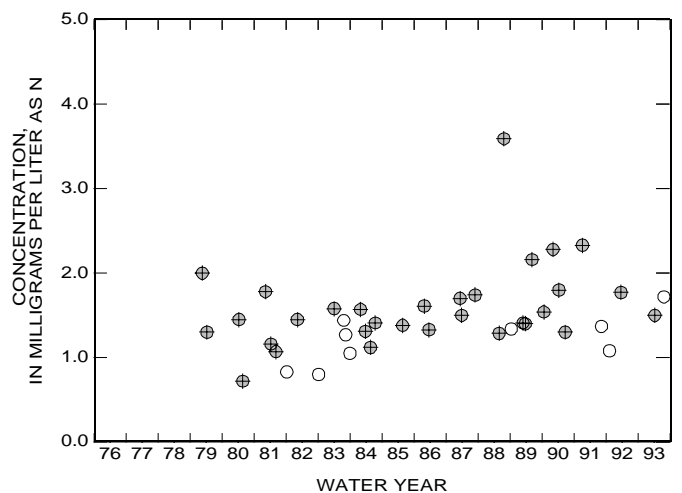
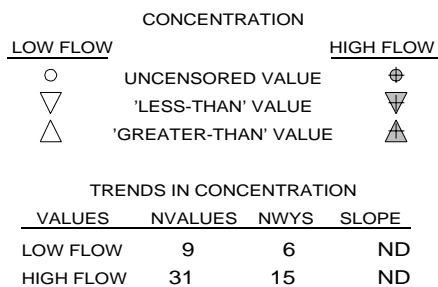
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



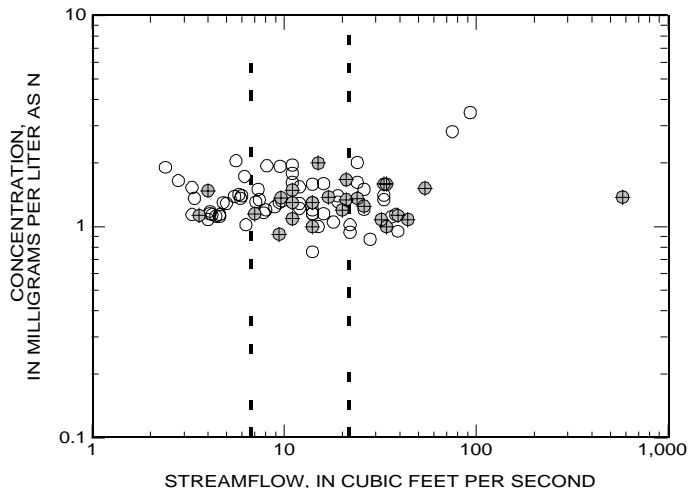
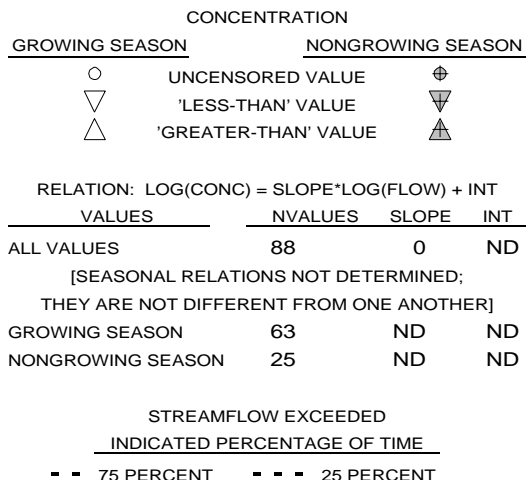
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



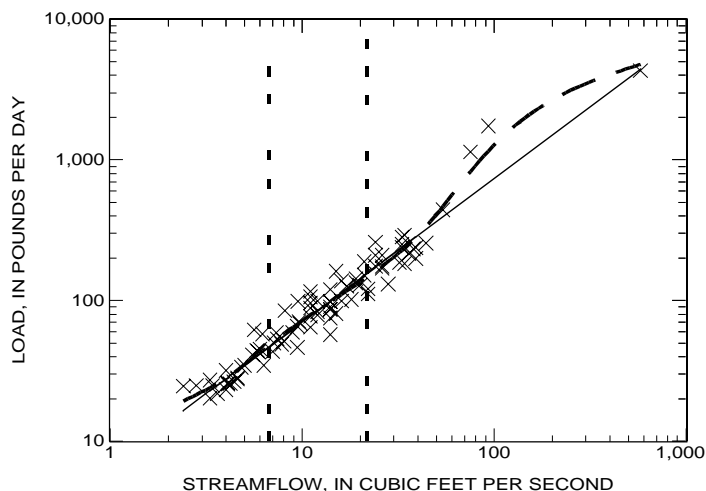
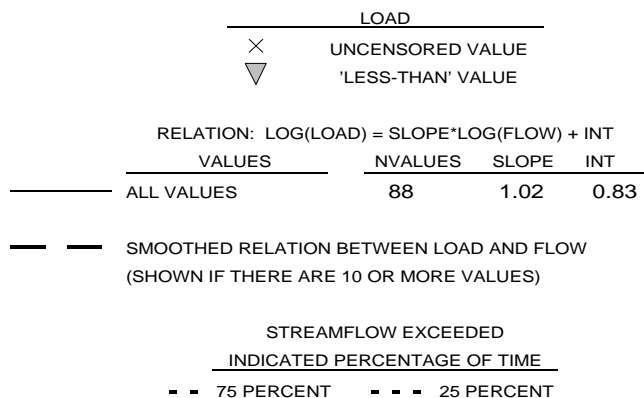
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

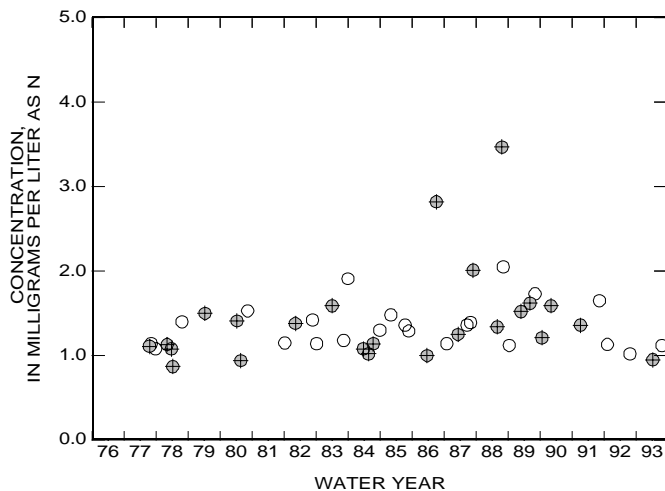
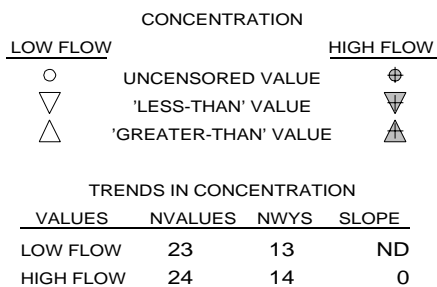
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



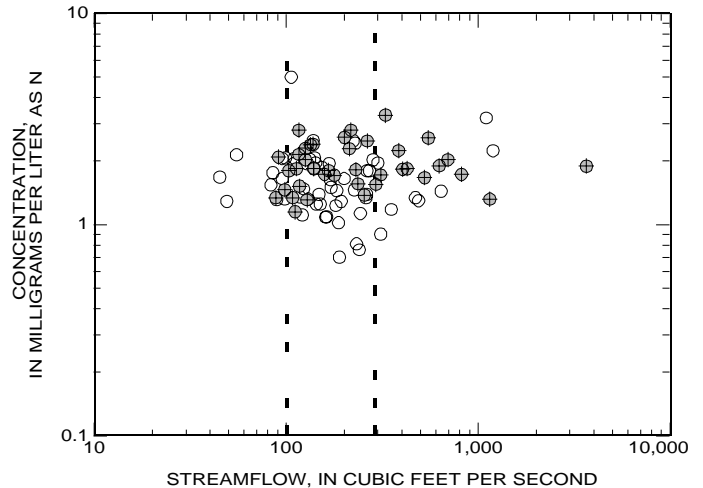
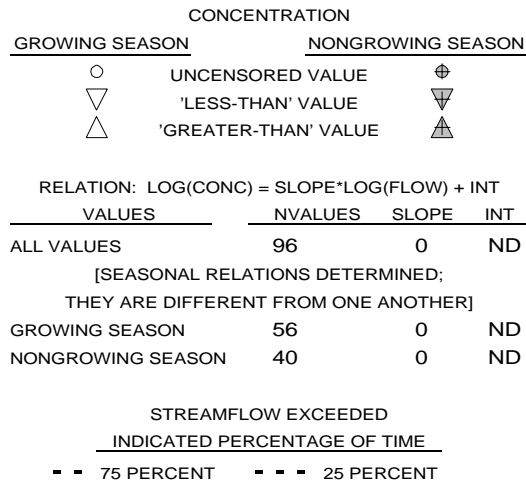
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



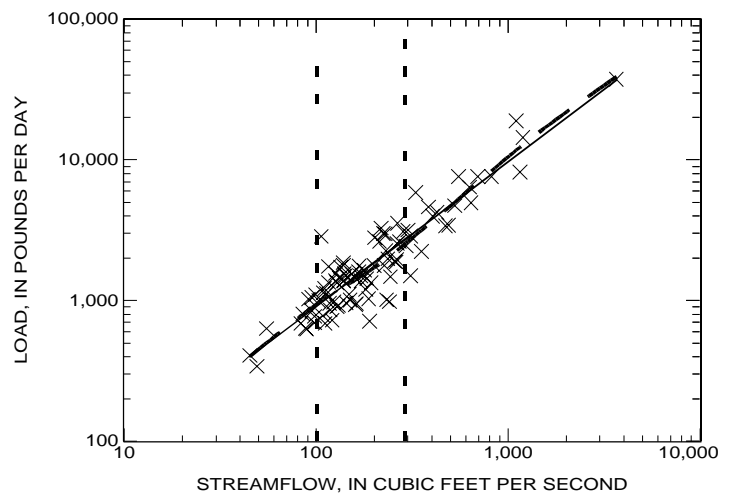
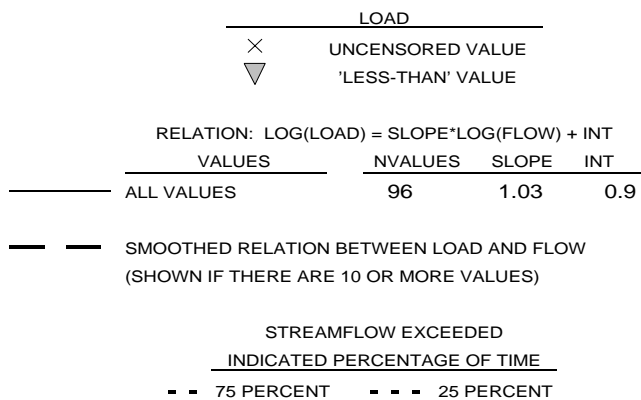
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

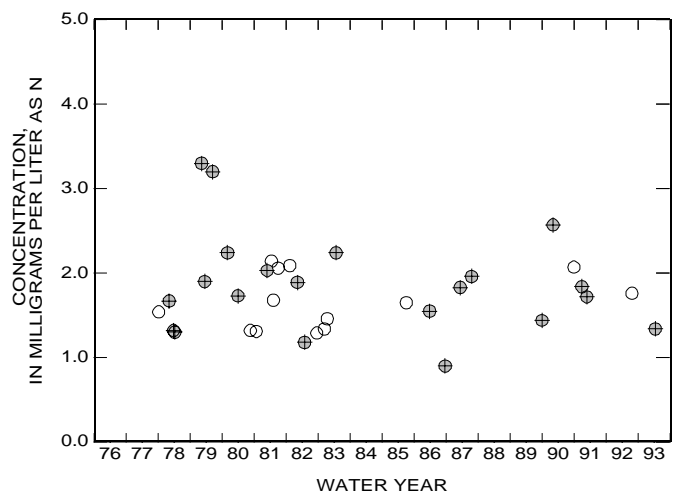
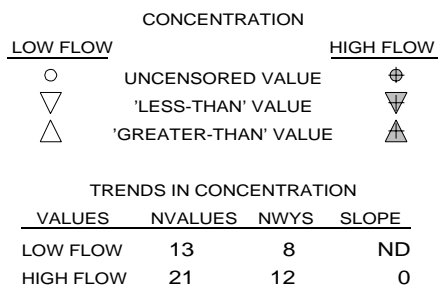
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



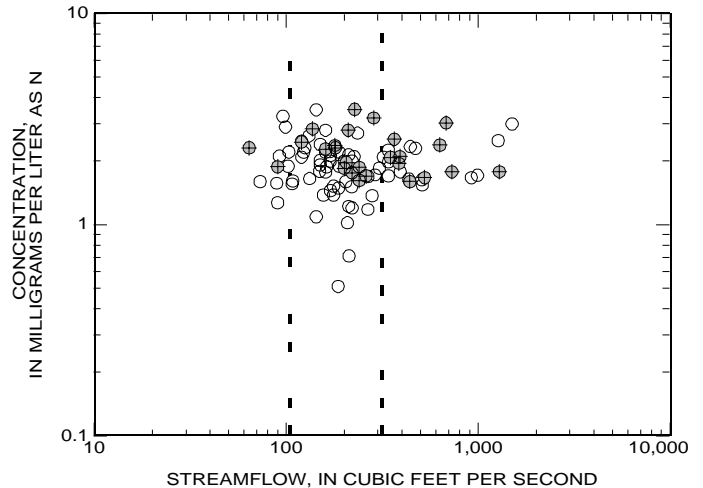
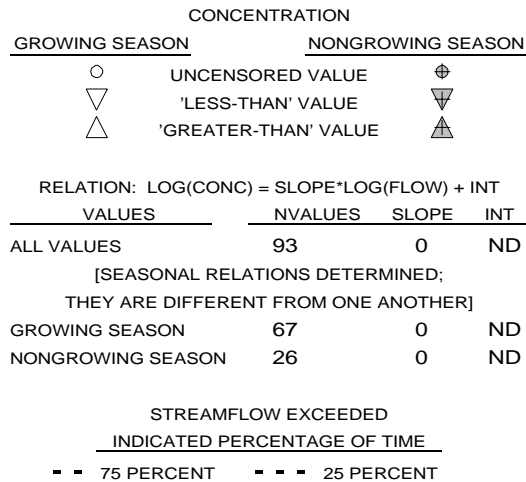
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



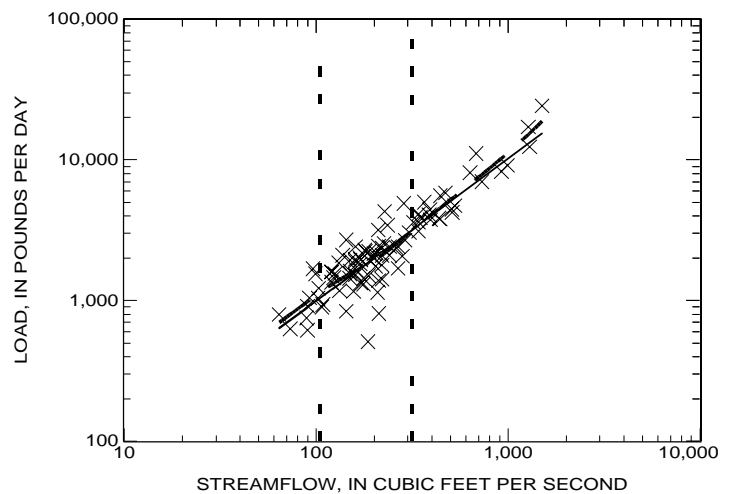
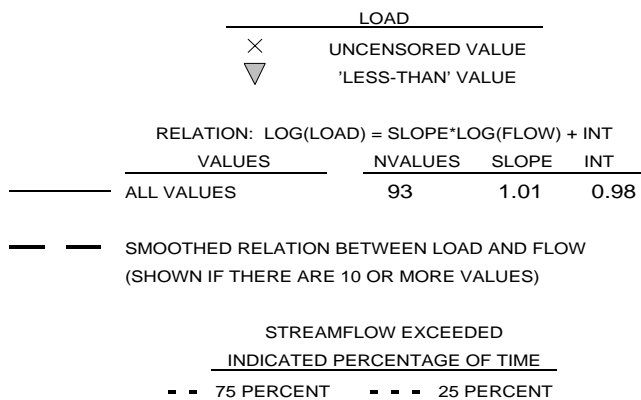
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

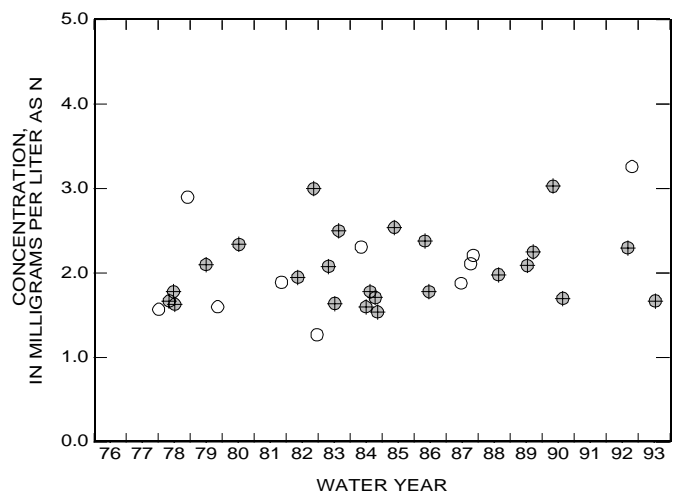
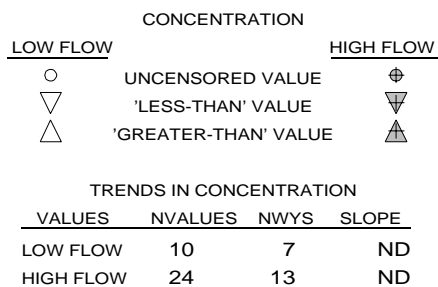
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



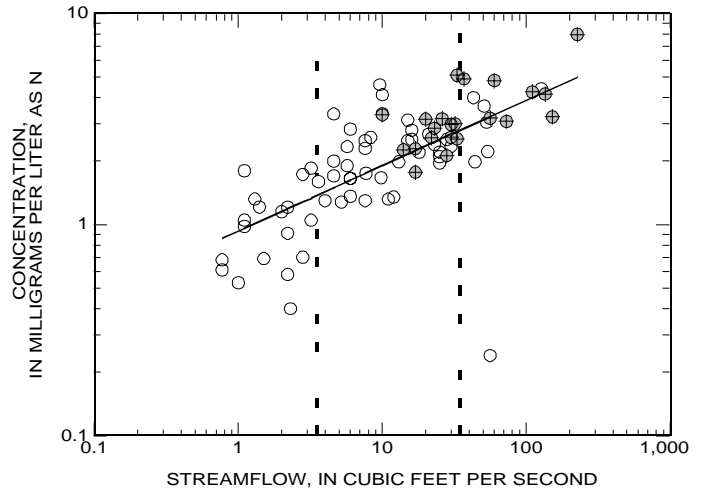
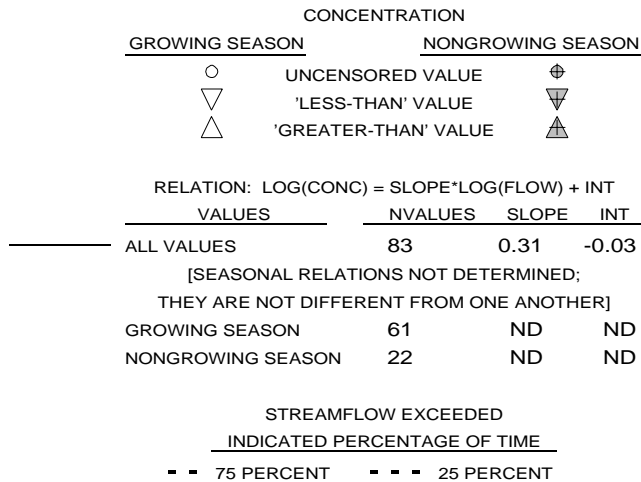
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



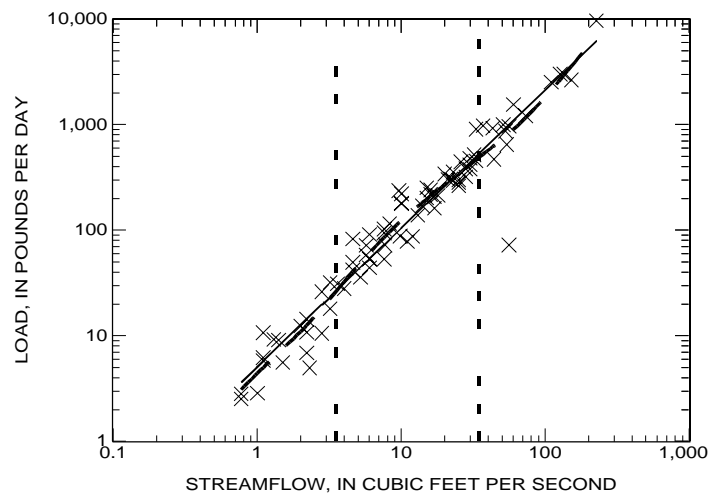
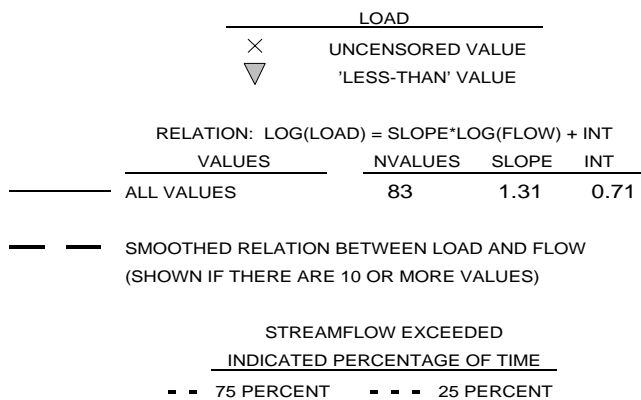
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

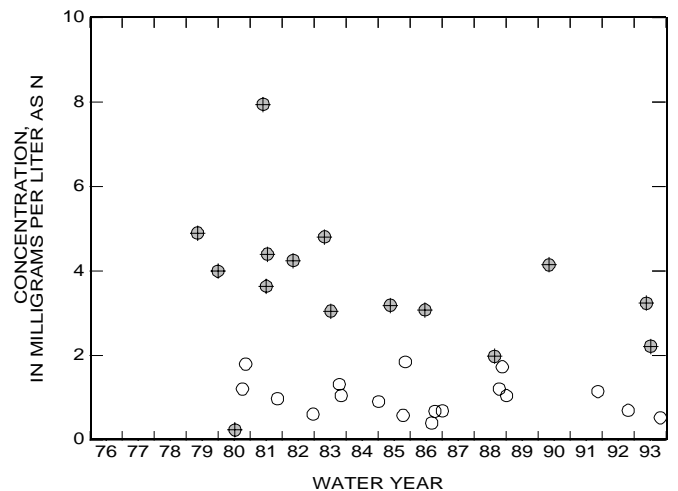
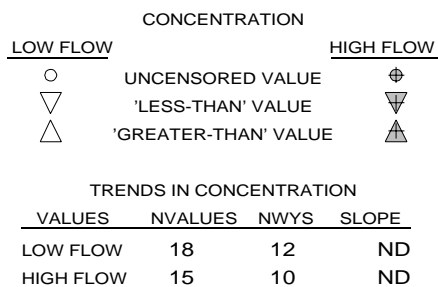
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



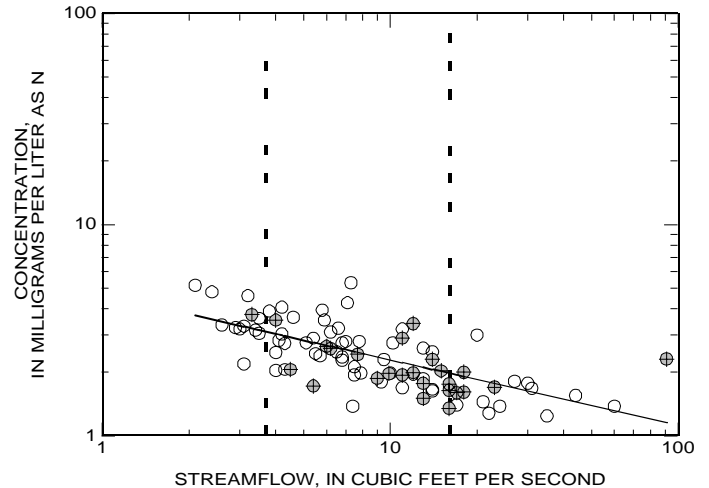
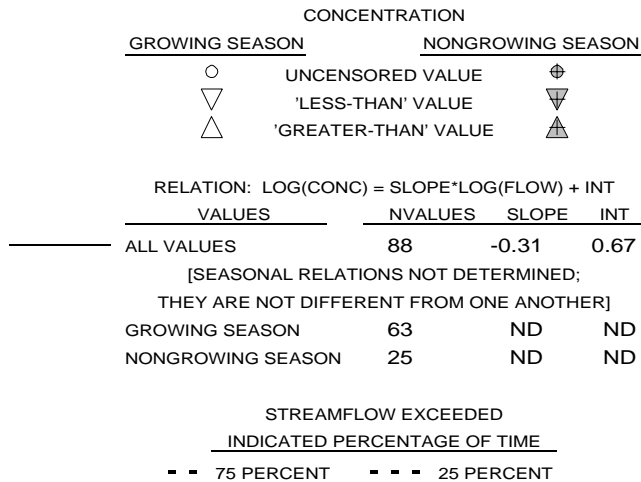
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



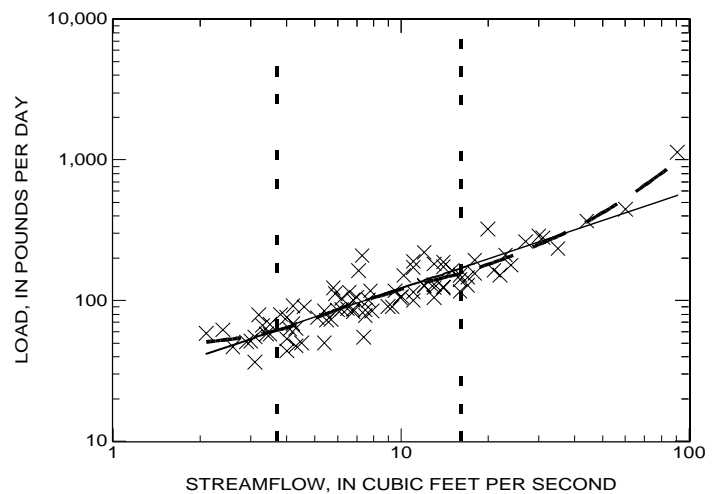
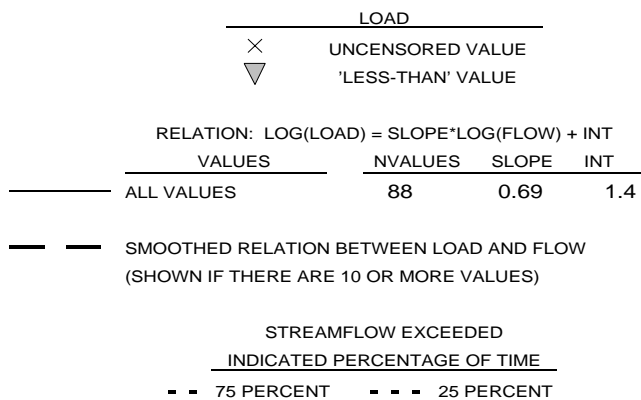
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

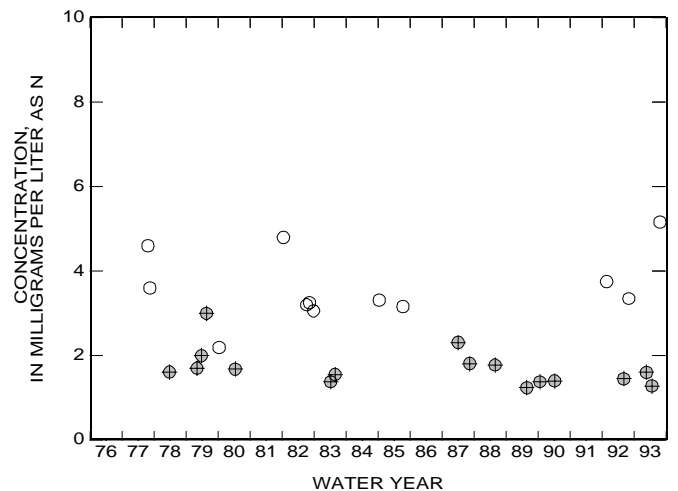
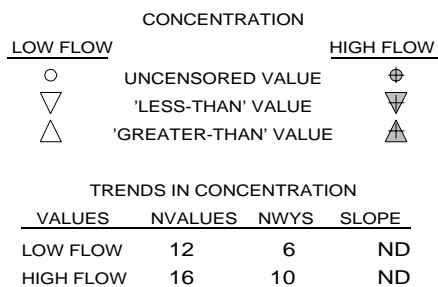
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



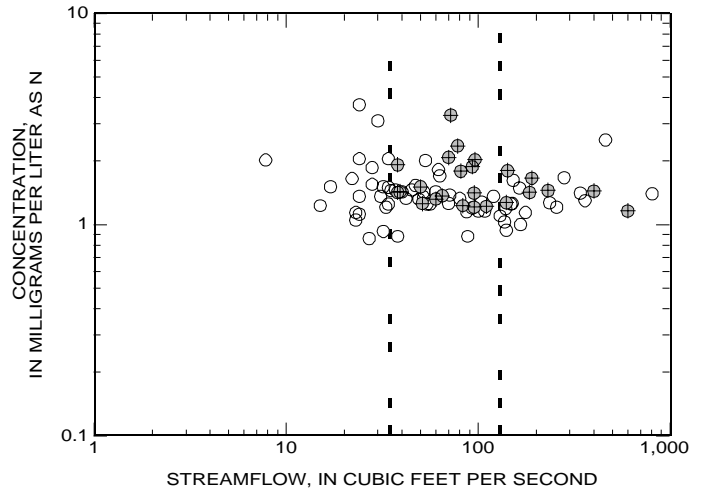
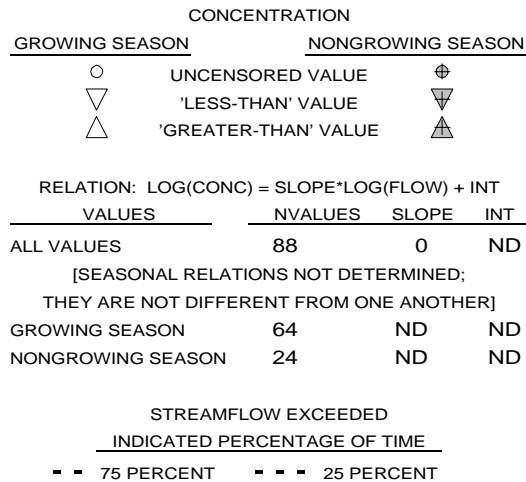
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



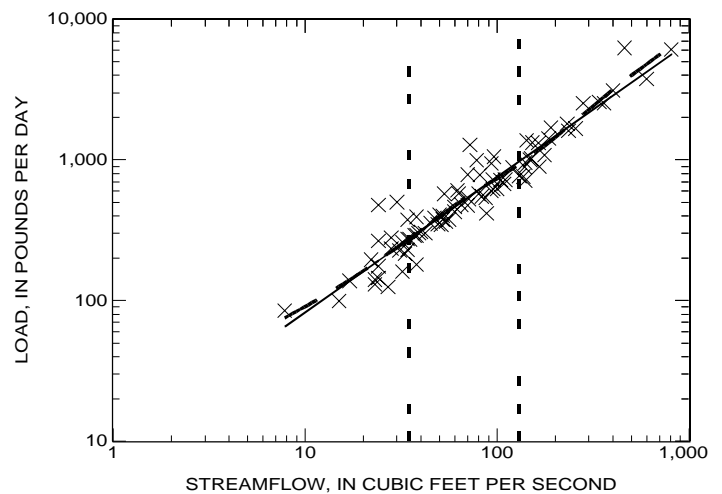
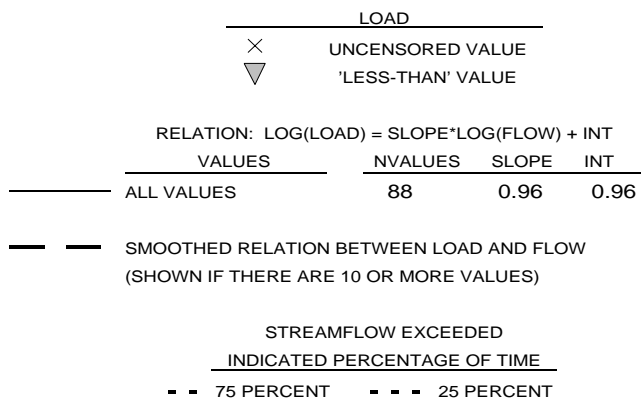
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

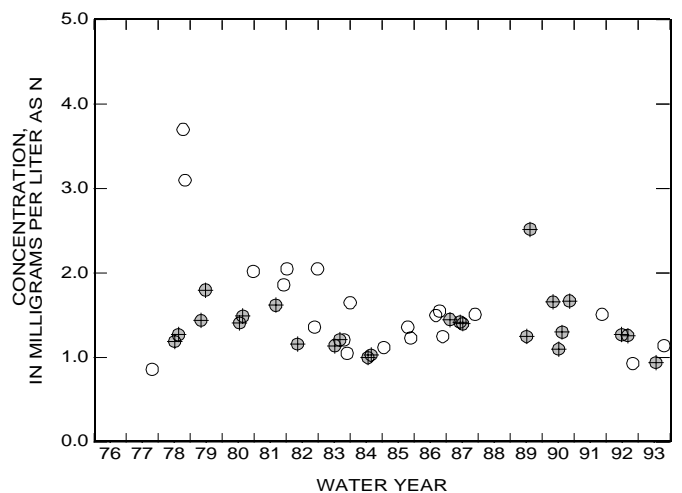
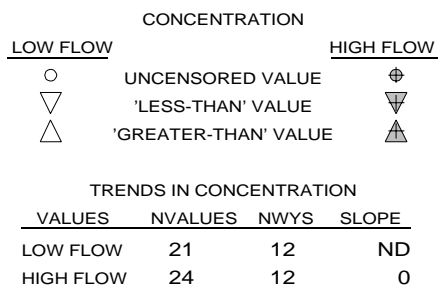
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



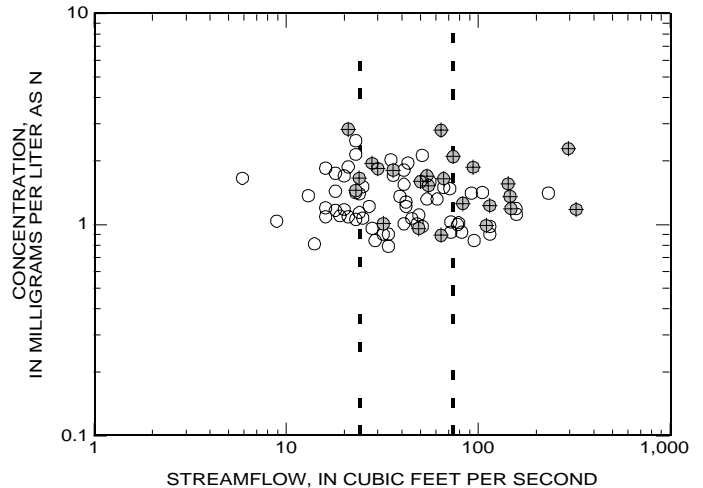
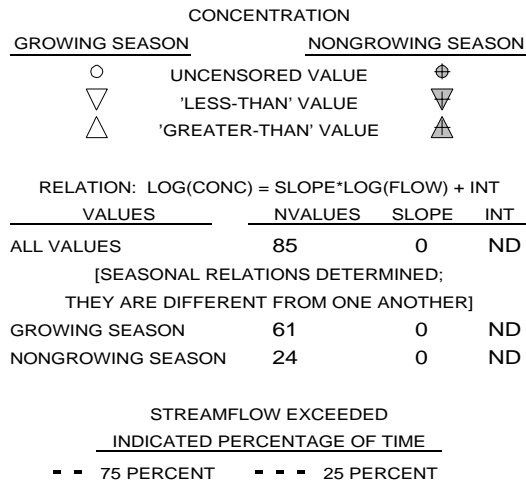
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



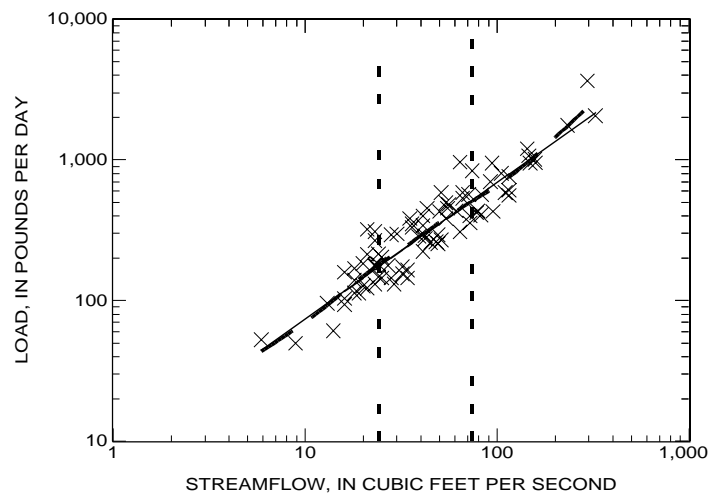
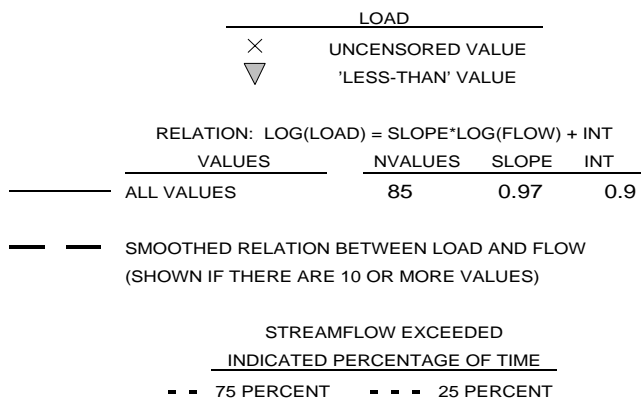
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

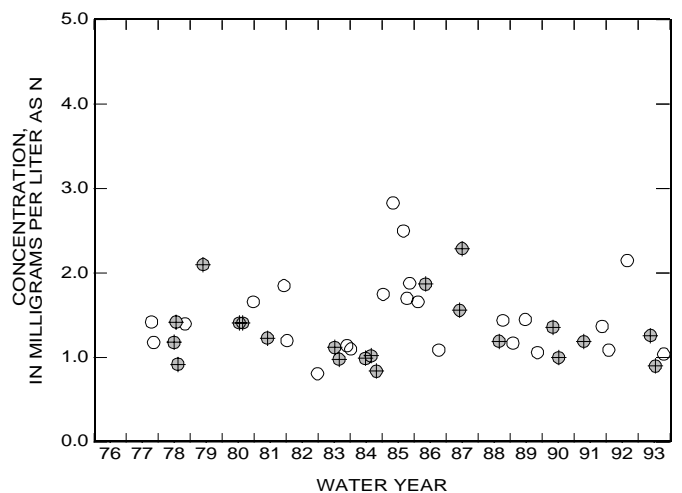
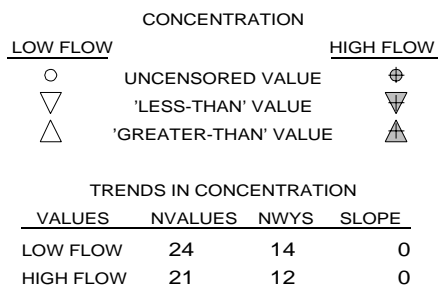
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



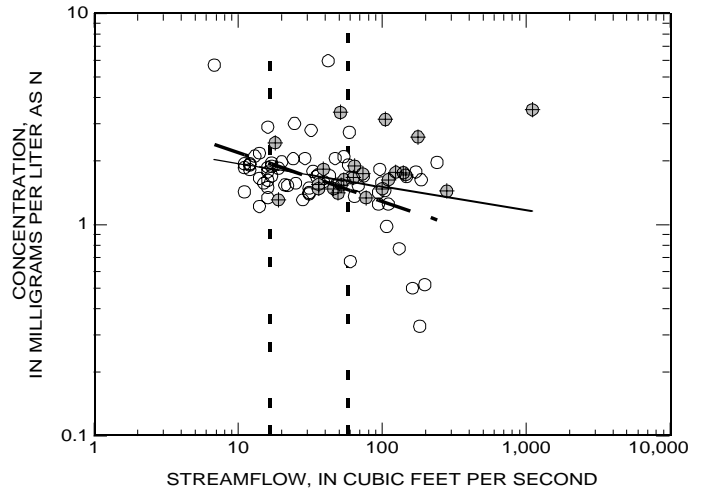
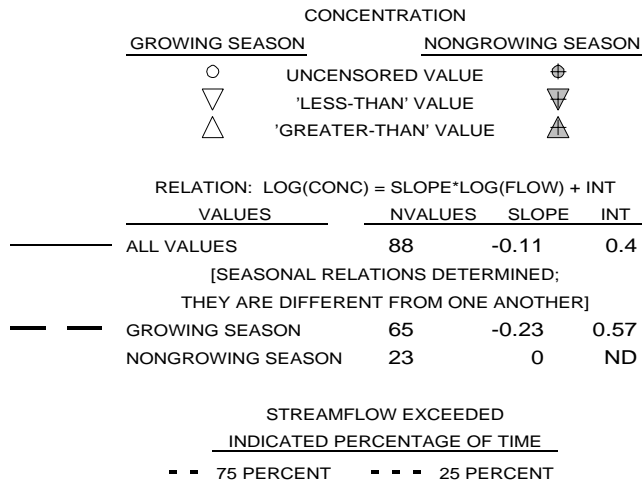
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



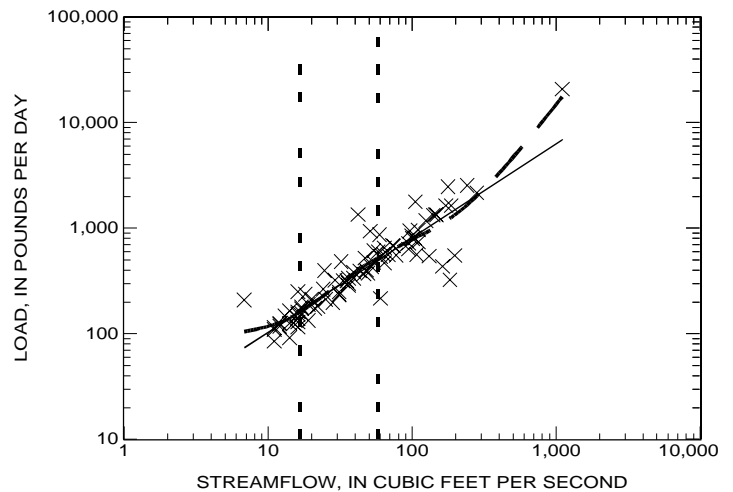
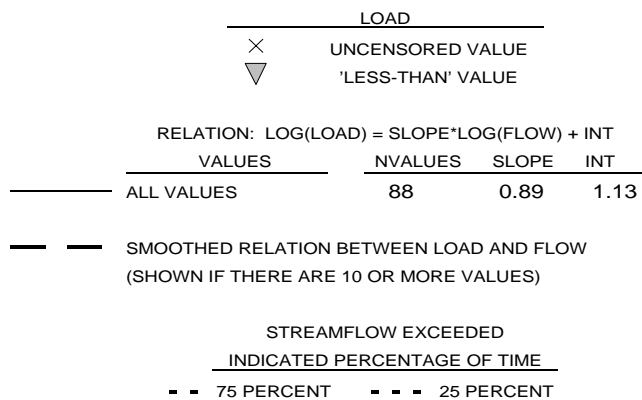
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

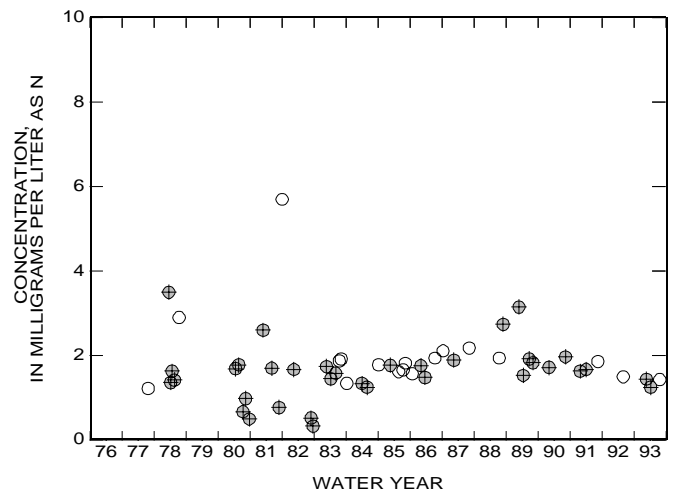
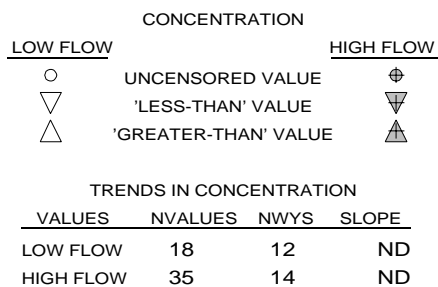
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



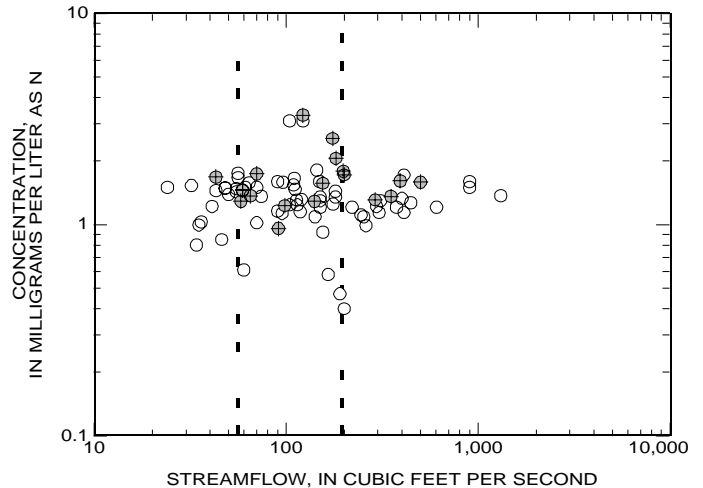
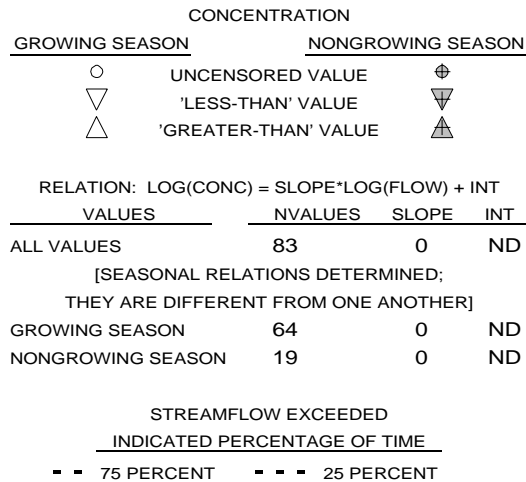
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



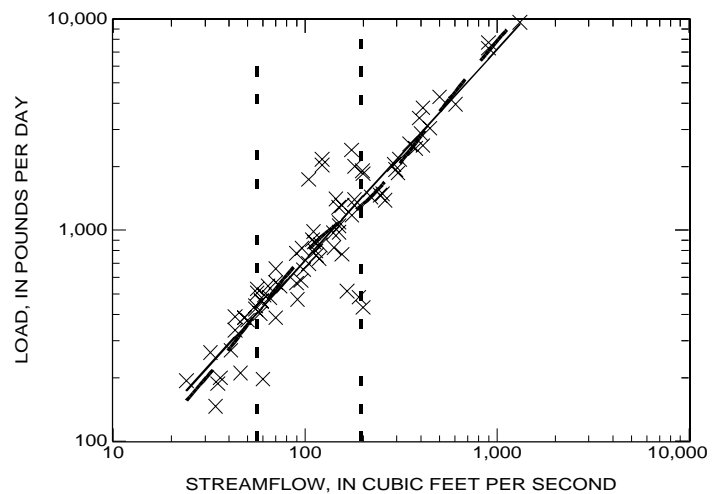
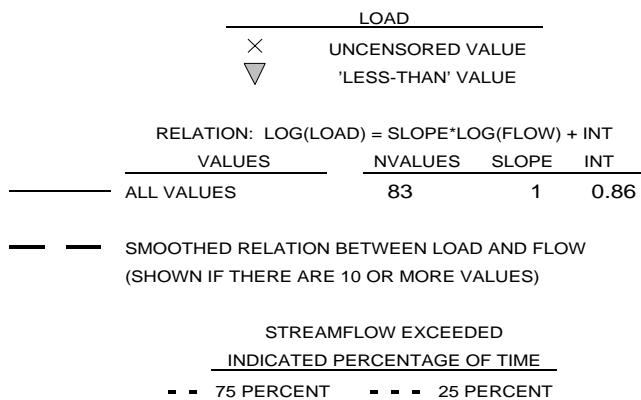
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

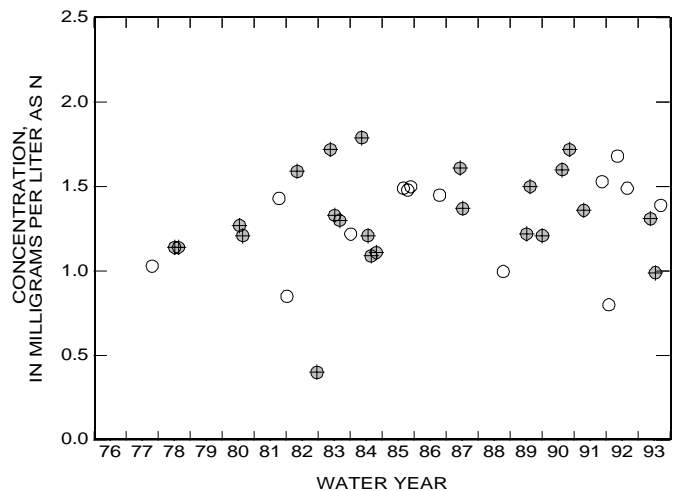
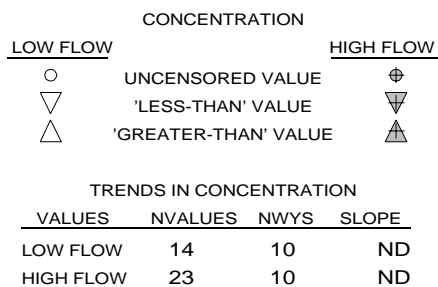
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



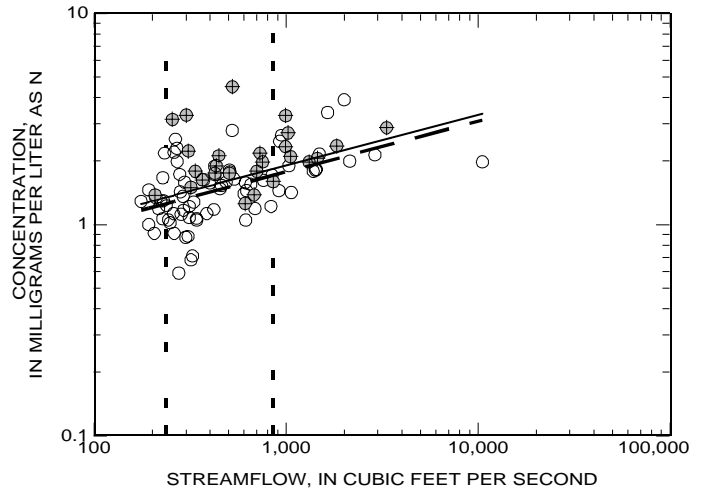
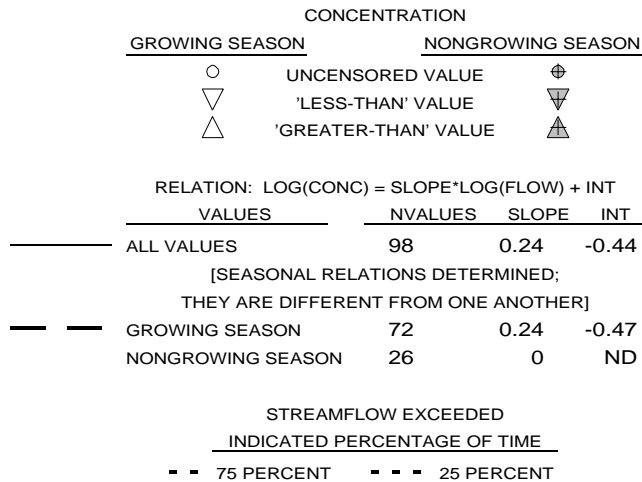
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



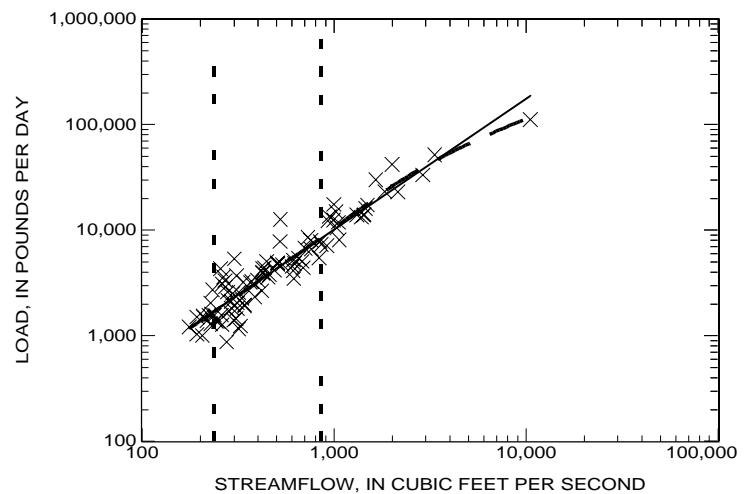
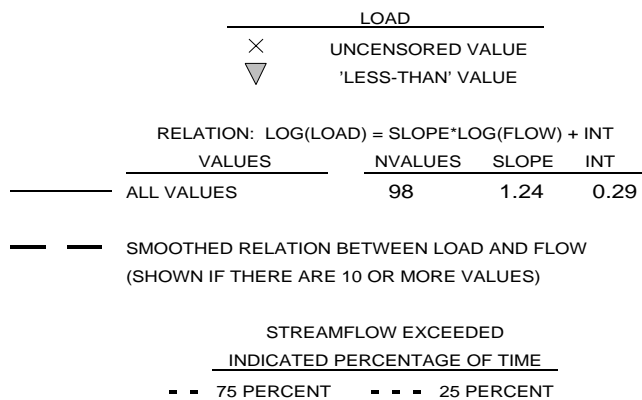
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

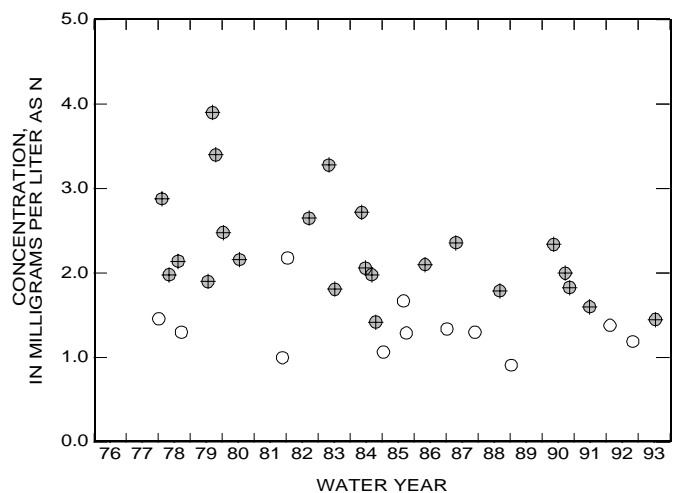
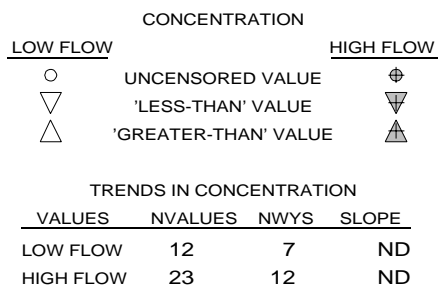
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



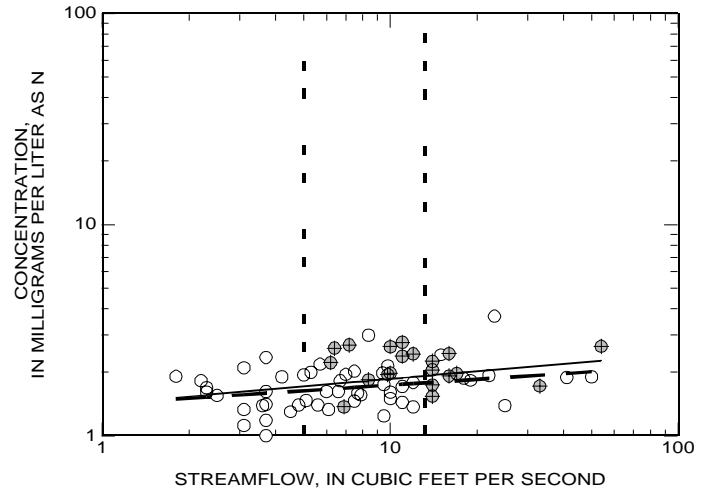
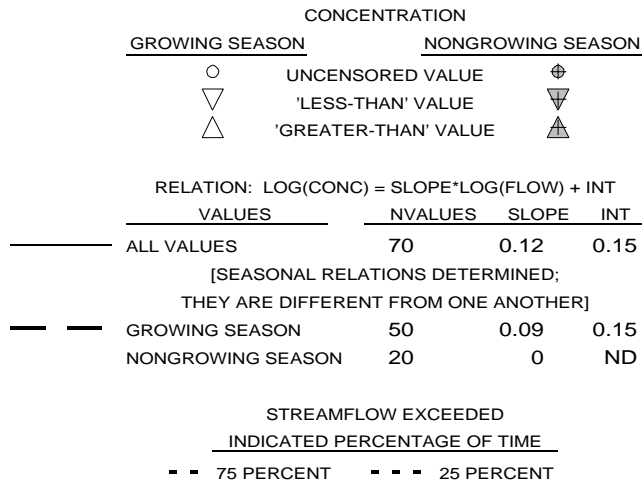
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



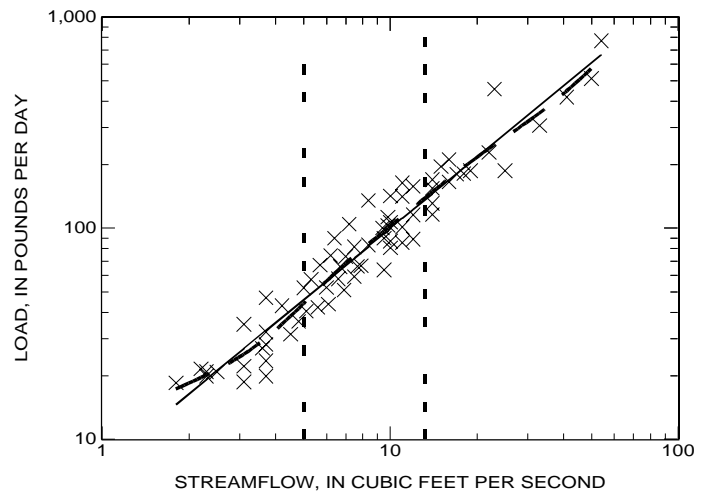
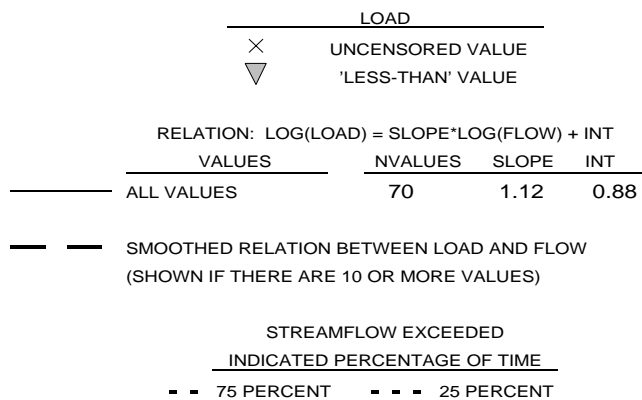
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

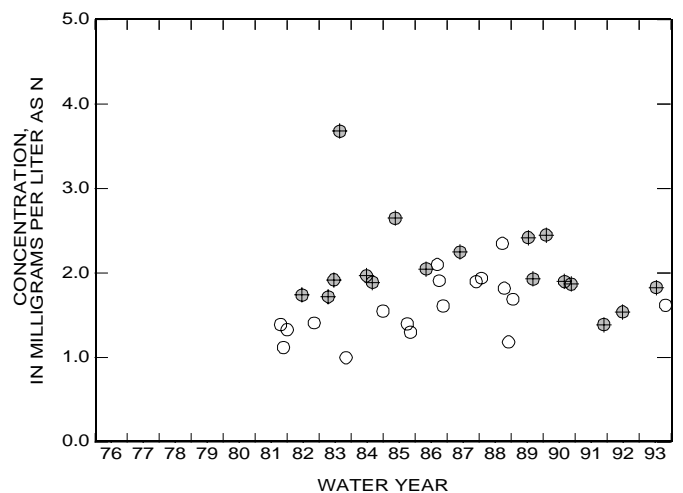
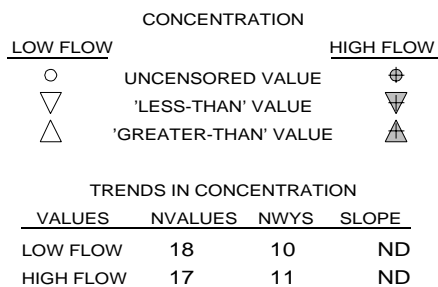
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



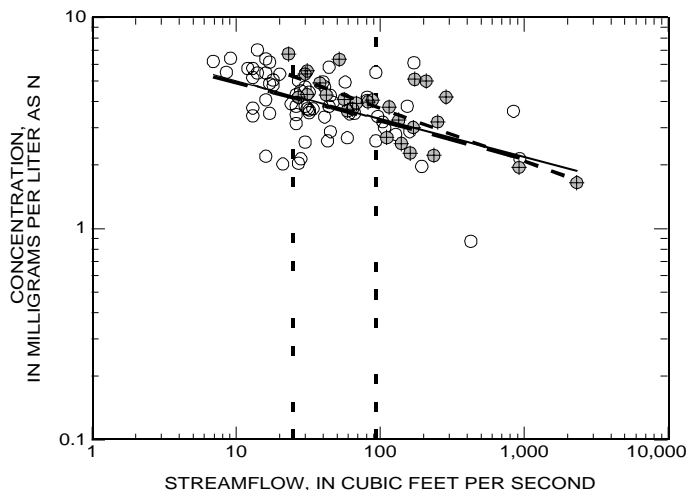
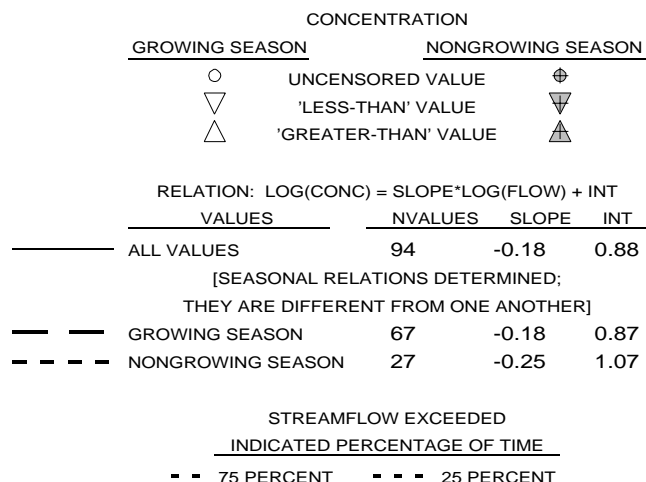
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



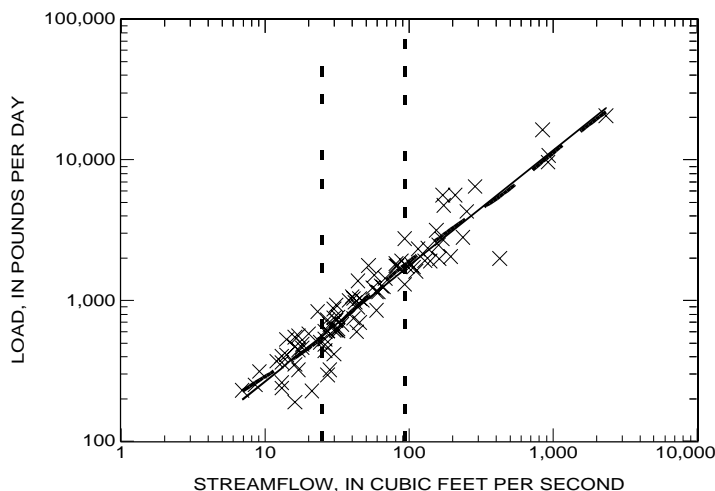
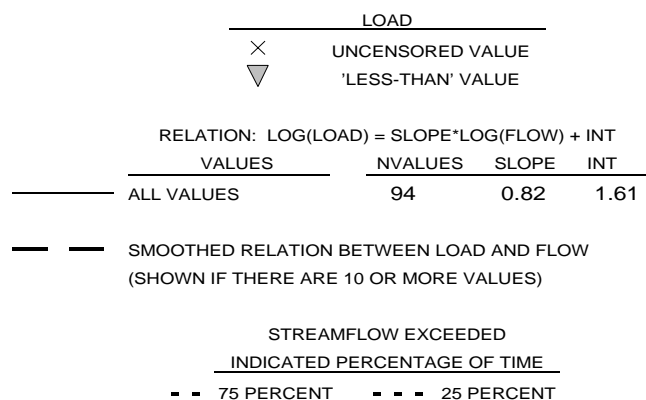
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

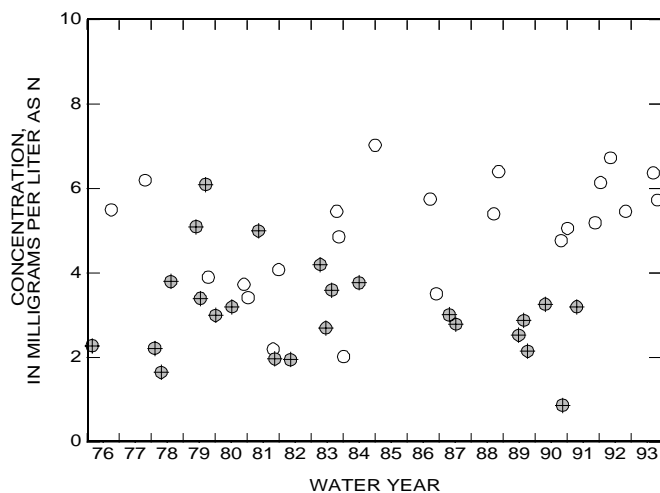
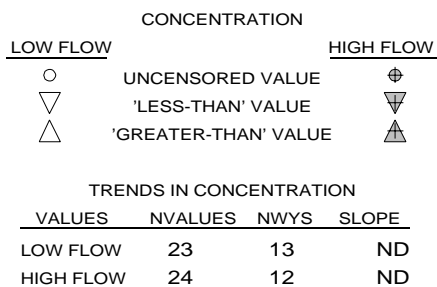
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



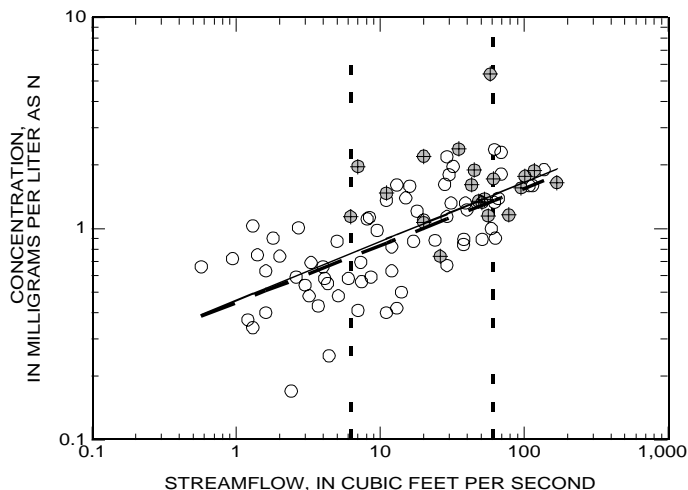
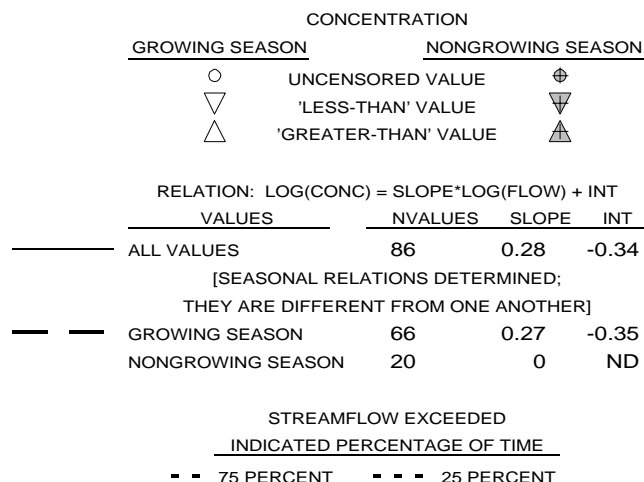
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



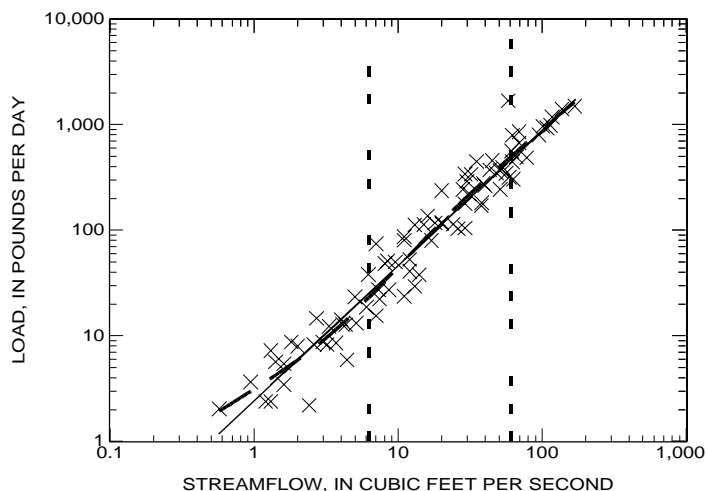
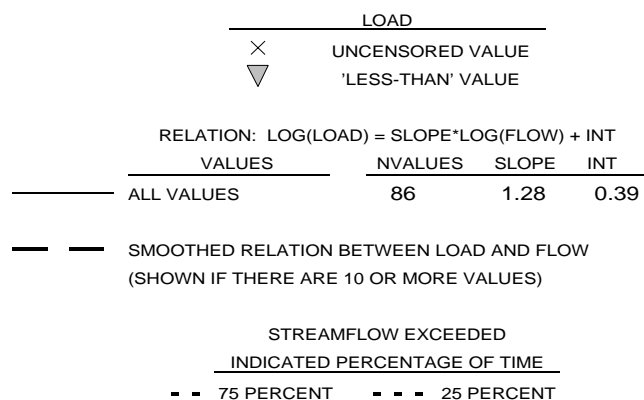
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

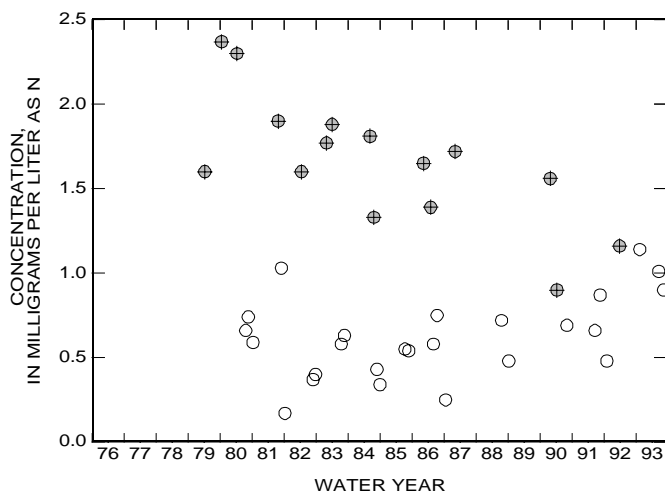
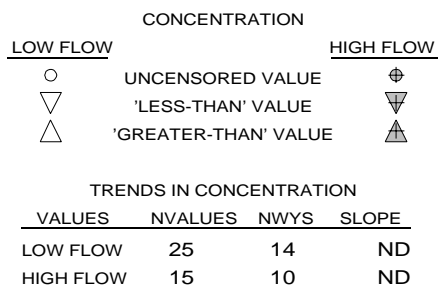
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



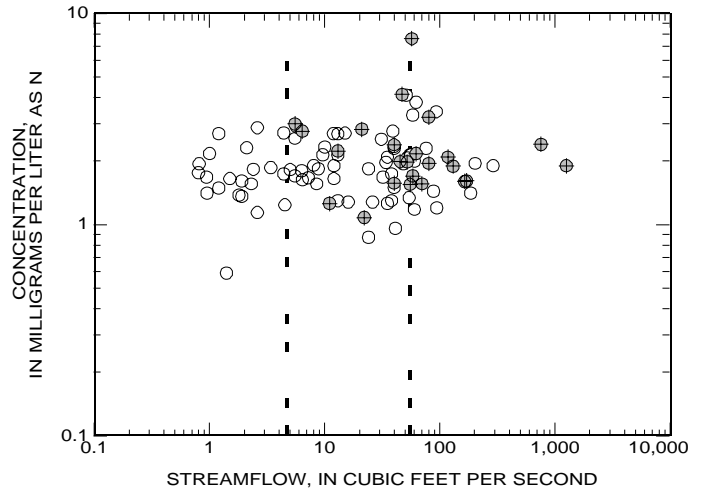
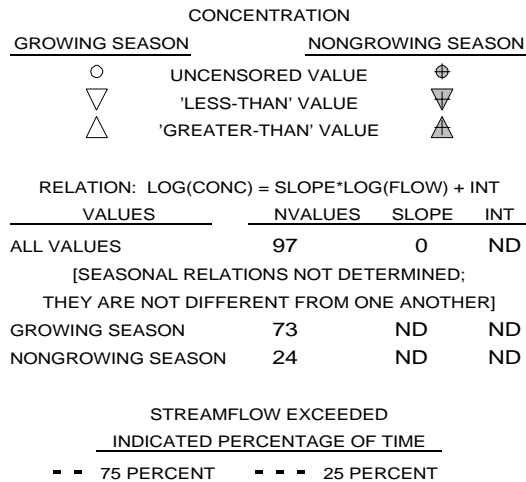
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



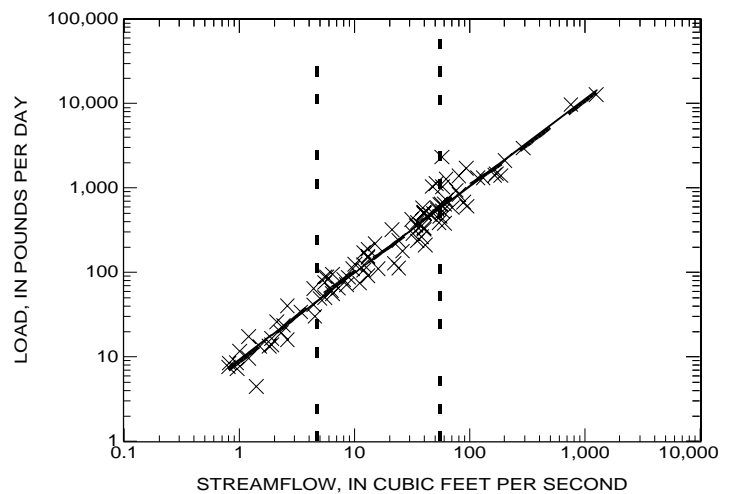
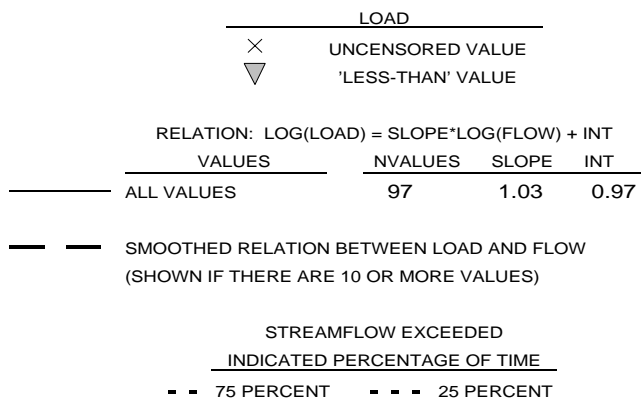
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

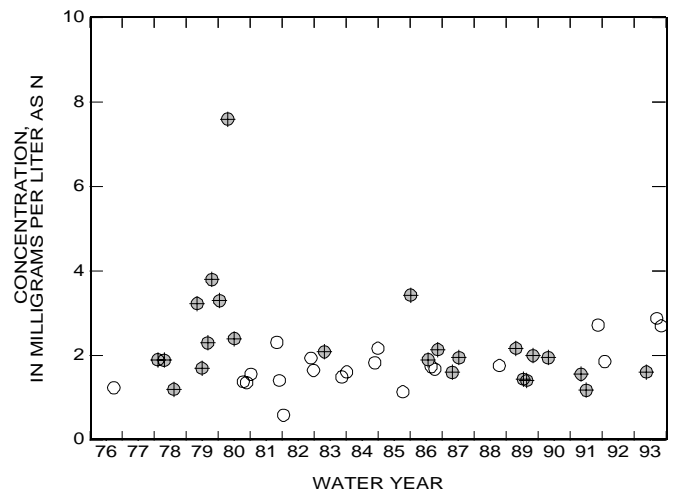
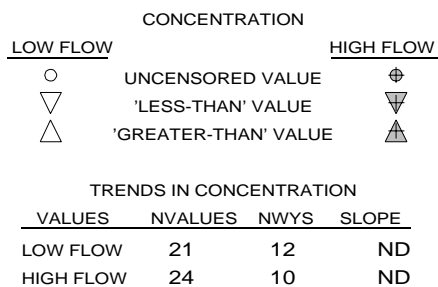
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



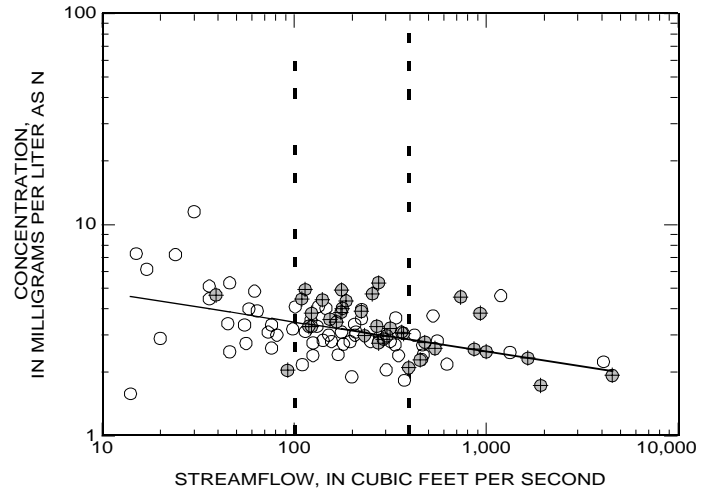
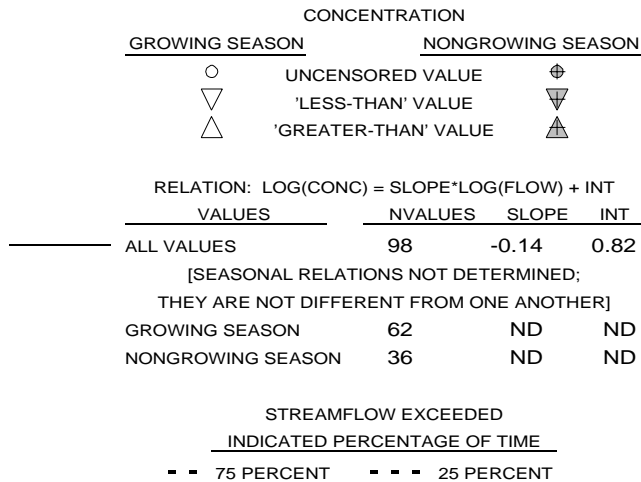
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



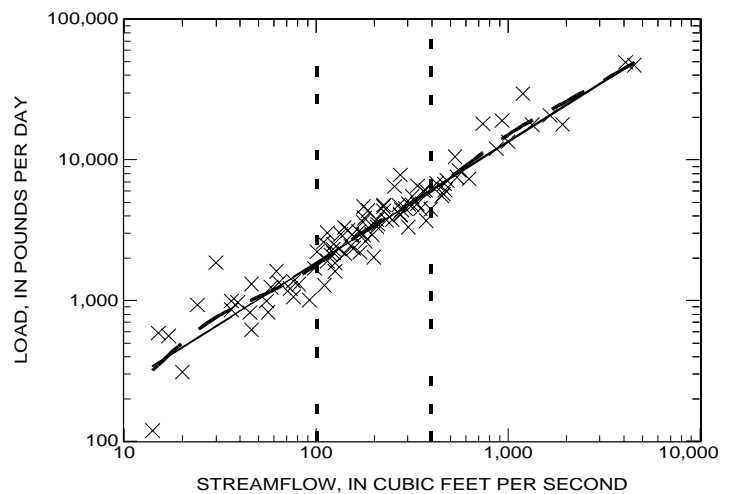
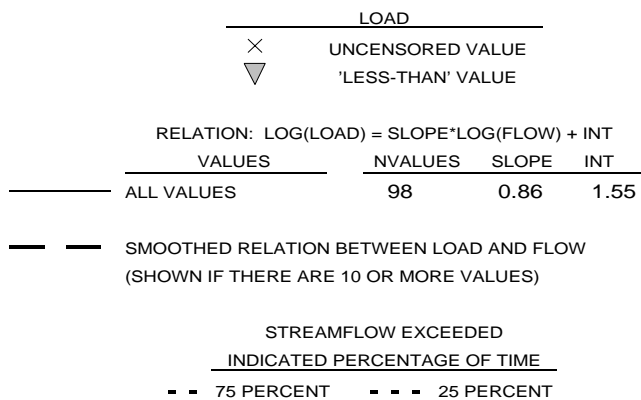
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

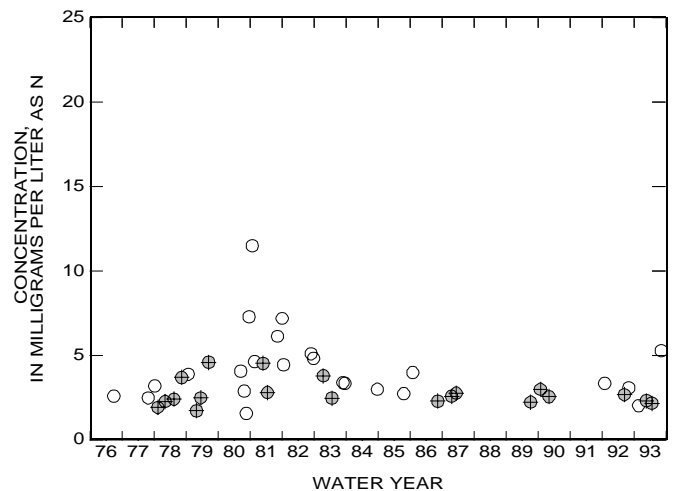
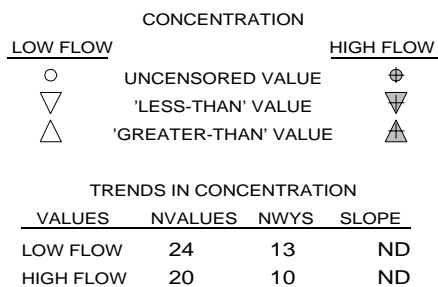
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



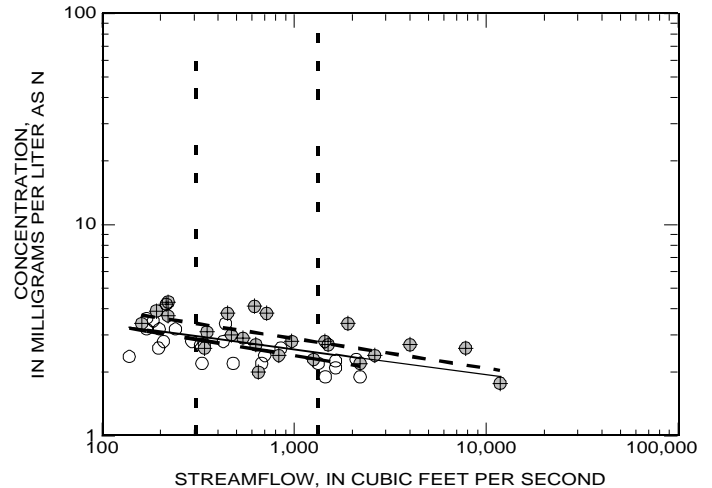
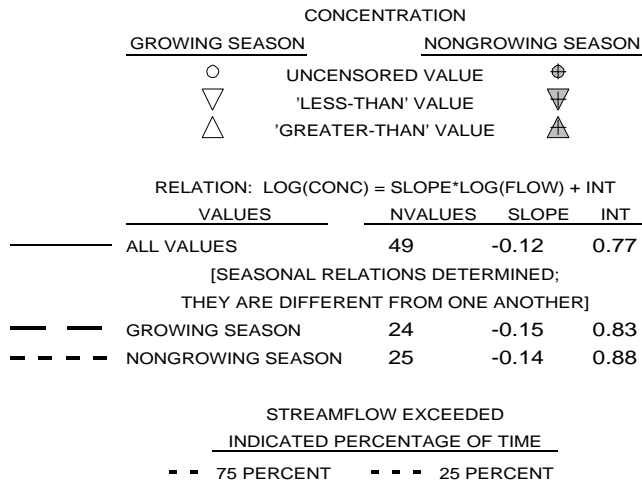
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



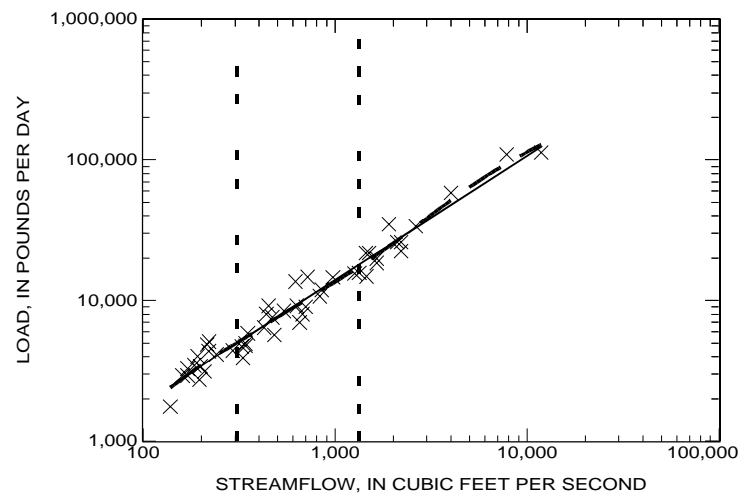
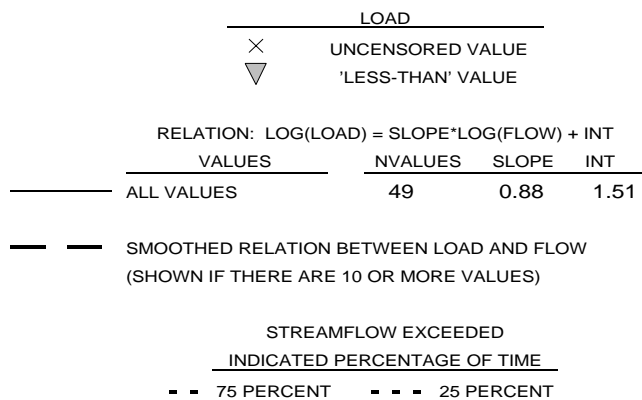
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

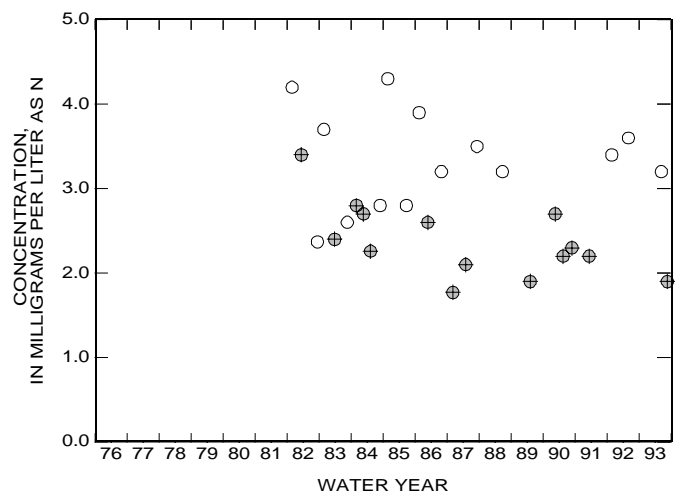
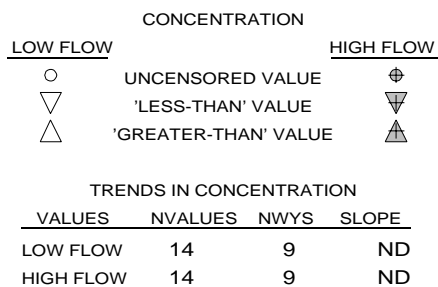
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



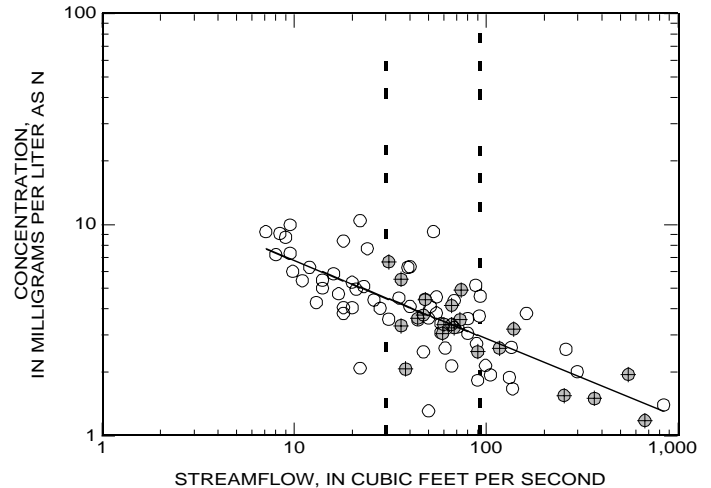
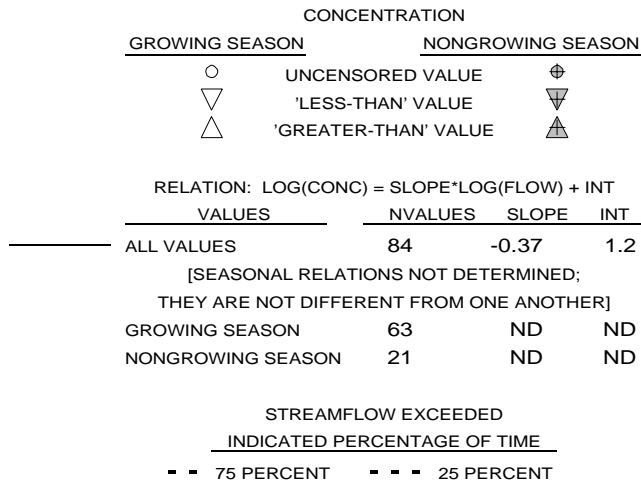
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



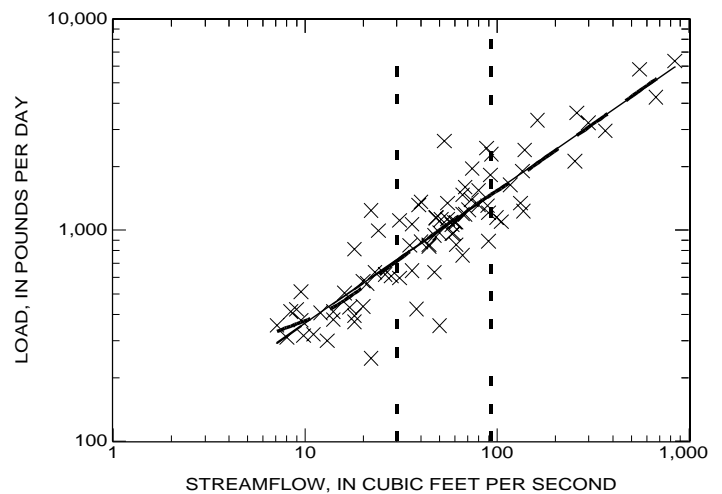
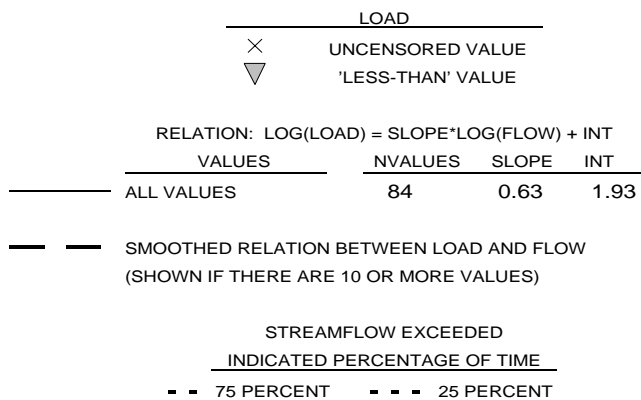
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

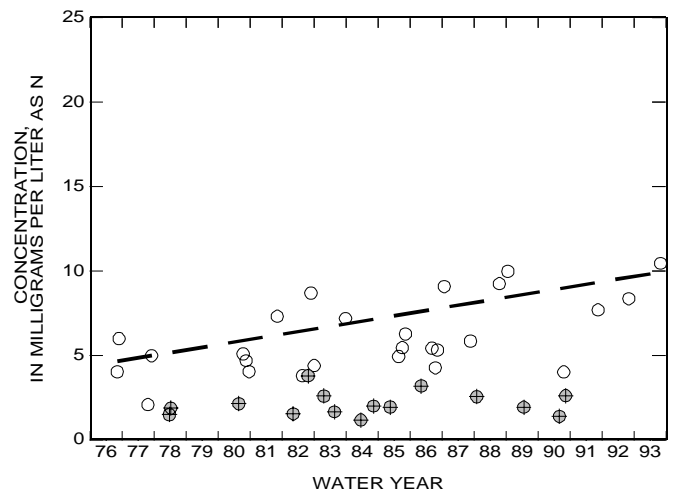
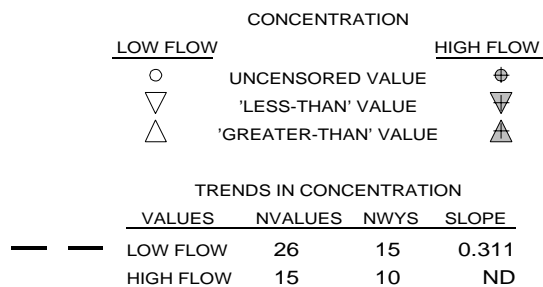
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



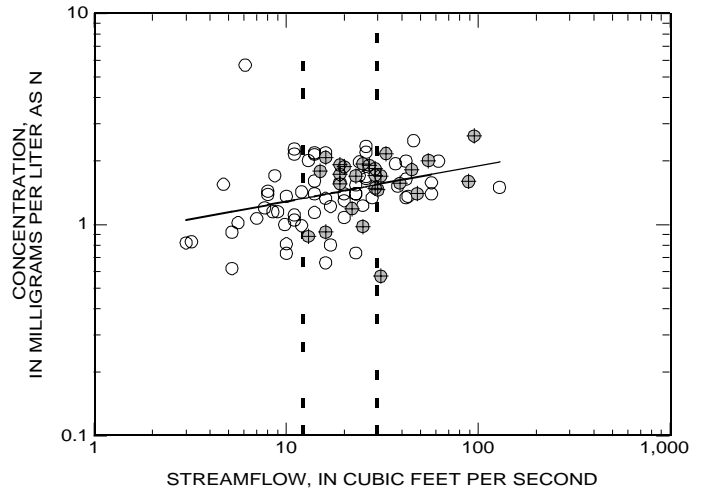
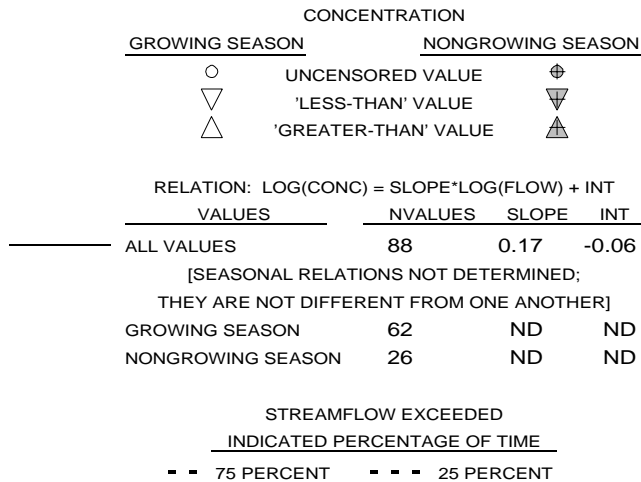
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



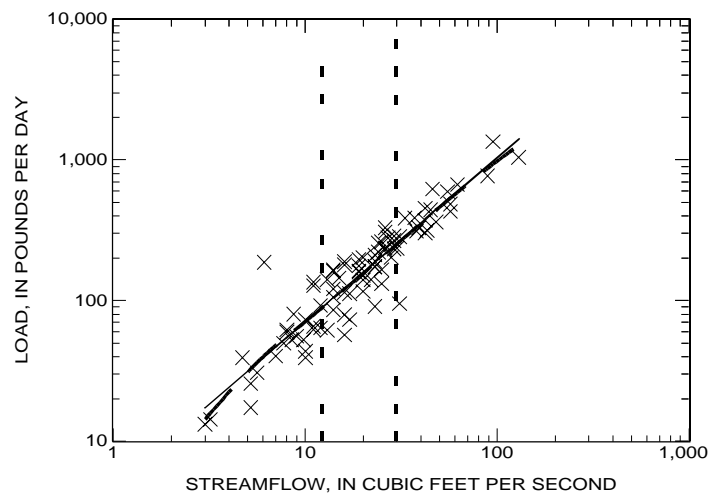
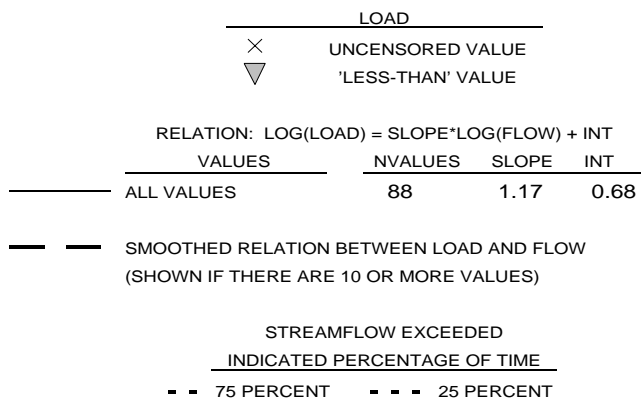
APPENDIX 11. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITROGEN
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

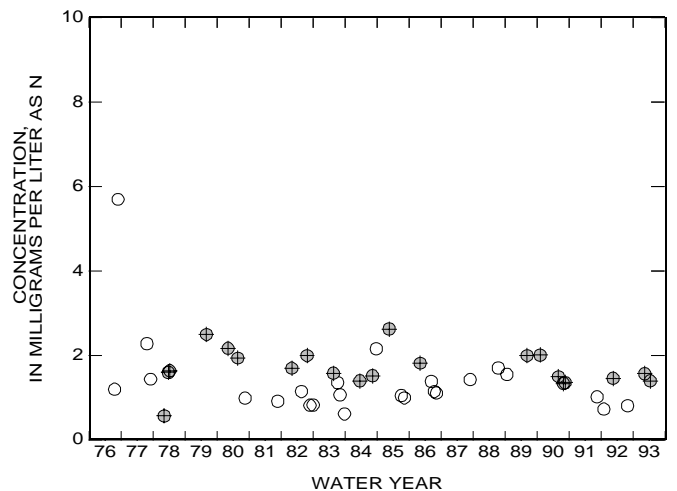
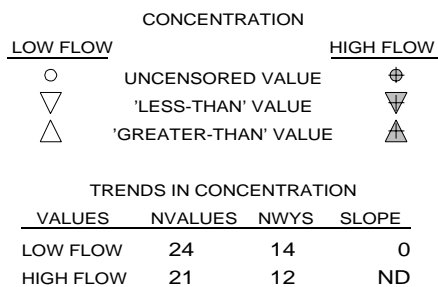
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



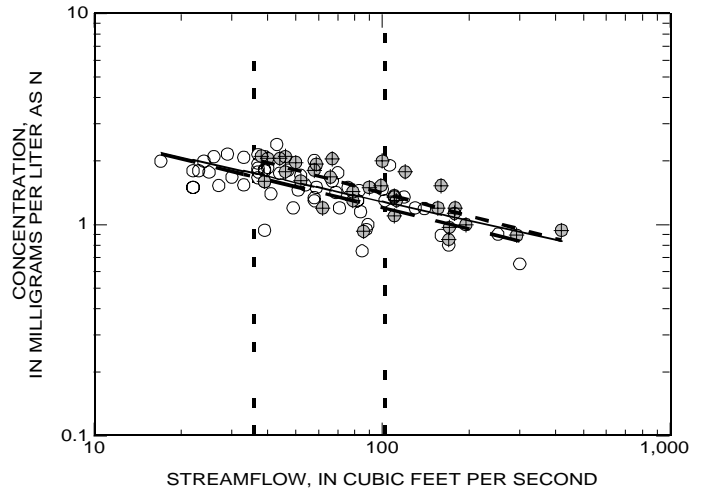
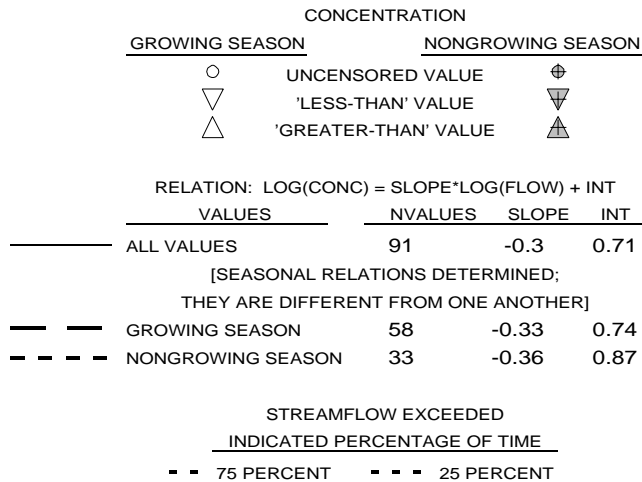
Appendix 12 - Total nitrate plus nitrite

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

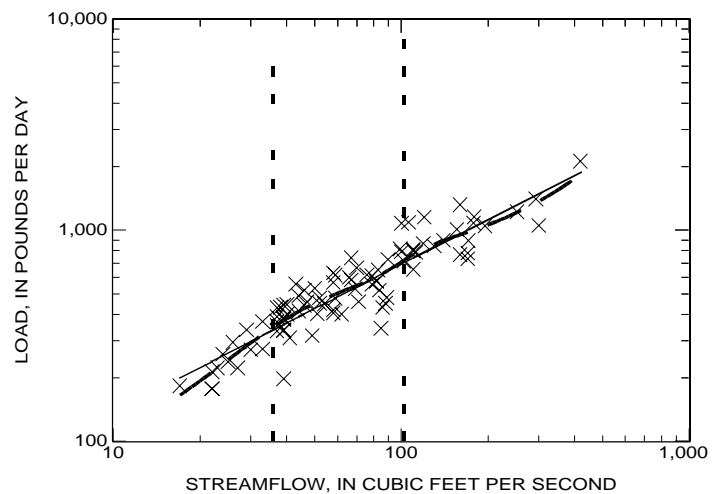
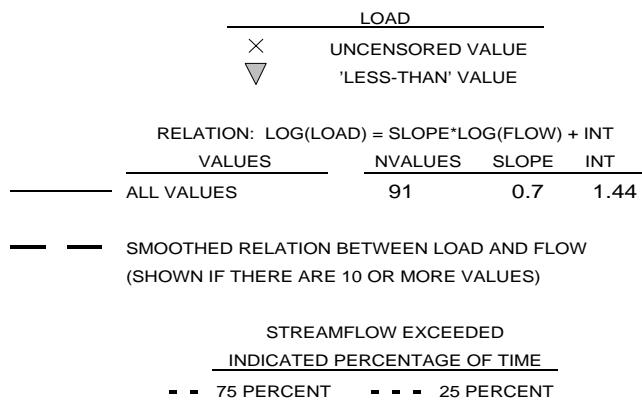
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

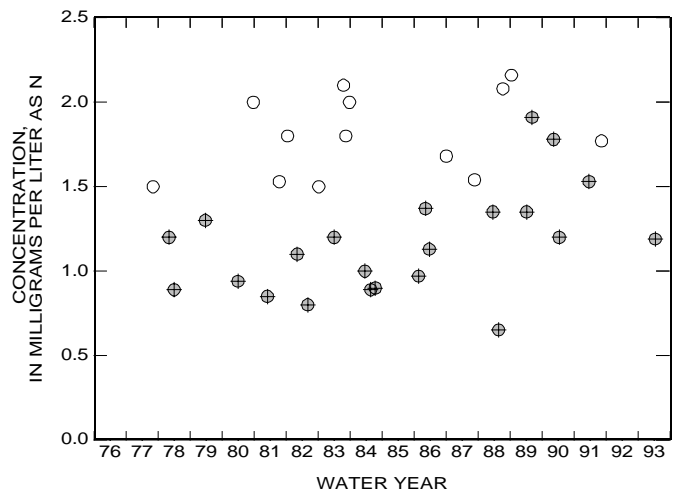
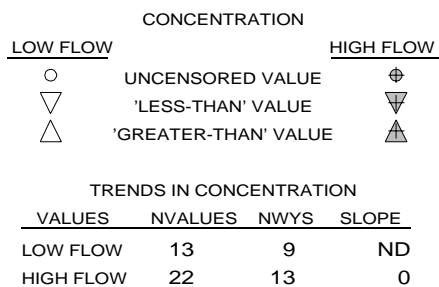
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



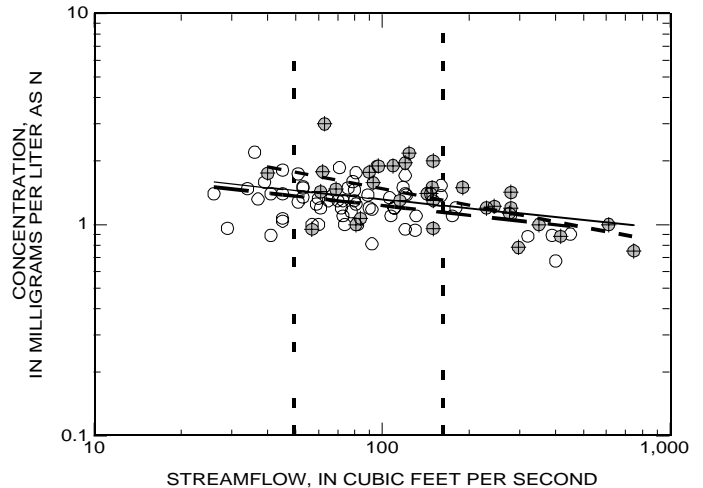
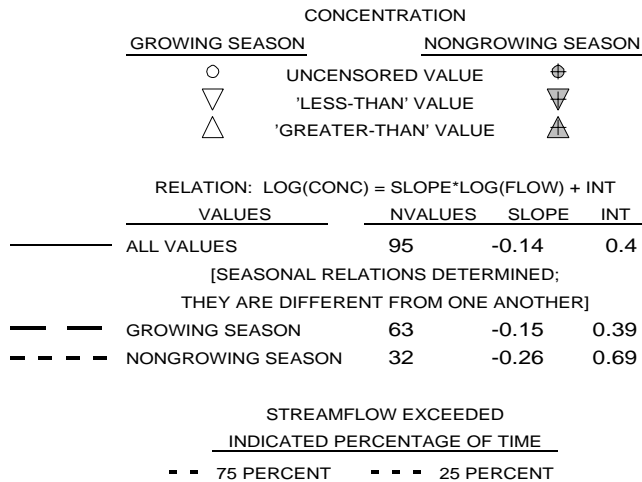
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



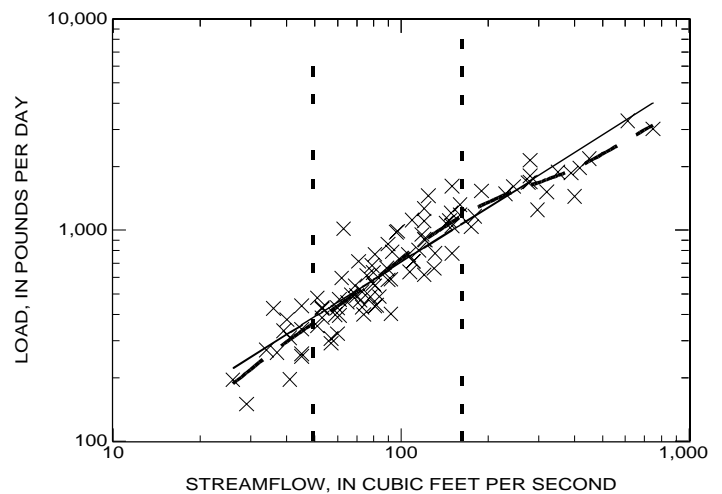
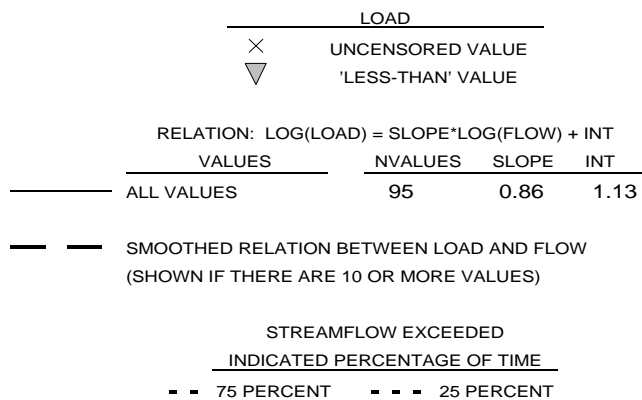
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

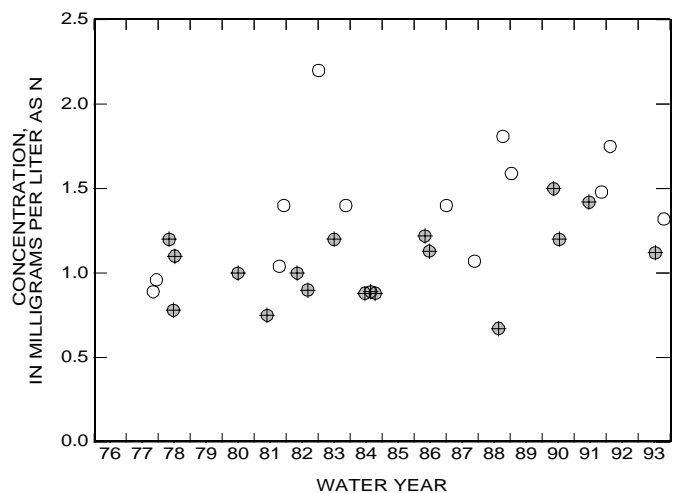
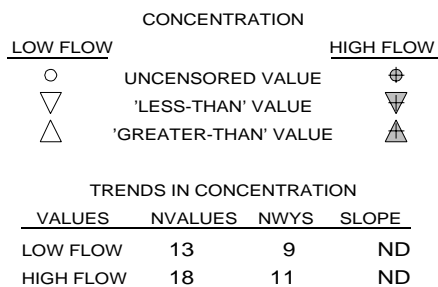
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



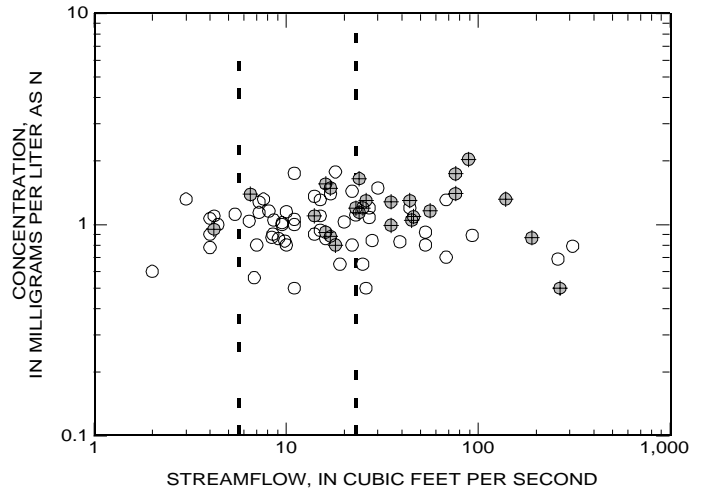
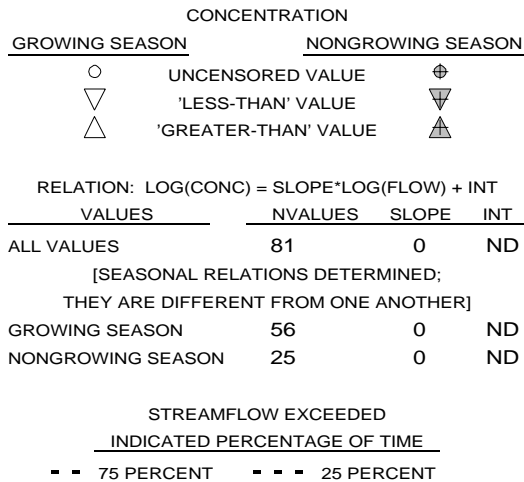
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



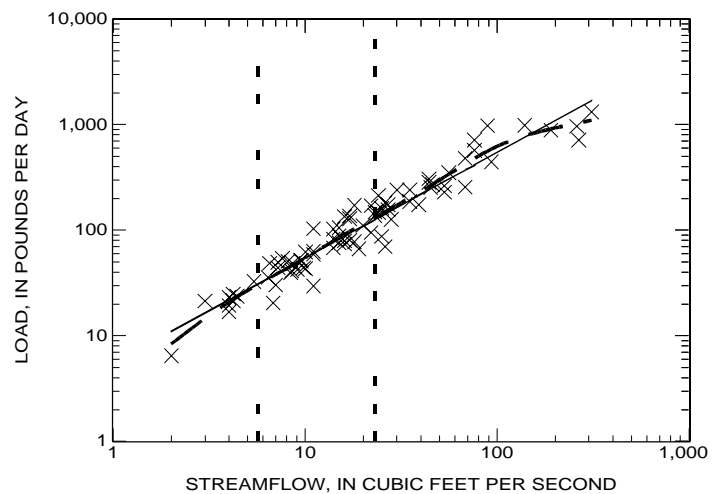
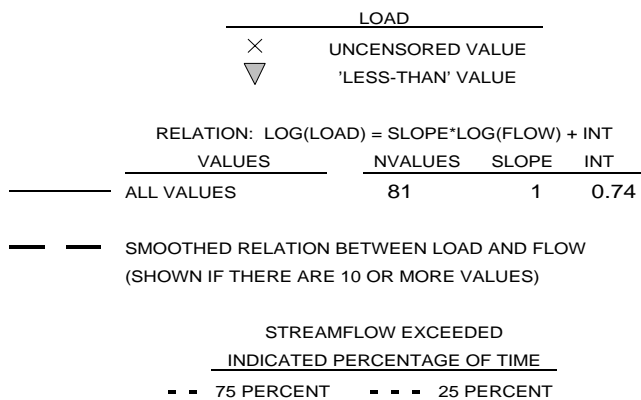
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

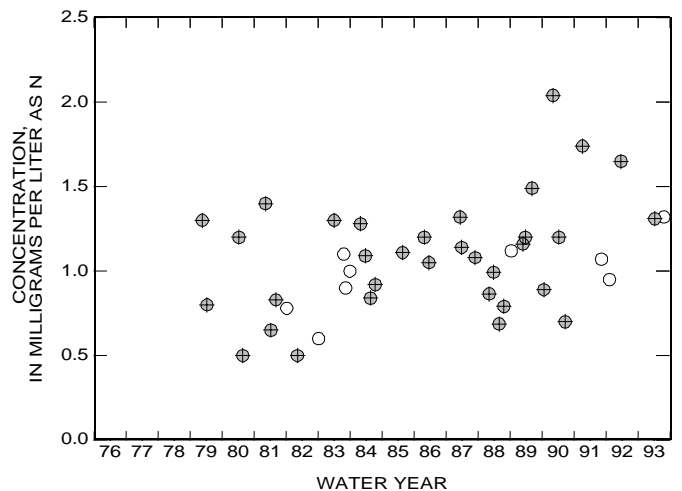
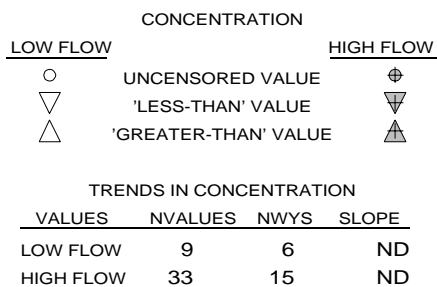
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



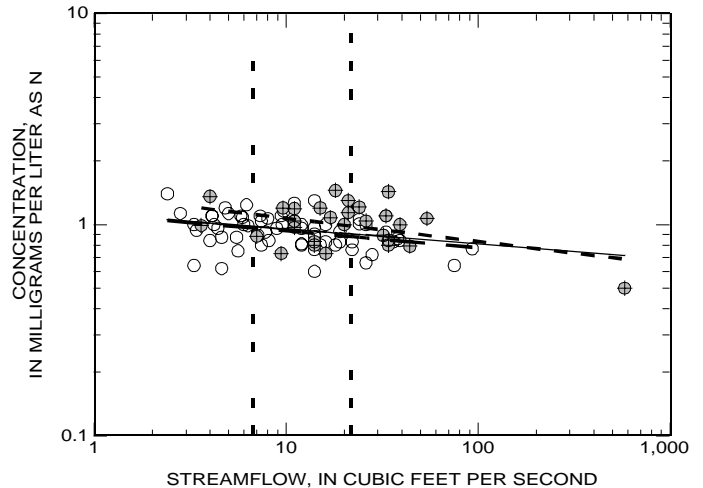
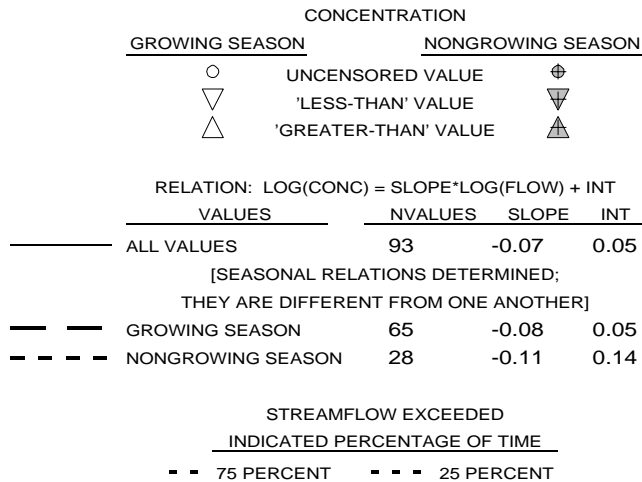
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



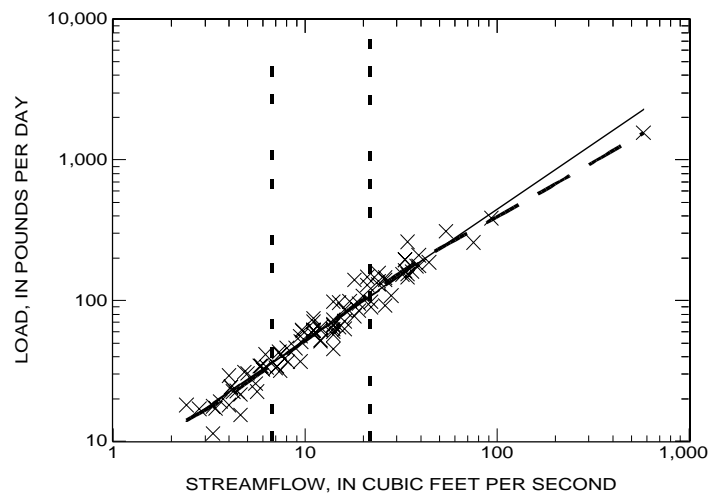
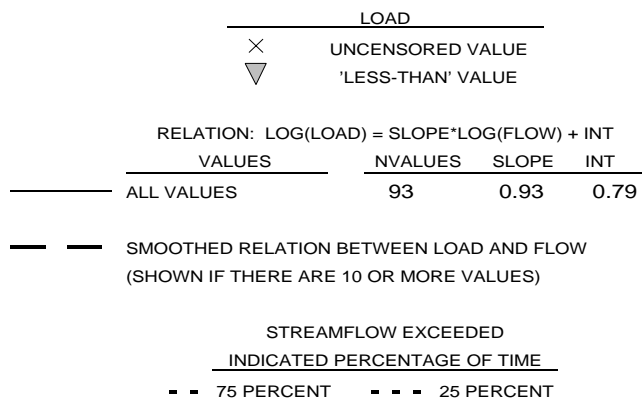
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

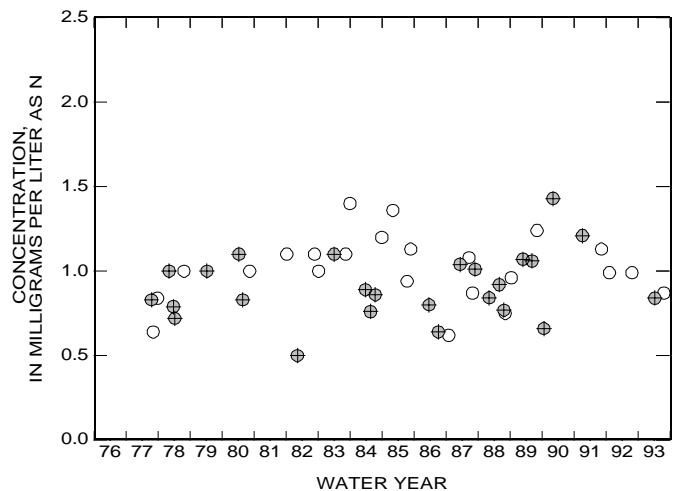
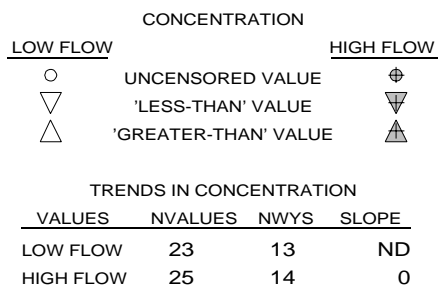
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



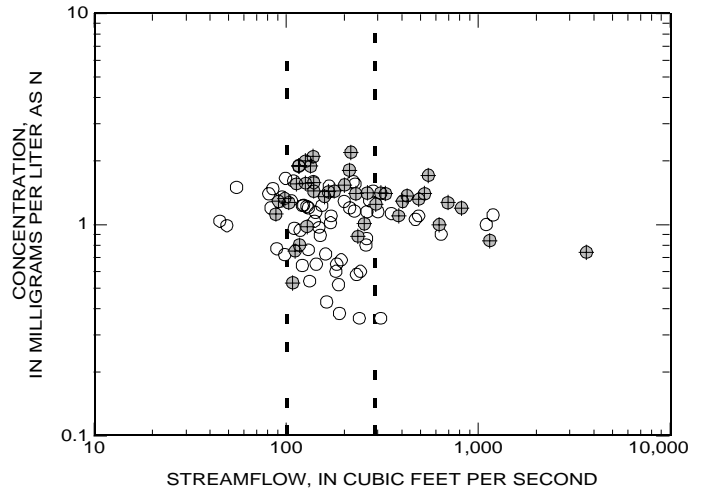
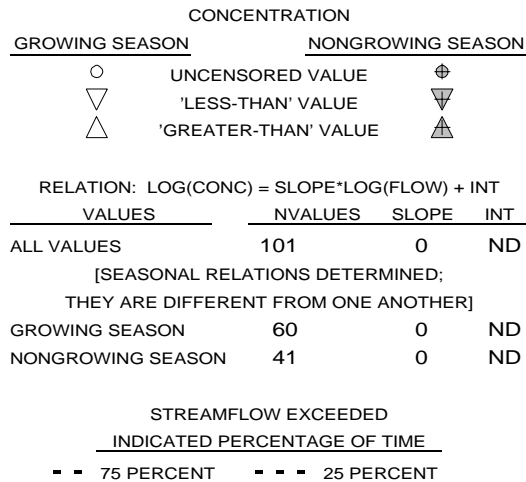
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



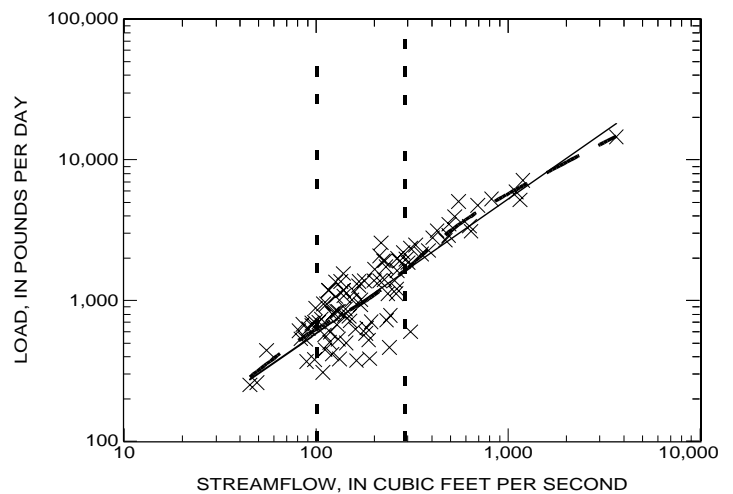
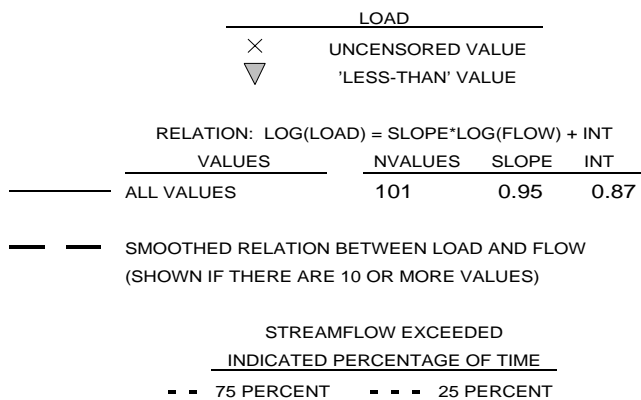
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

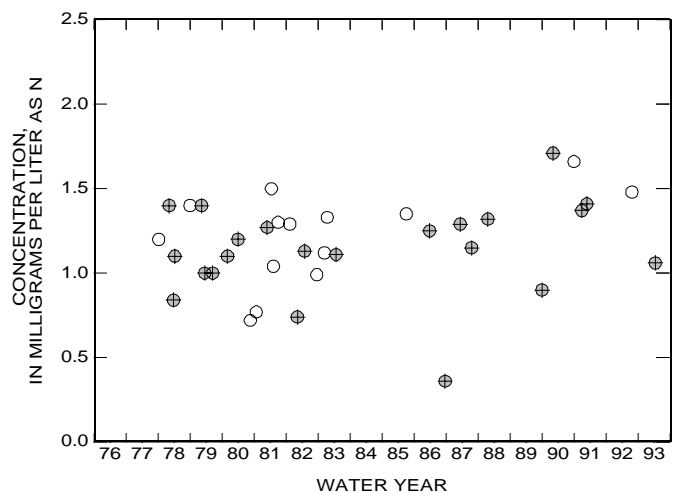
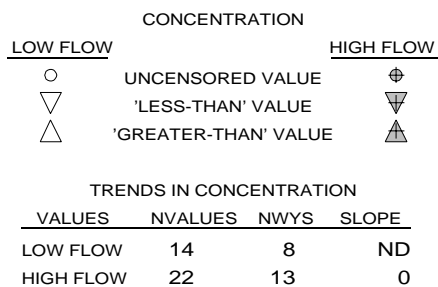
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



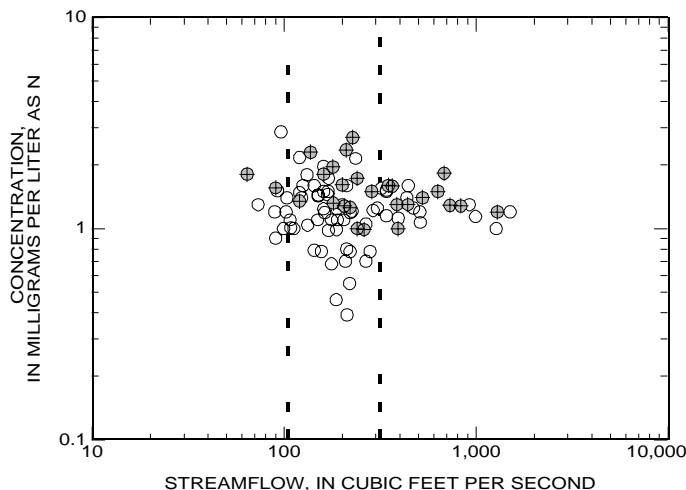
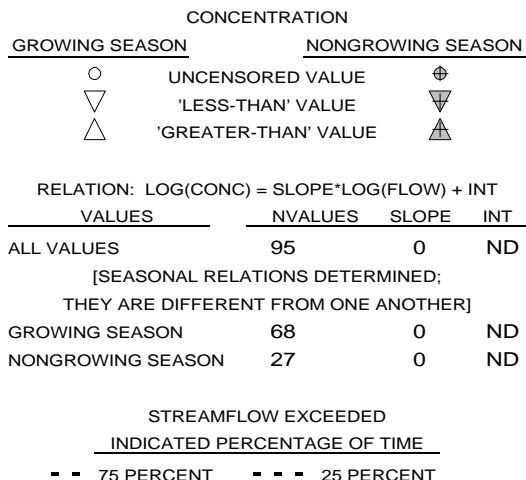
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



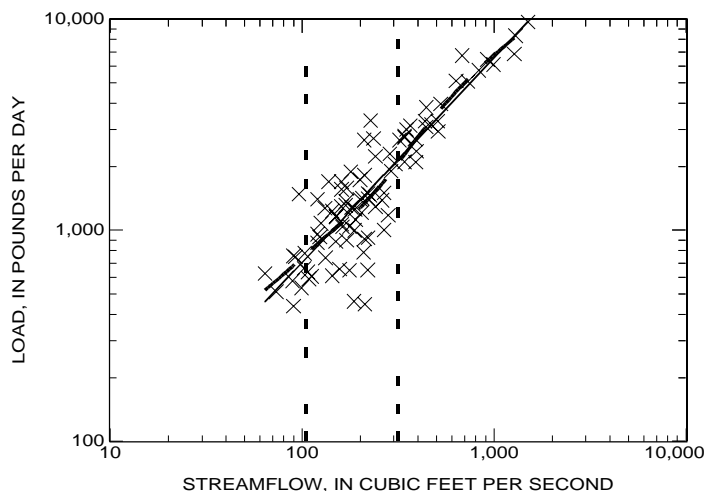
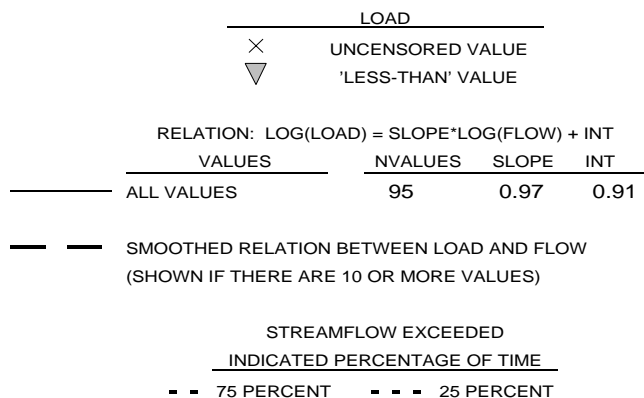
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

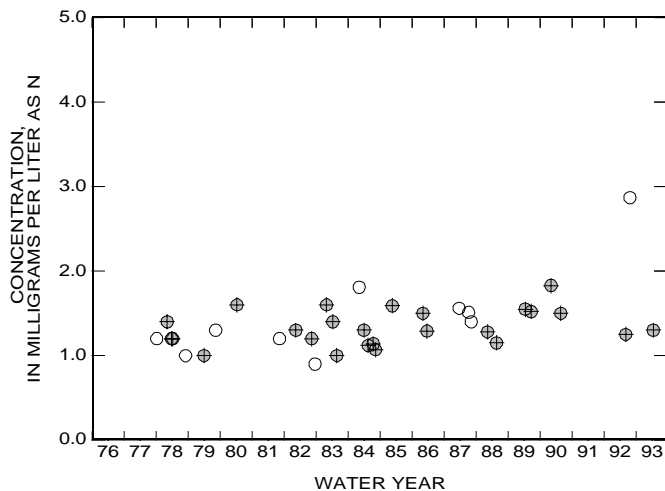
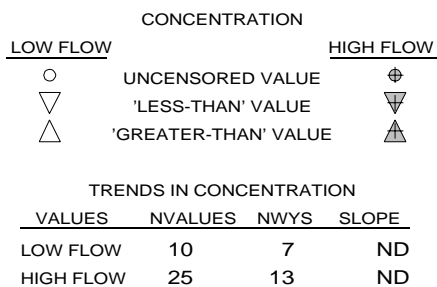
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



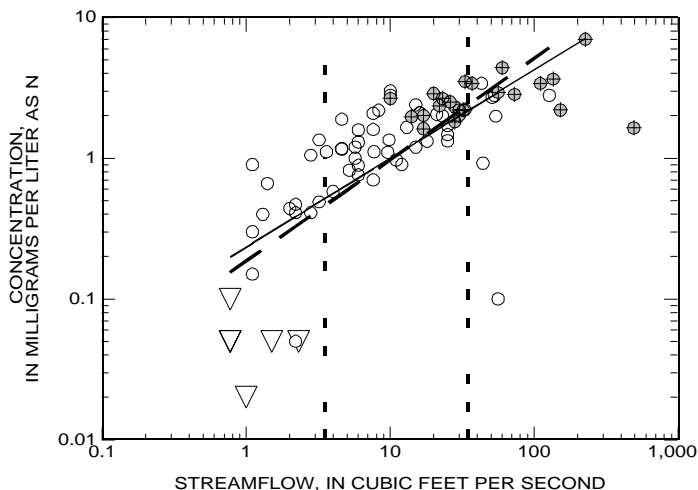
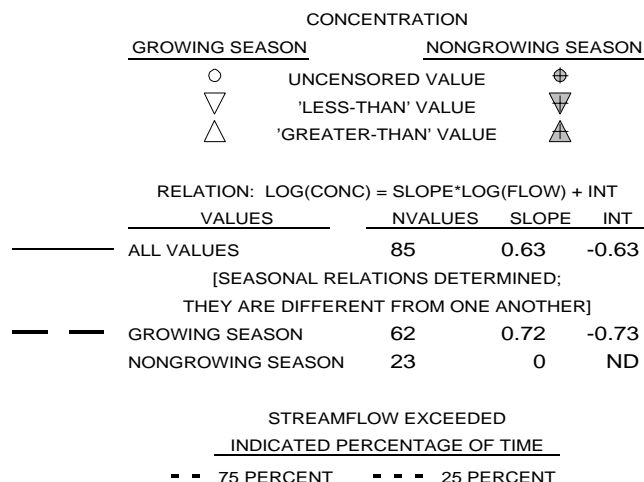
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



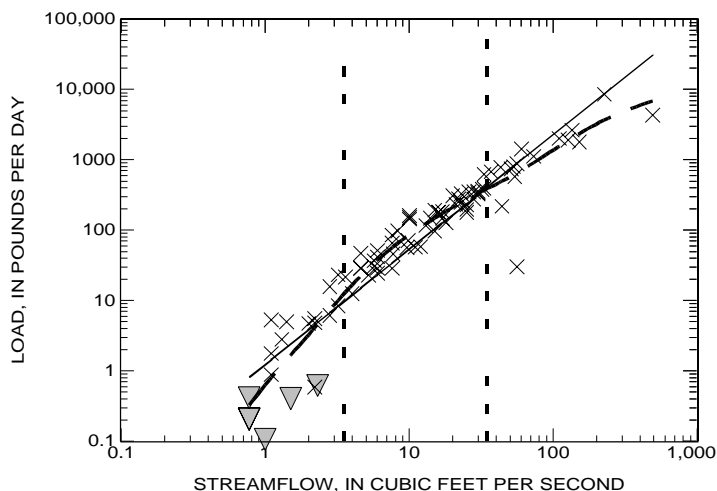
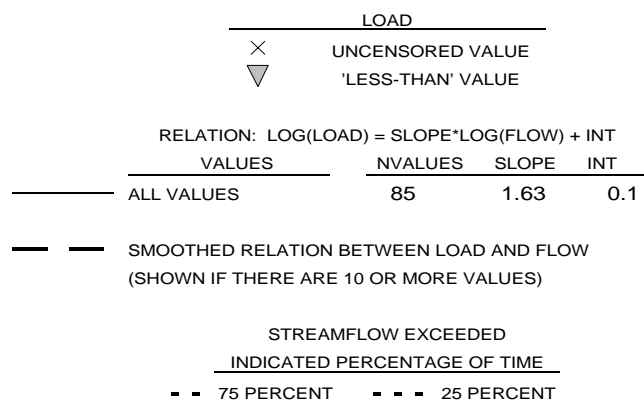
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

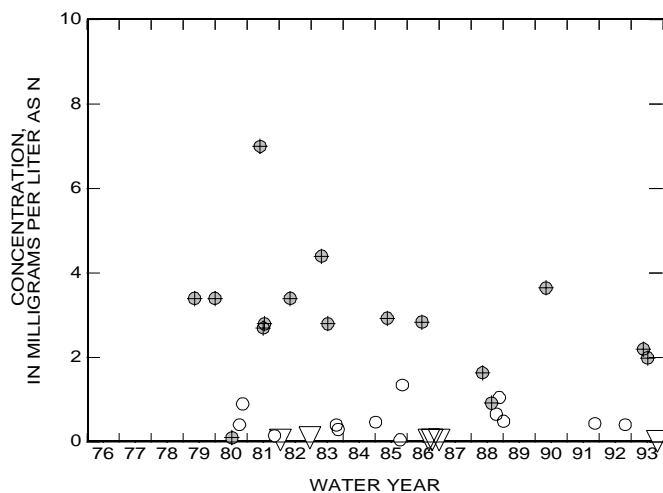
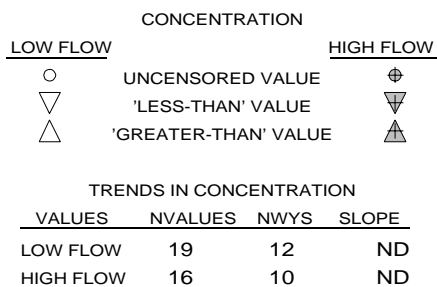
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



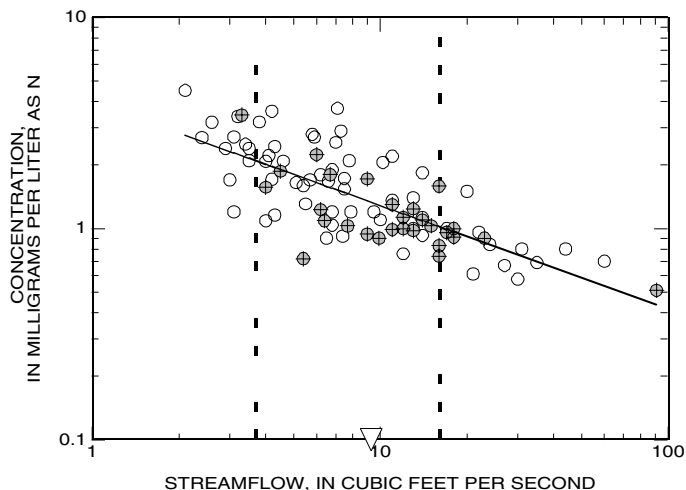
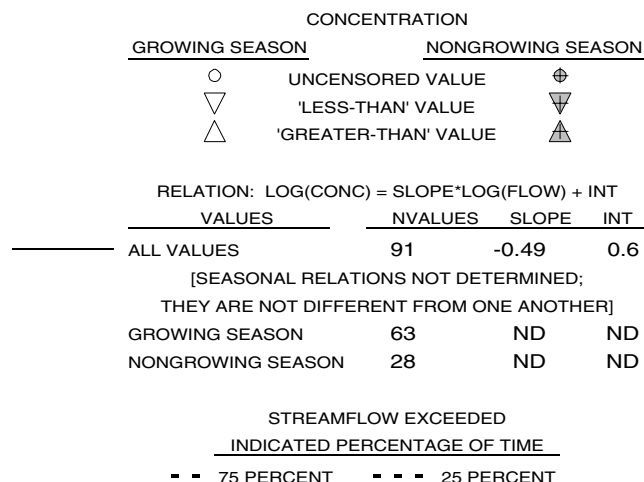
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



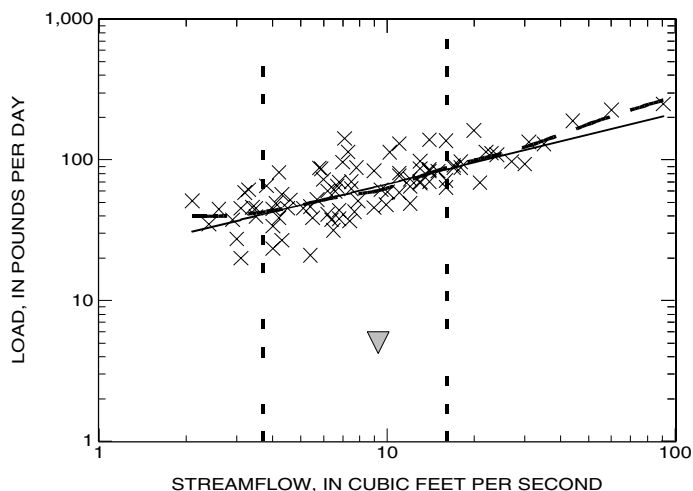
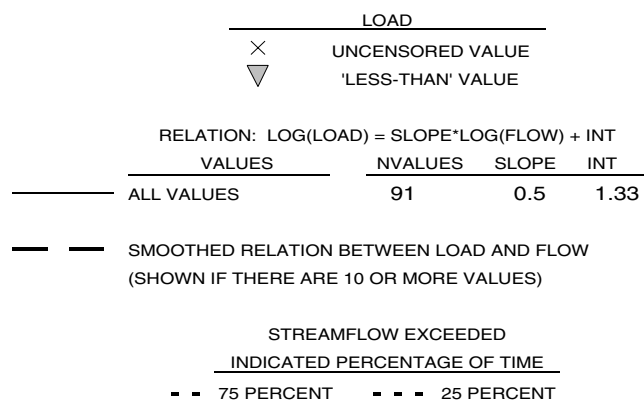
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

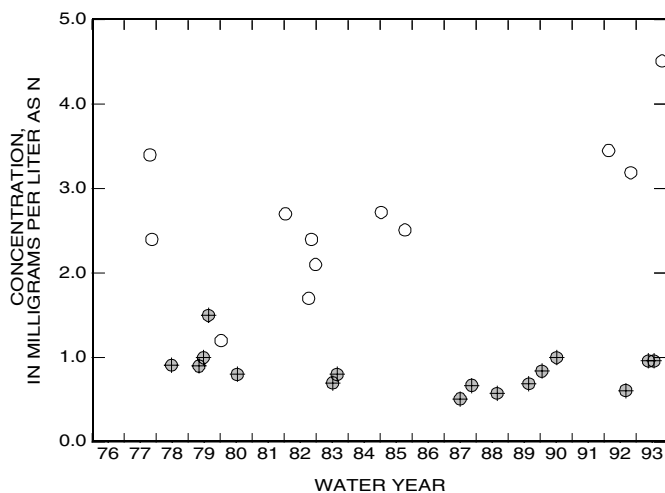
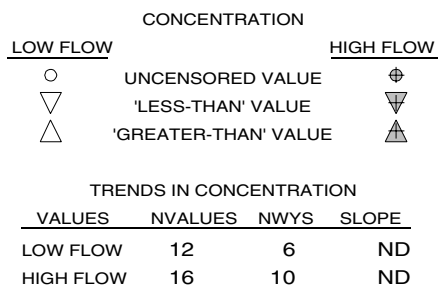
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



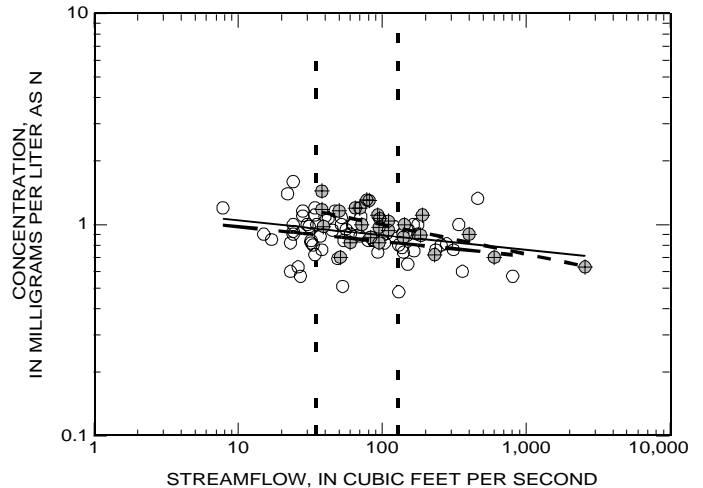
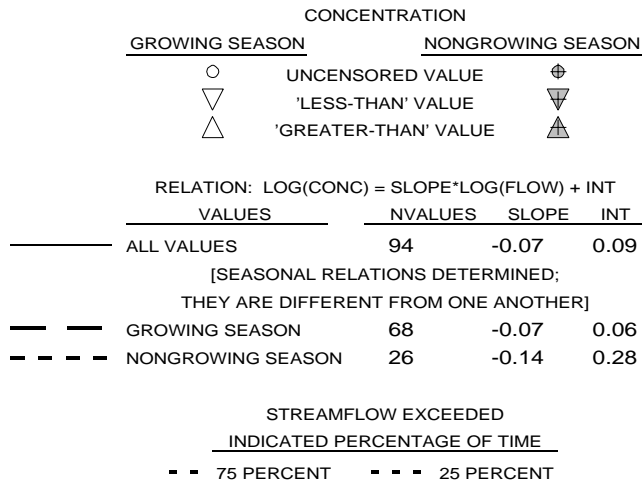
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



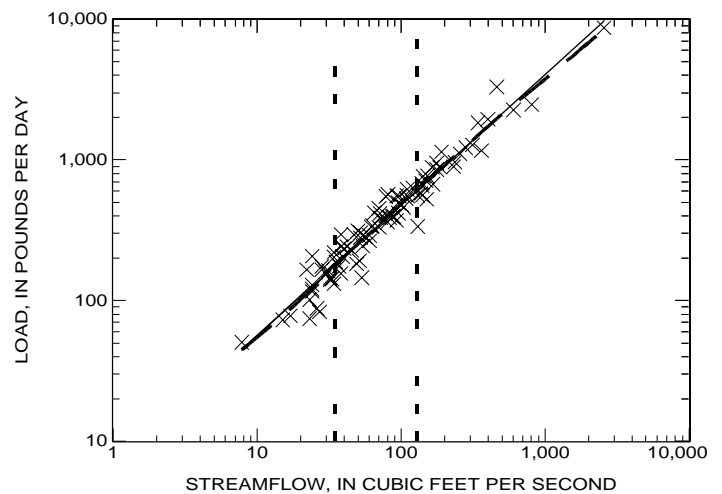
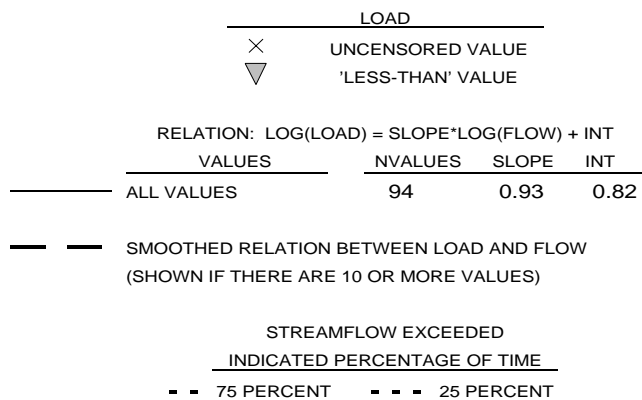
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

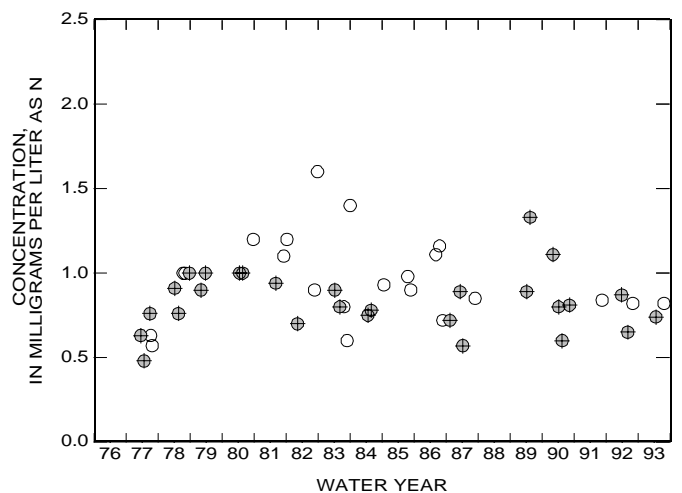
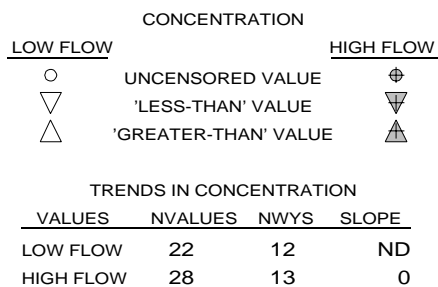
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



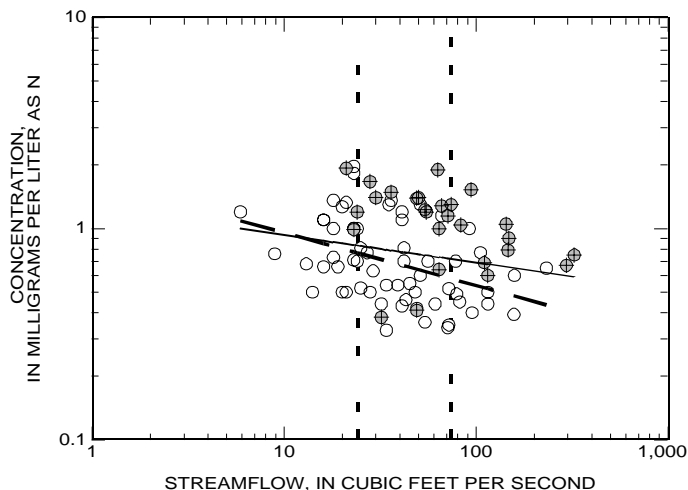
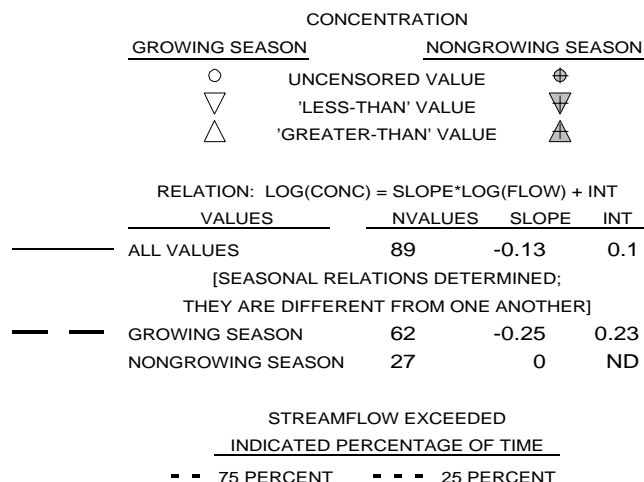
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



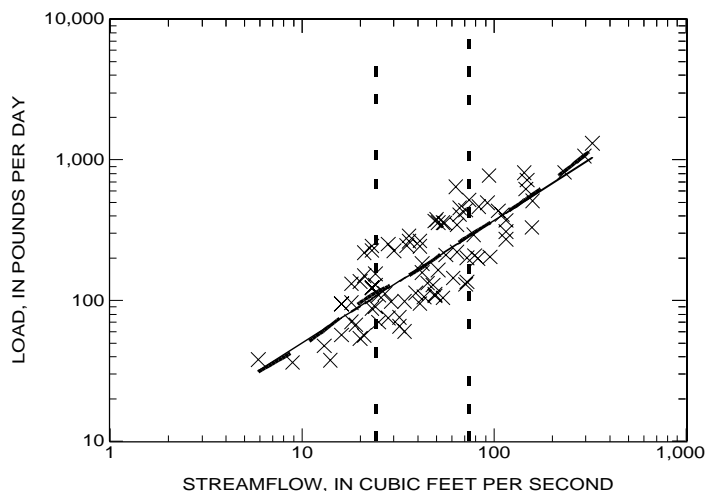
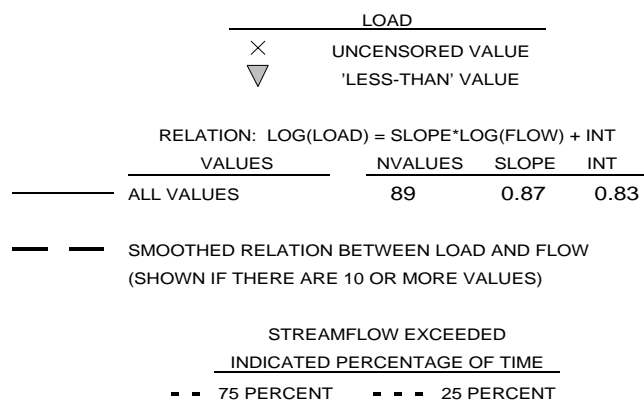
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

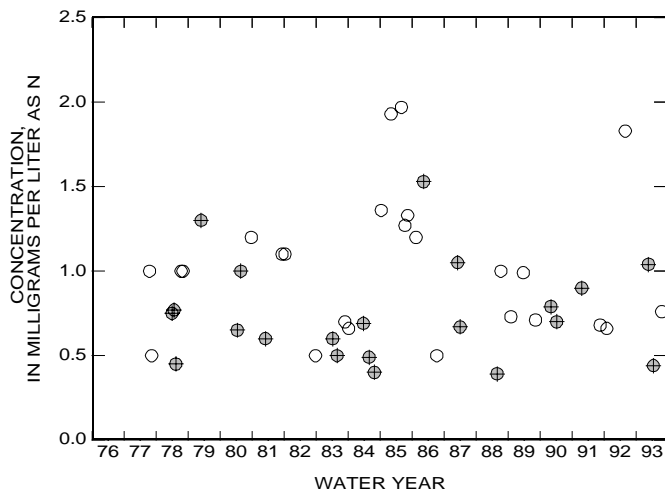
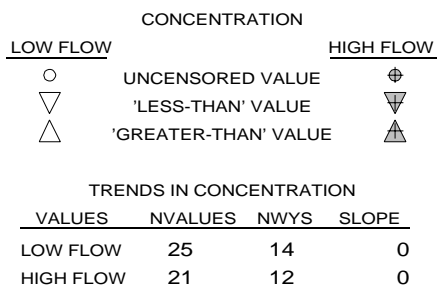
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



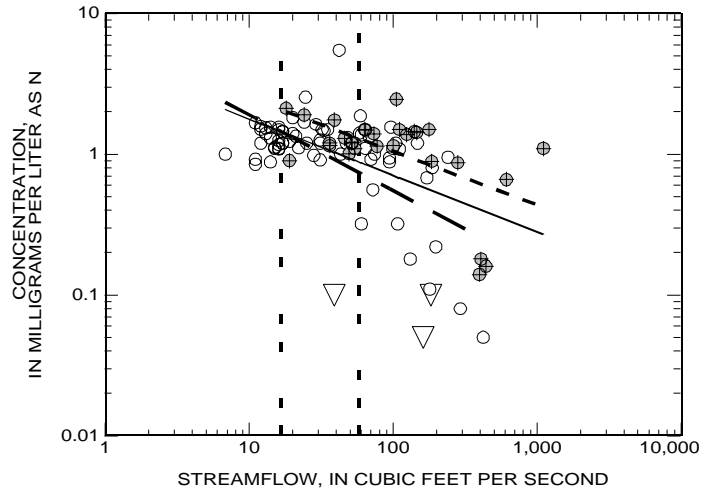
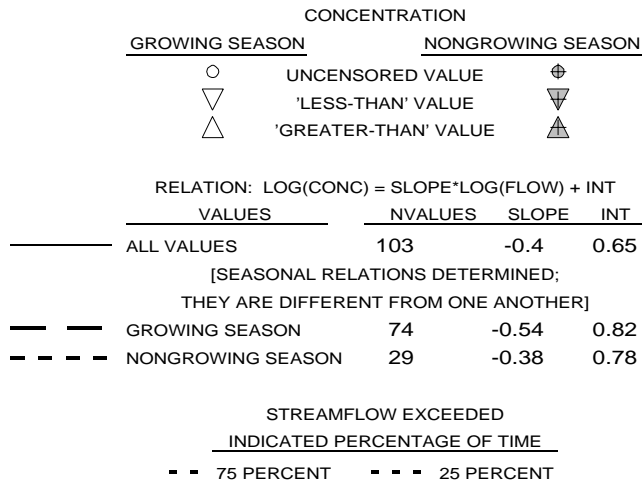
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



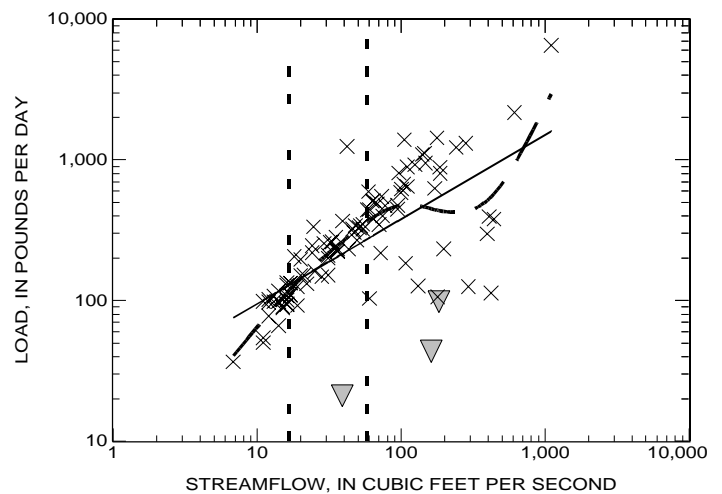
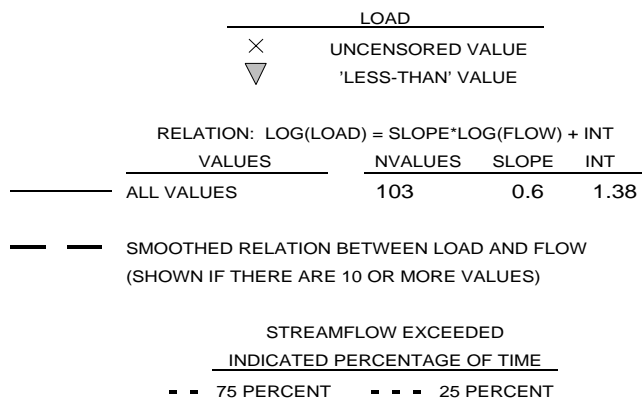
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

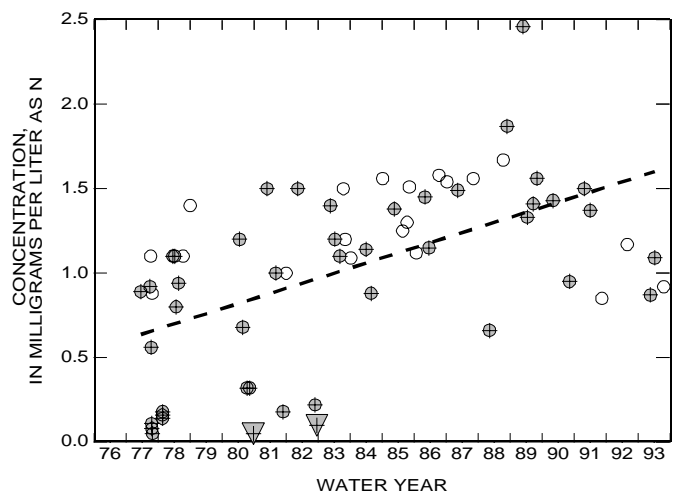
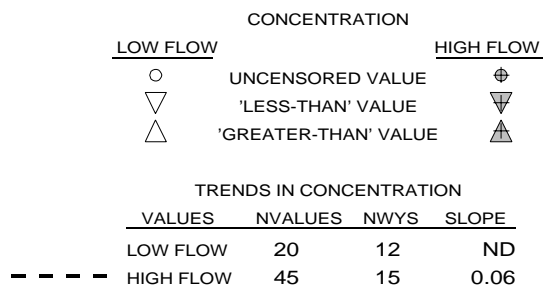
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



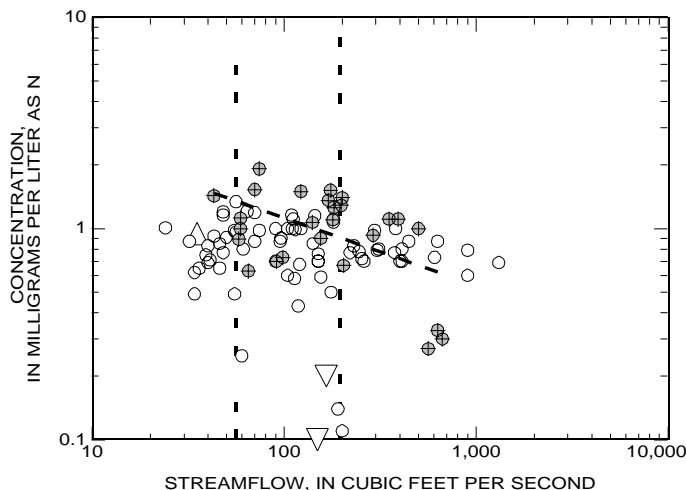
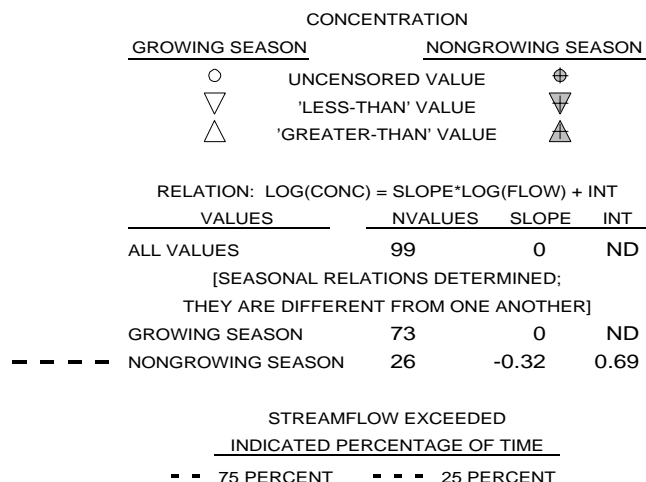
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



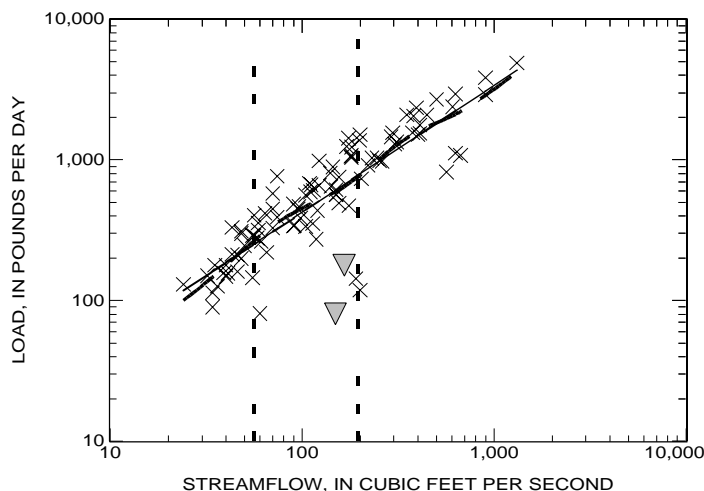
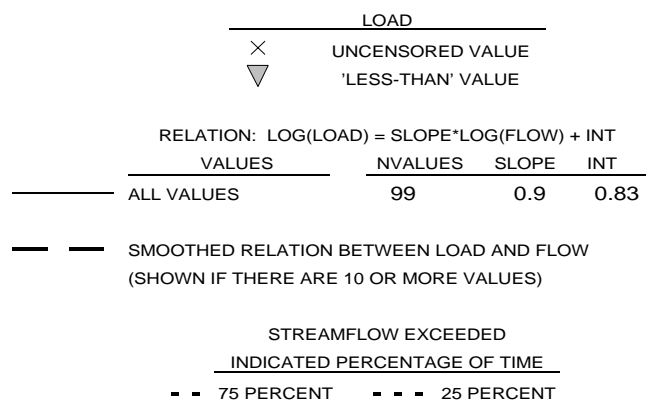
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

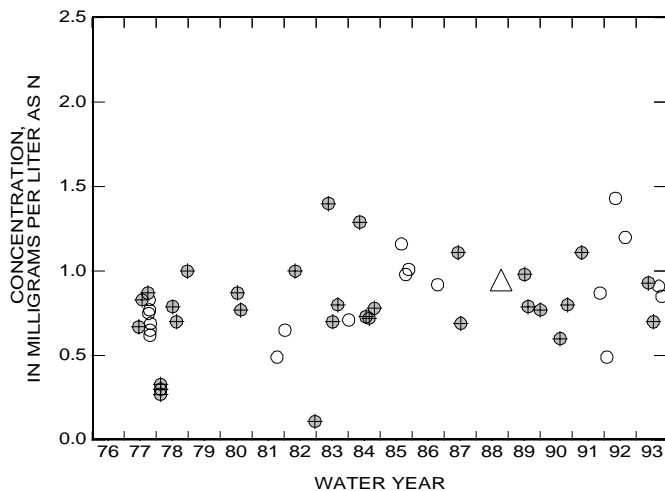
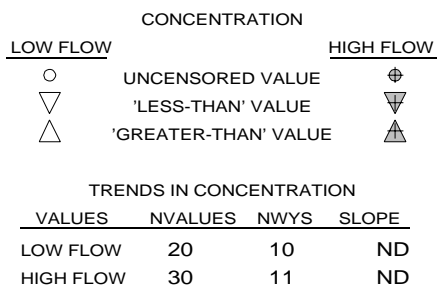
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



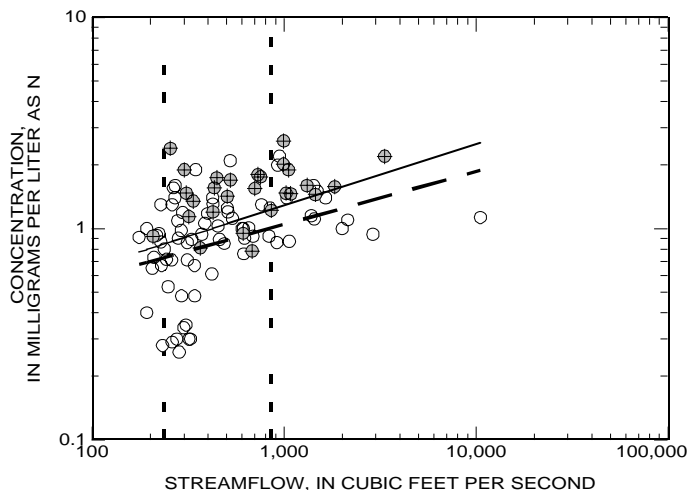
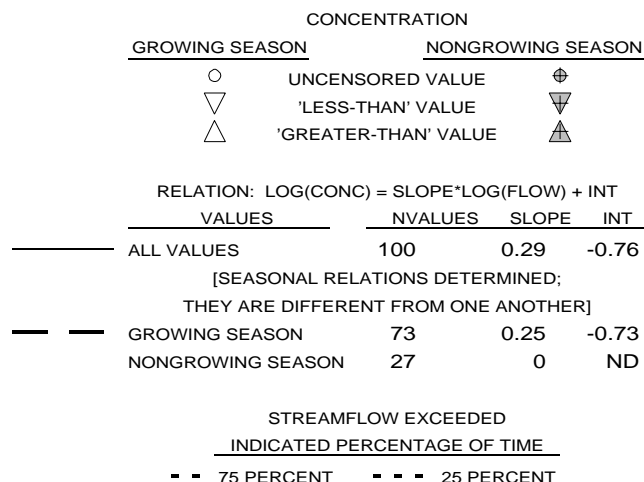
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



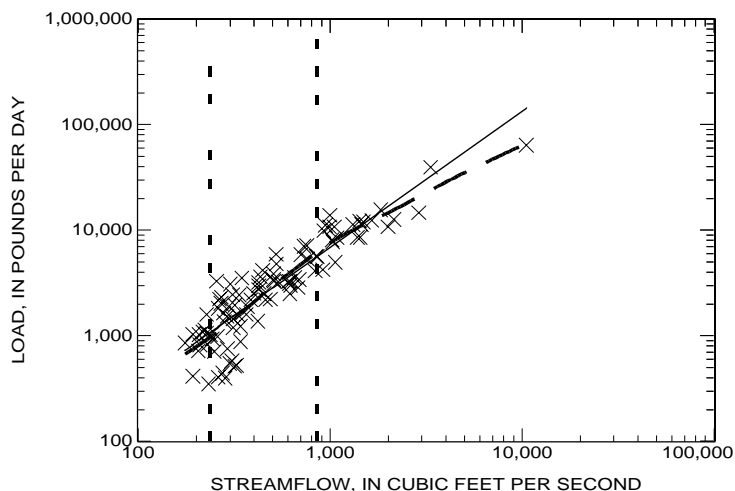
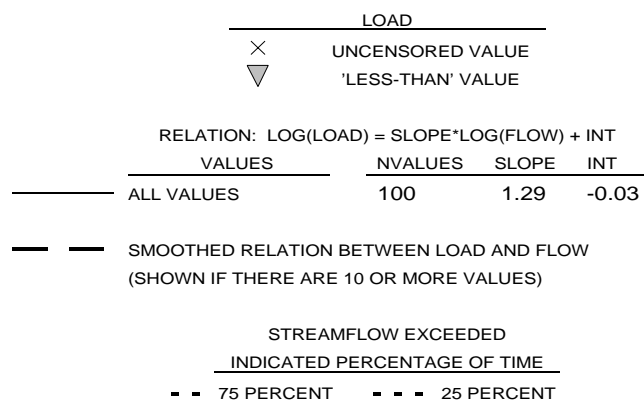
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

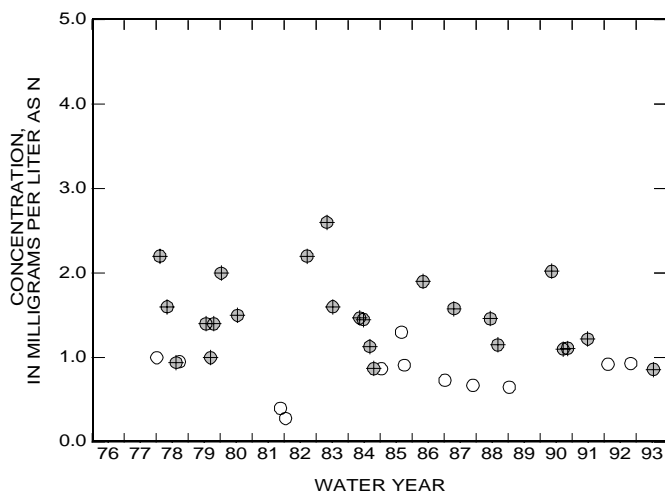
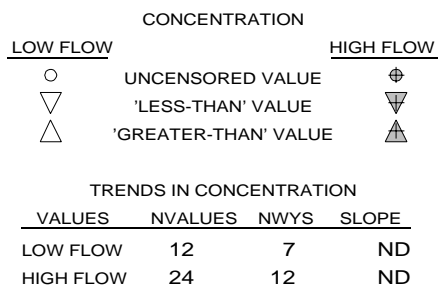
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



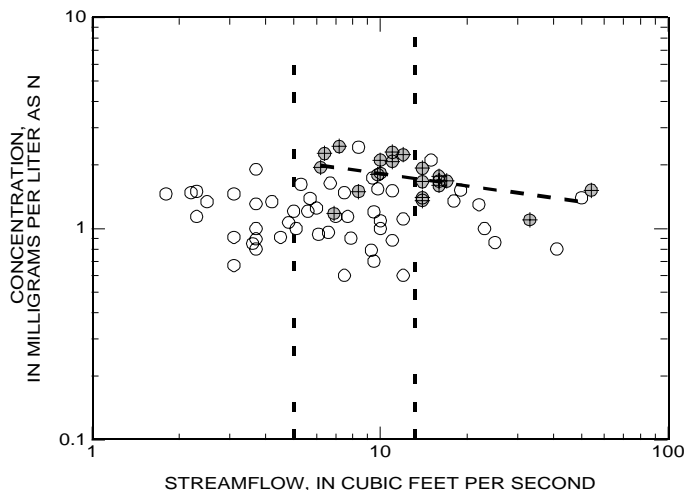
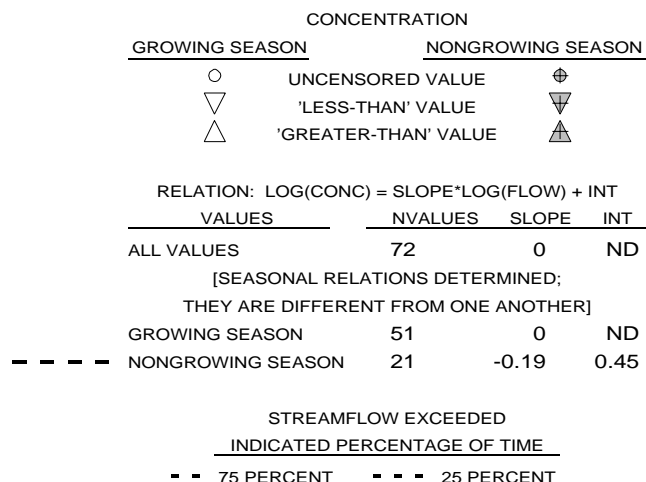
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



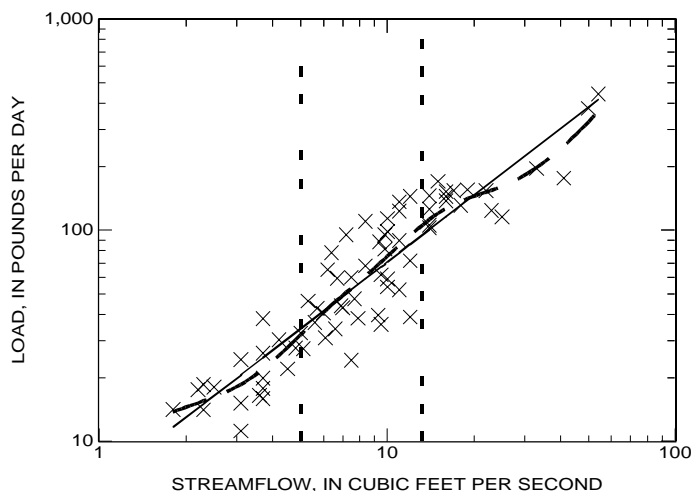
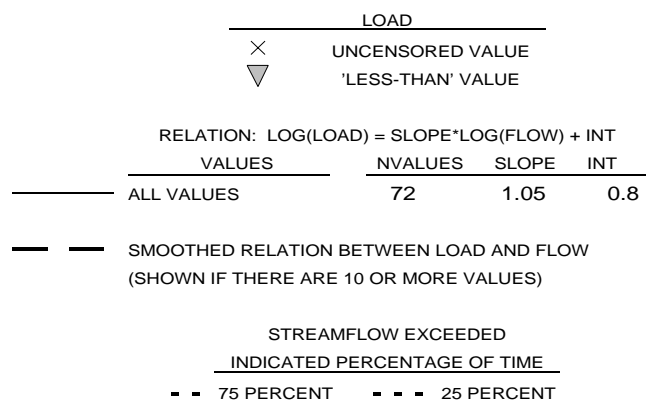
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

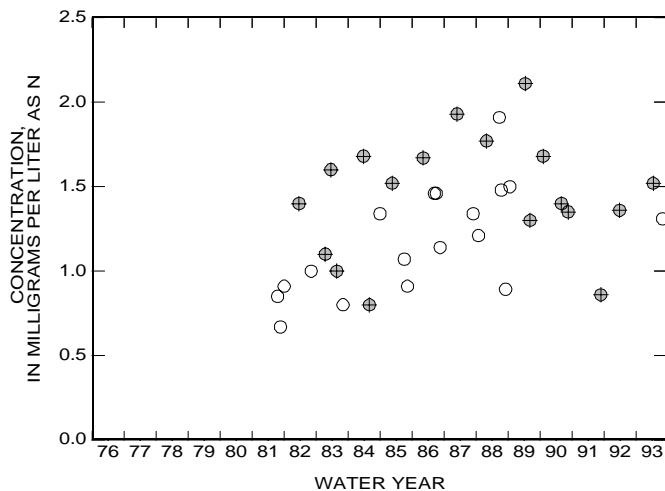
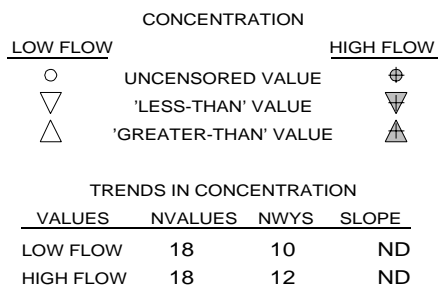
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



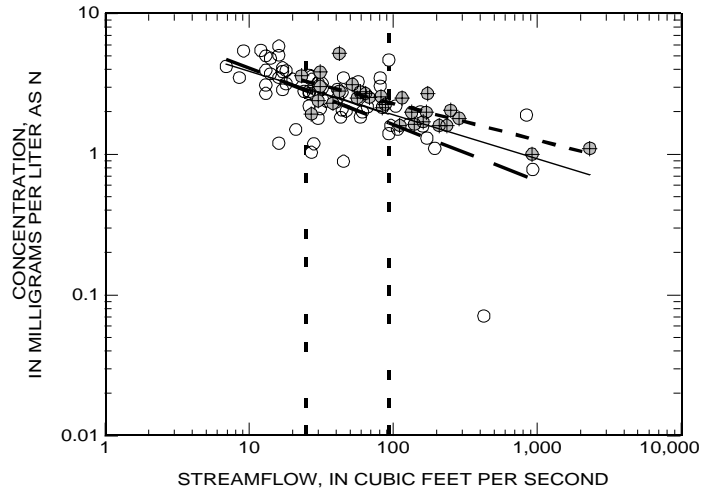
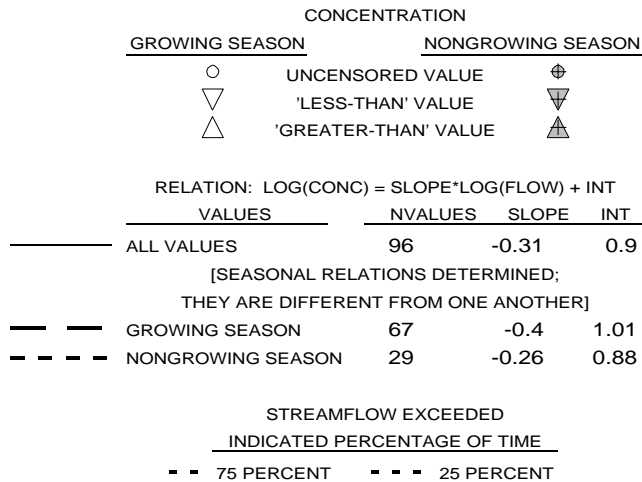
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



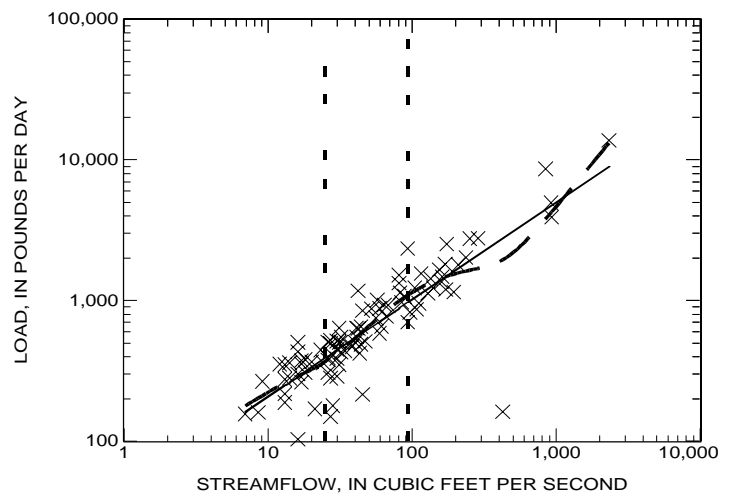
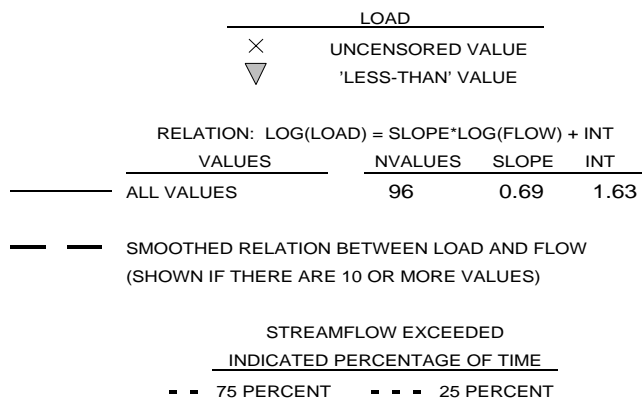
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

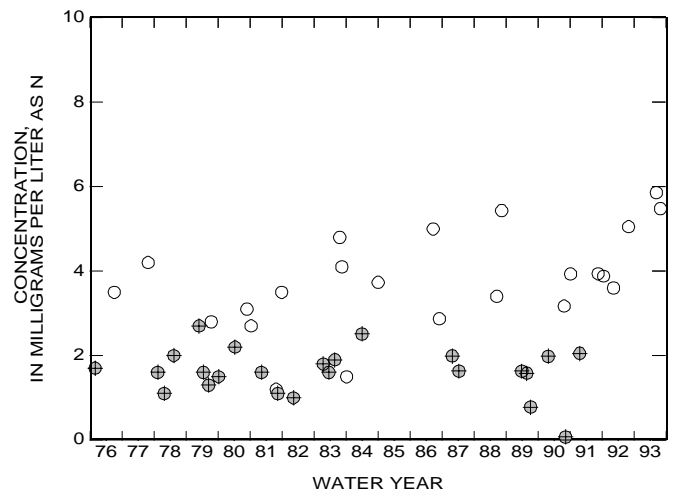
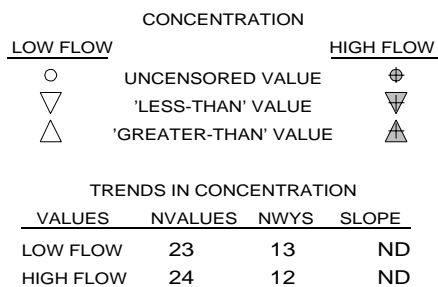
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



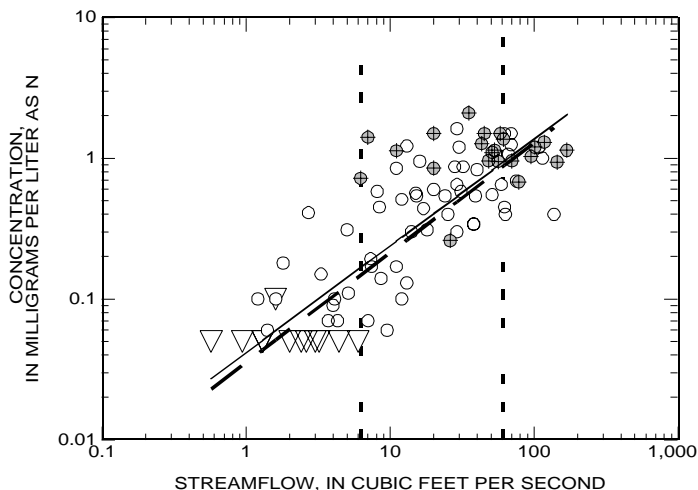
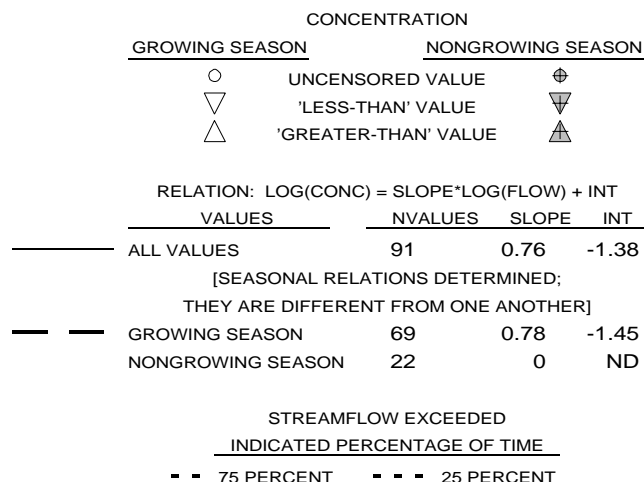
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



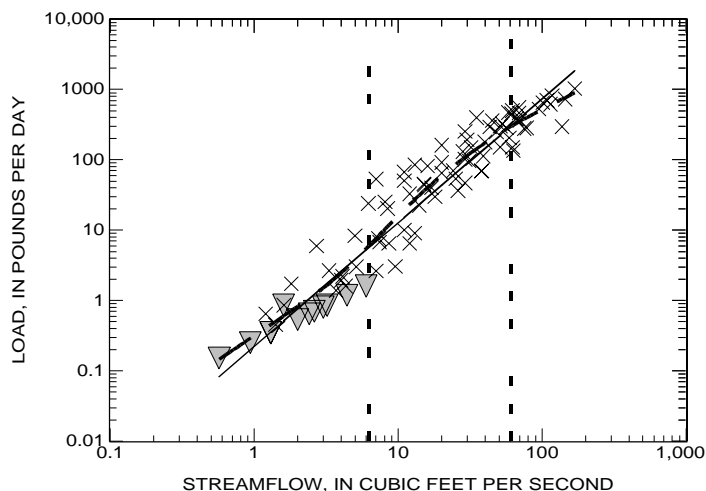
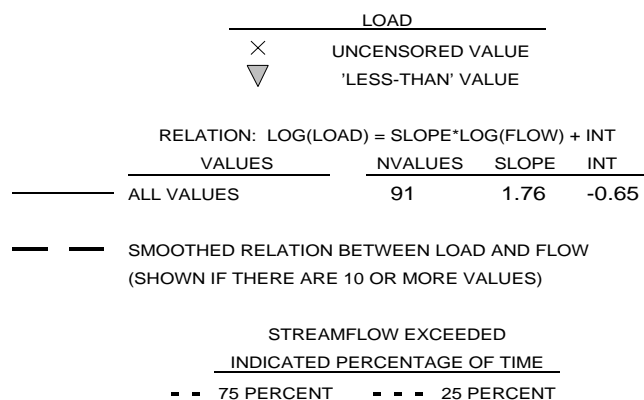
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

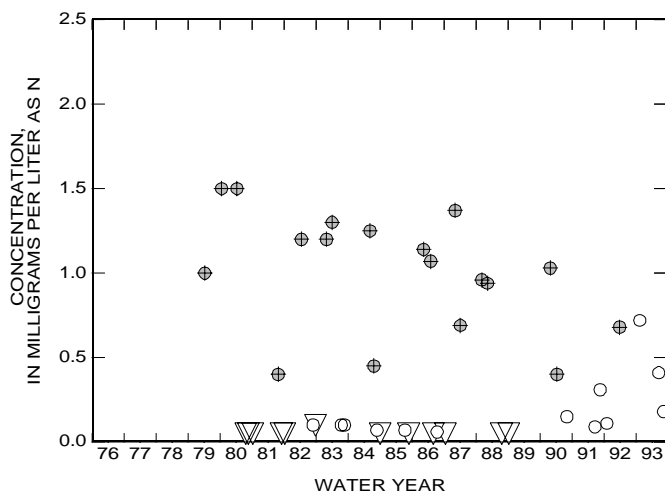
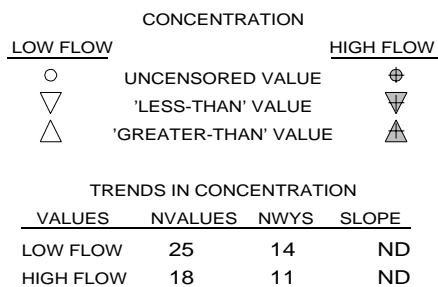
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



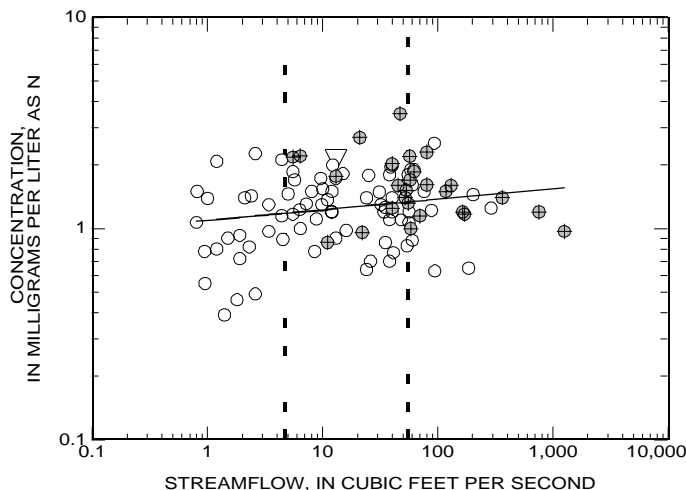
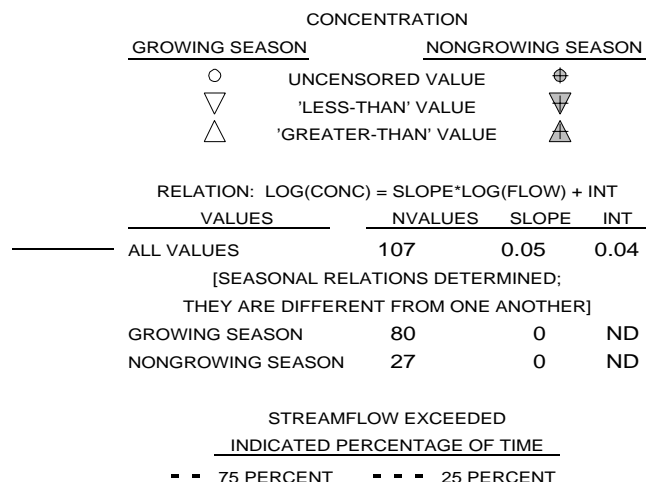
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



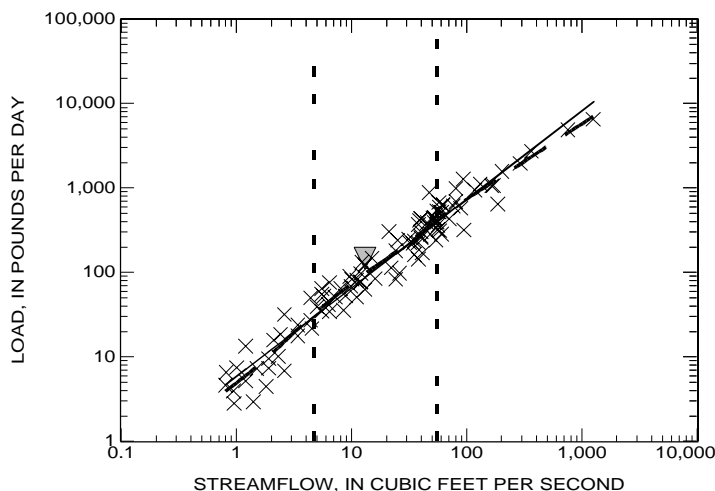
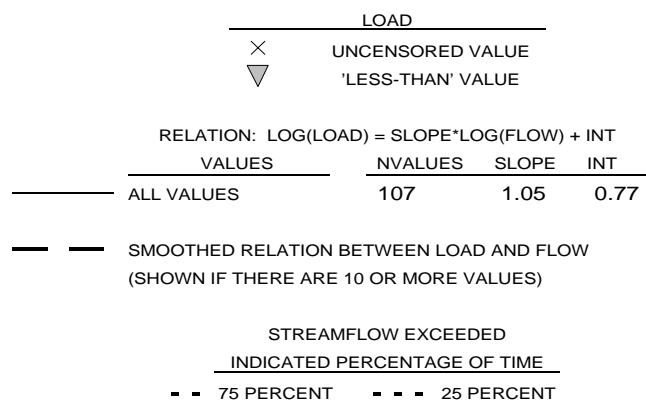
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

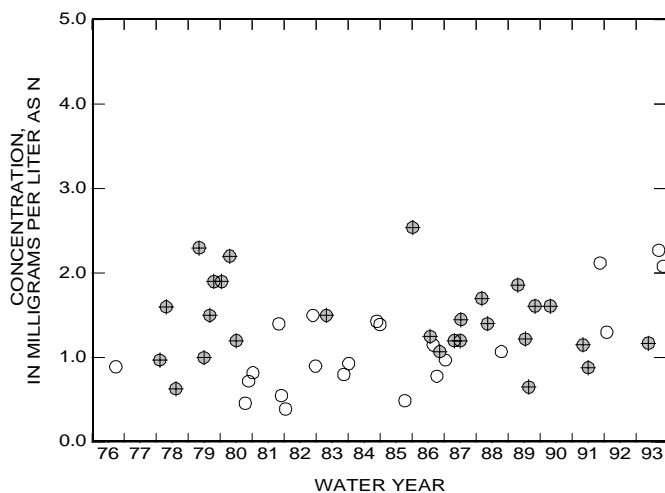
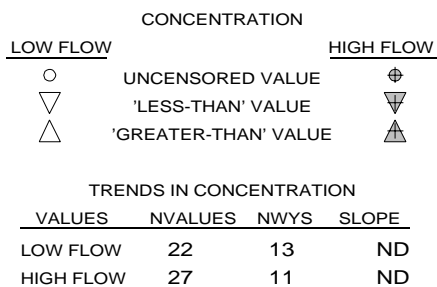
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



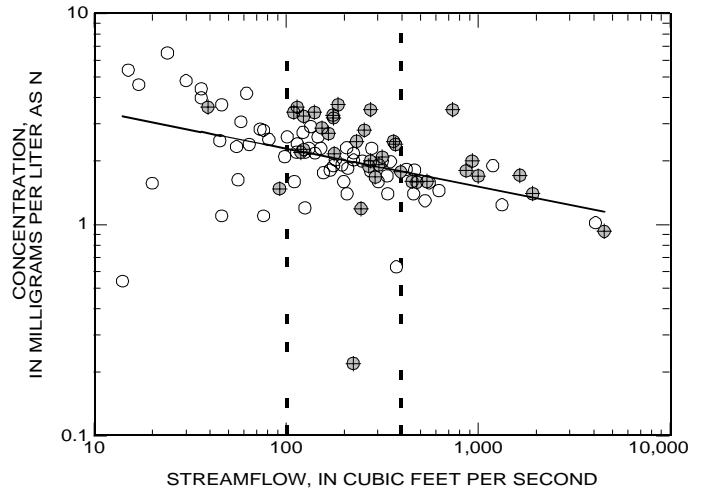
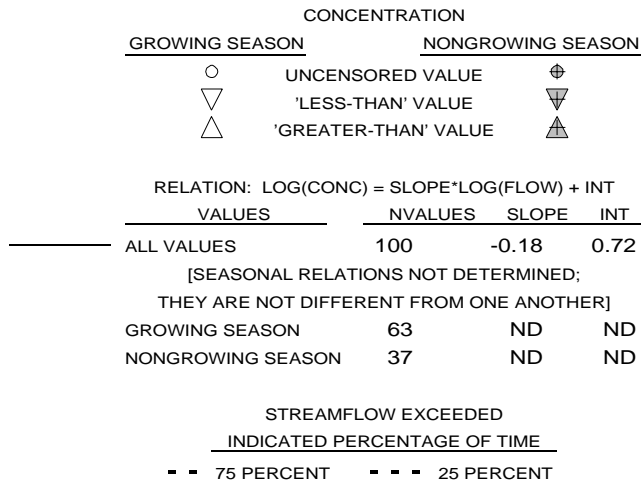
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



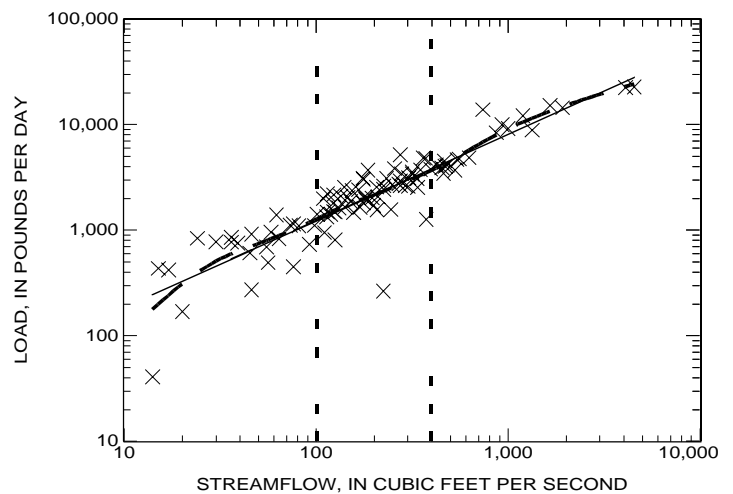
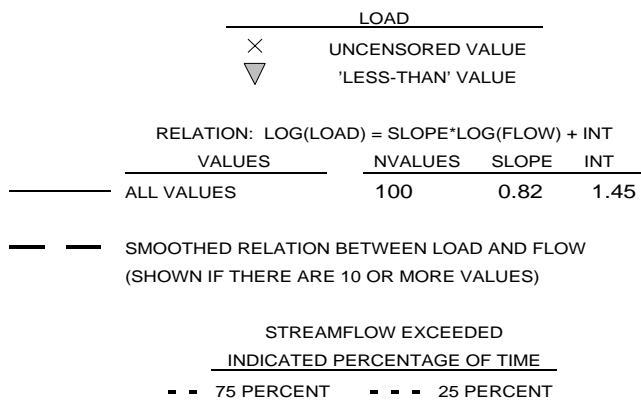
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

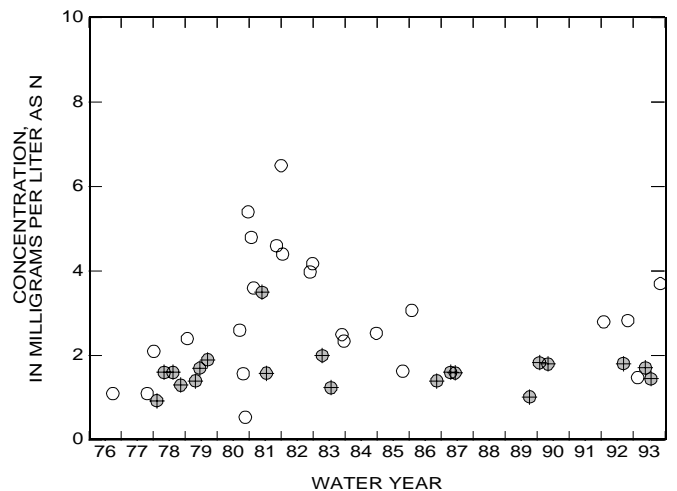
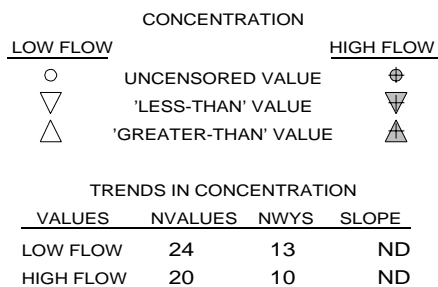
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



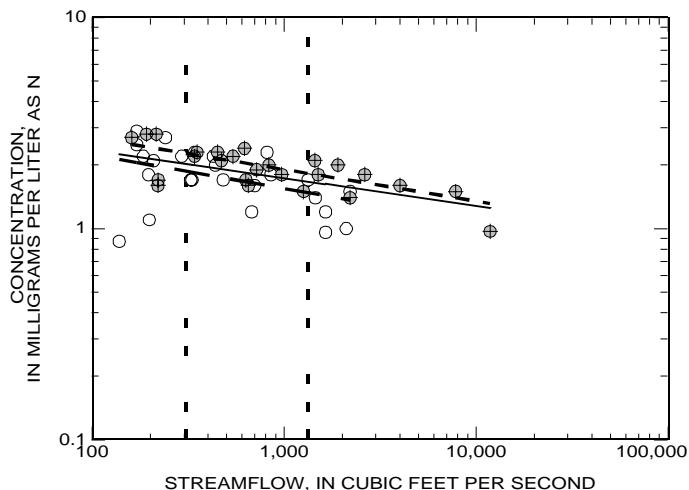
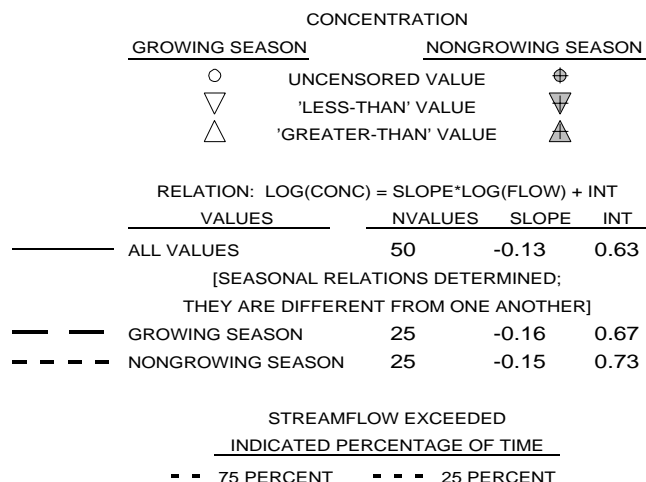
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



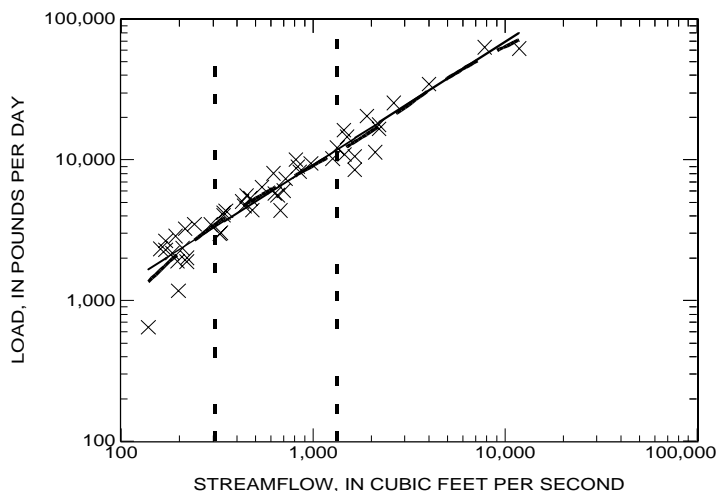
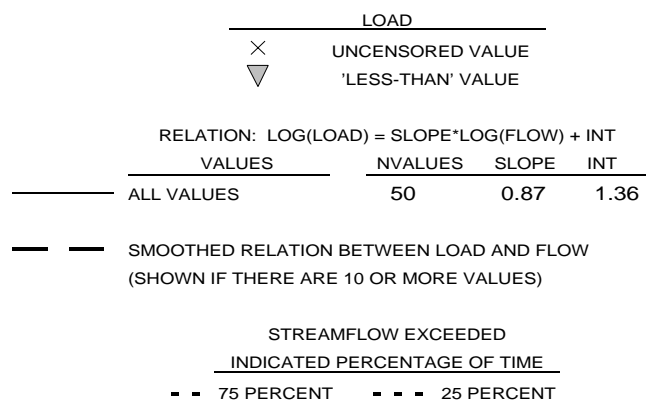
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

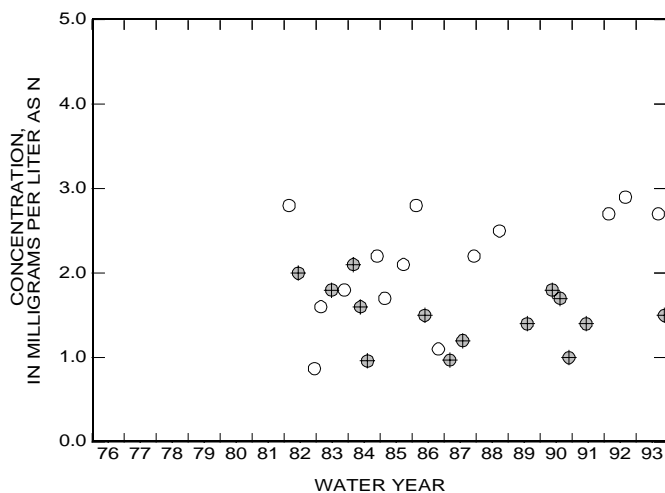
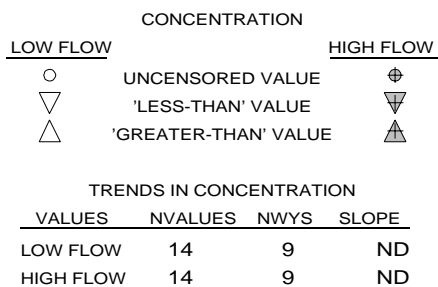
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



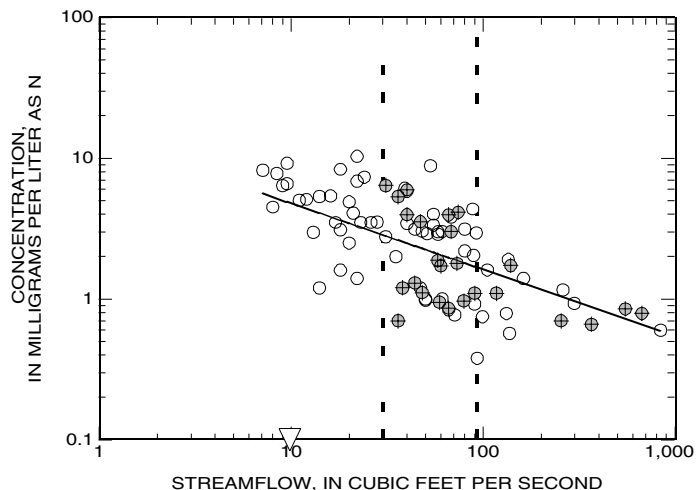
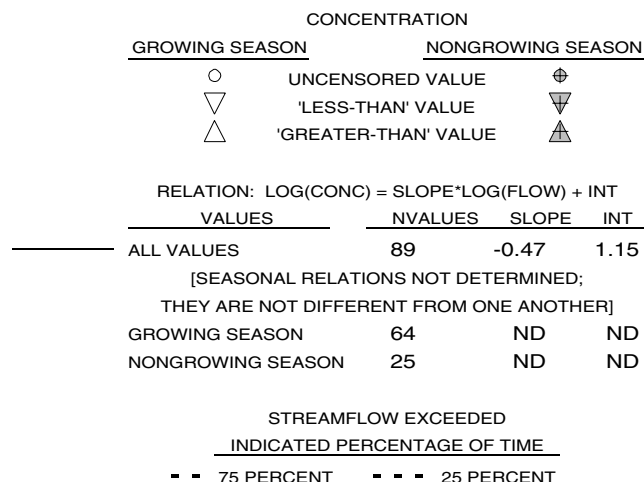
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



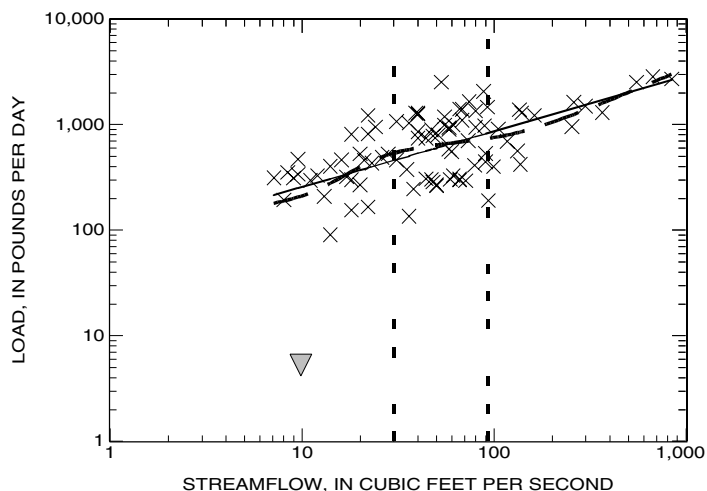
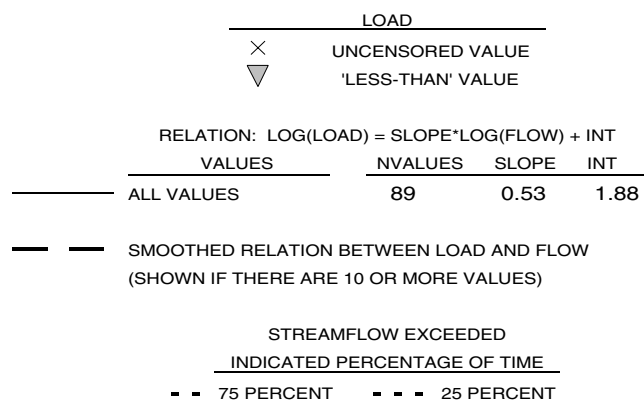
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

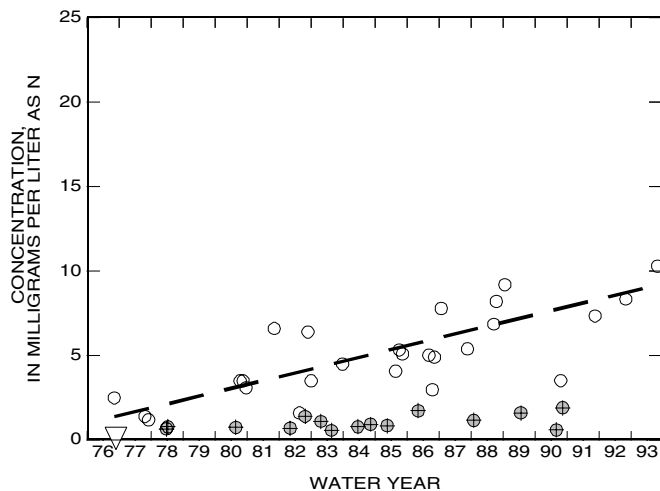
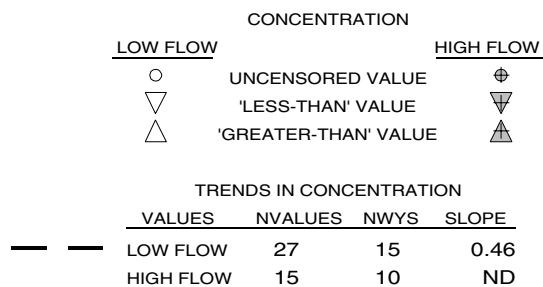
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



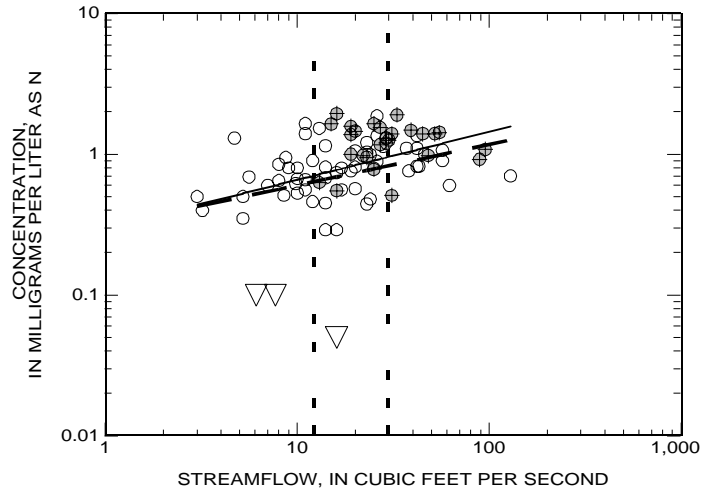
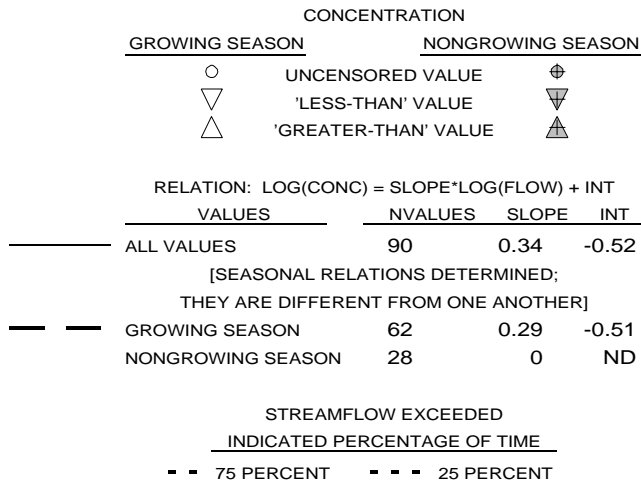
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



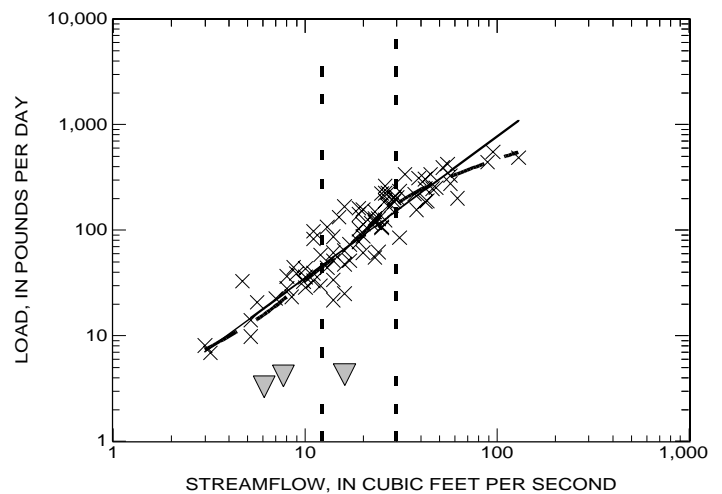
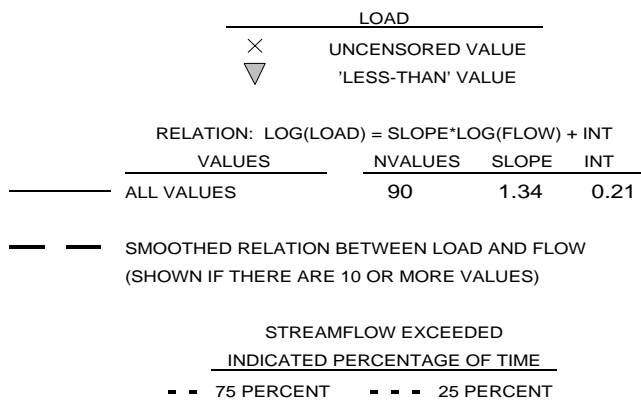
APPENDIX 12. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRATE PLUS NITRITE
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

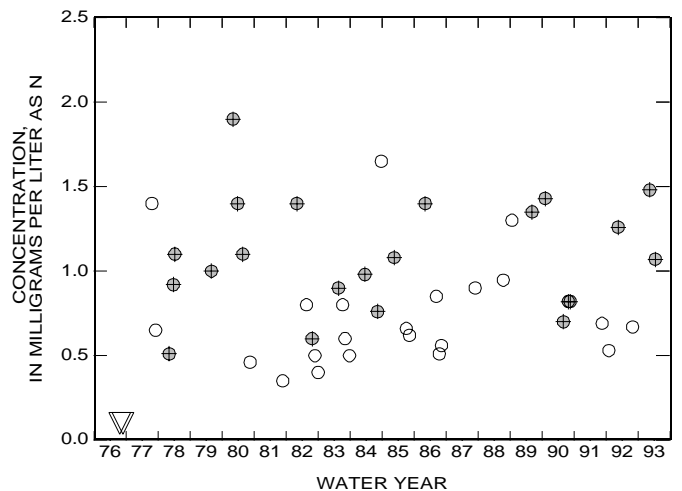
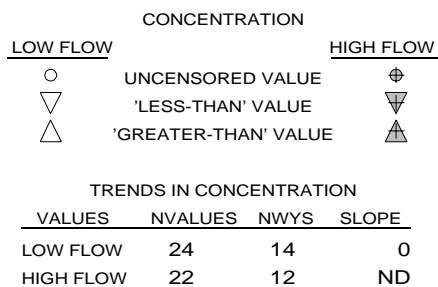
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



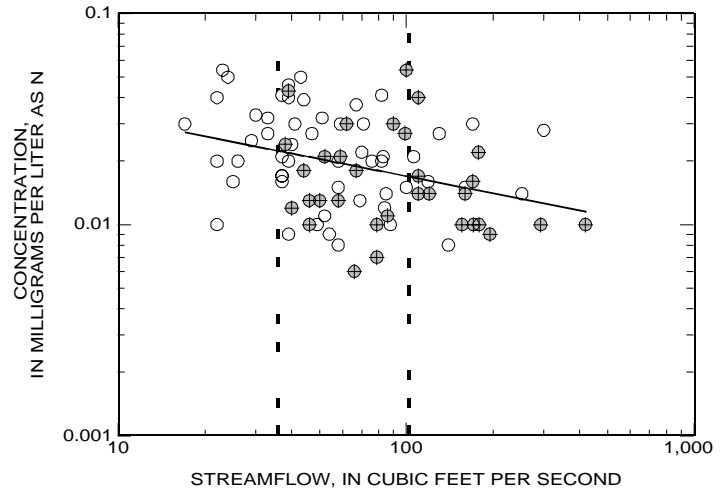
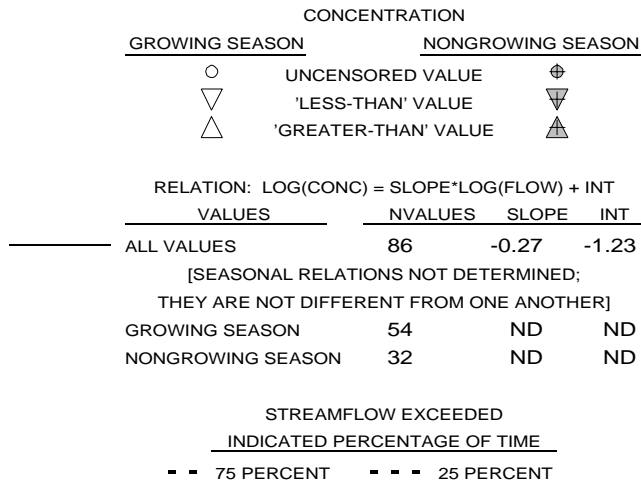
Appendix 13 - Total nitrite

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

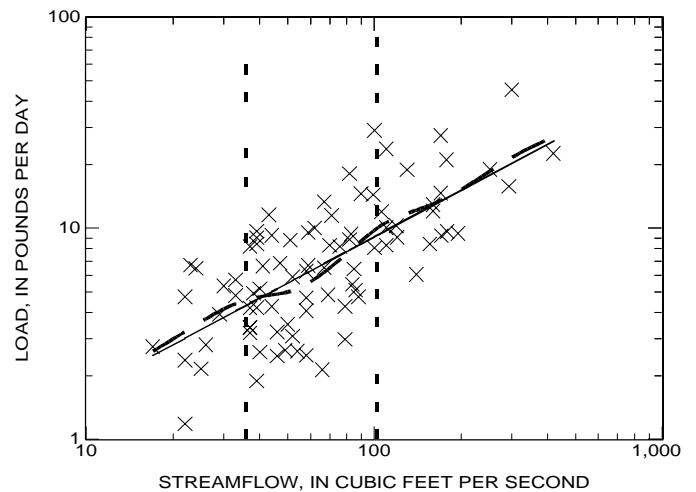
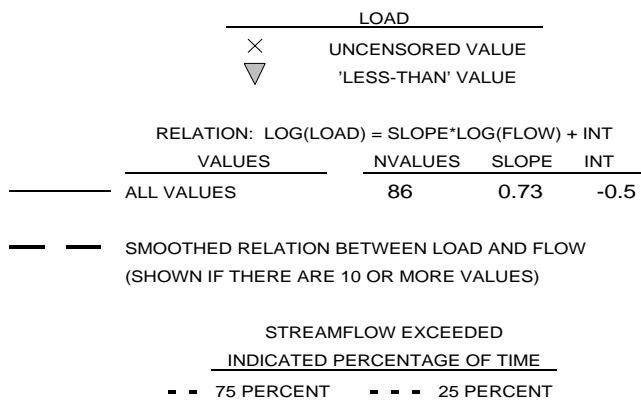
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

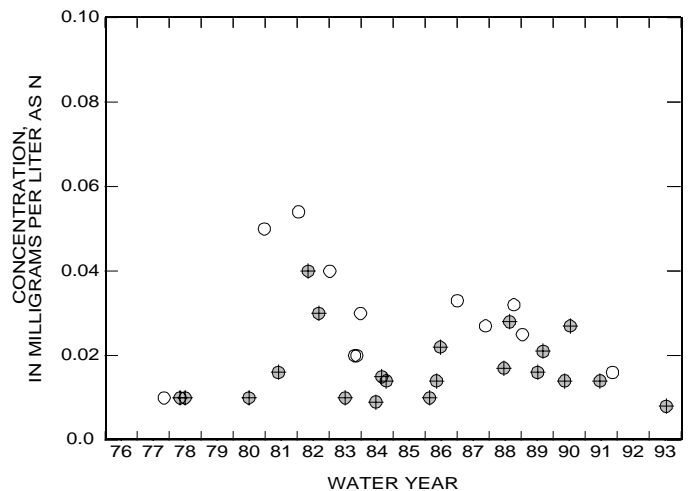
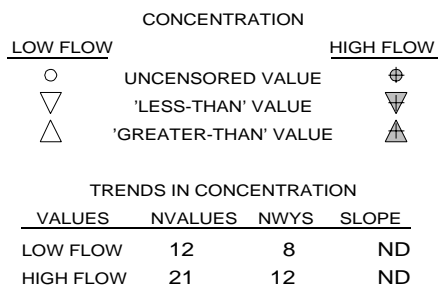
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

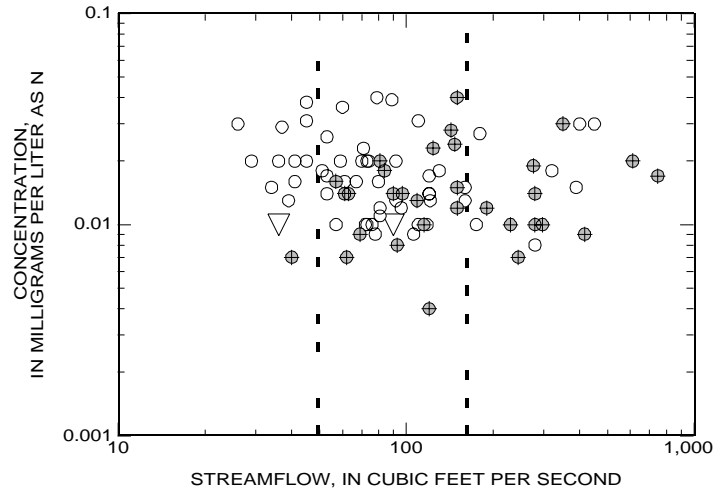
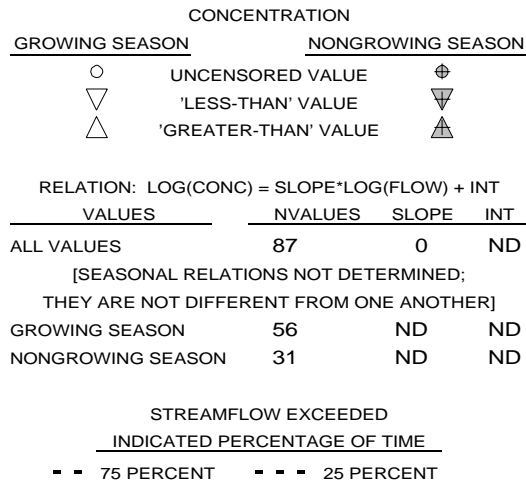


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

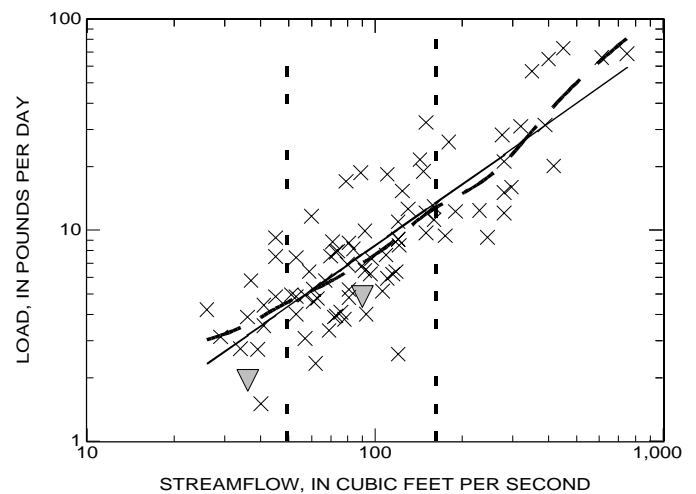
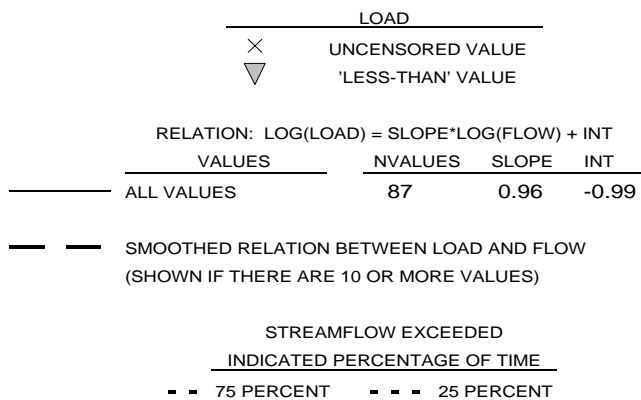
TOTAL NITRITE
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

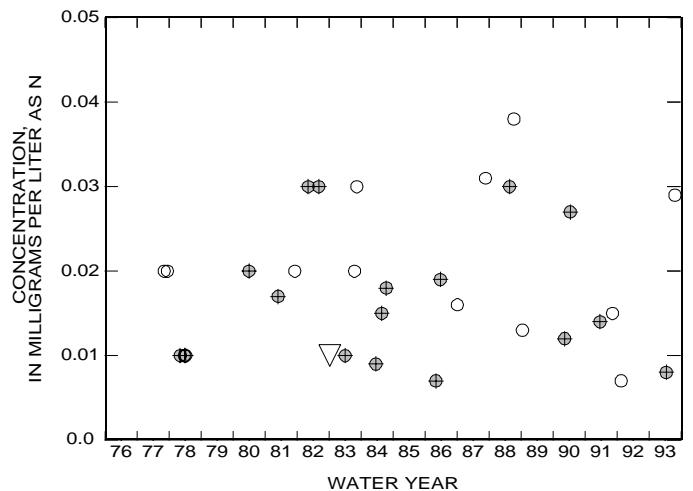
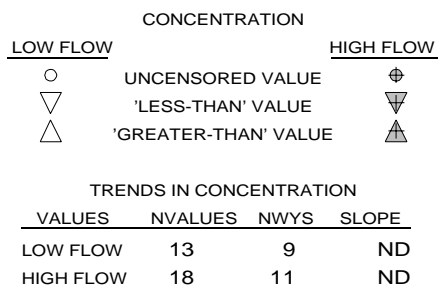
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

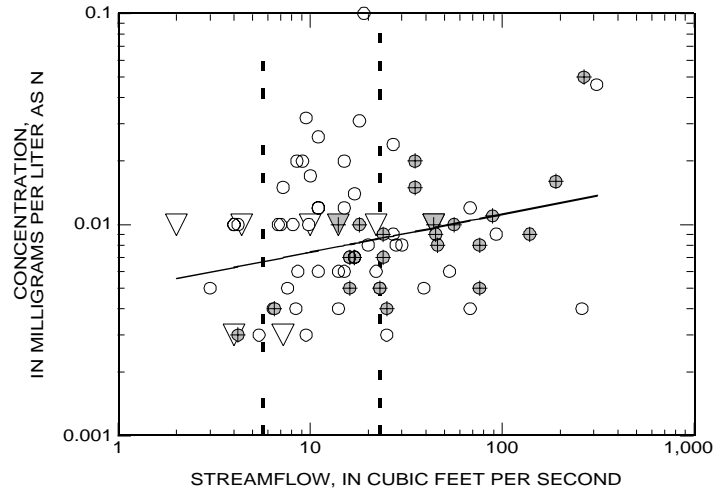
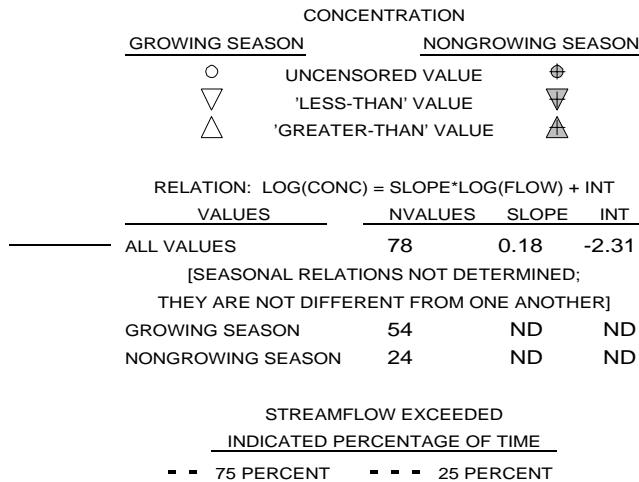


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

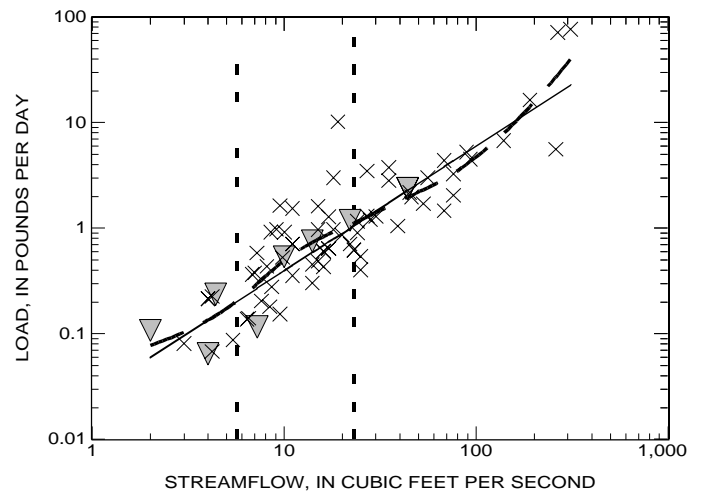
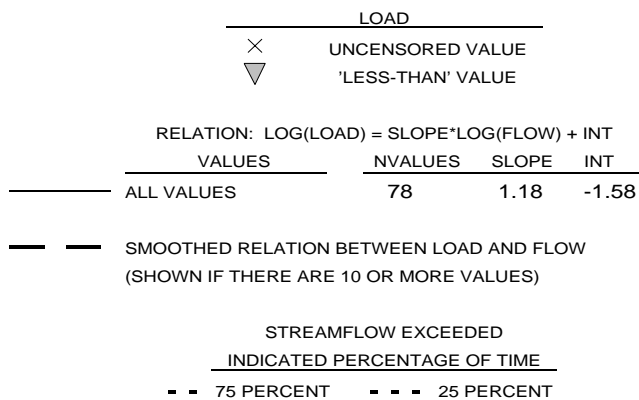
TOTAL NITRITE
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

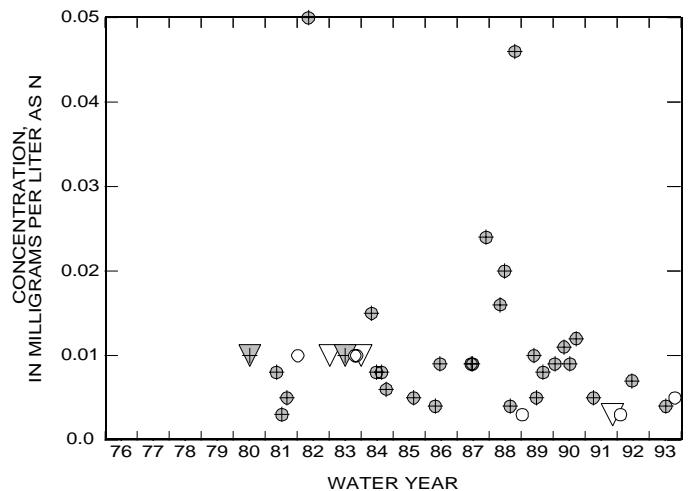
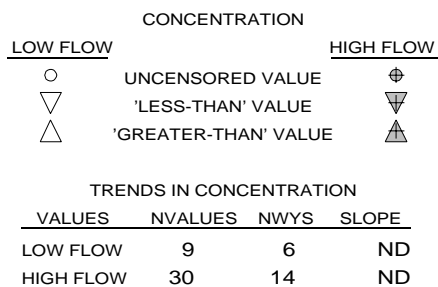
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



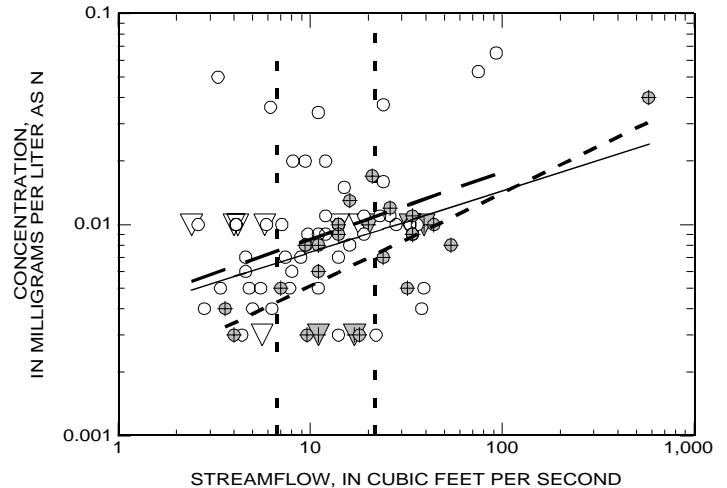
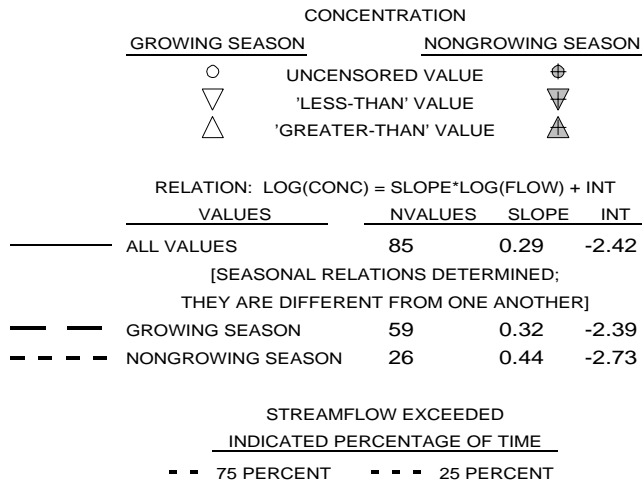
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



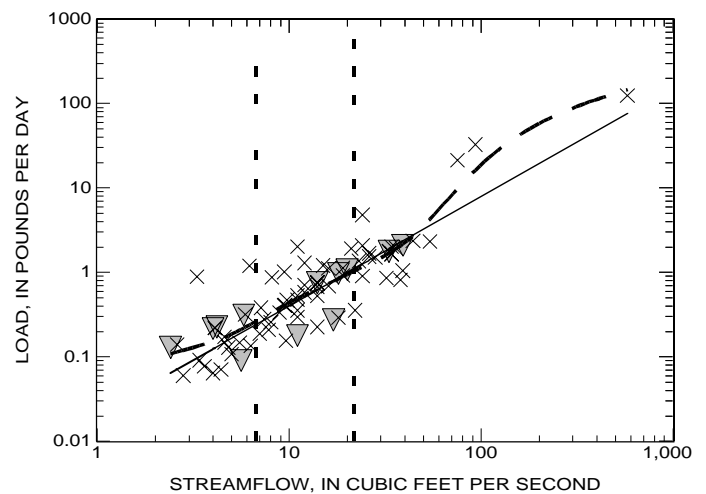
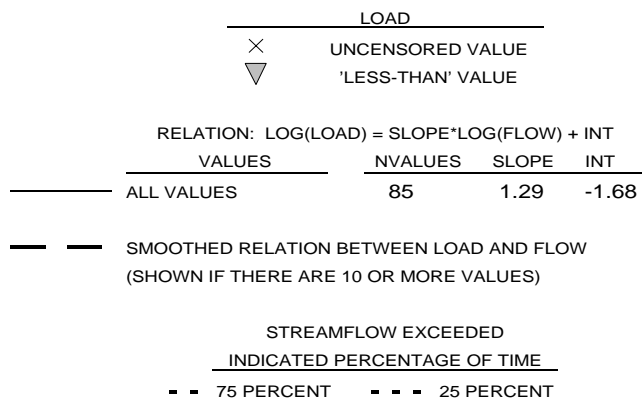
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

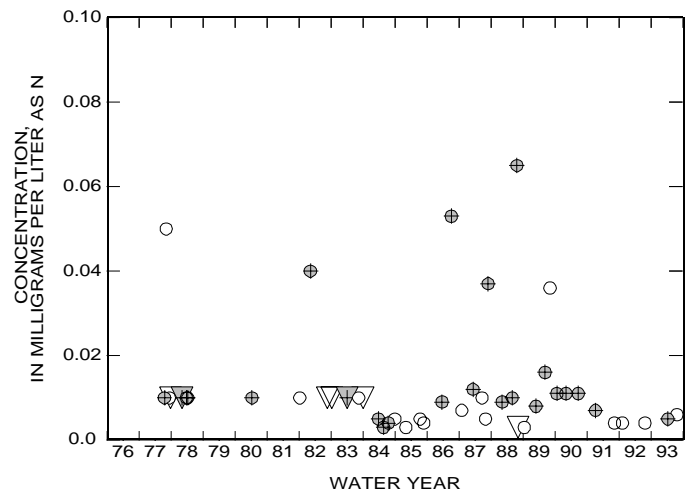
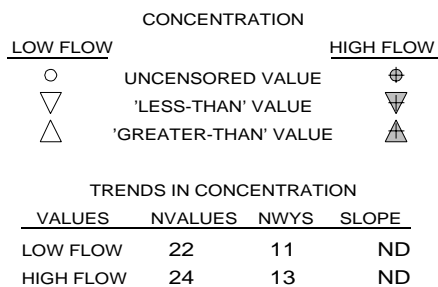
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



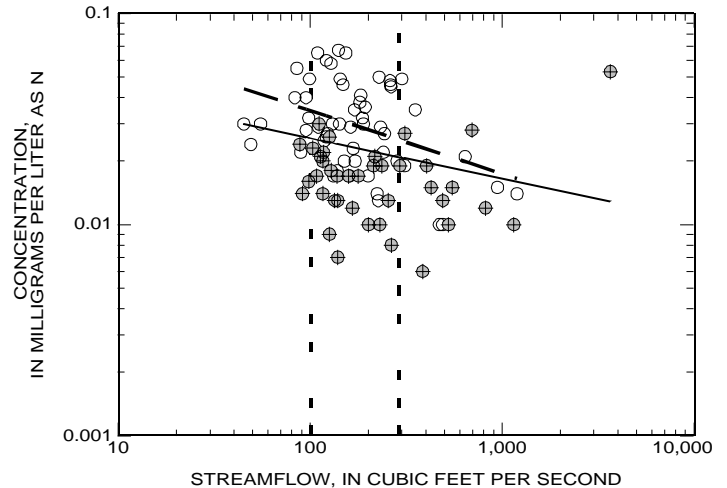
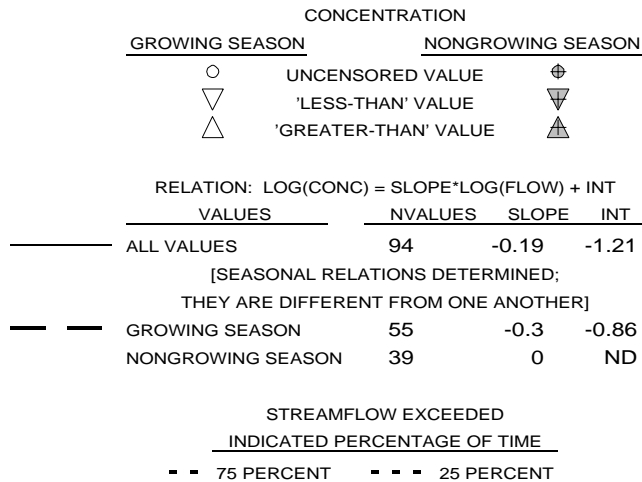
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



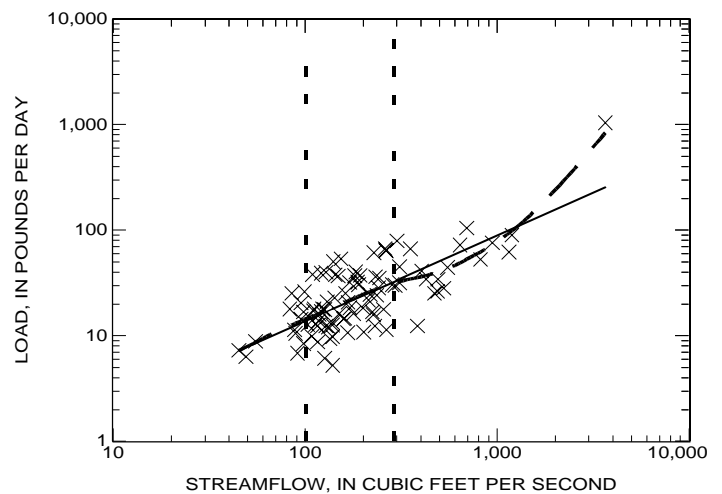
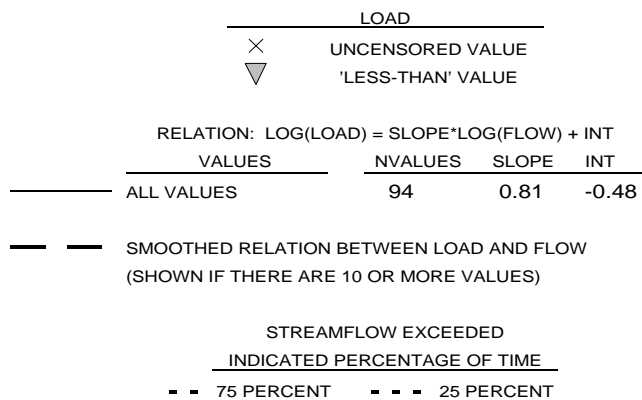
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

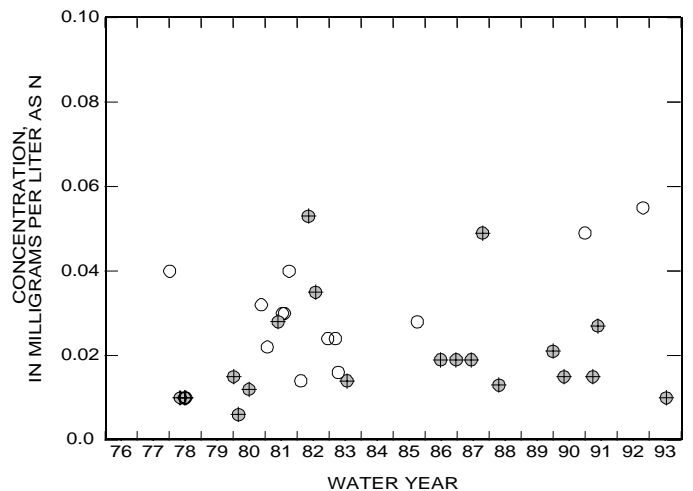
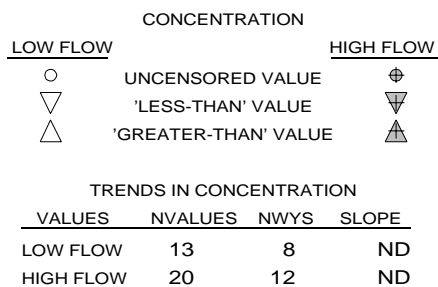
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



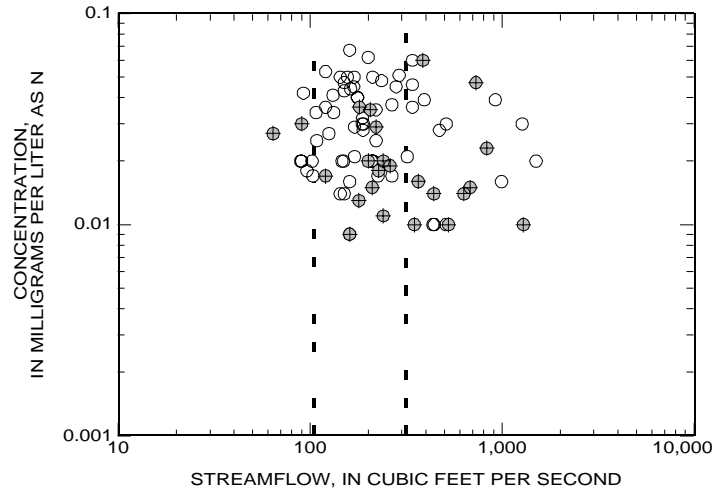
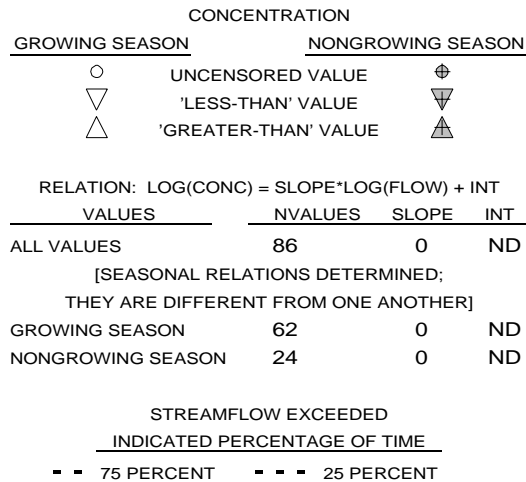
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



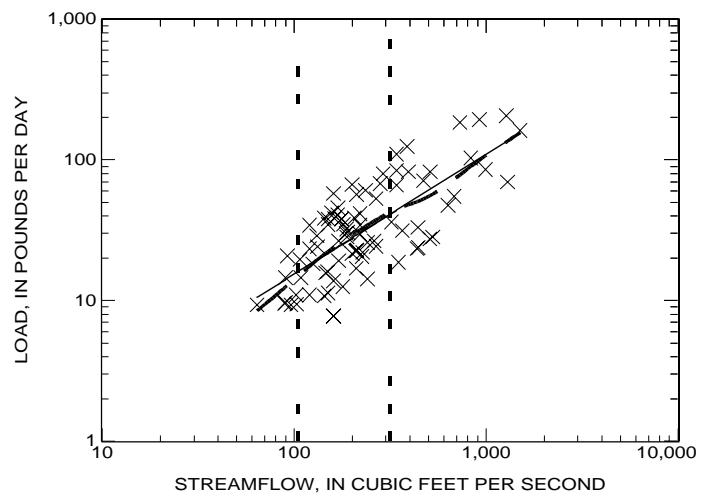
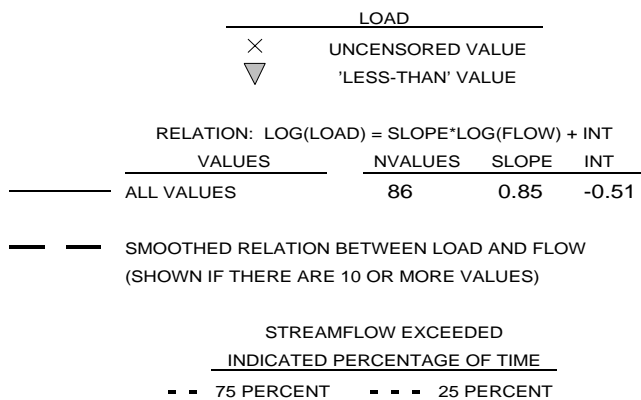
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

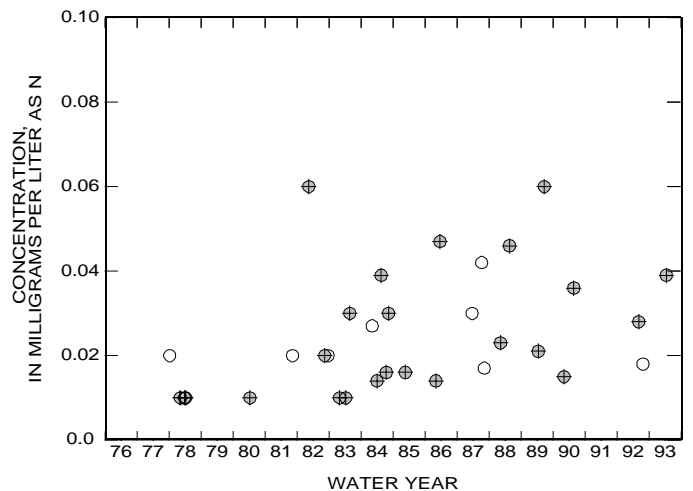
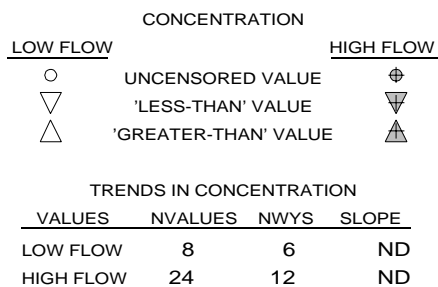
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



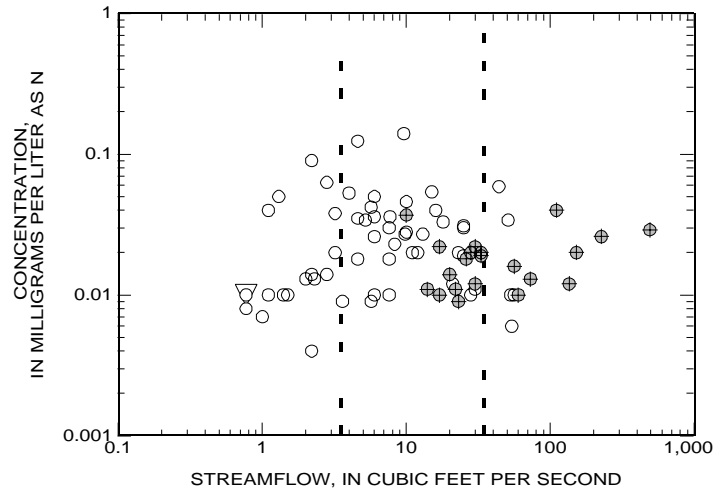
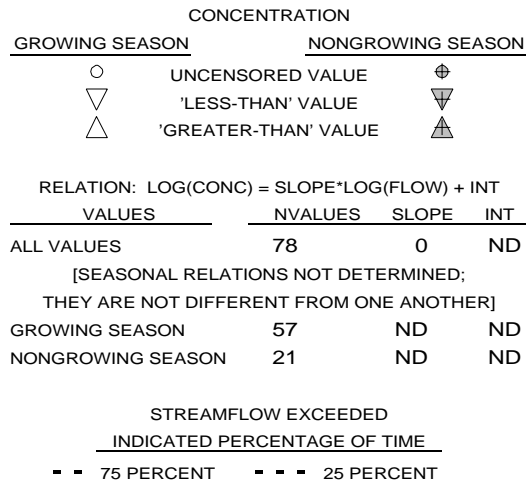
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



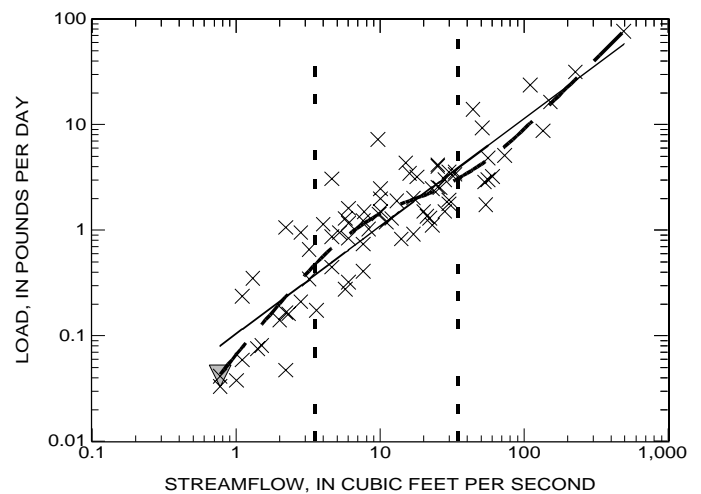
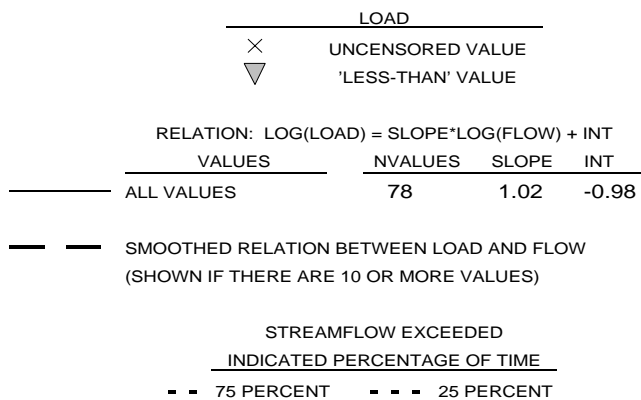
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

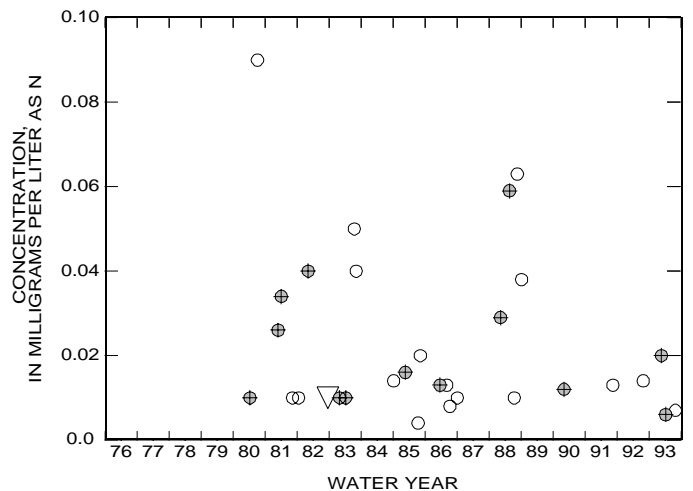
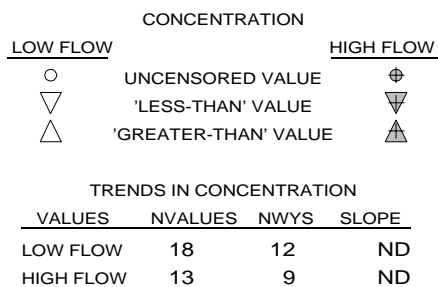
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

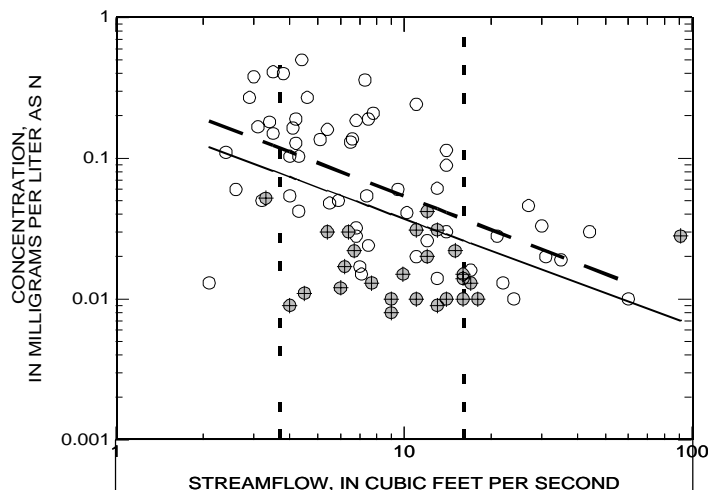
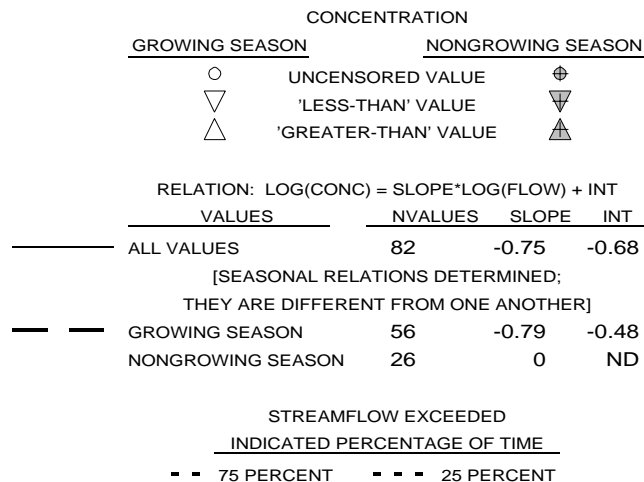


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

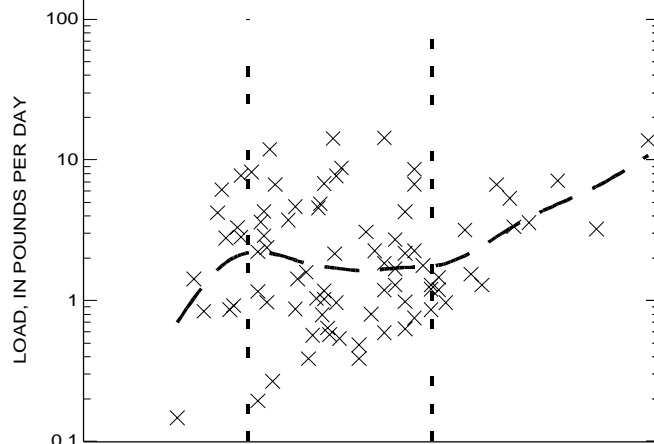
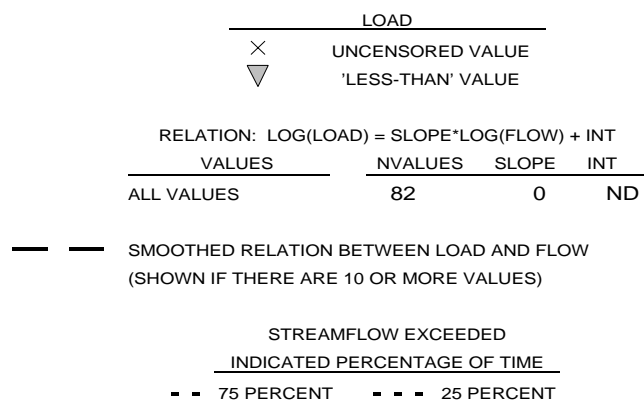
TOTAL NITRITE
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

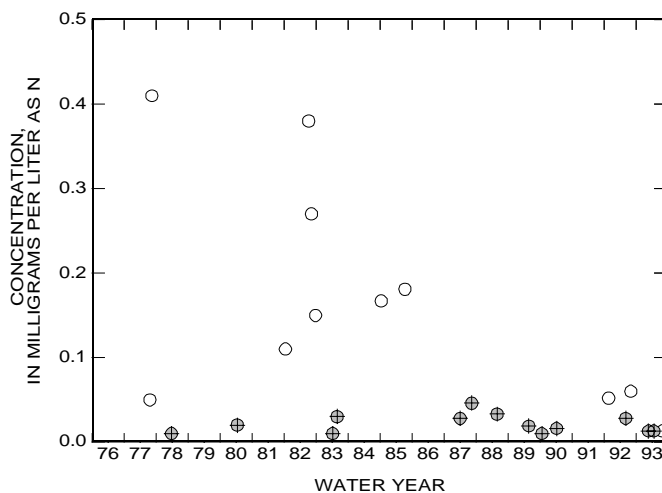
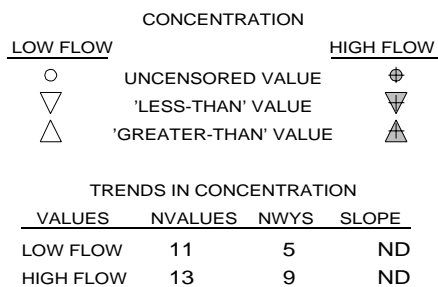
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

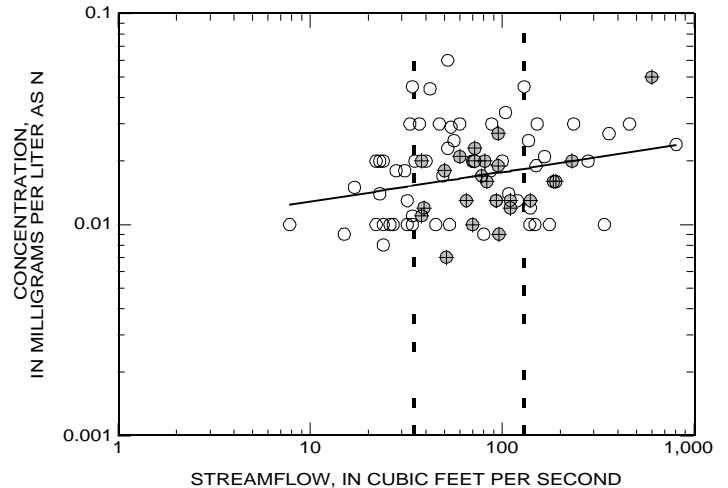
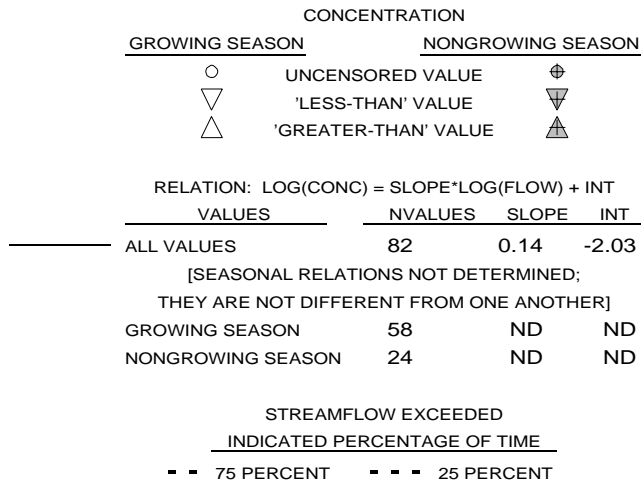


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

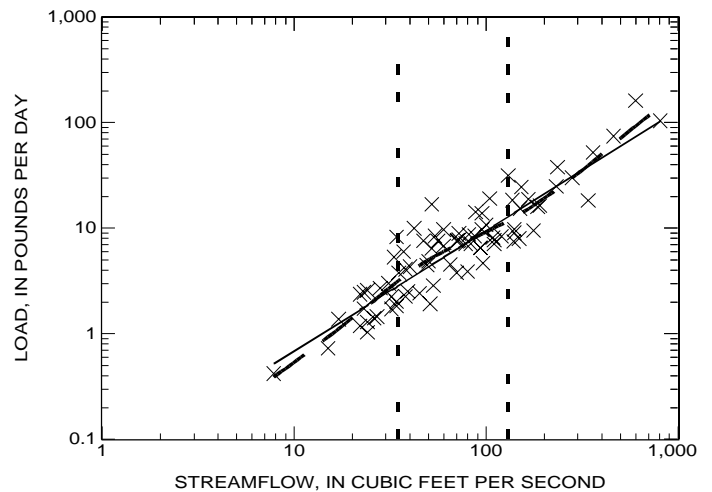
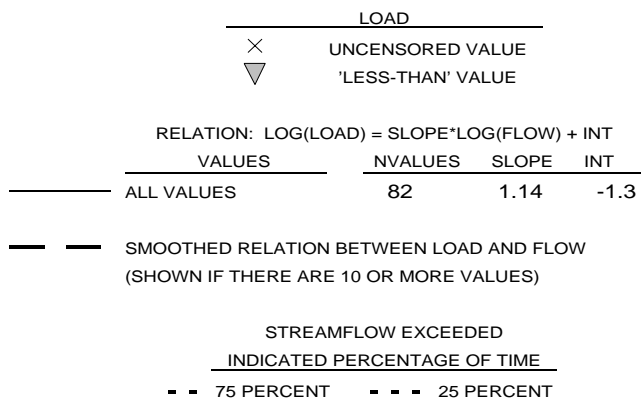
TOTAL NITRITE
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

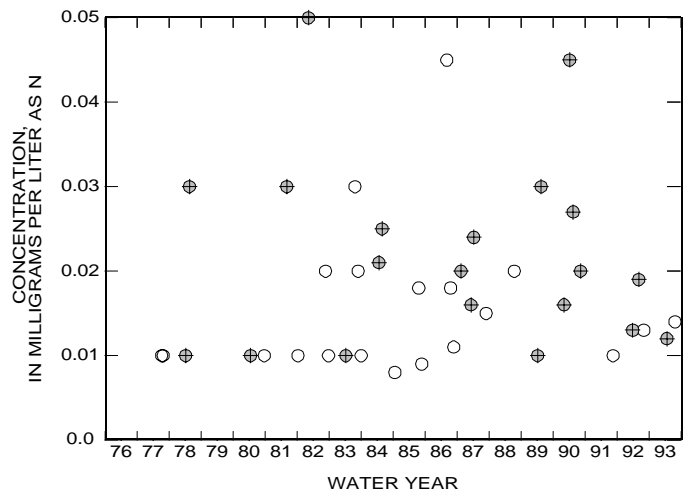
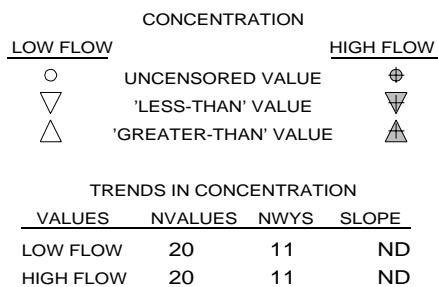
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

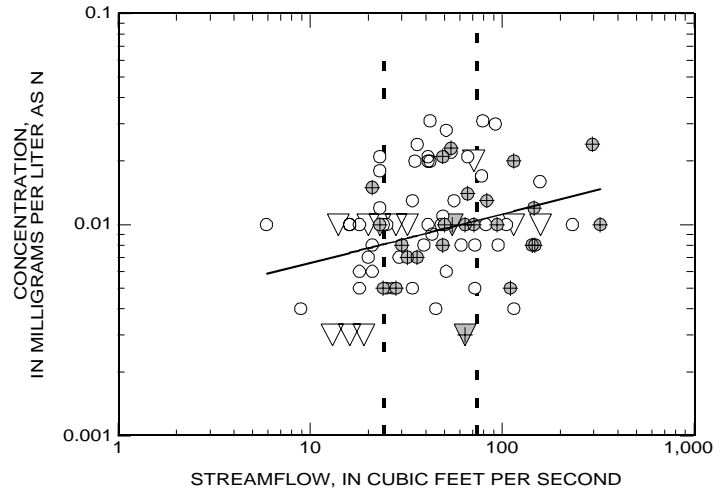
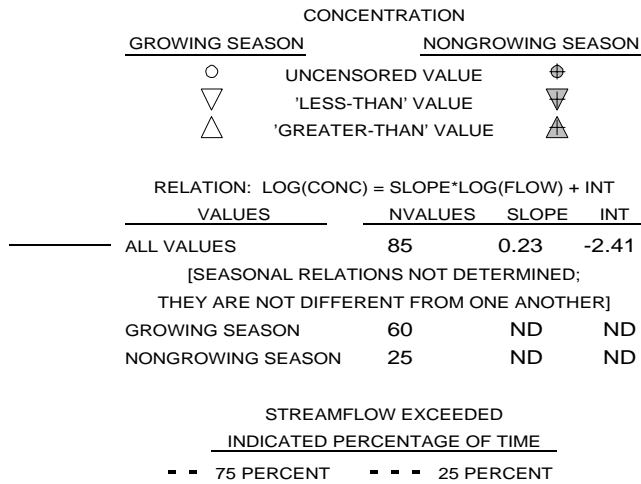


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

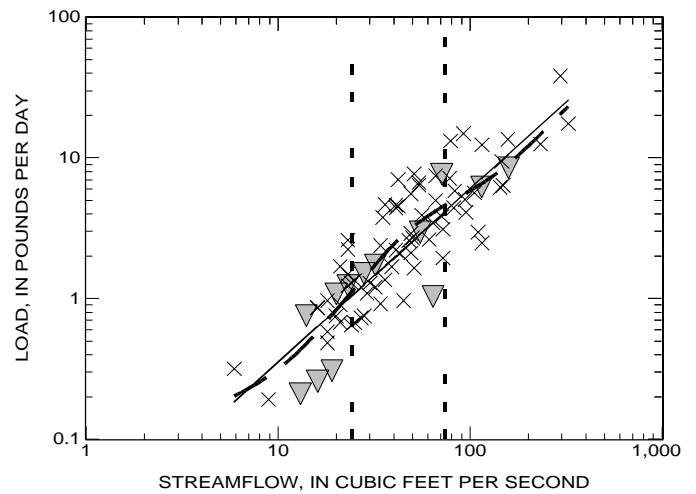
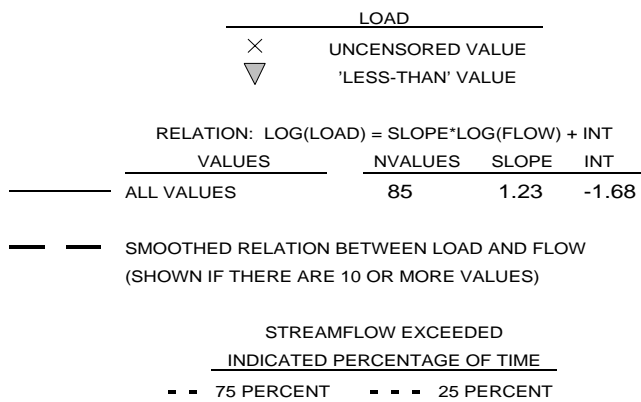
TOTAL NITRITE
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

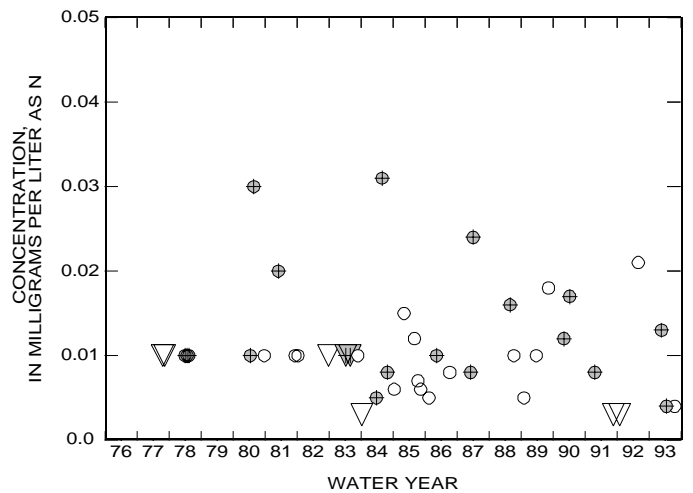
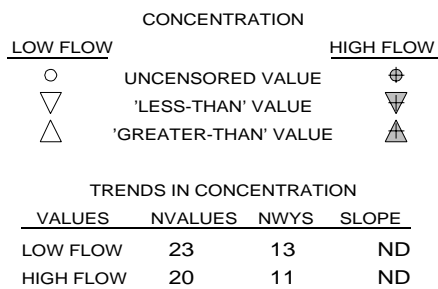
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

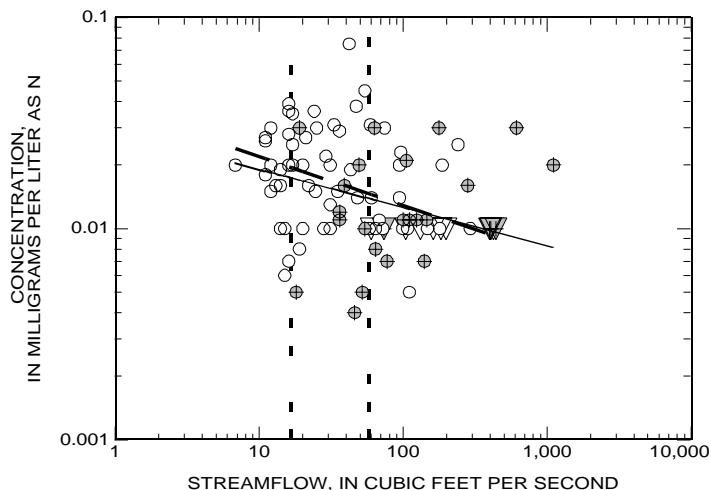
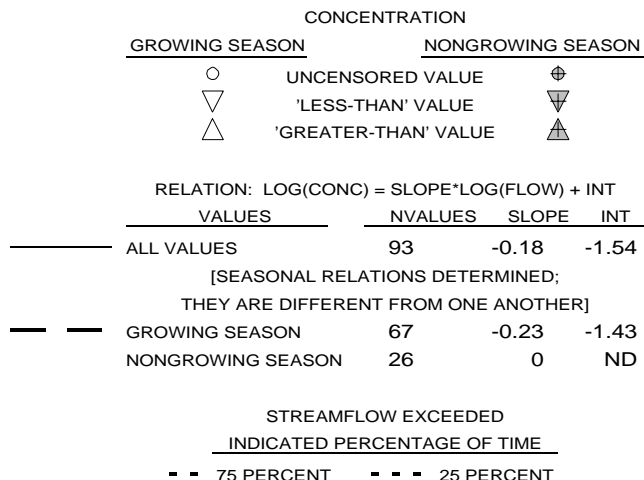


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

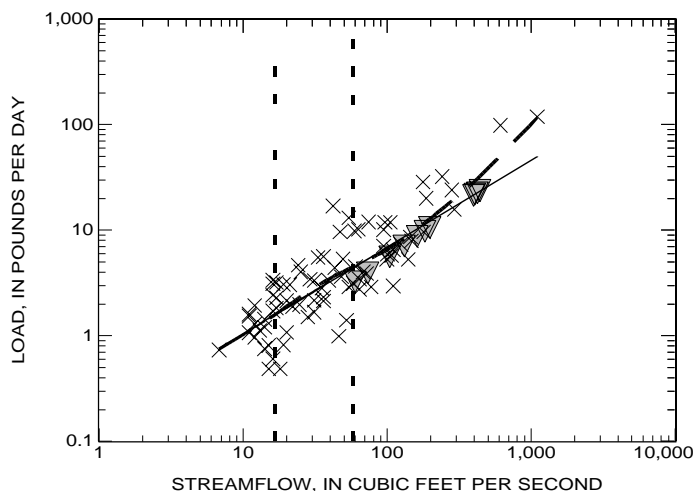
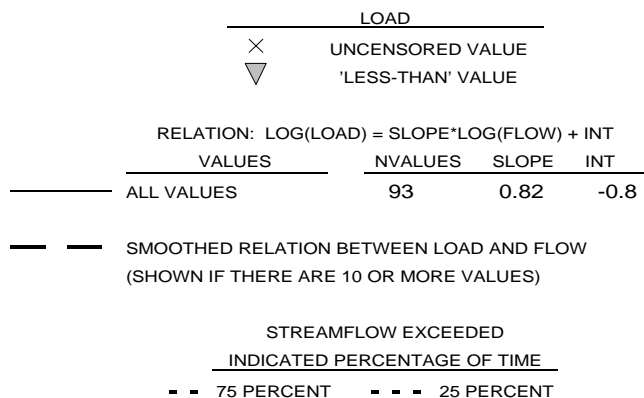
TOTAL NITRITE
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

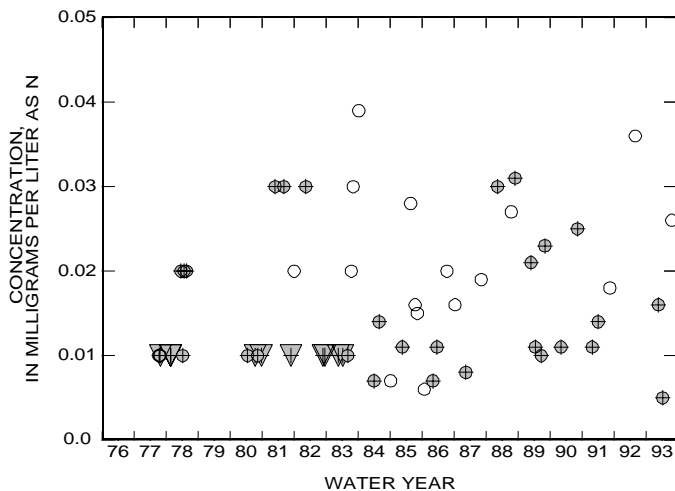
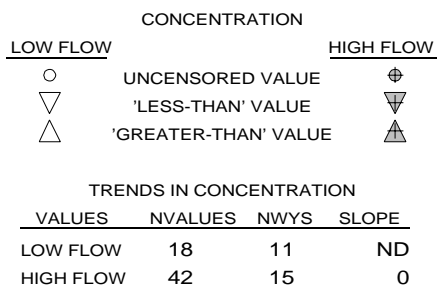
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



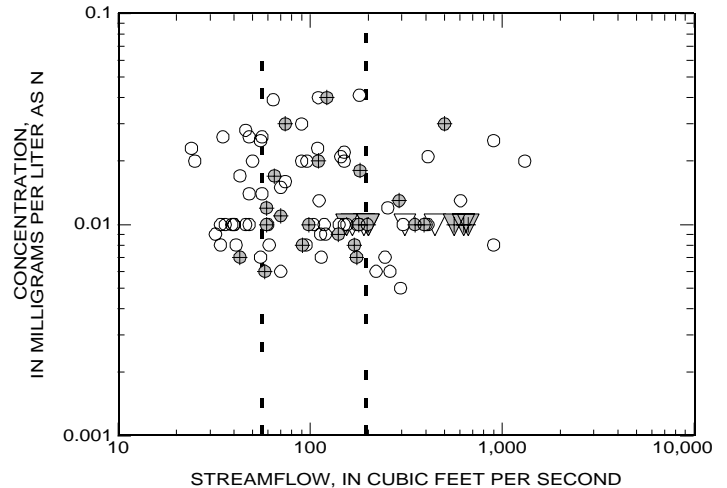
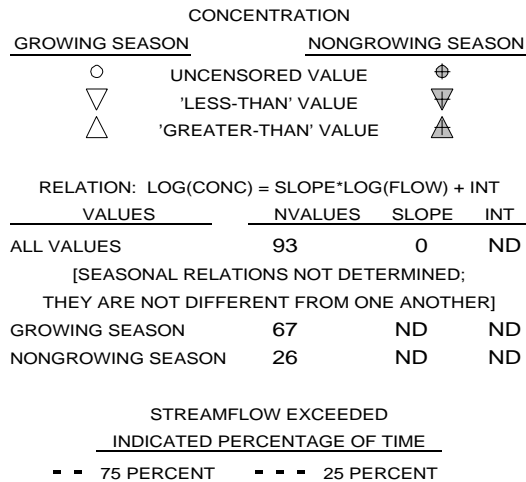
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



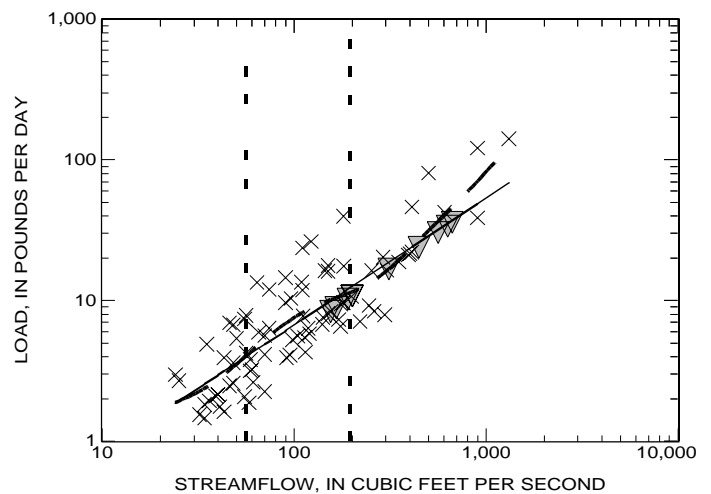
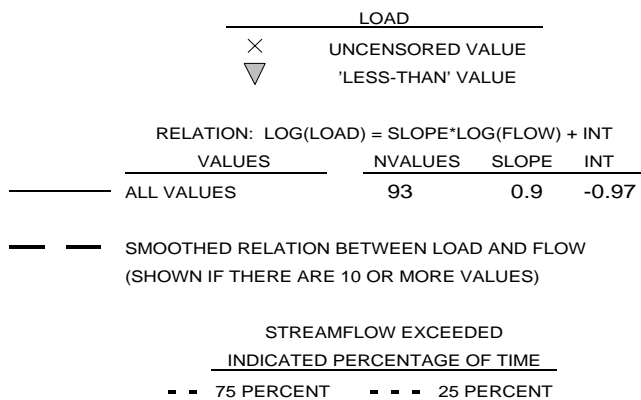
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

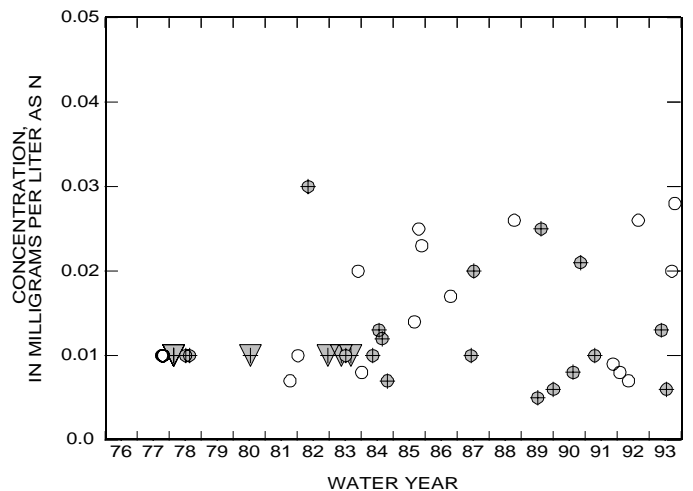
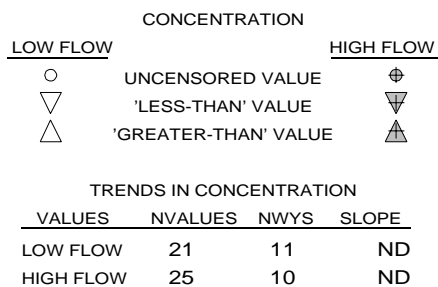
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



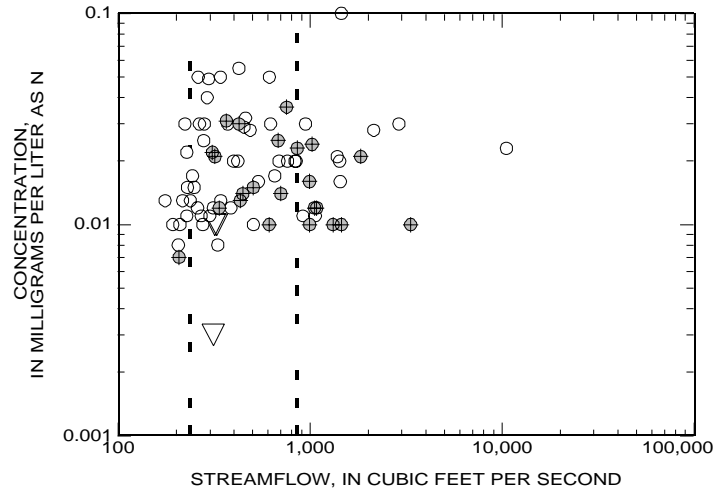
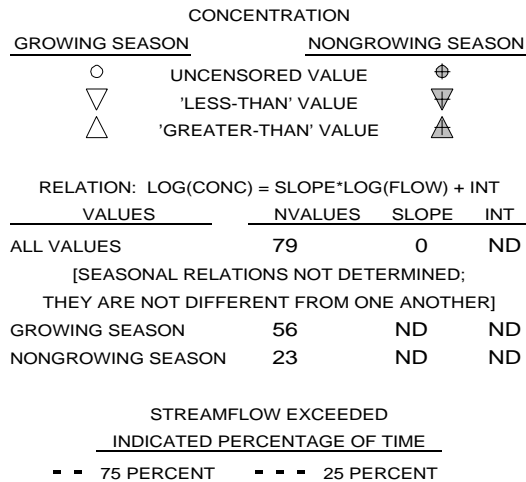
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



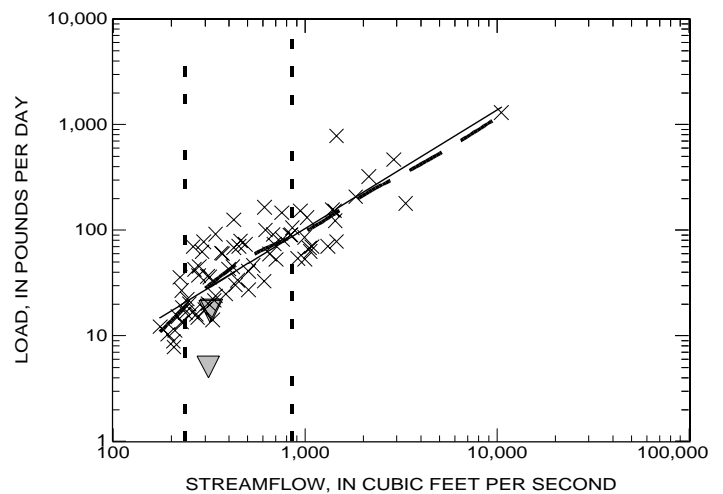
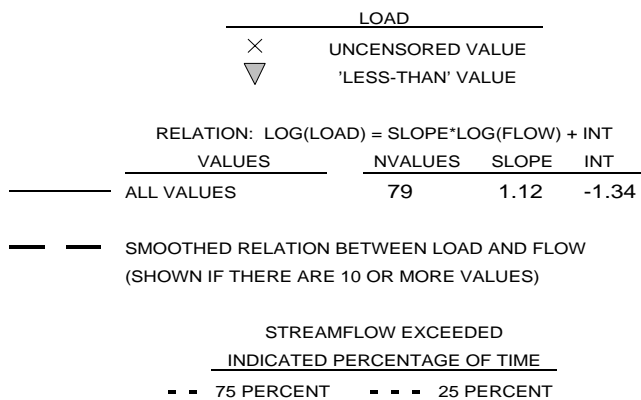
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

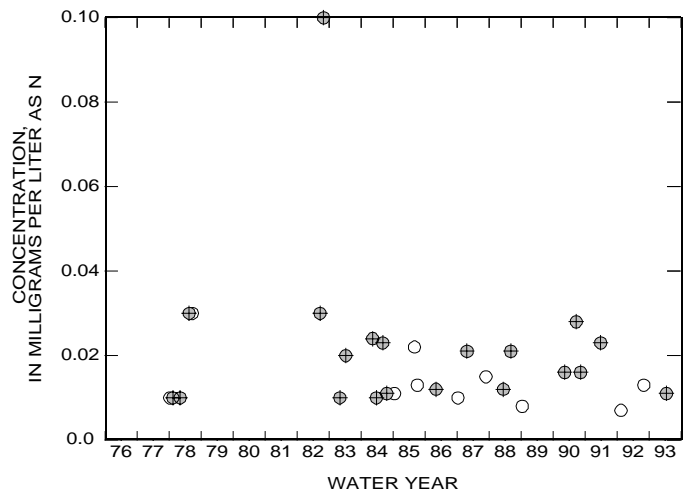
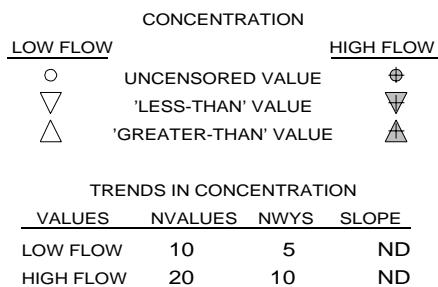
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

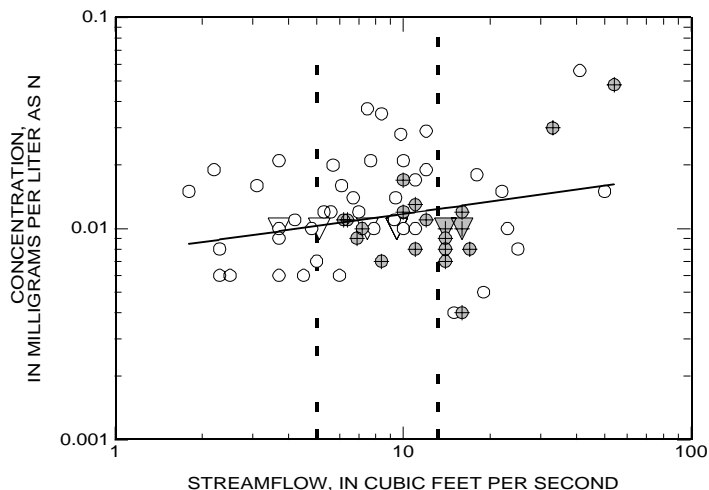
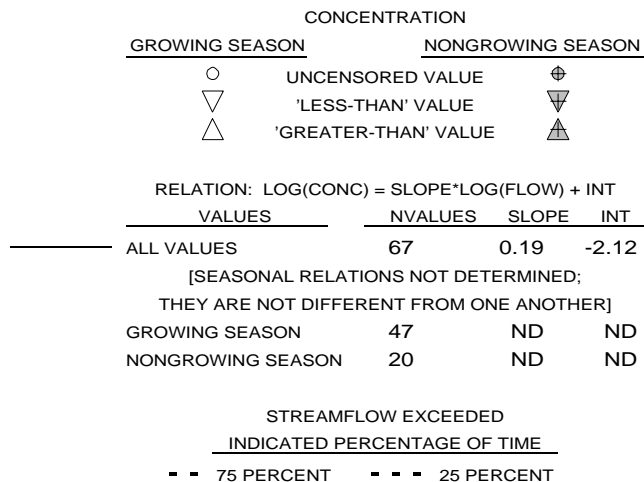


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

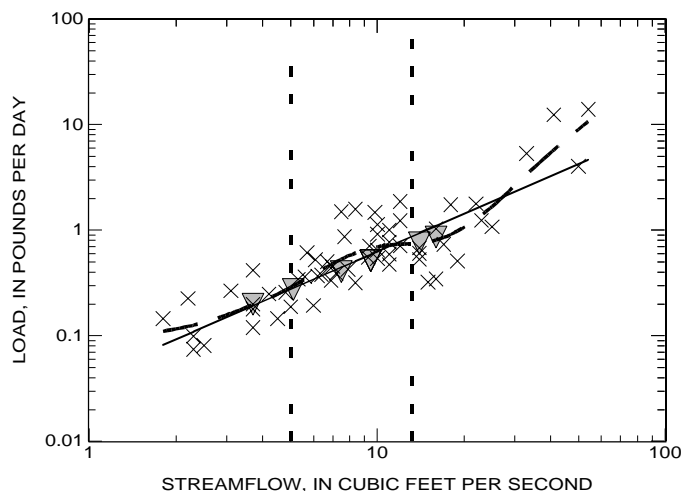
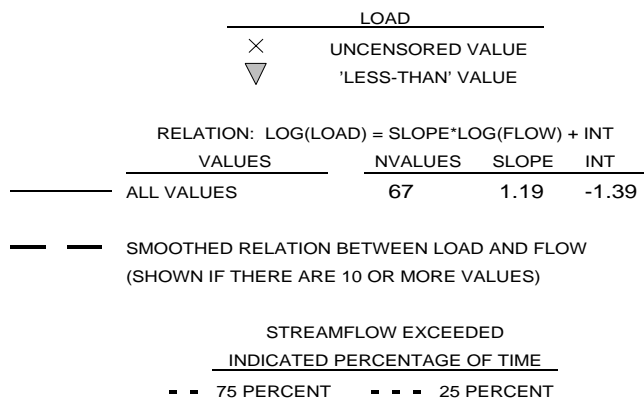
TOTAL NITRITE
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

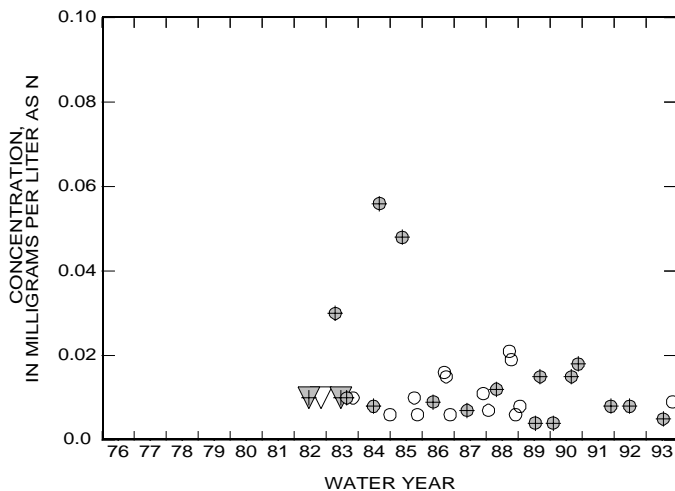
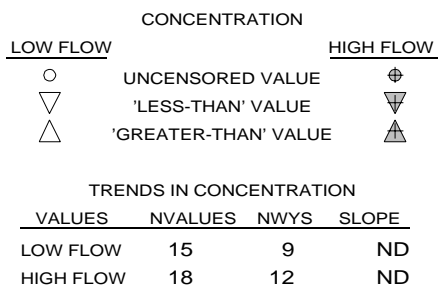
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

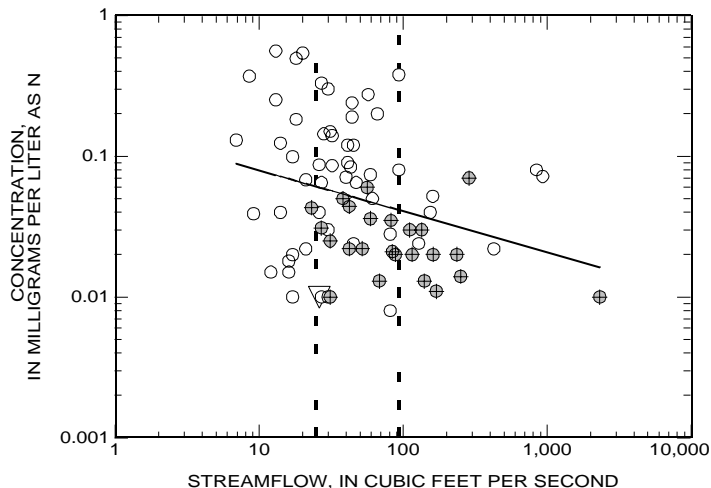
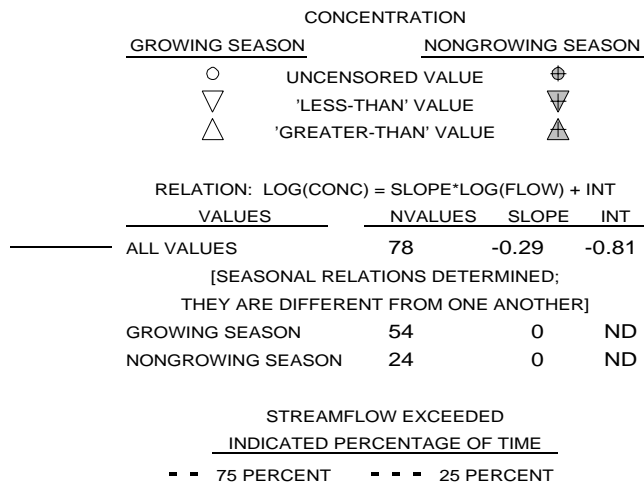


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

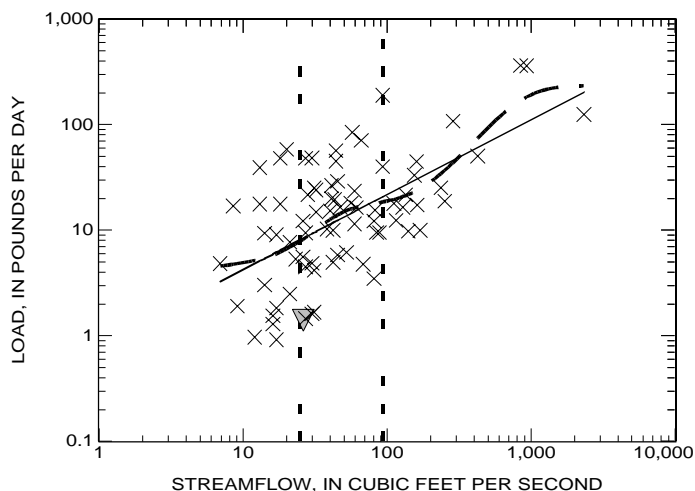
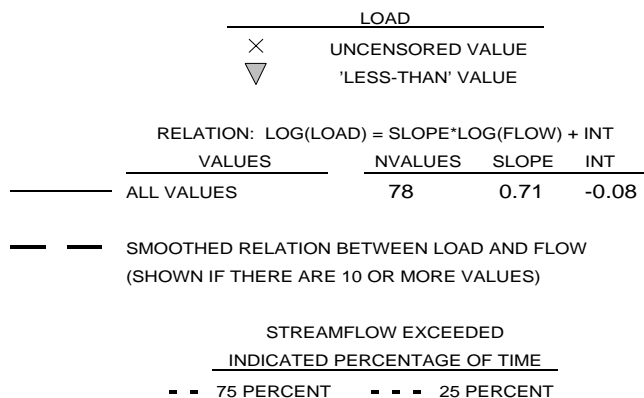
TOTAL NITRITE
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

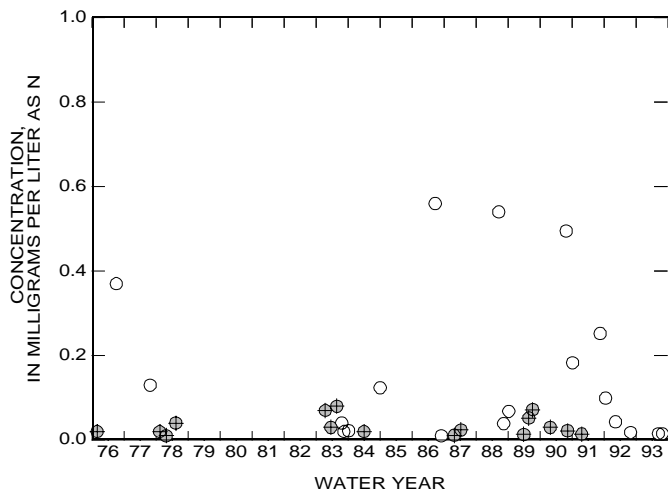
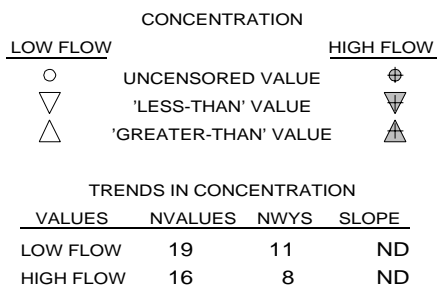
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

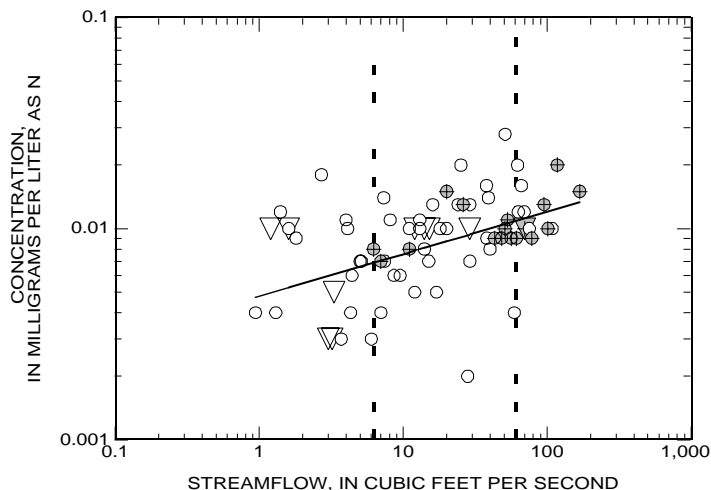
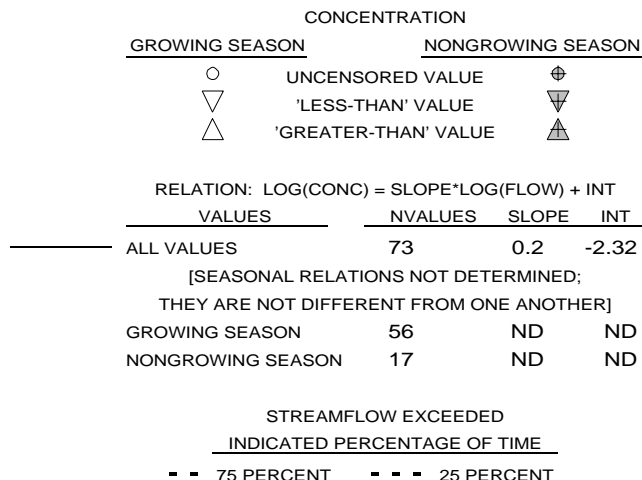


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

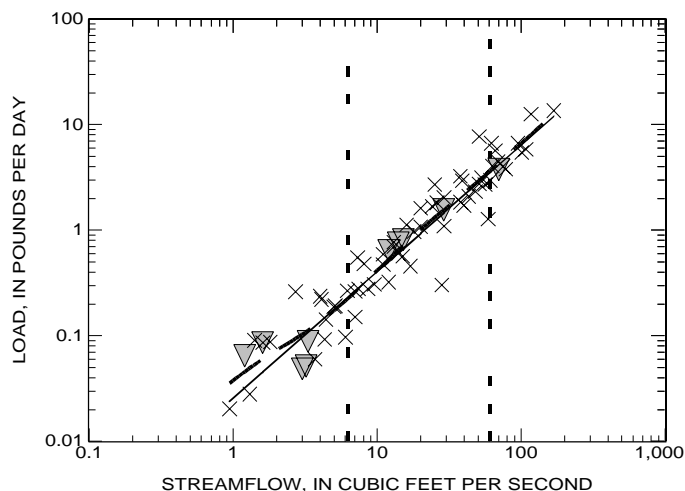
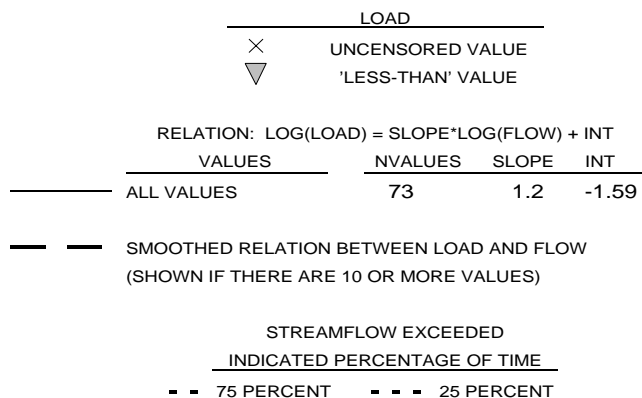
TOTAL NITRITE
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

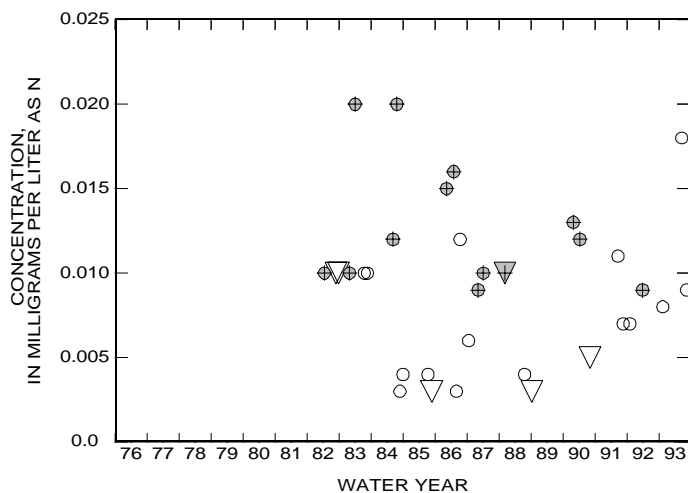
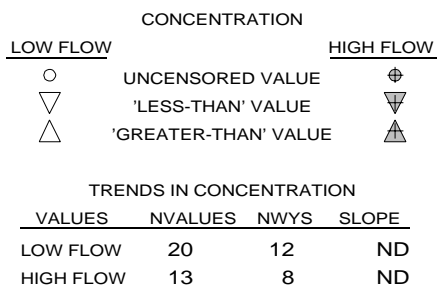
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



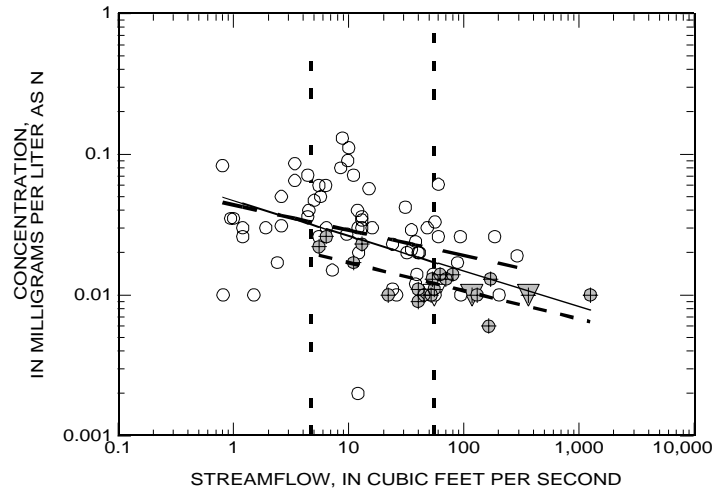
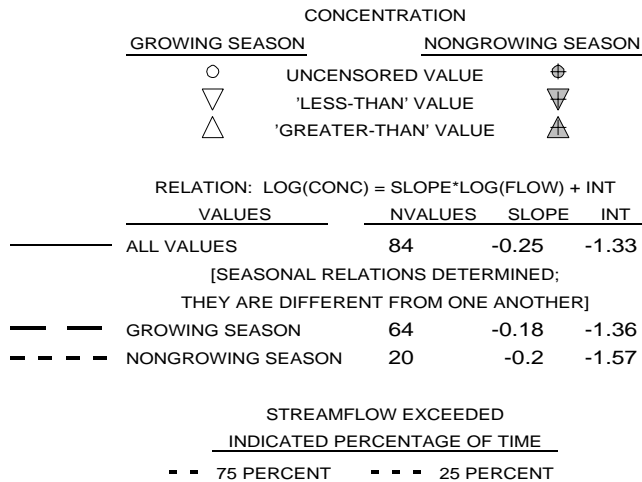
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



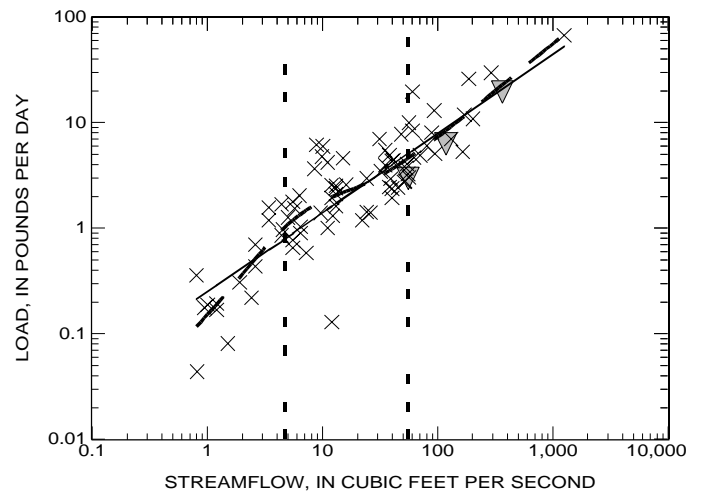
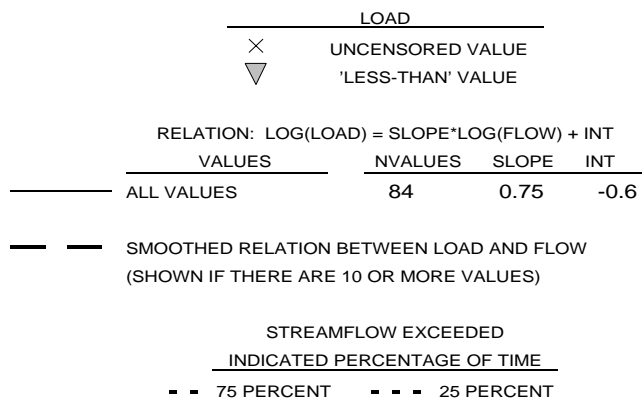
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

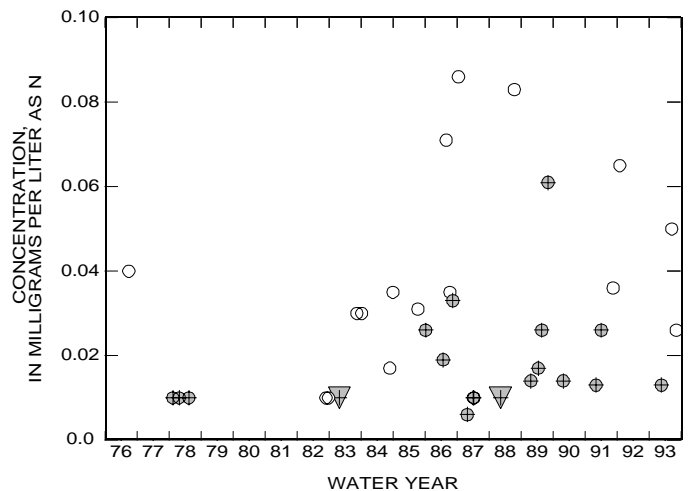
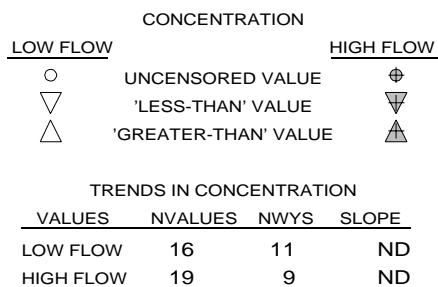
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



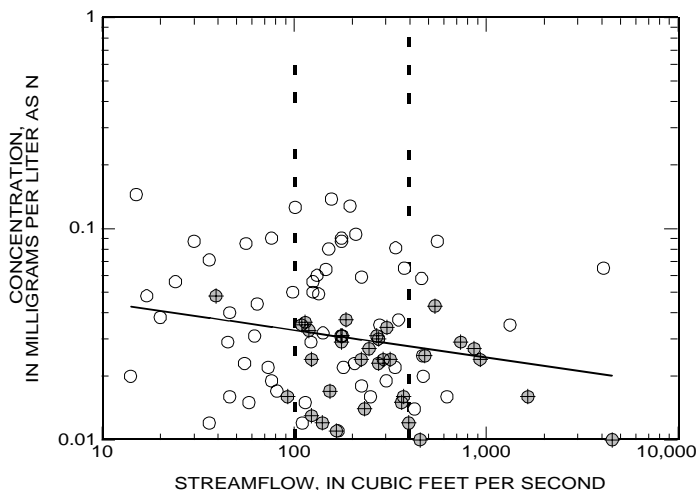
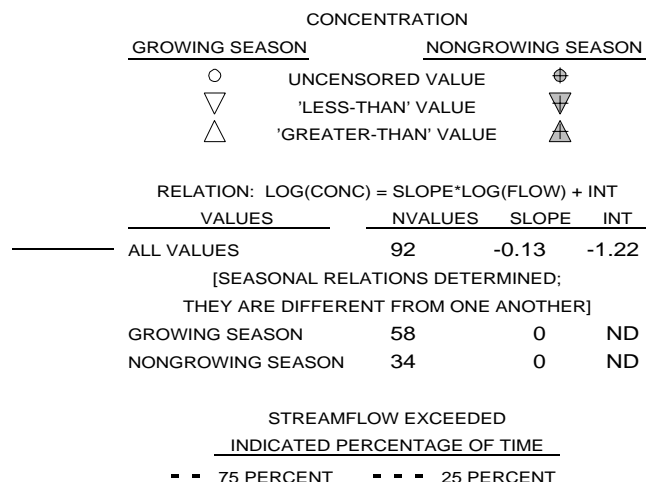
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



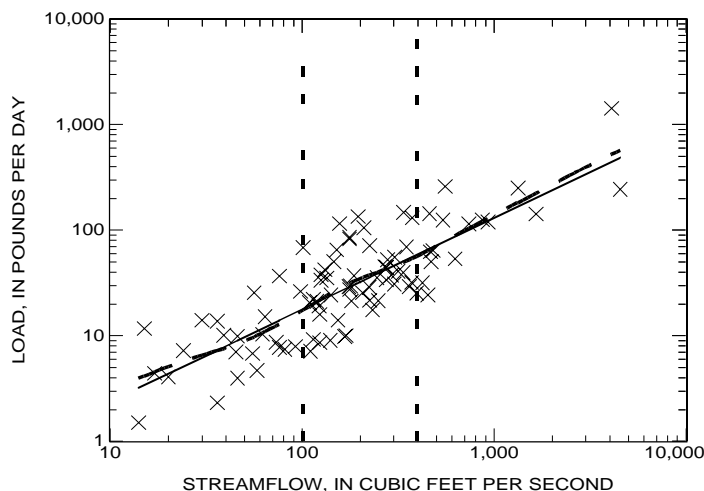
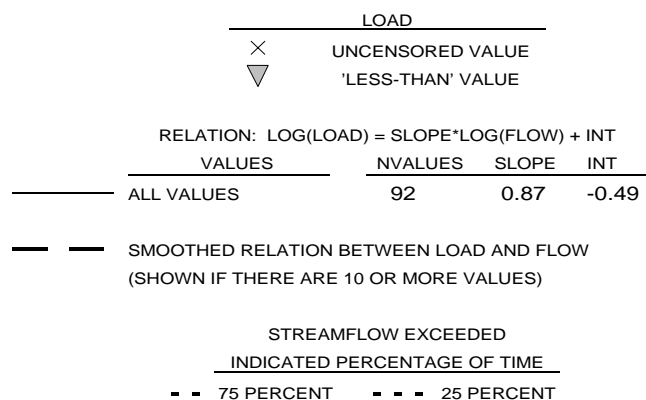
APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL NITRITE
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

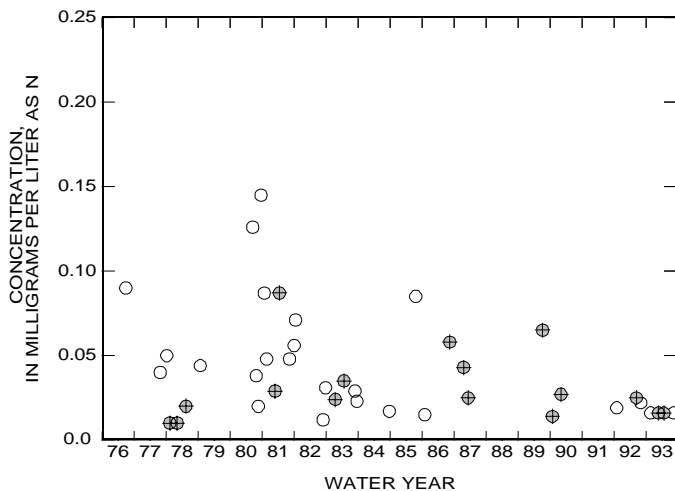
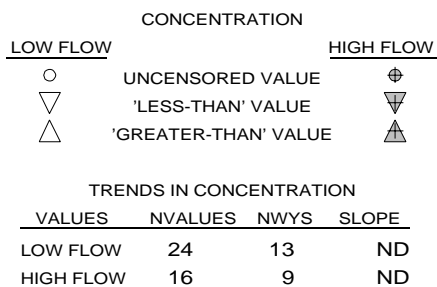
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

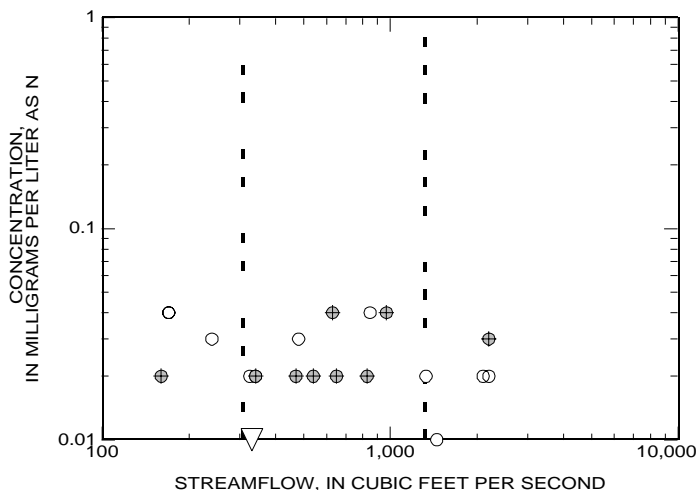
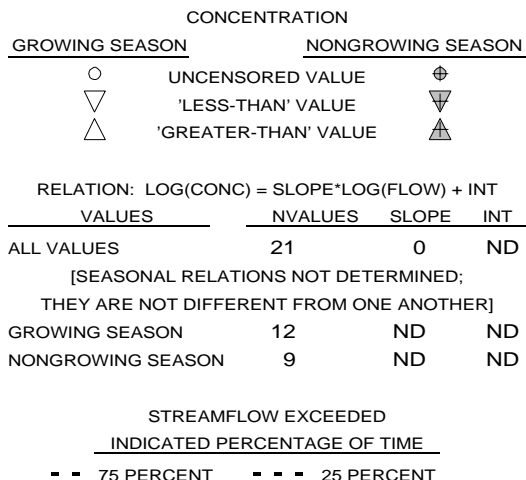


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

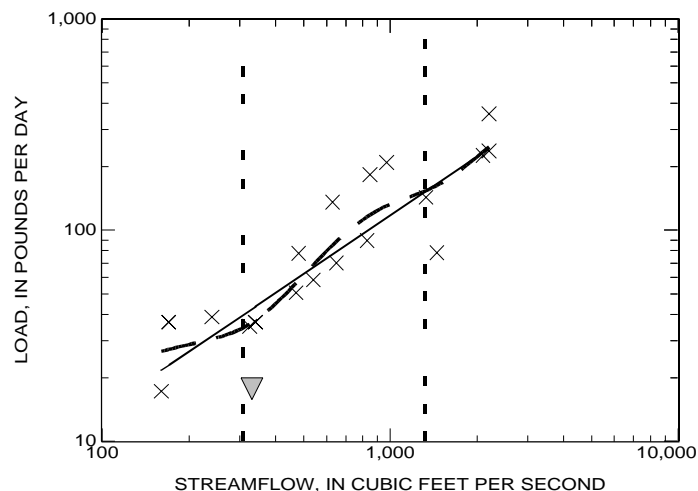
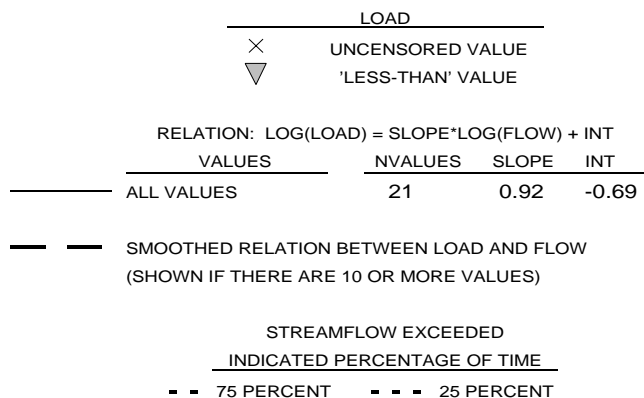
TOTAL NITRITE
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

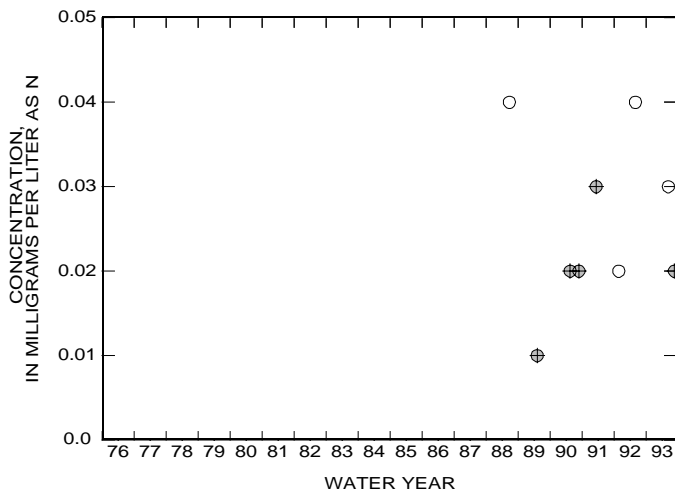
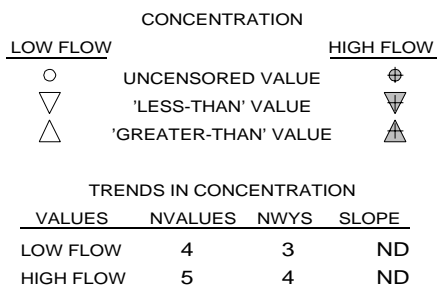
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

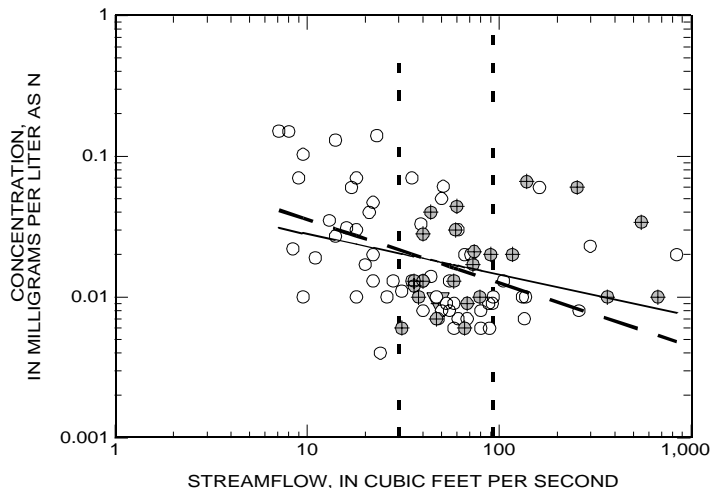
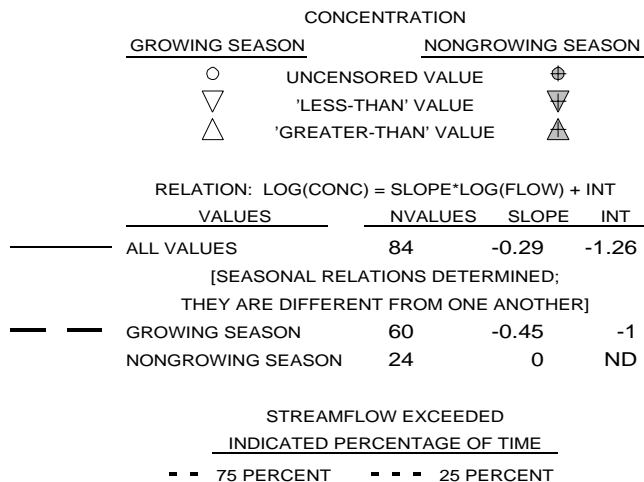


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

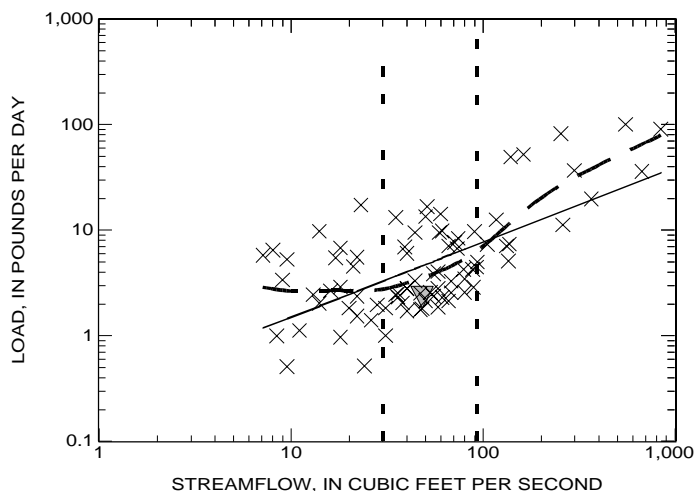
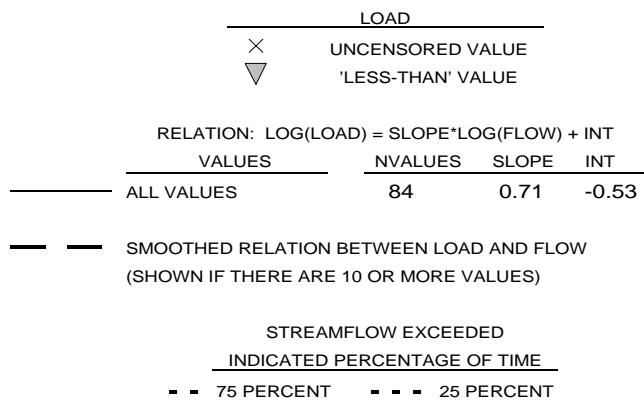
TOTAL NITRITE
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

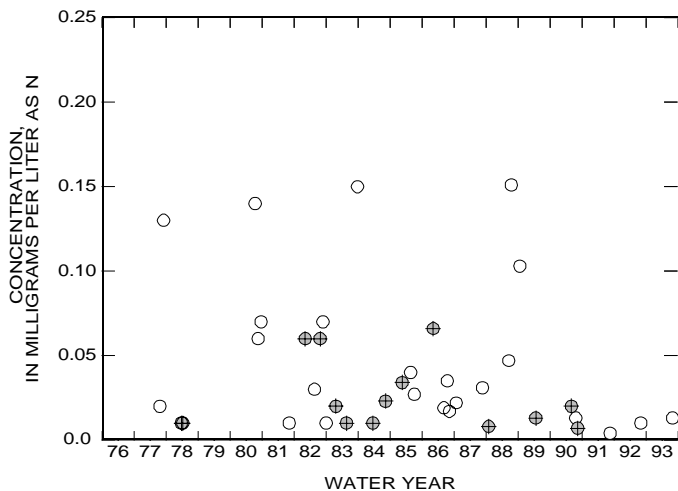
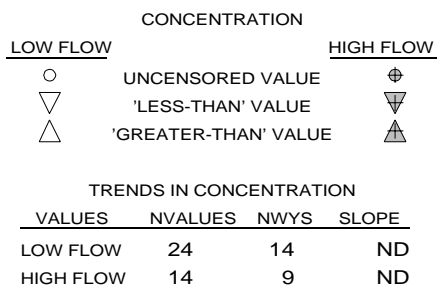
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

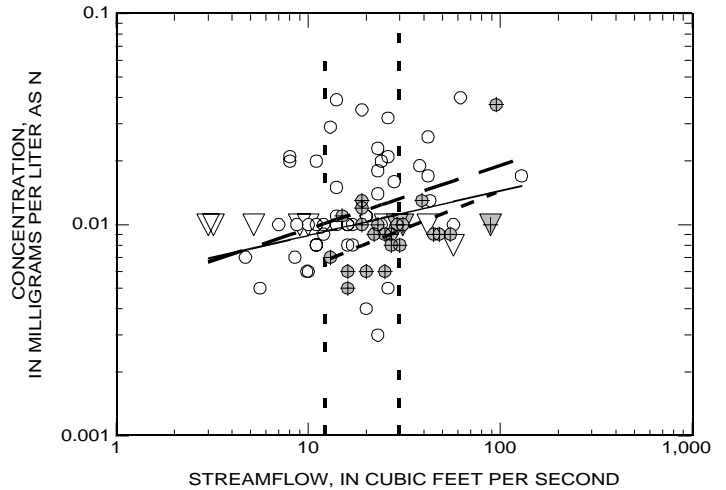
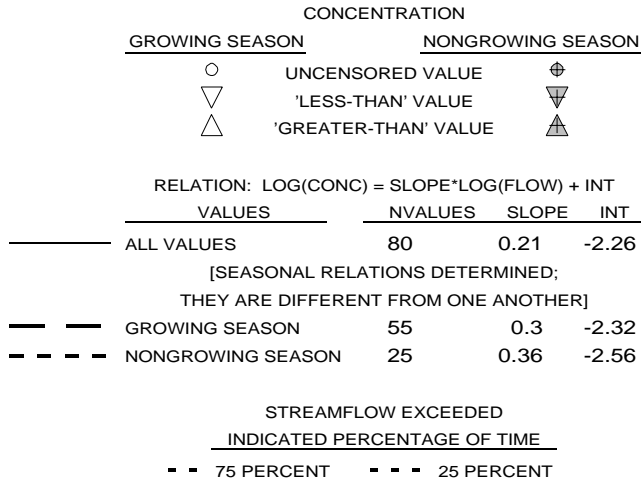


APPENDIX 13. Relations of constituent concentration and load to streamflow and trends in concentration with time

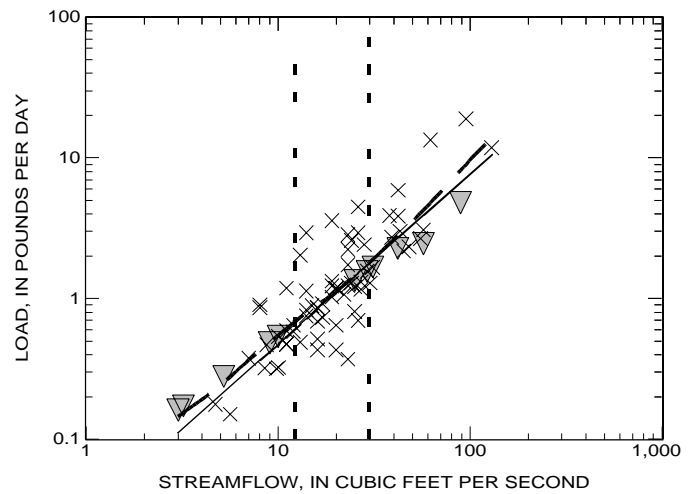
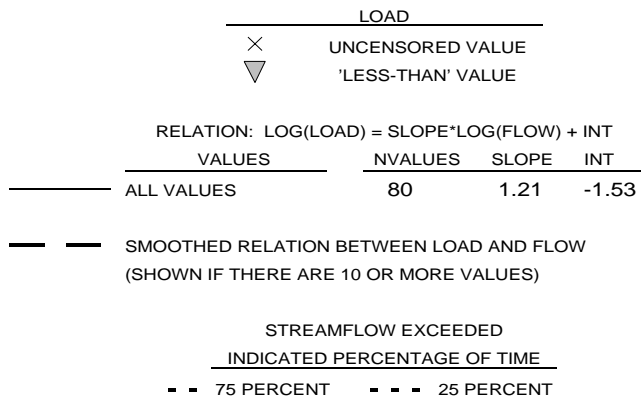
TOTAL NITRITE
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

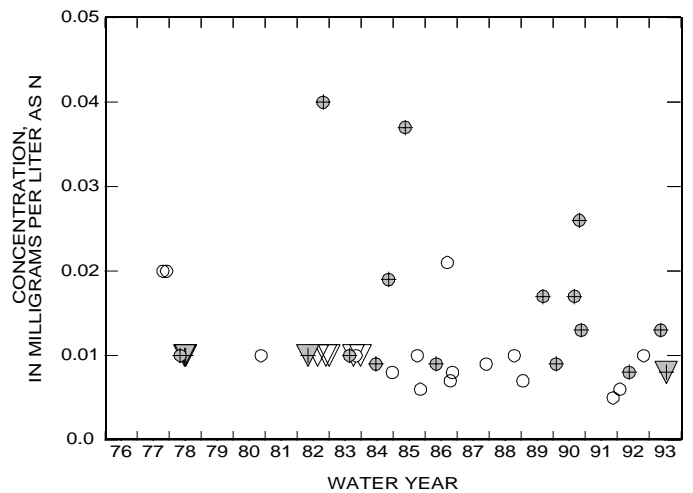
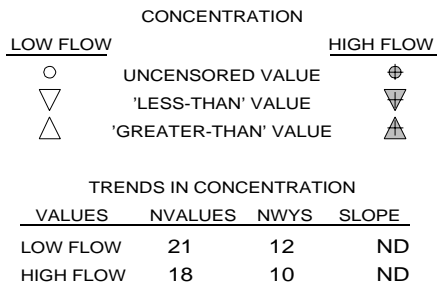
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



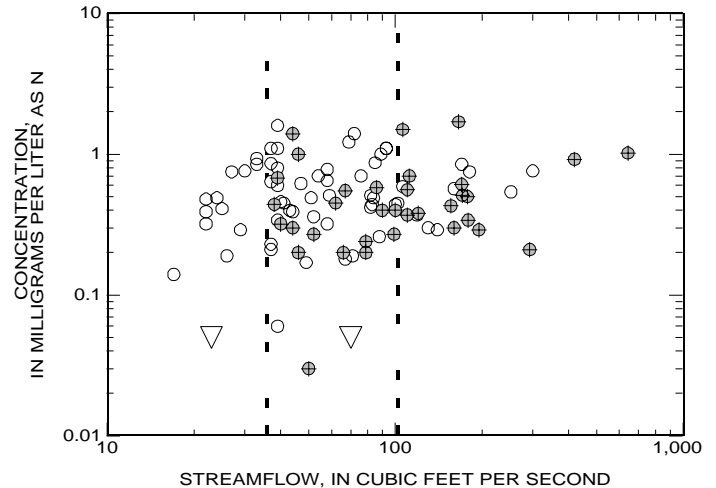
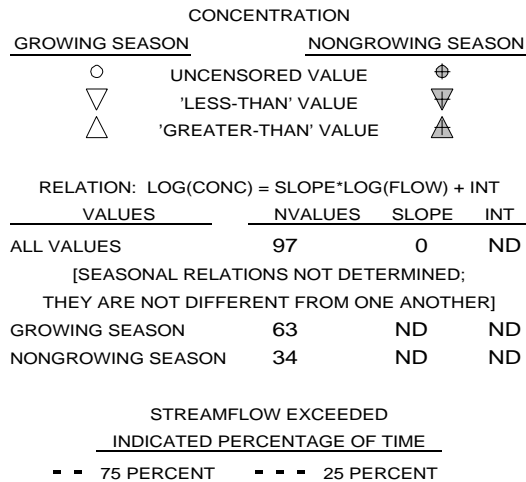
Appendix 14 - Total ammonia plus organic nitrogen

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

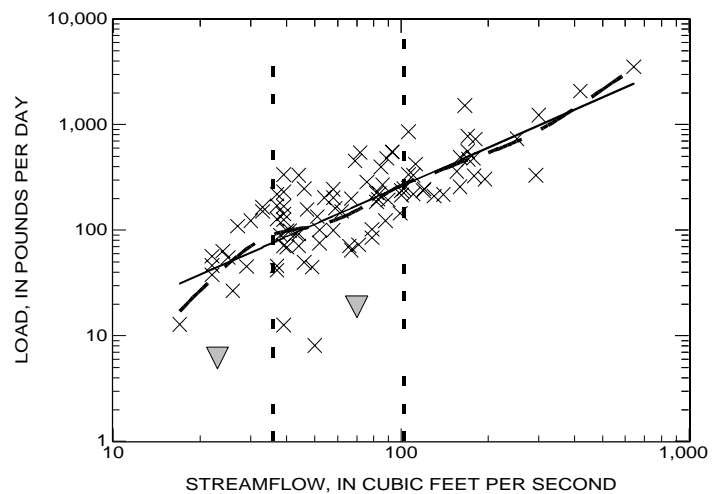
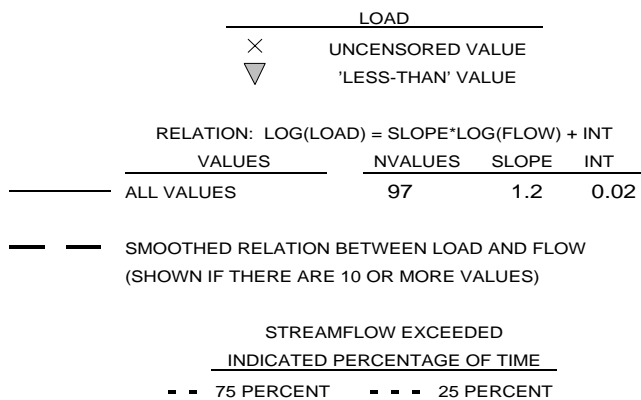
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

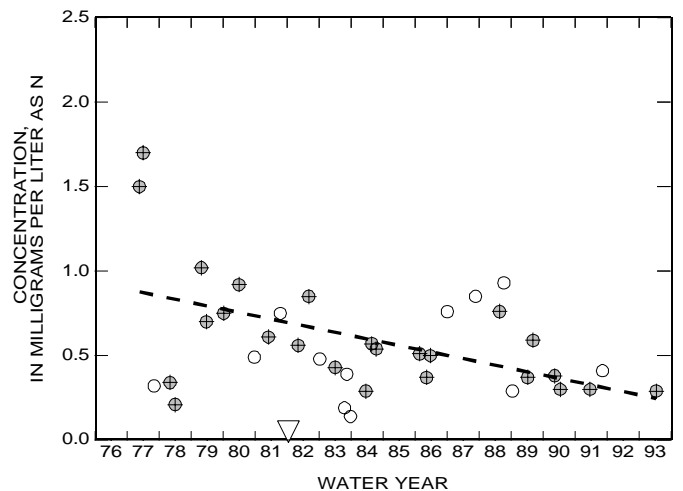
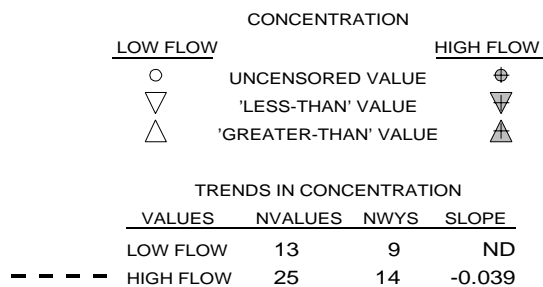
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



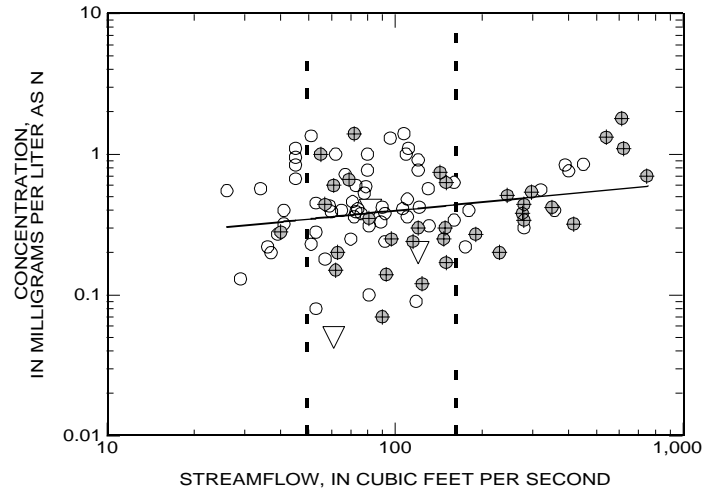
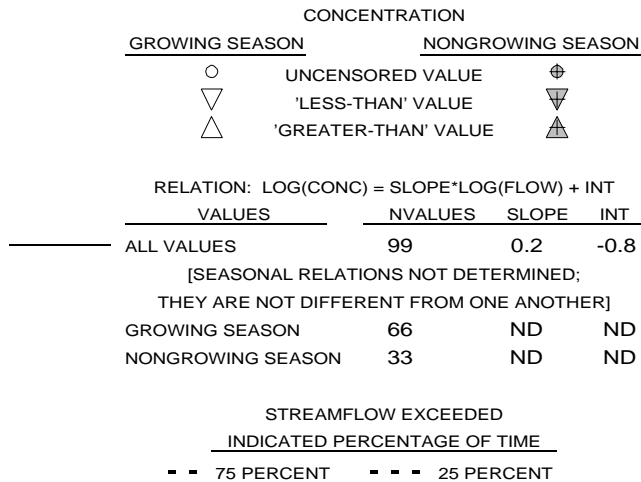
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



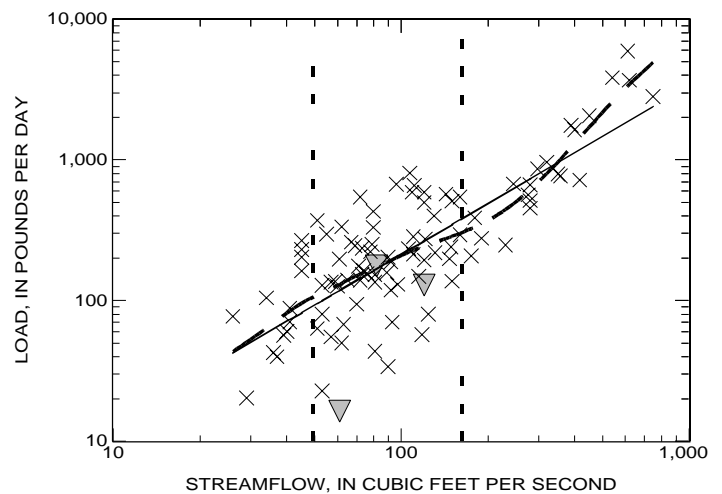
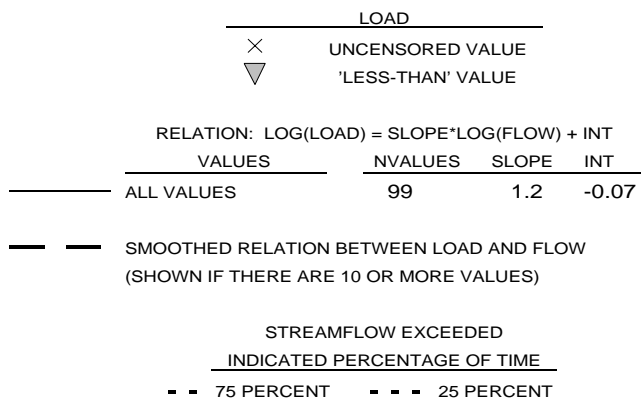
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

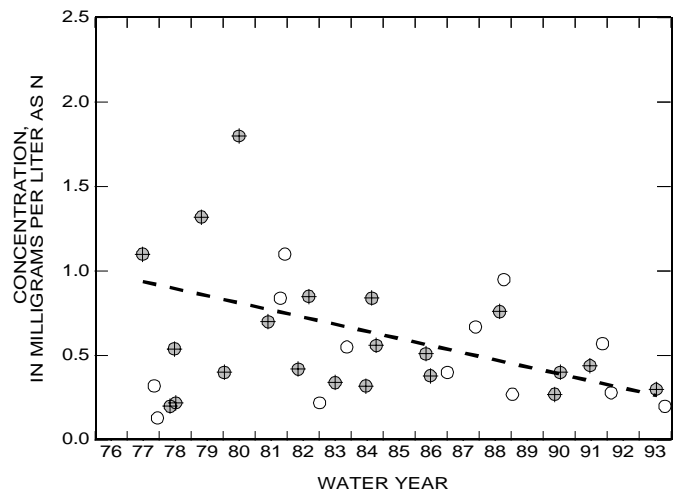
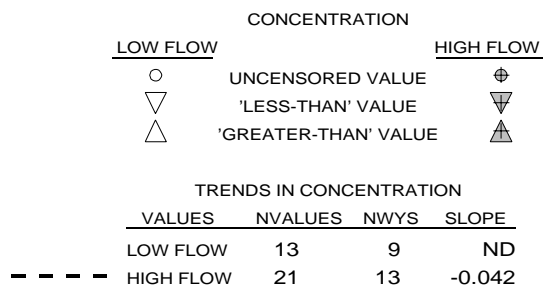
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



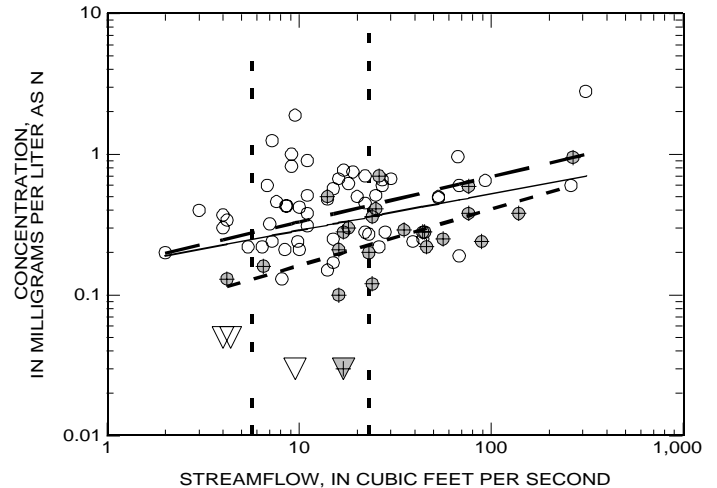
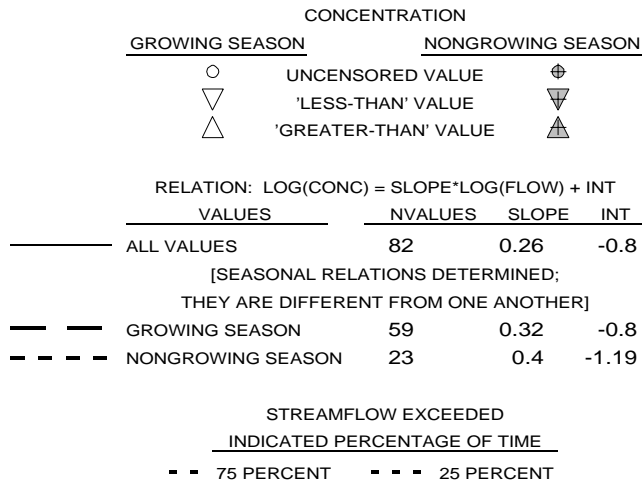
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



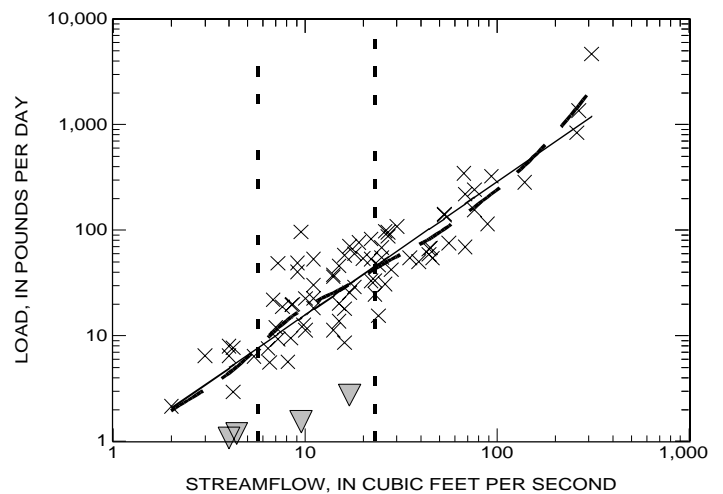
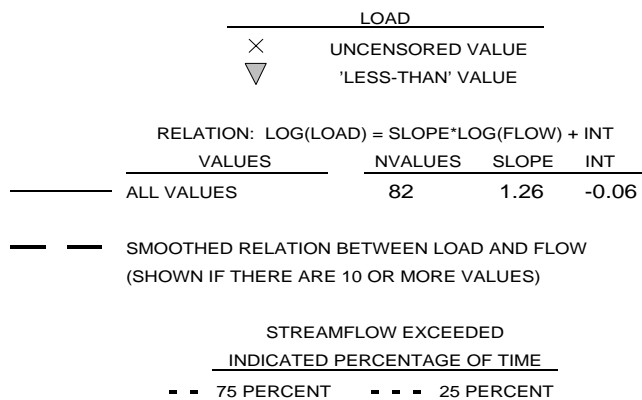
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

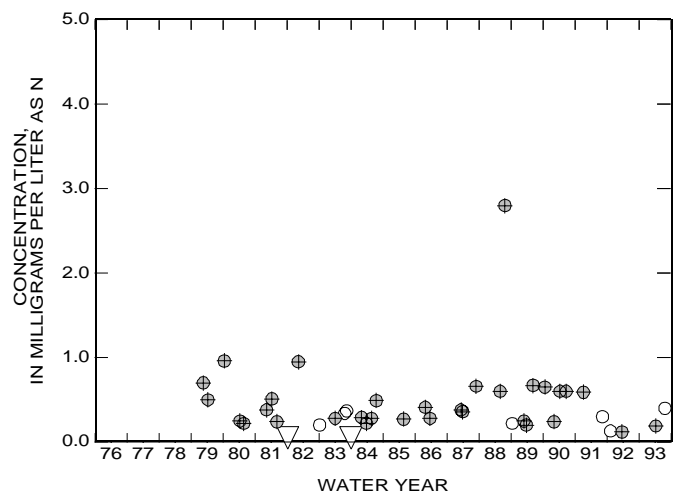
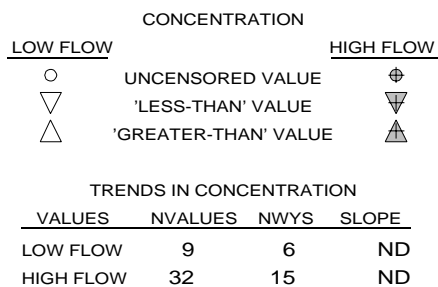
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



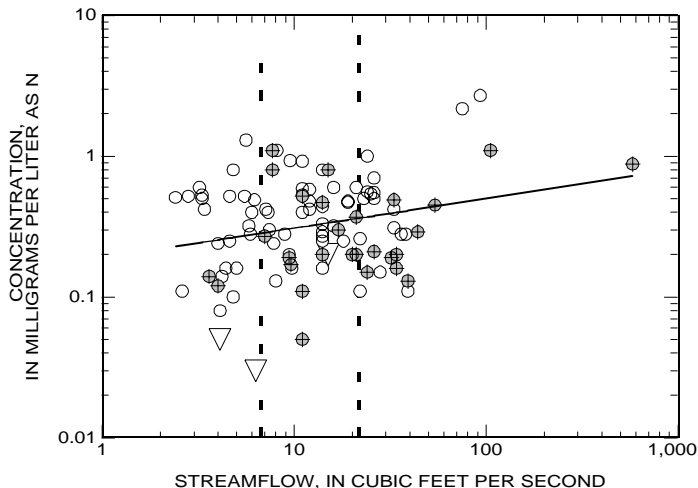
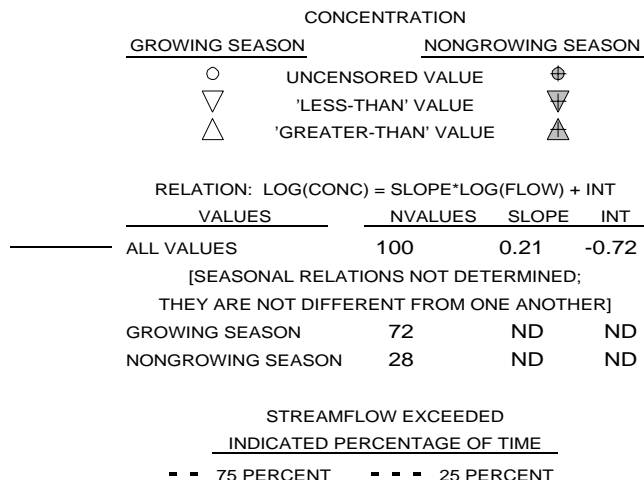
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



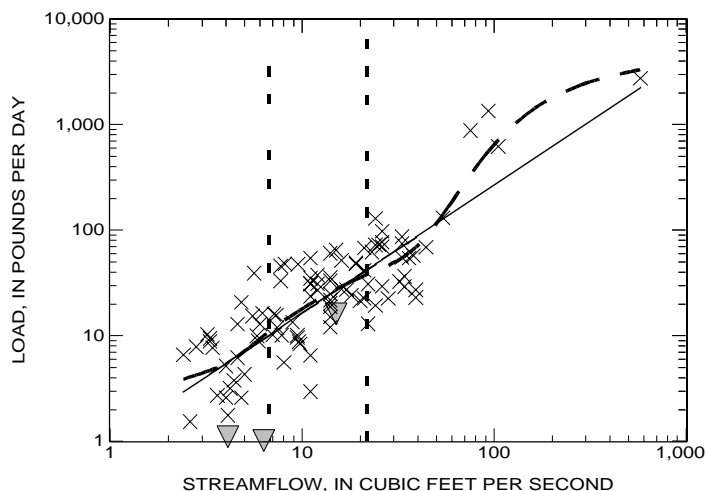
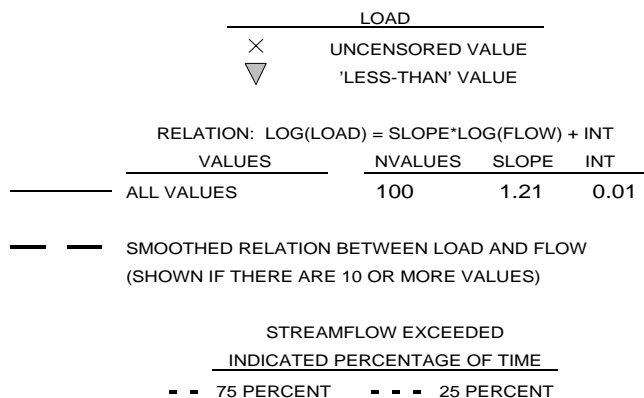
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

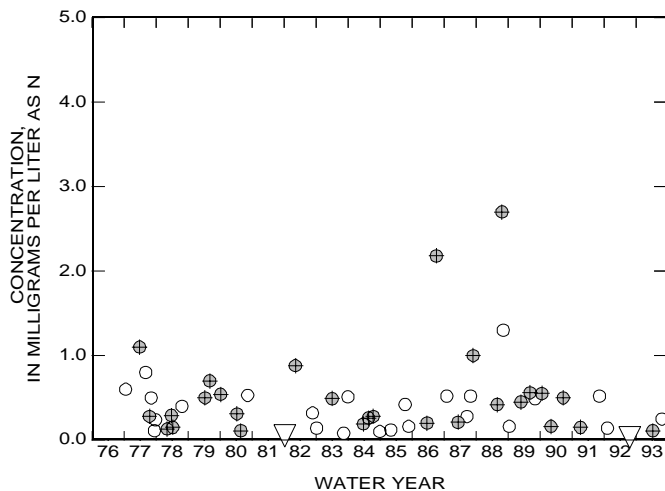
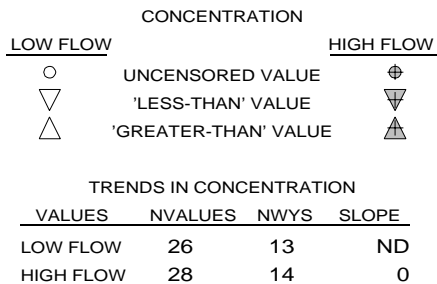
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



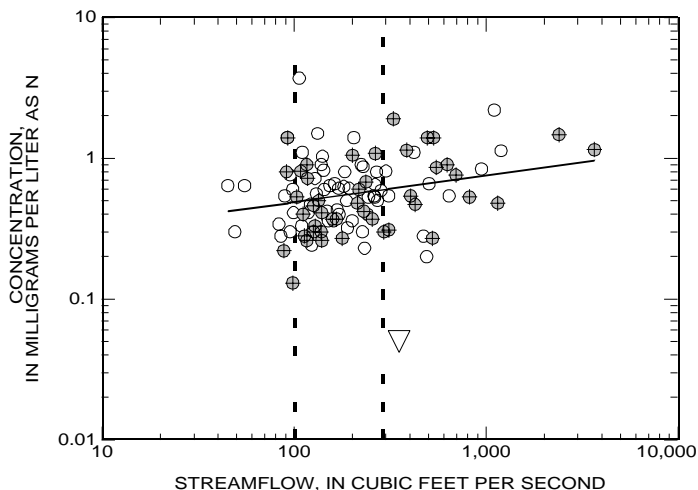
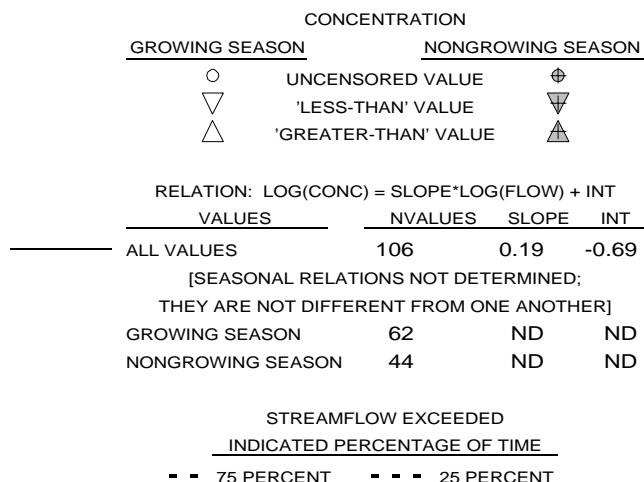
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



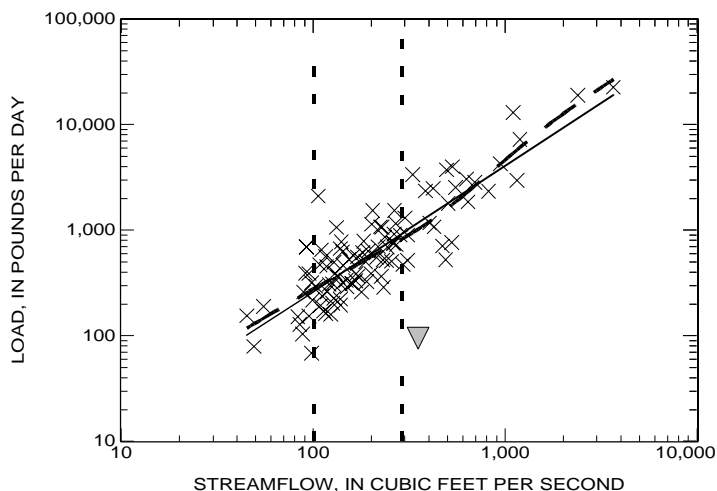
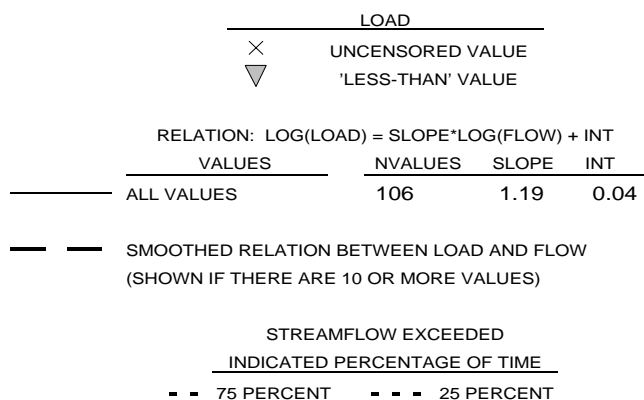
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

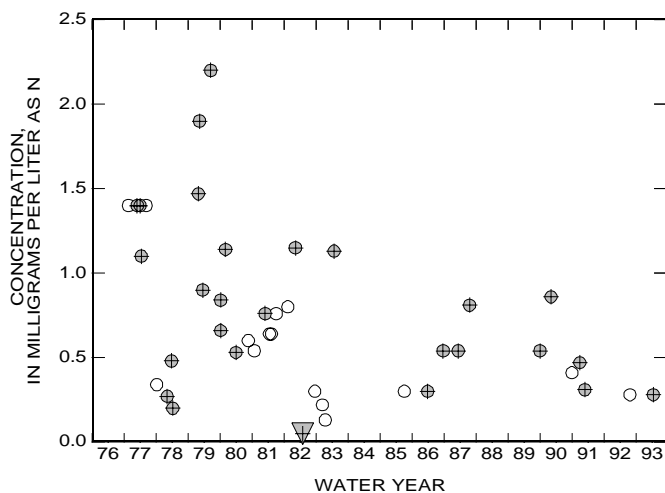
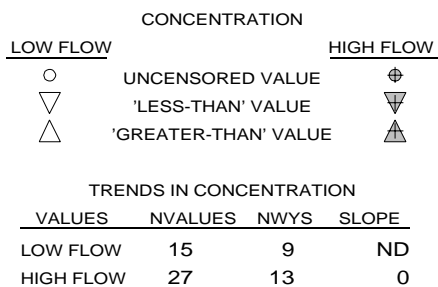
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



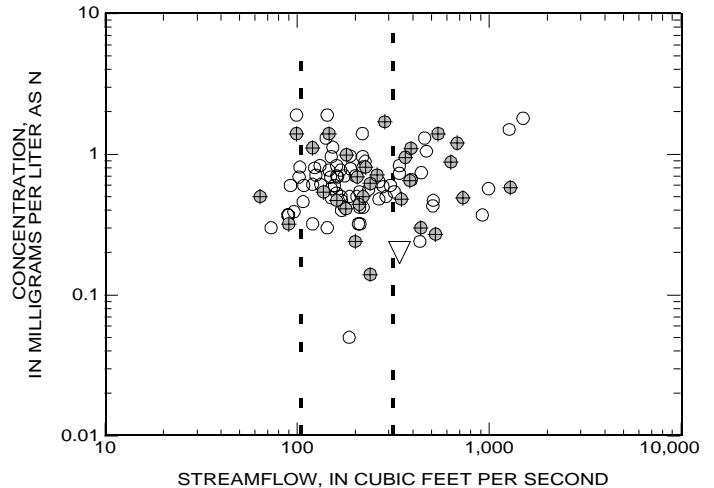
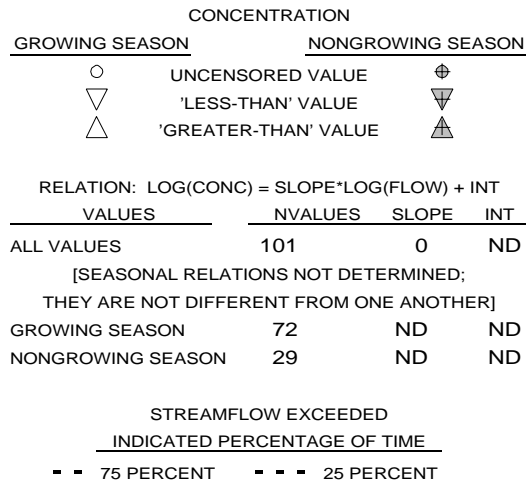
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



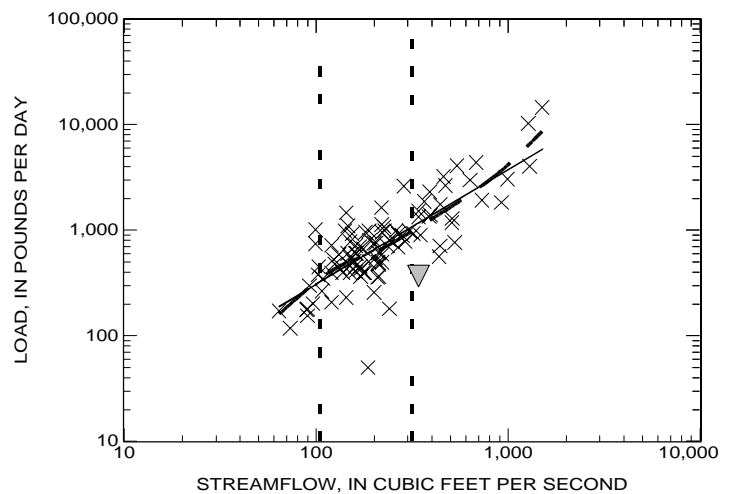
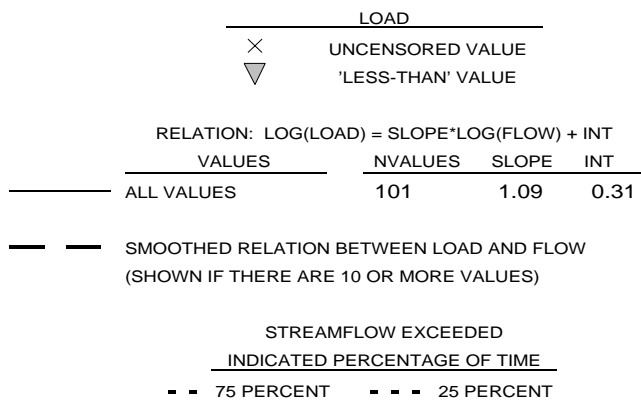
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

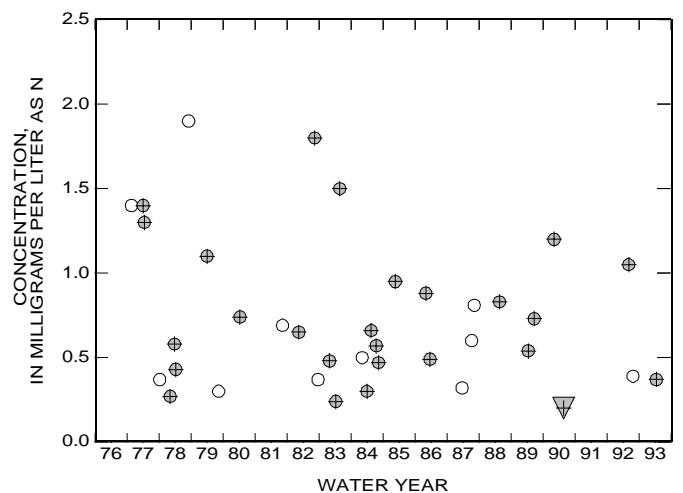
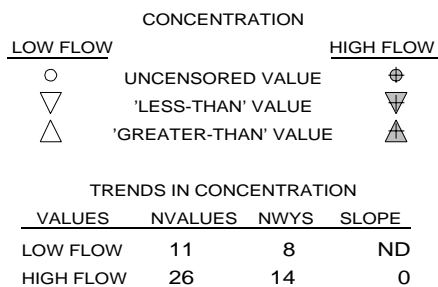
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



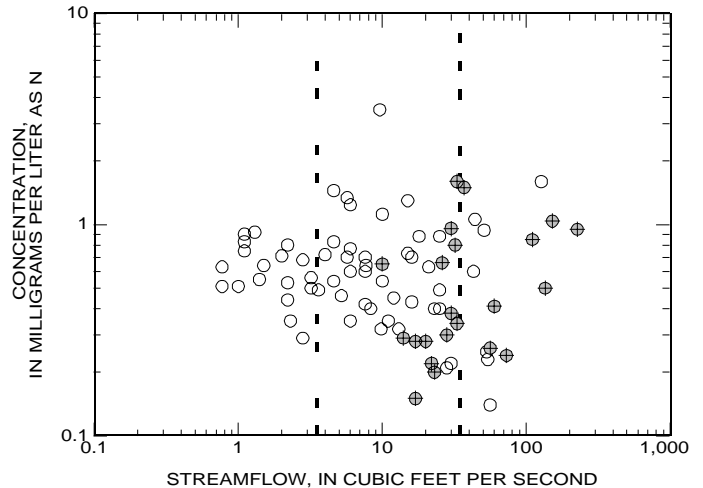
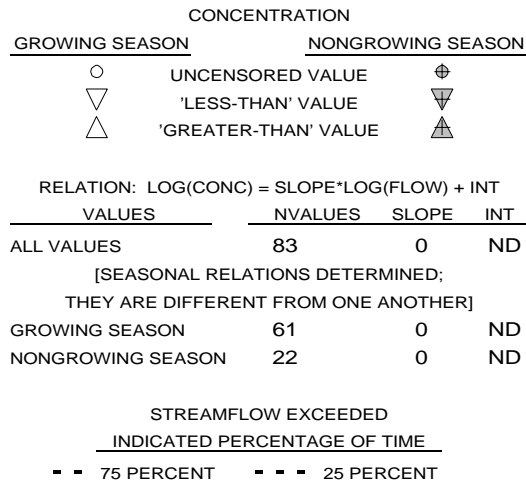
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



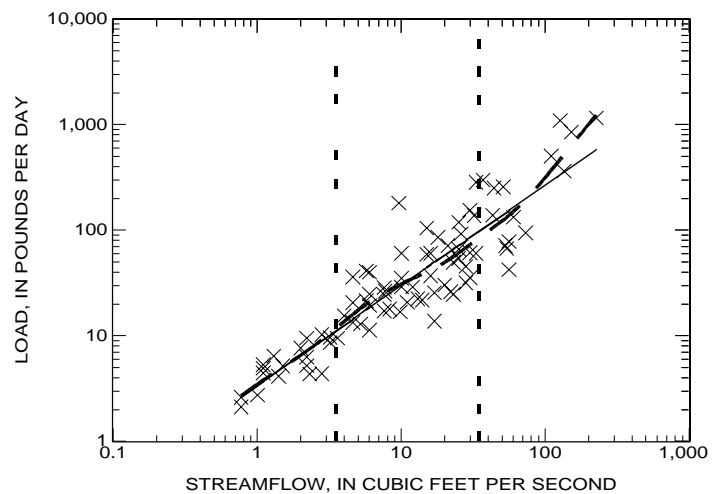
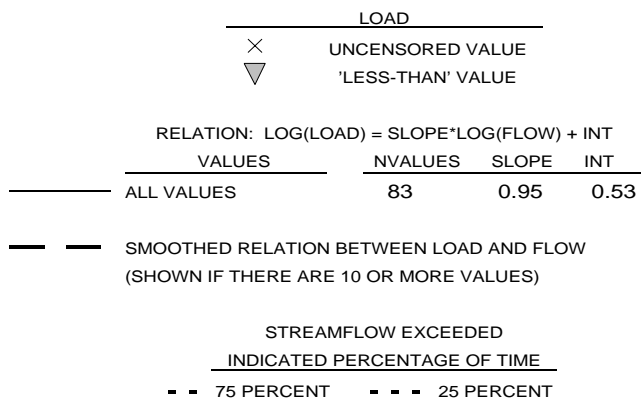
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

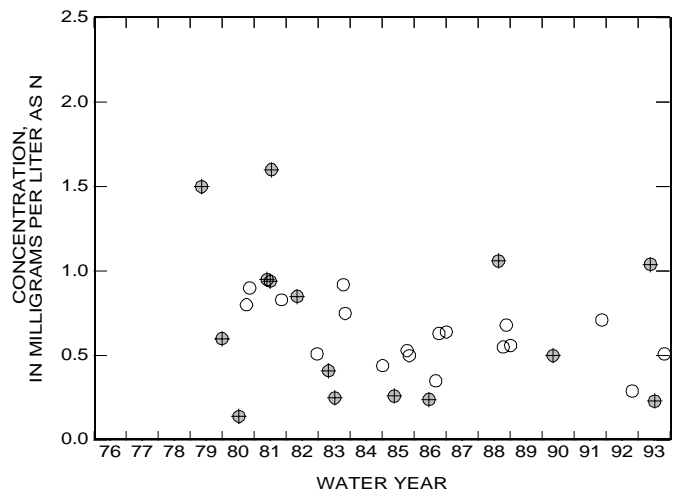
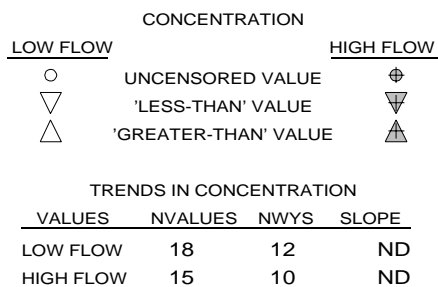
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



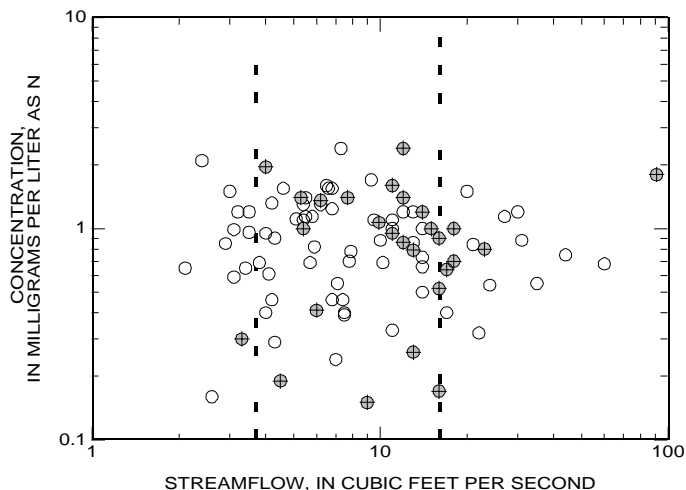
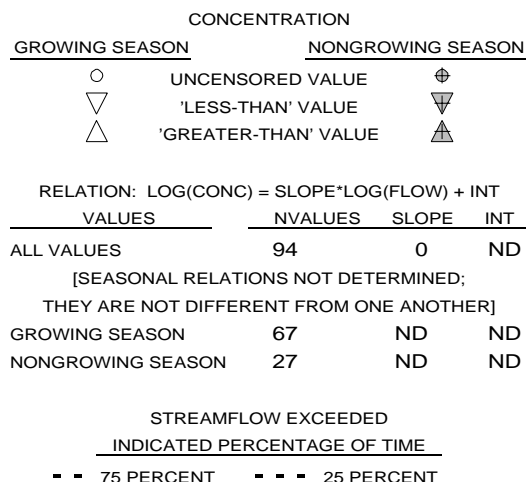
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



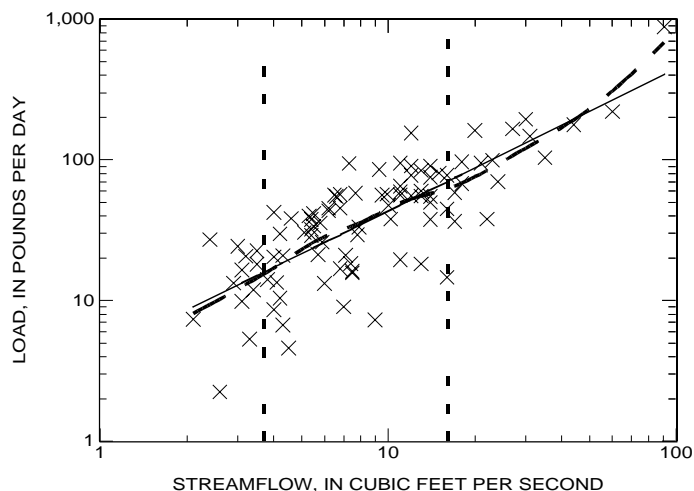
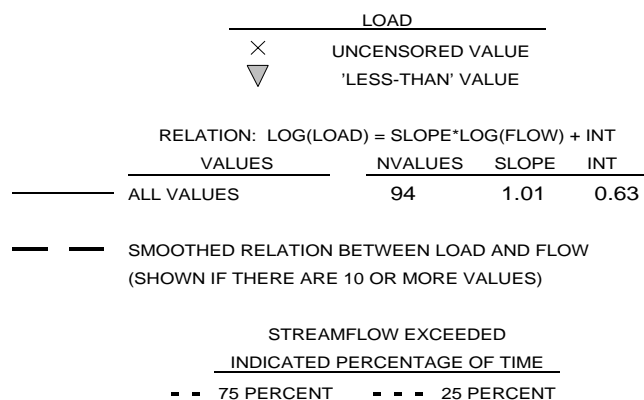
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

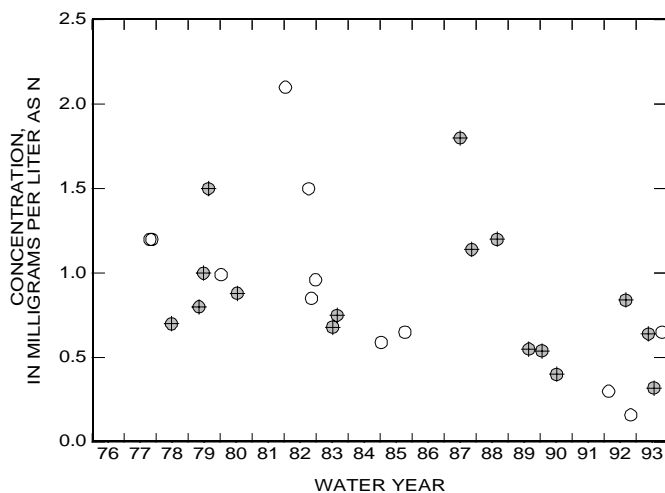
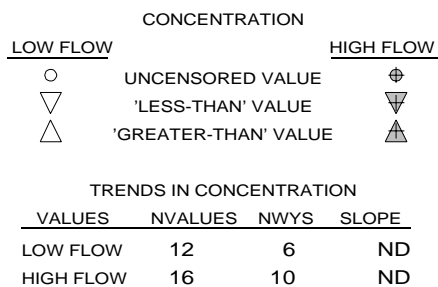
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



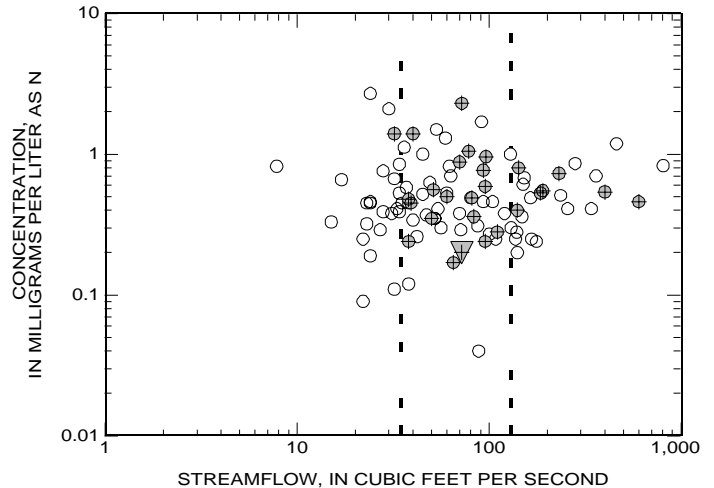
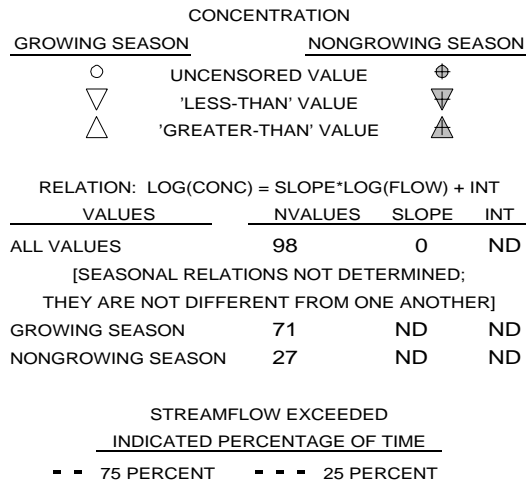
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



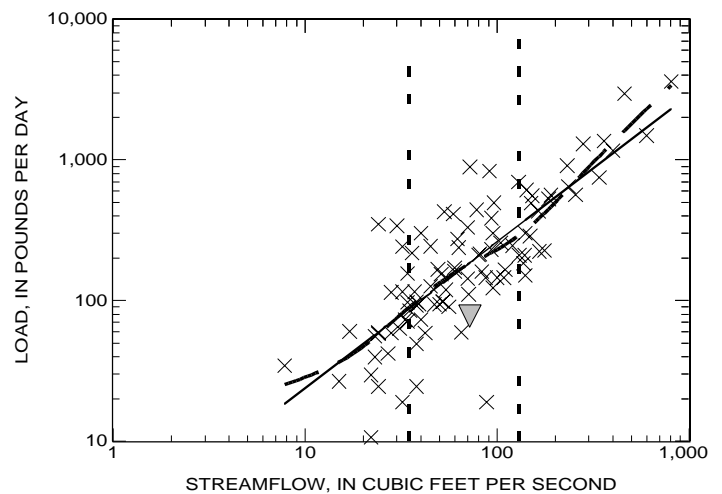
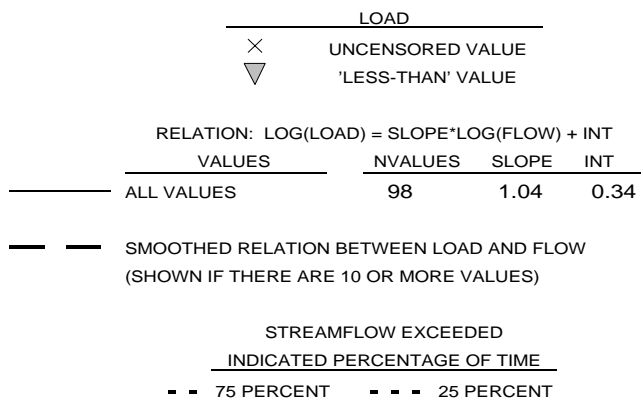
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

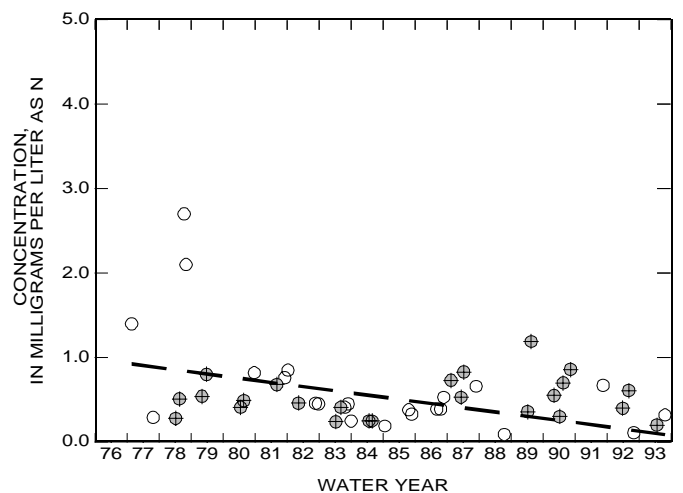
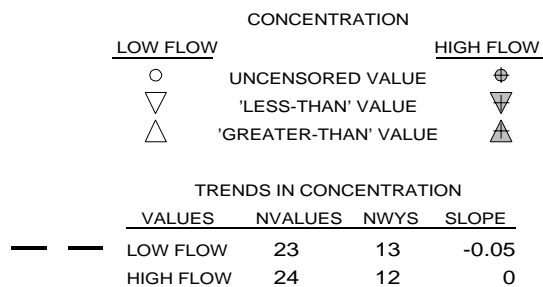
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



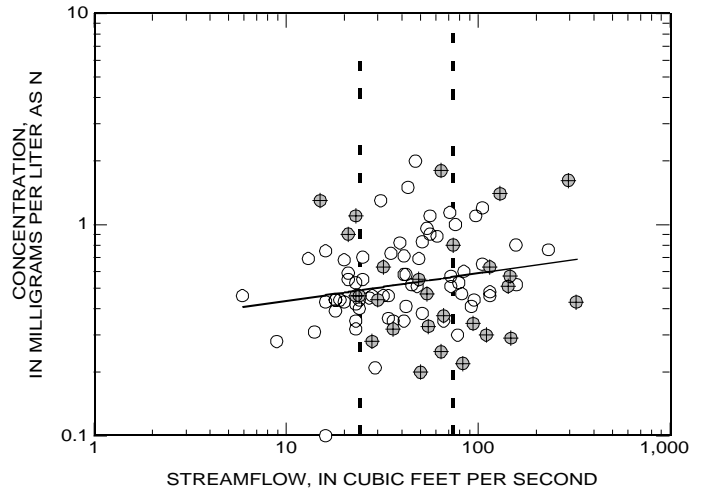
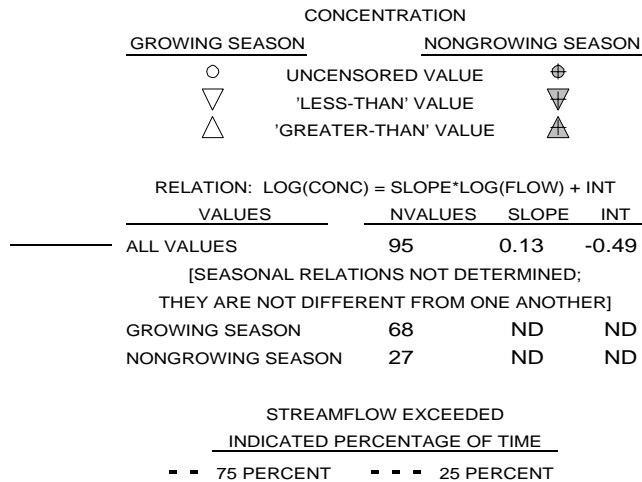
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



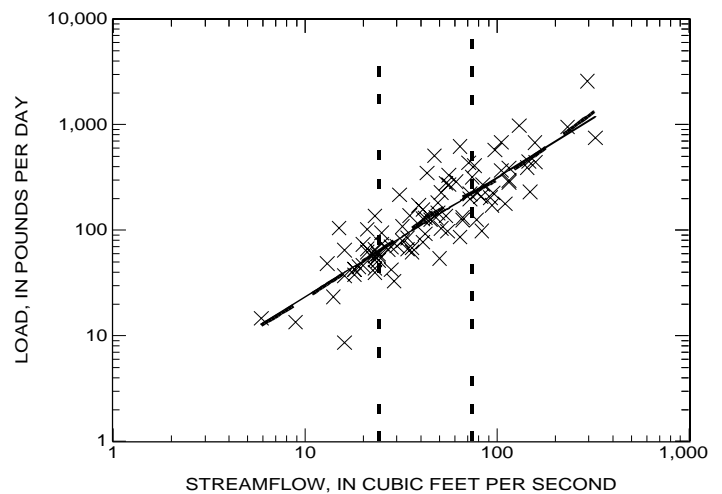
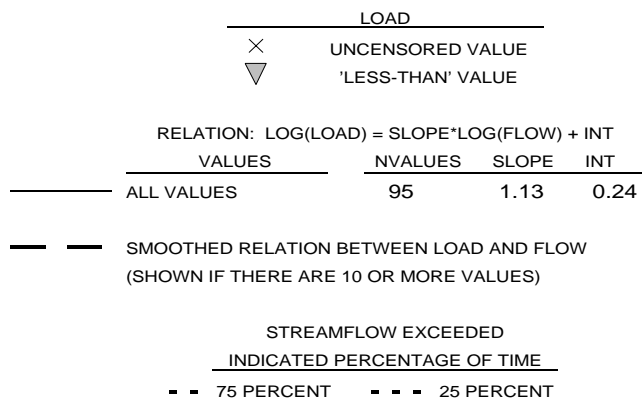
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

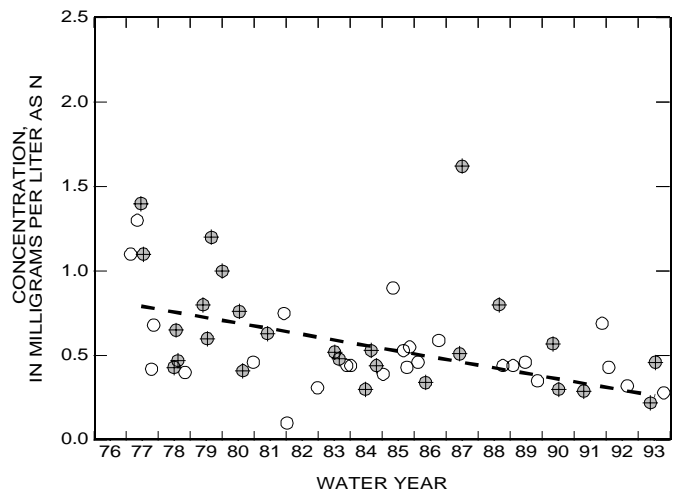
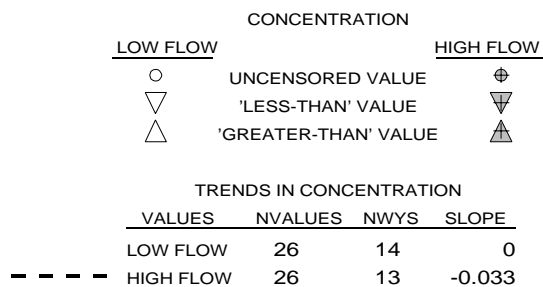
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



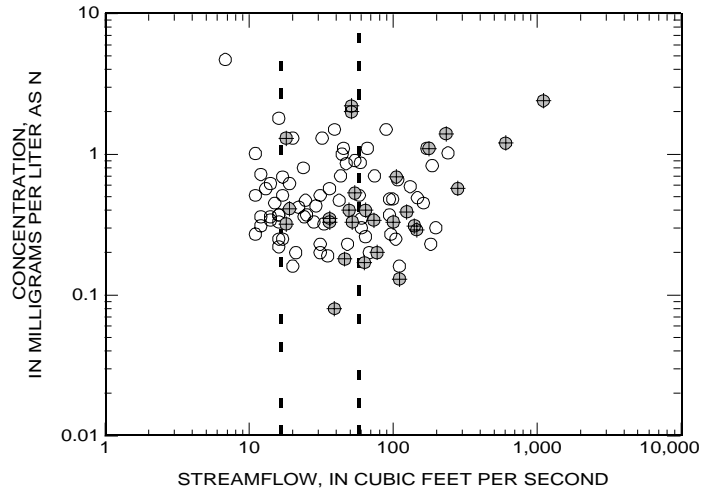
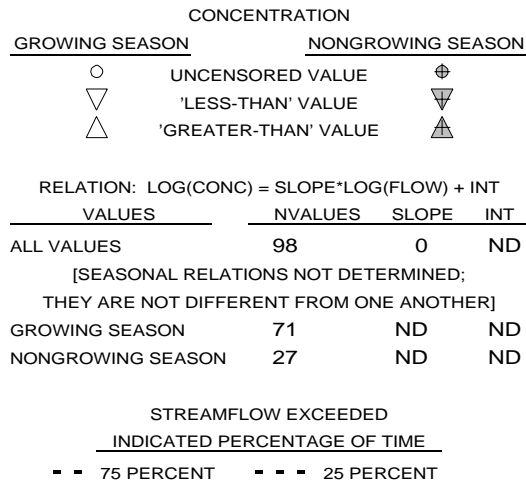
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



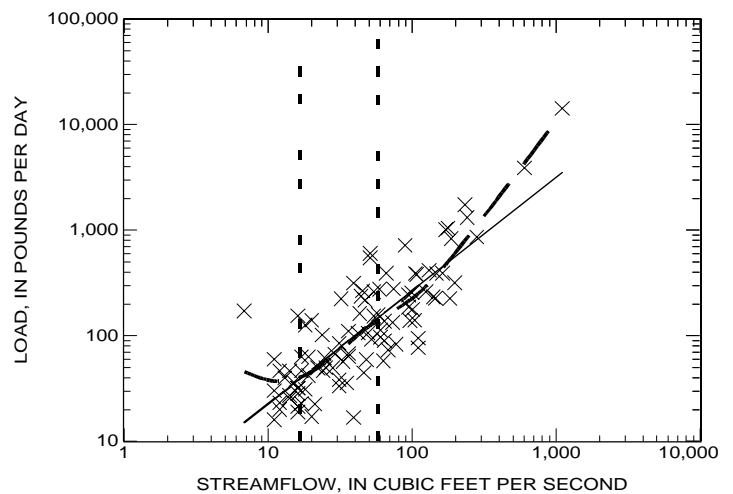
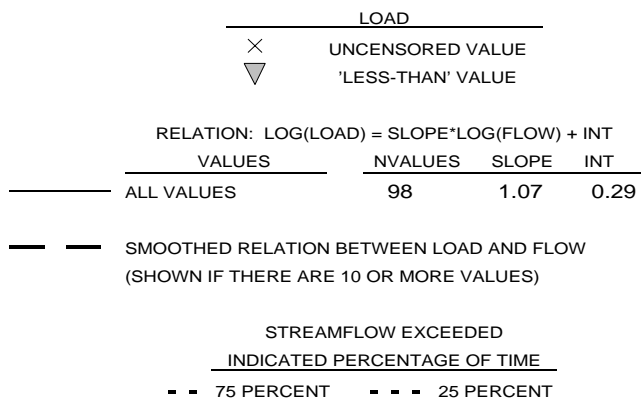
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

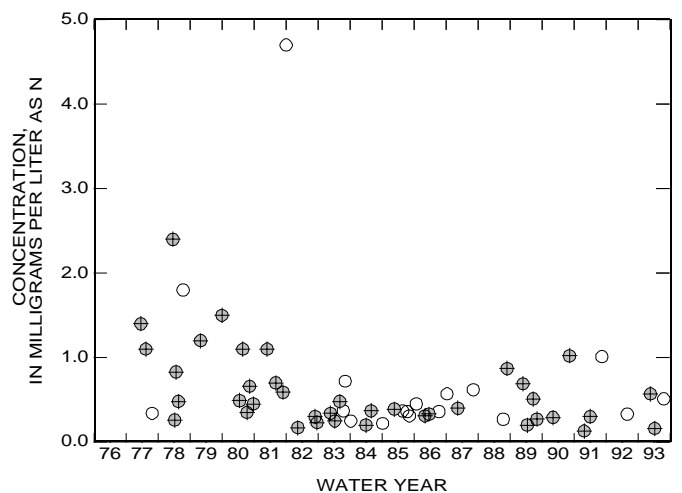
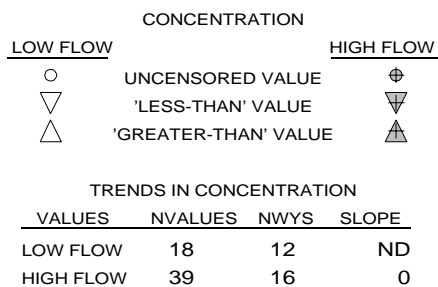
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



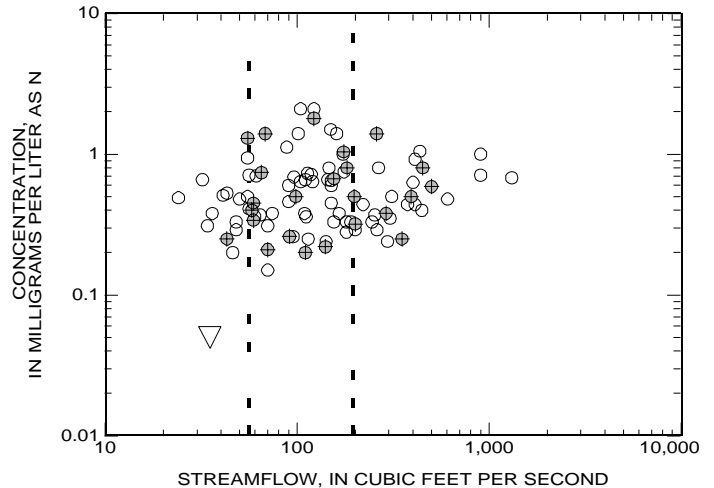
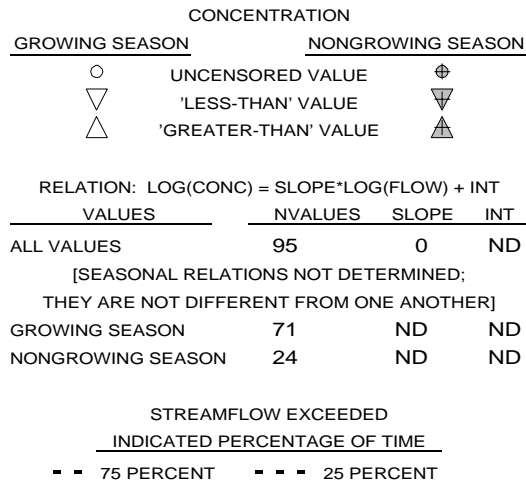
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



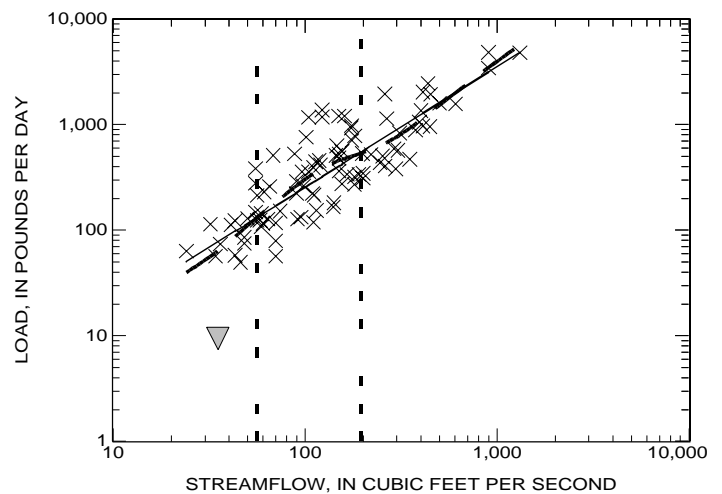
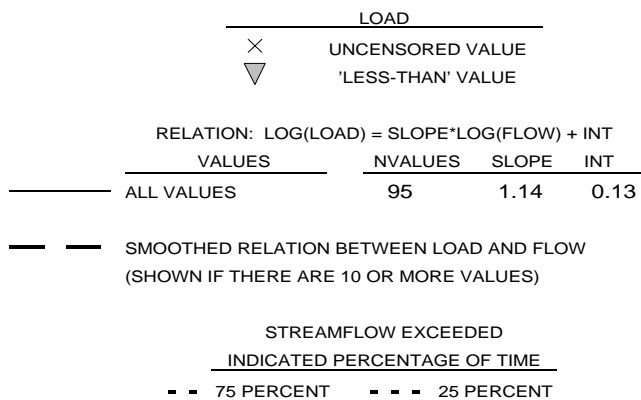
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

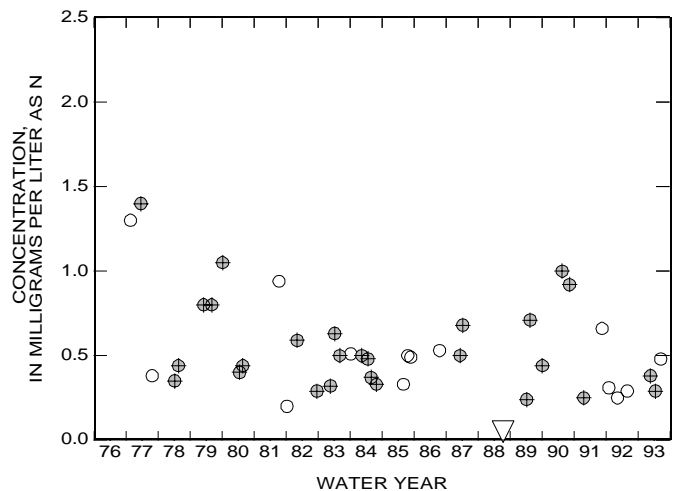
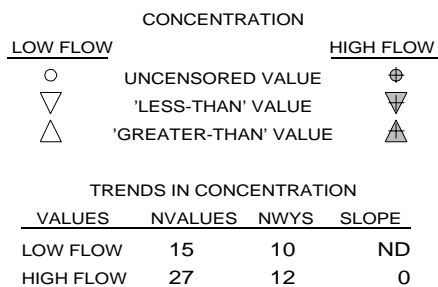
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



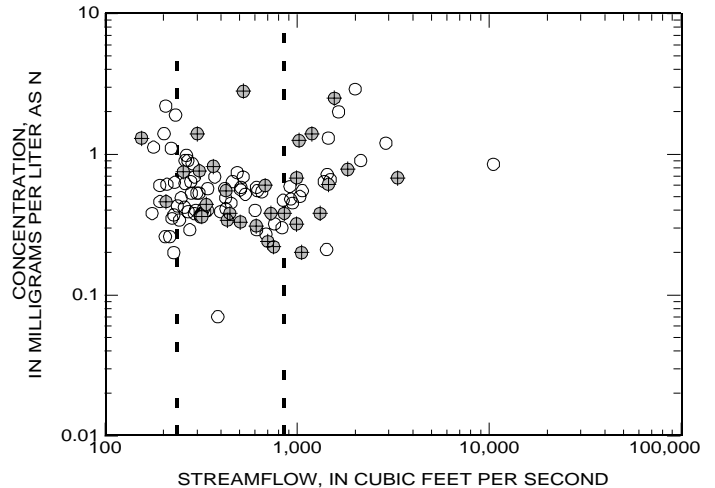
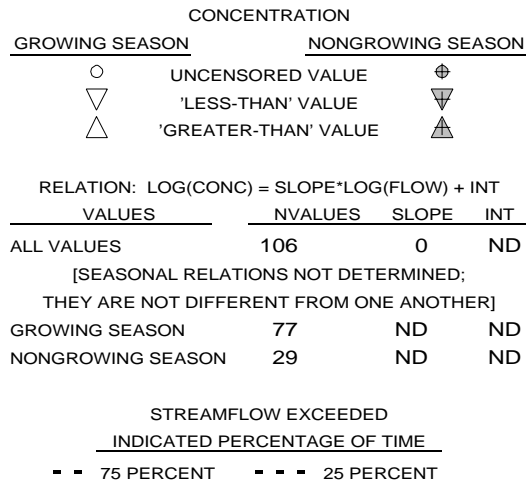
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



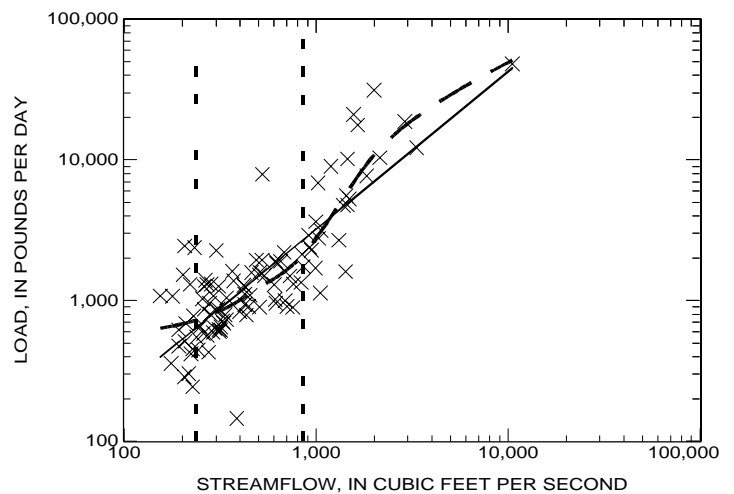
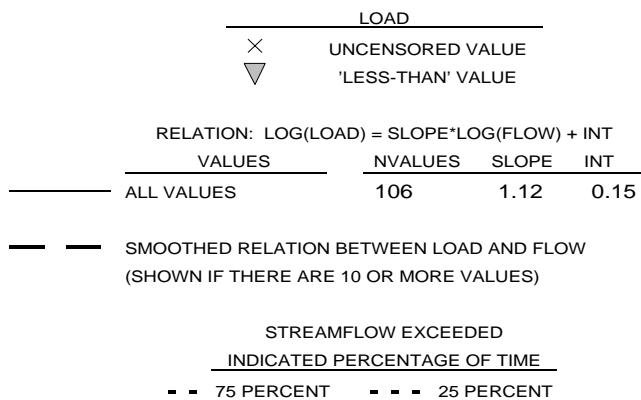
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

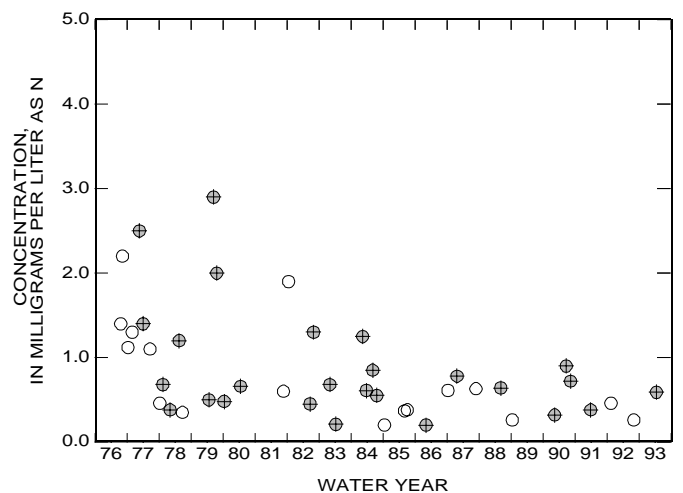
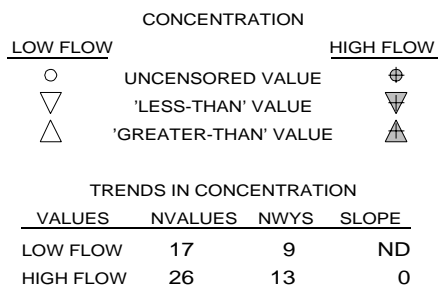
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



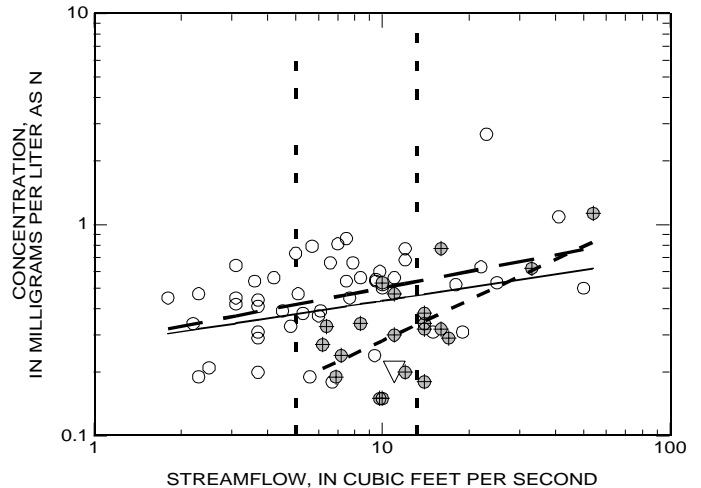
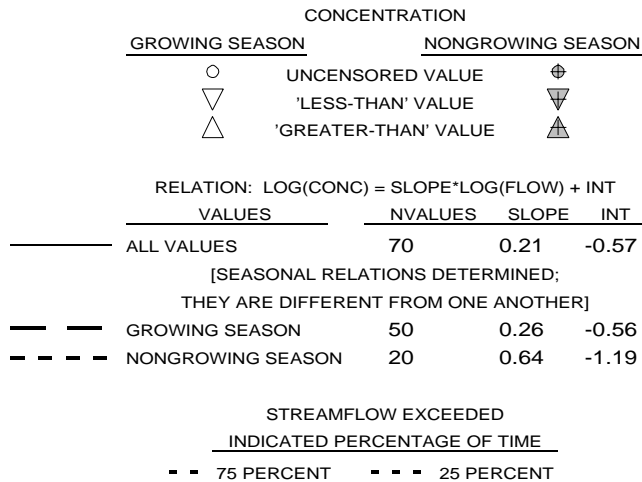
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



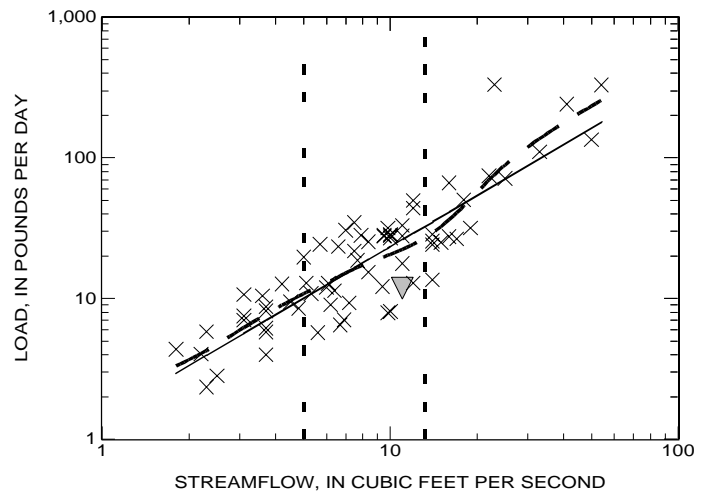
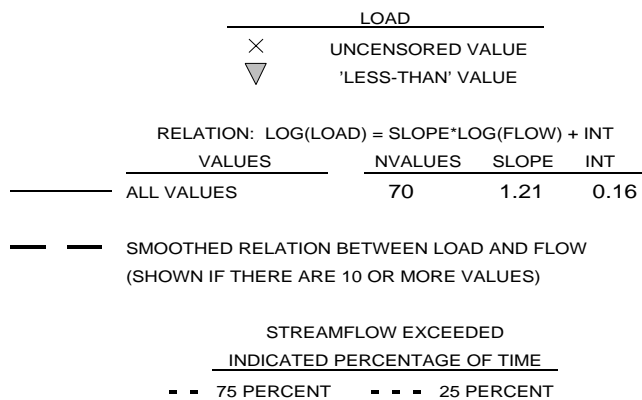
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

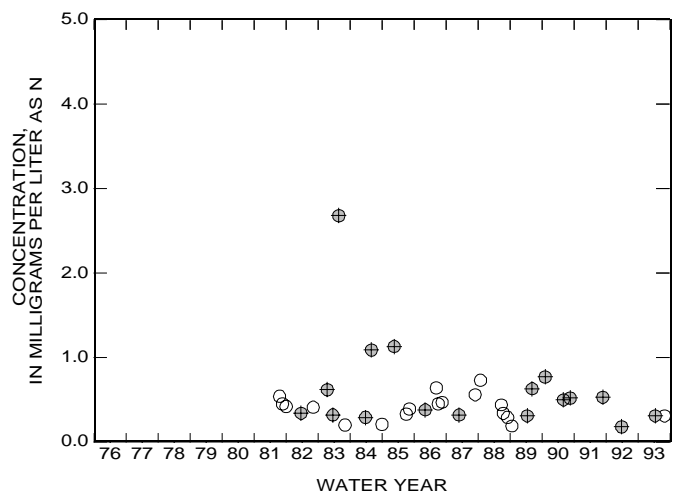
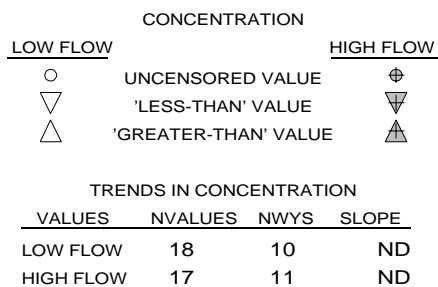
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



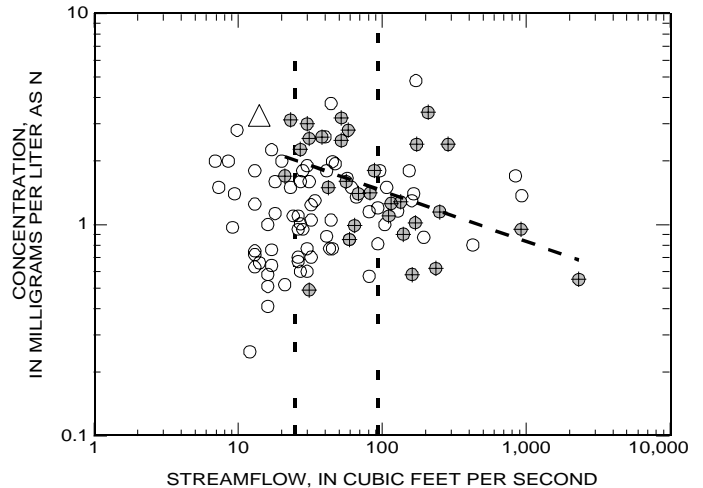
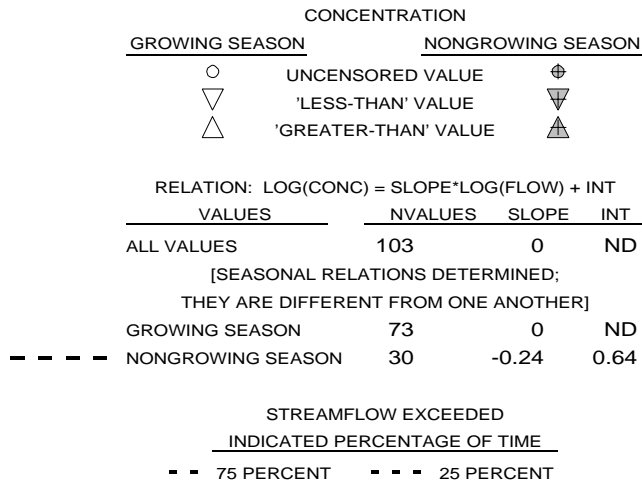
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



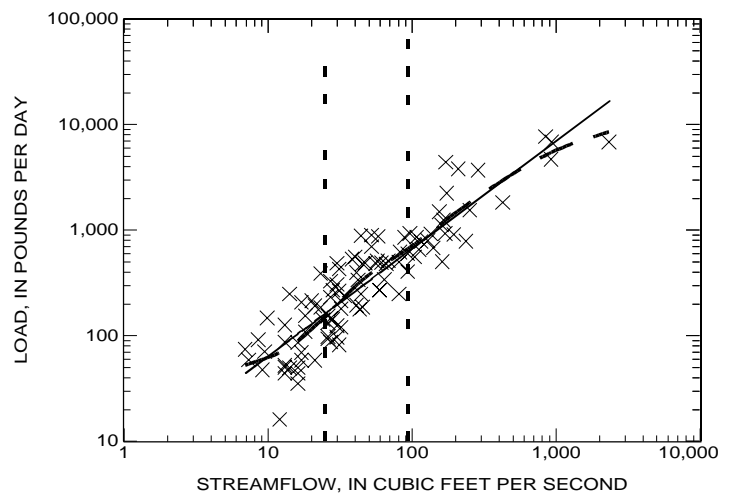
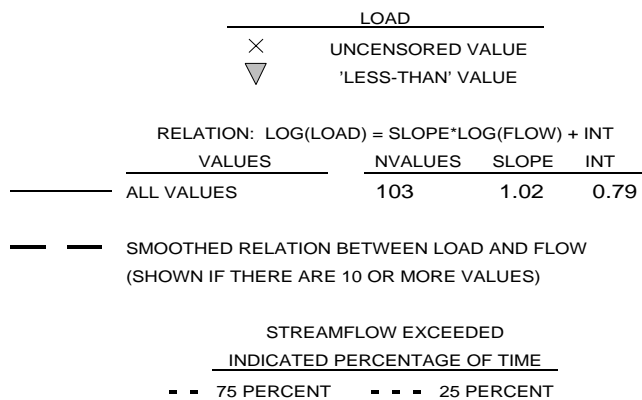
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

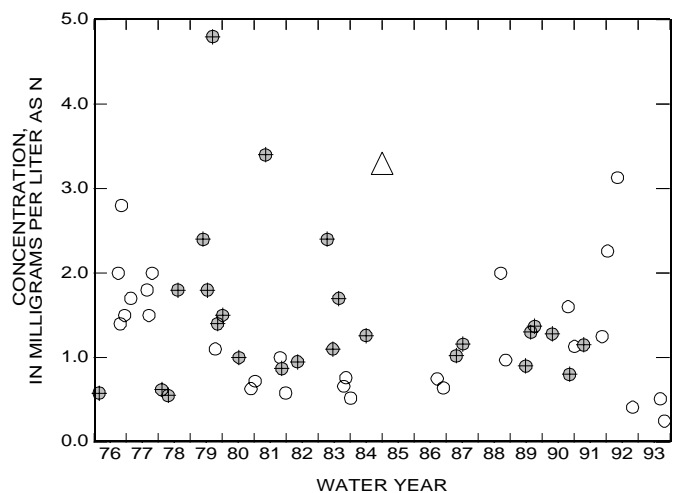
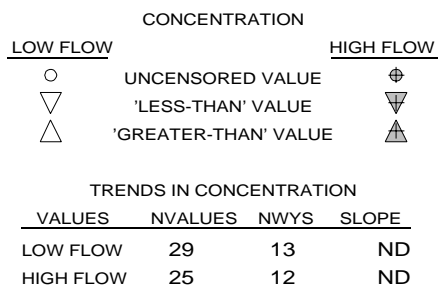
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



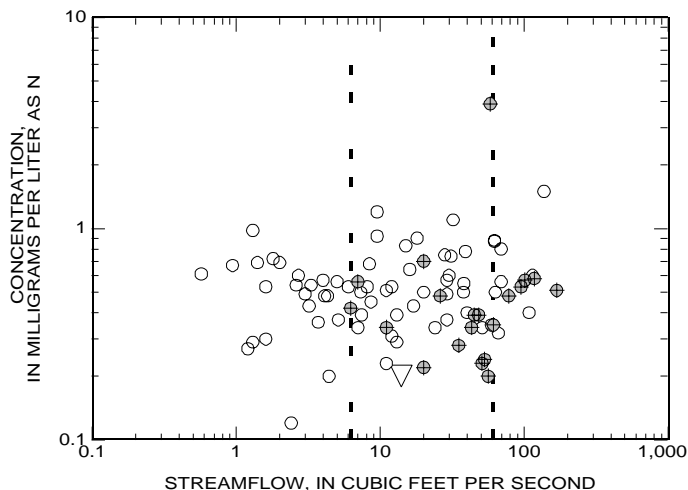
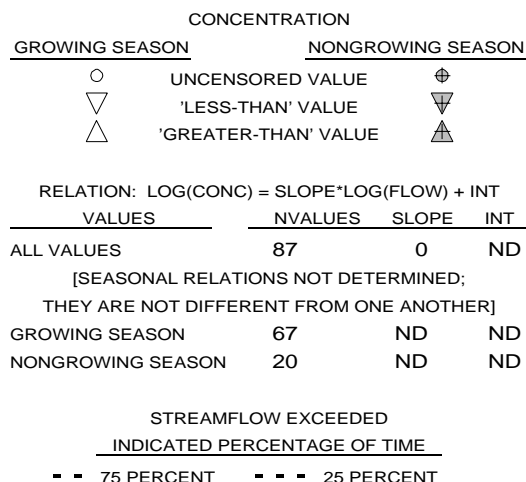
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



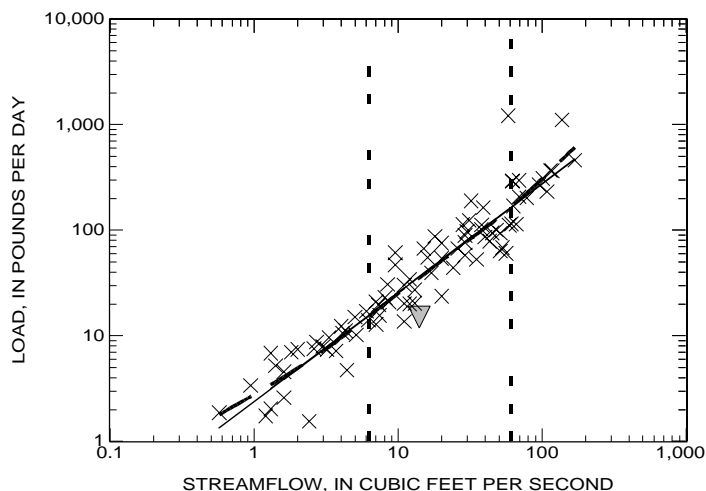
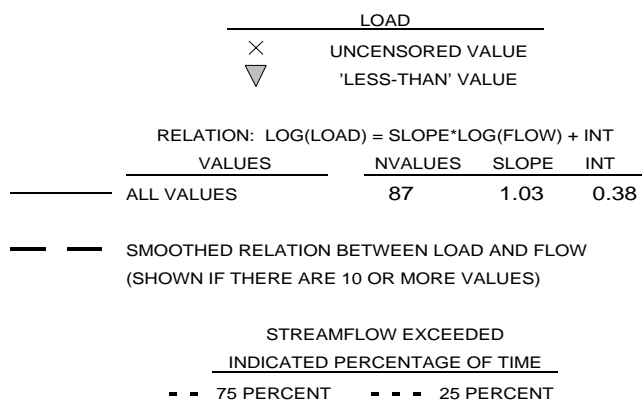
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

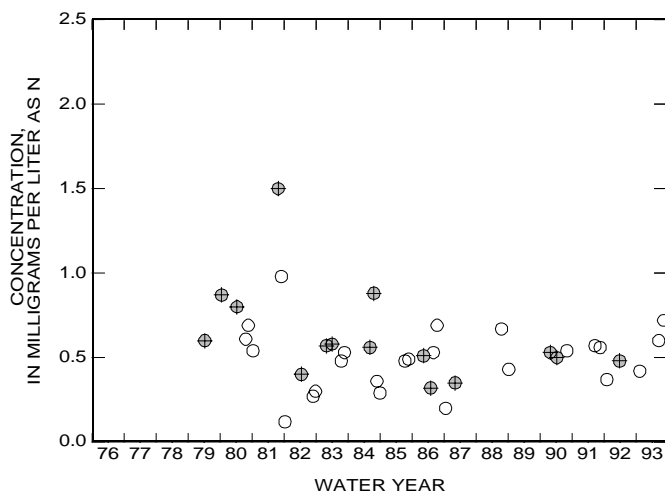
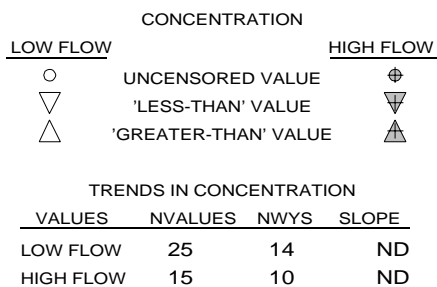
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



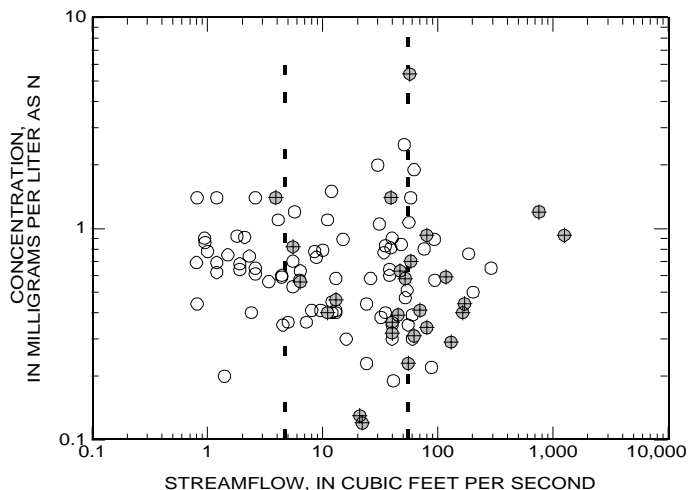
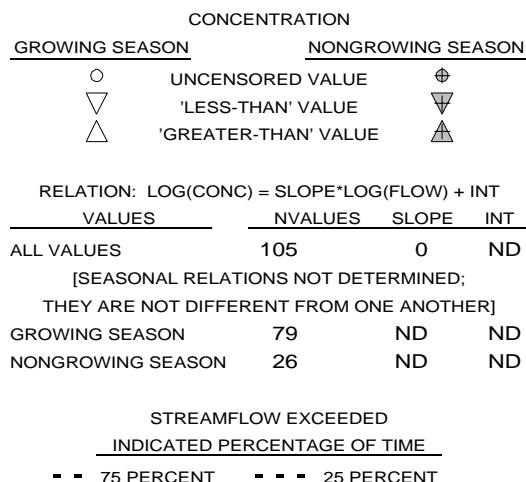
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



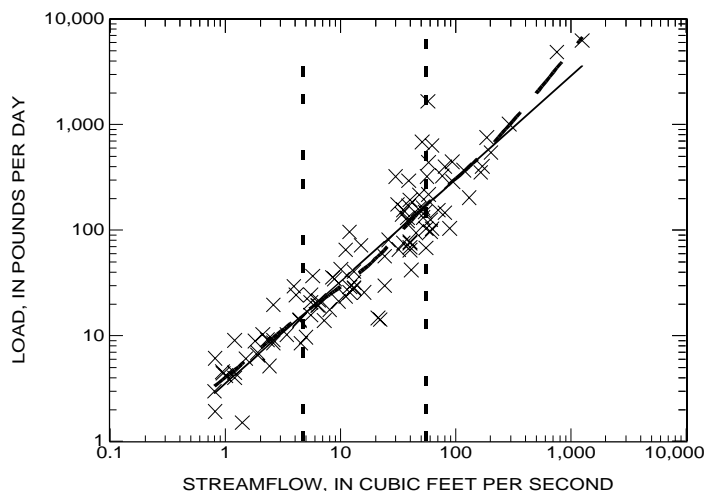
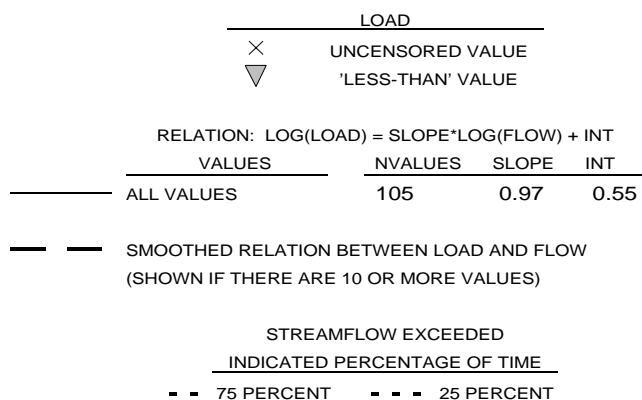
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

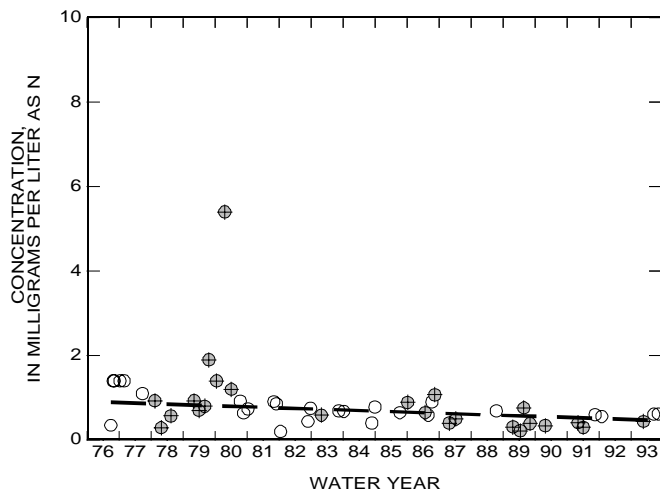
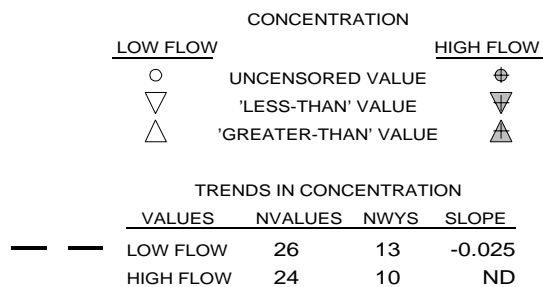
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



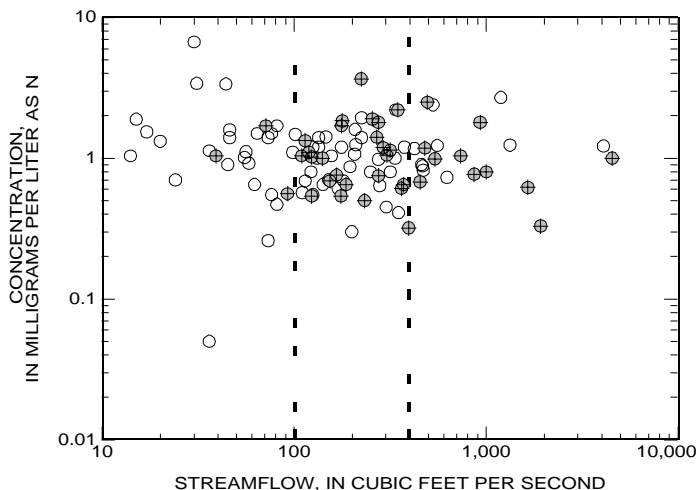
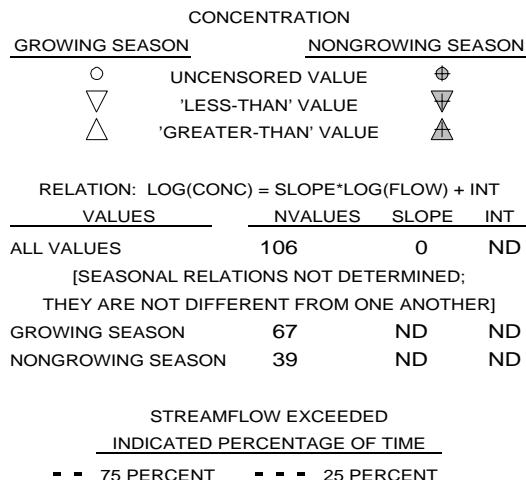
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



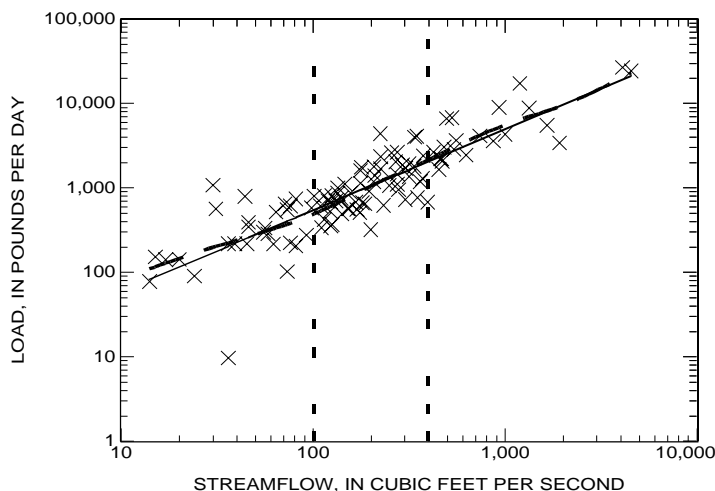
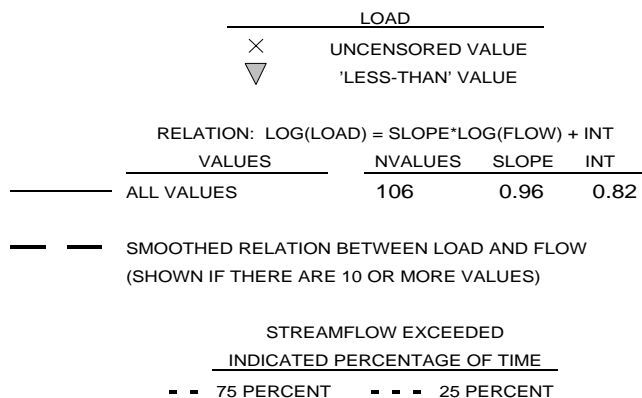
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

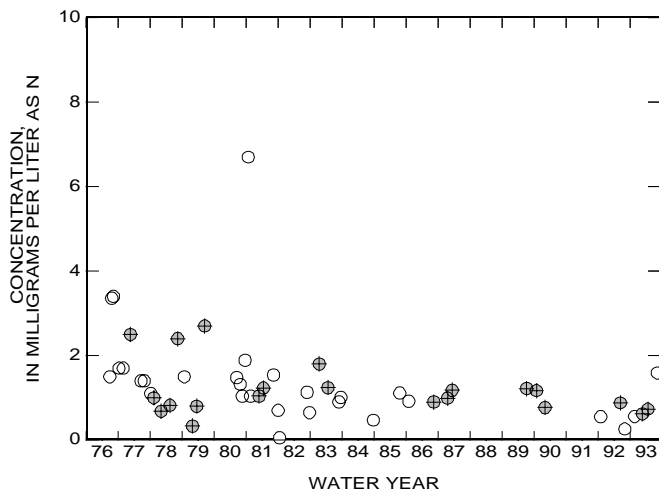
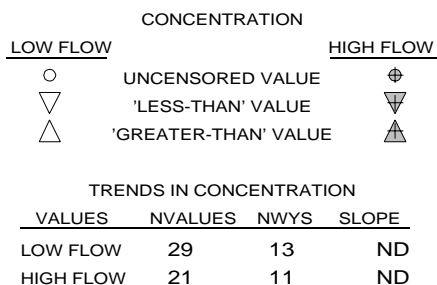
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



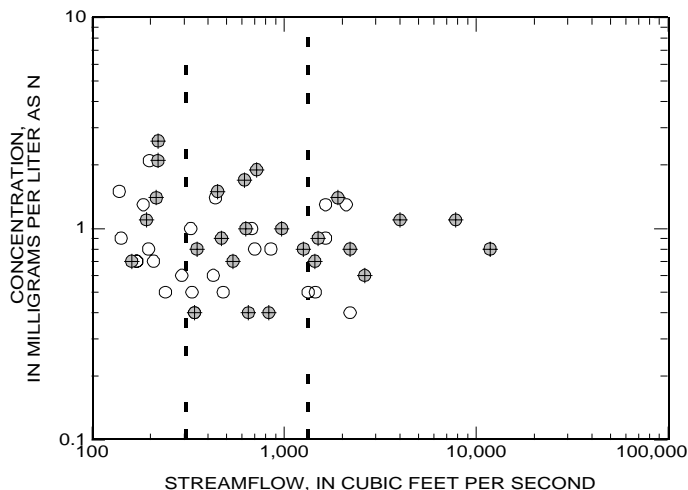
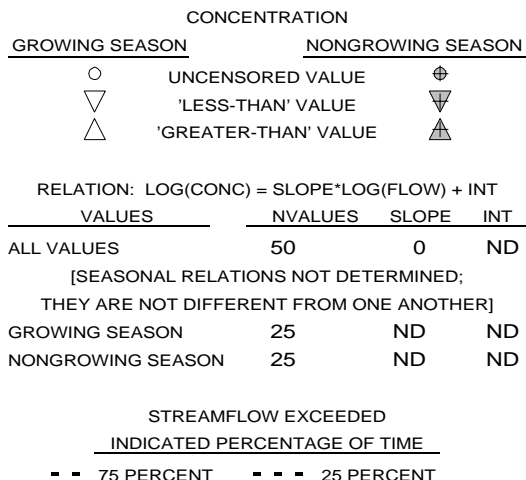
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



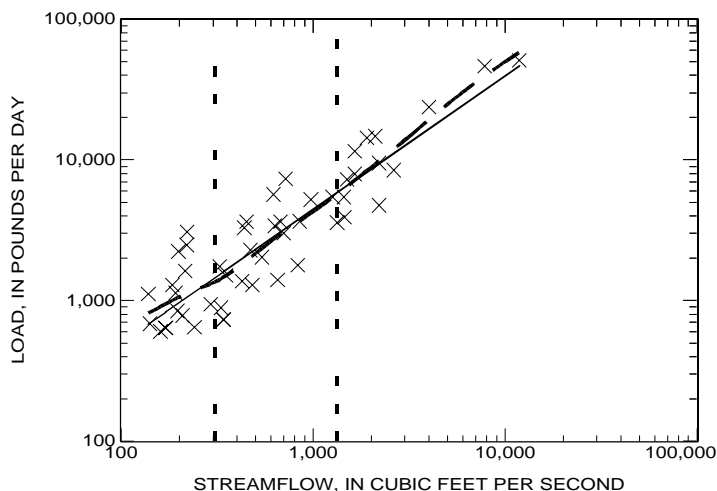
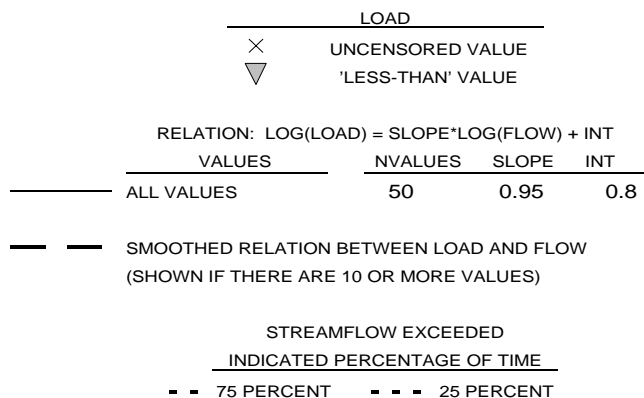
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

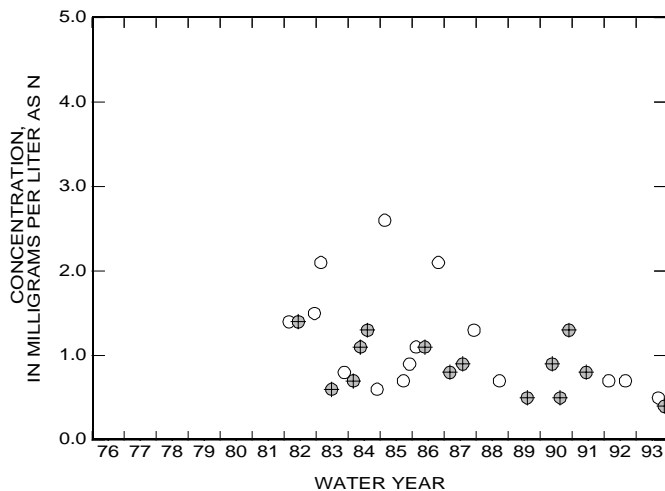
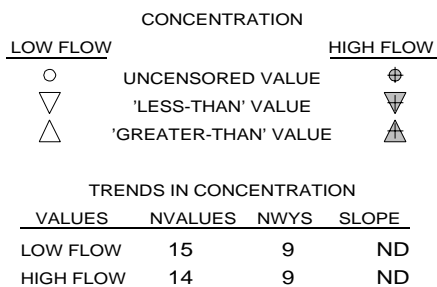
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



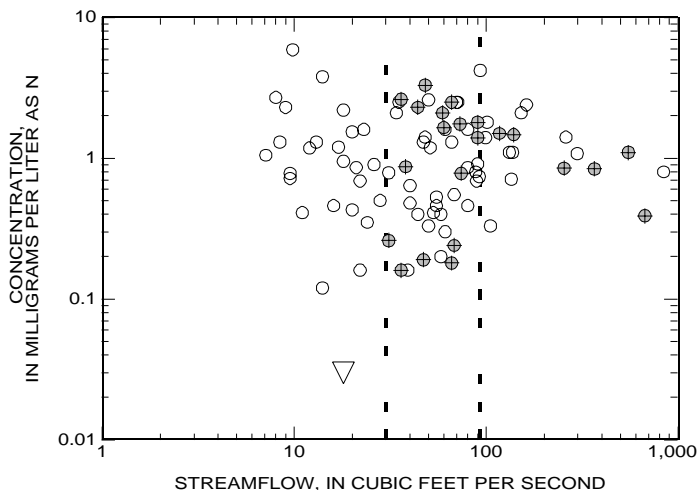
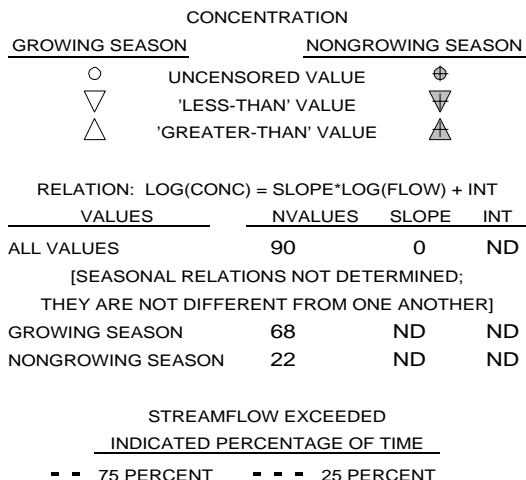
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



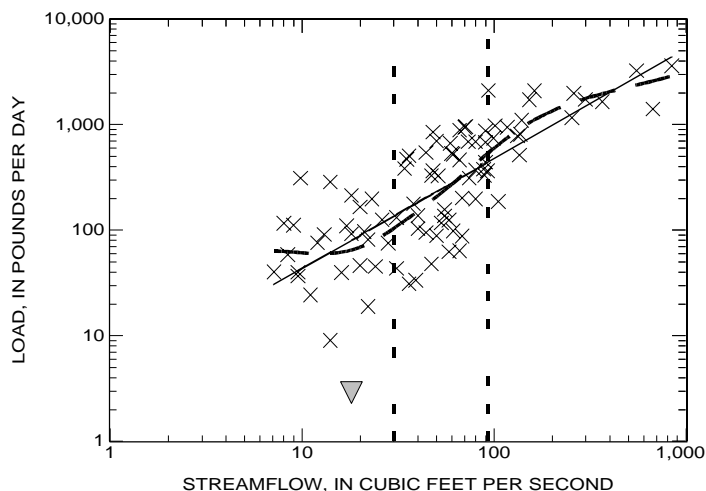
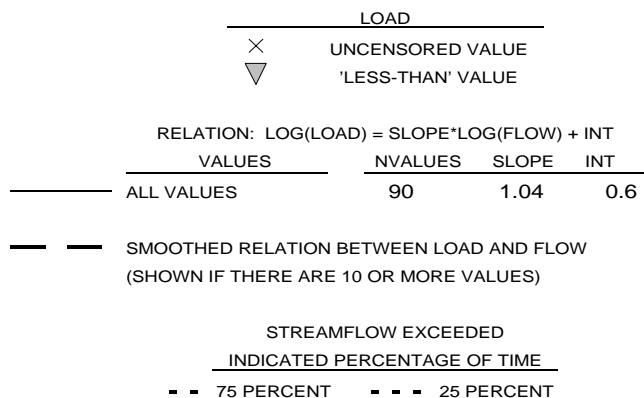
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

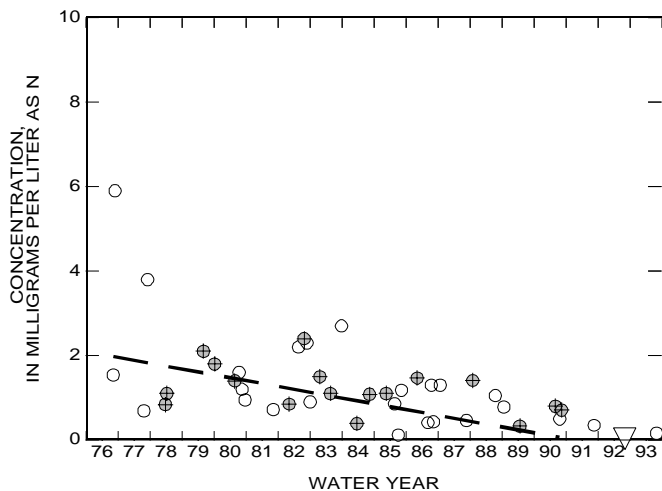
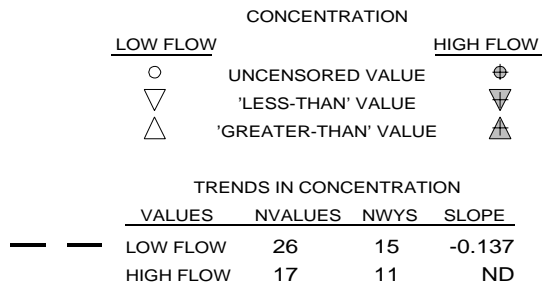
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



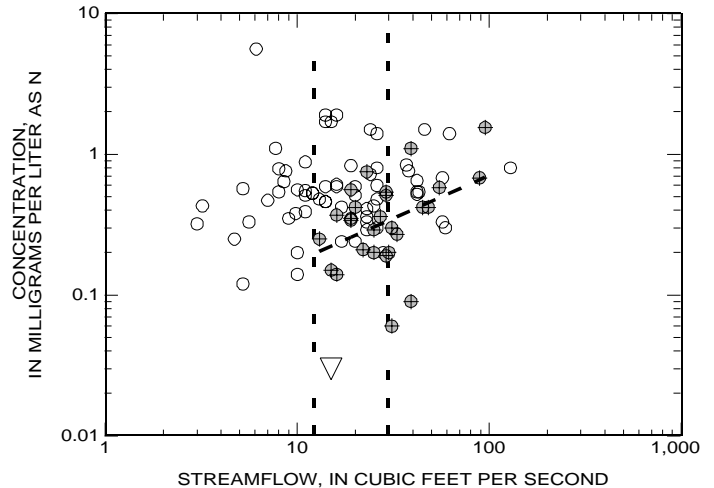
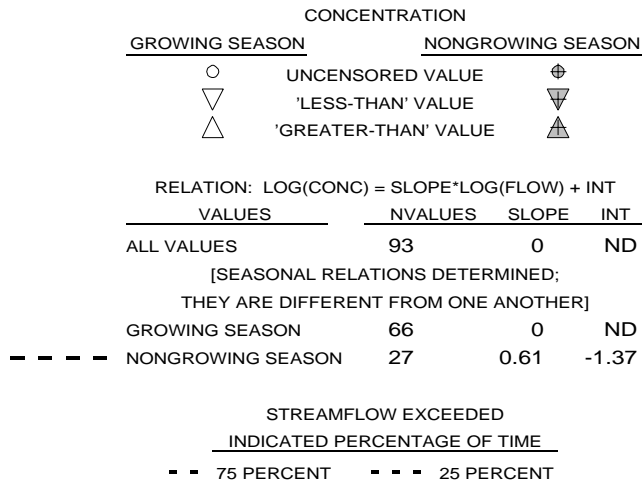
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



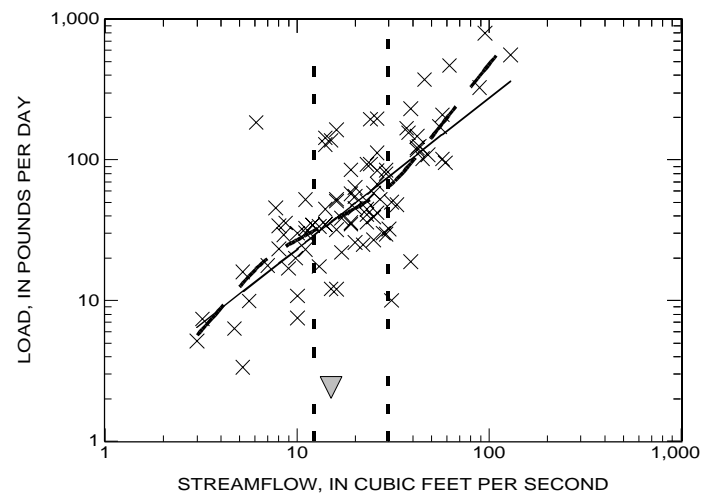
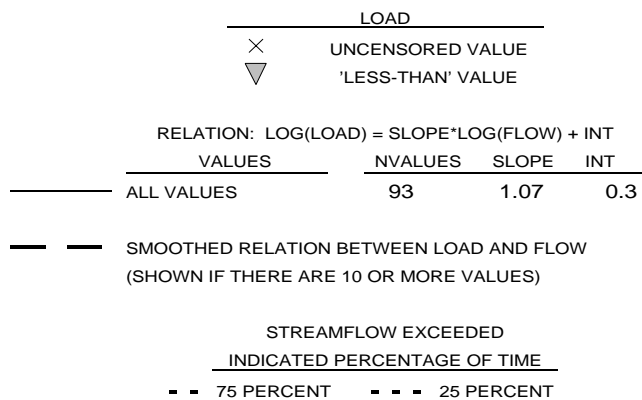
APPENDIX 14. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA PLUS ORGANIC NITROGEN
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

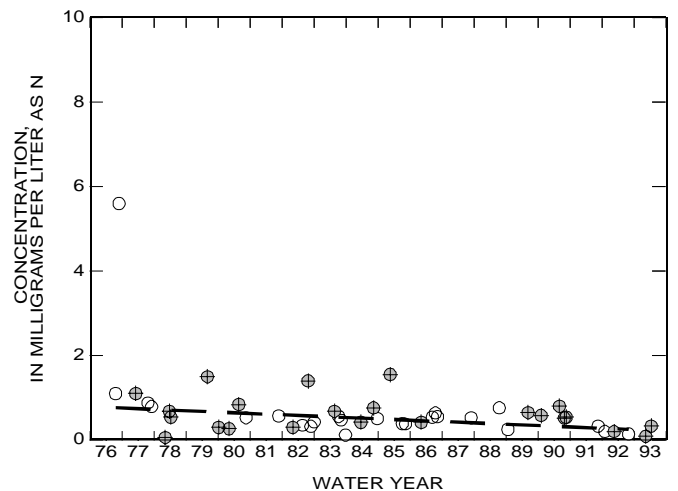
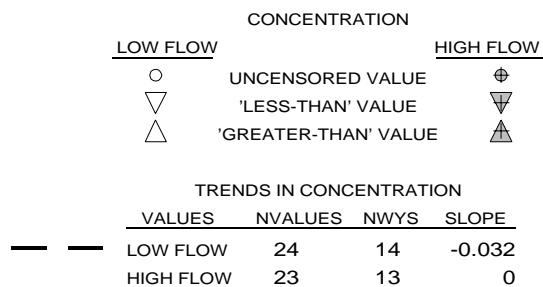
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



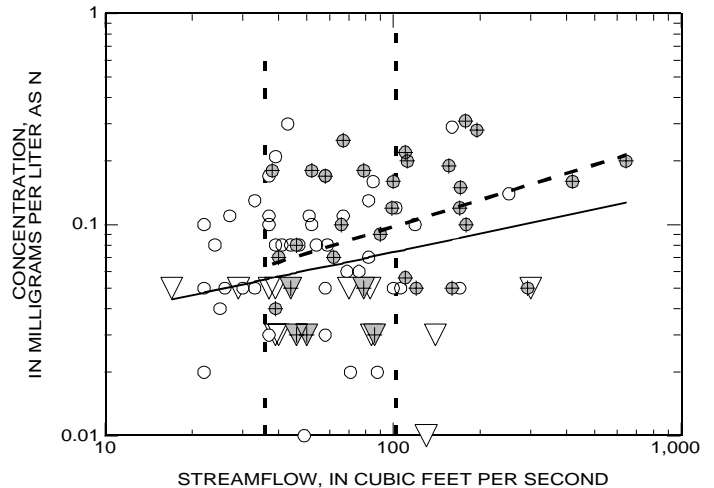
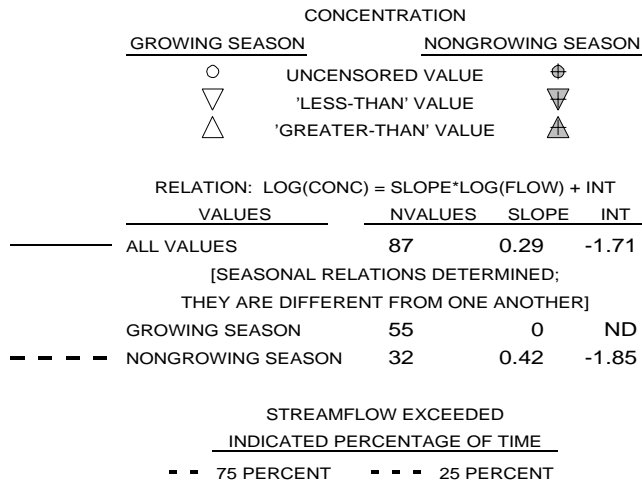
Appendix 15 - Total ammonia

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

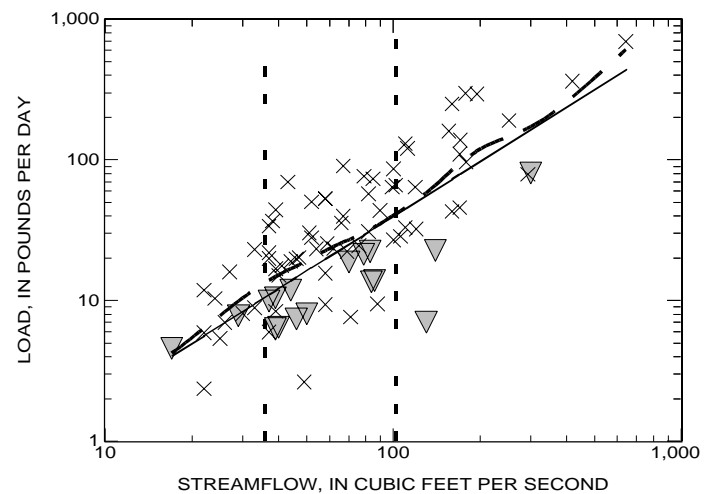
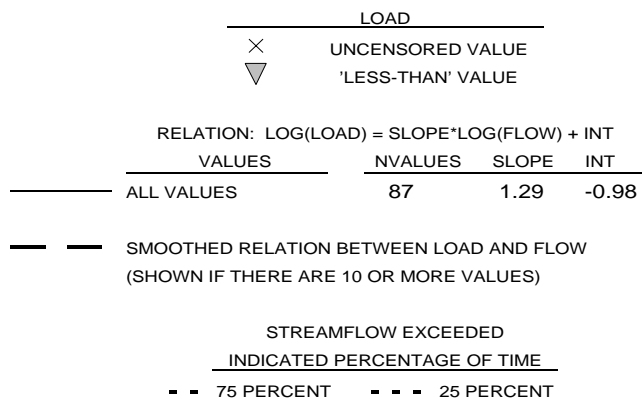
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

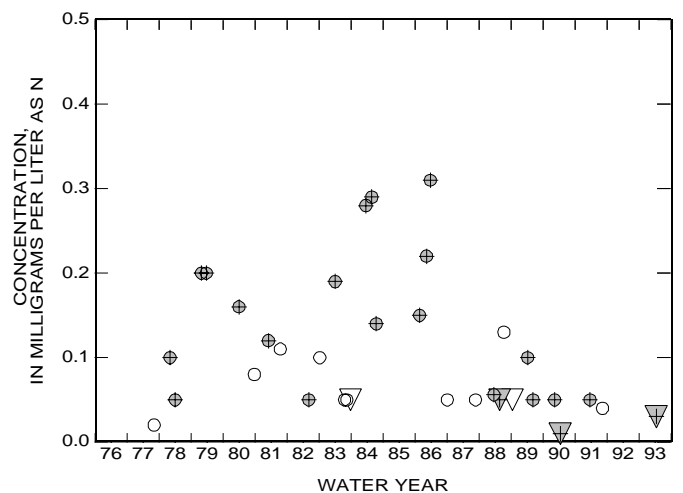
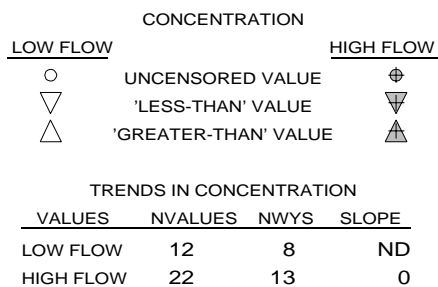
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



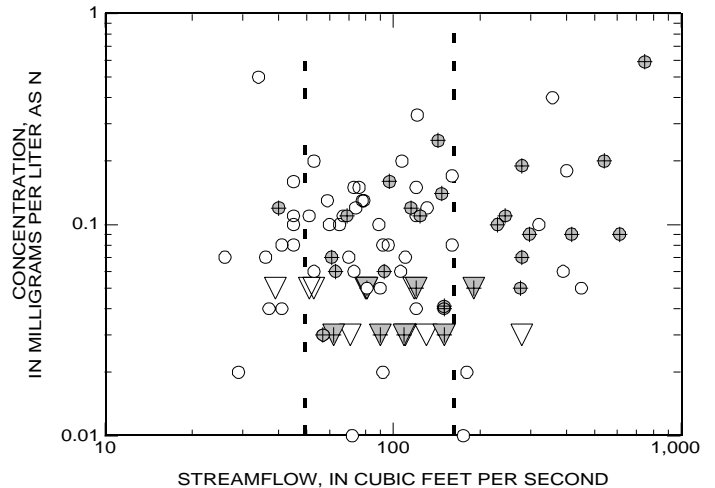
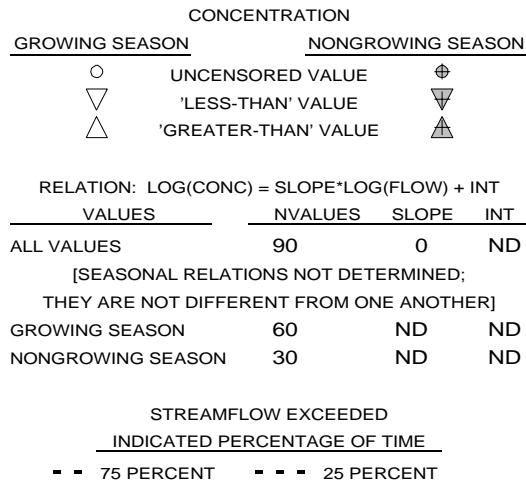
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



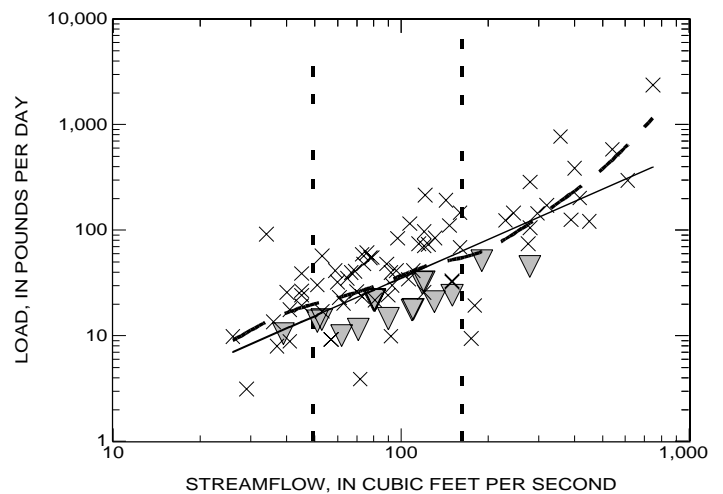
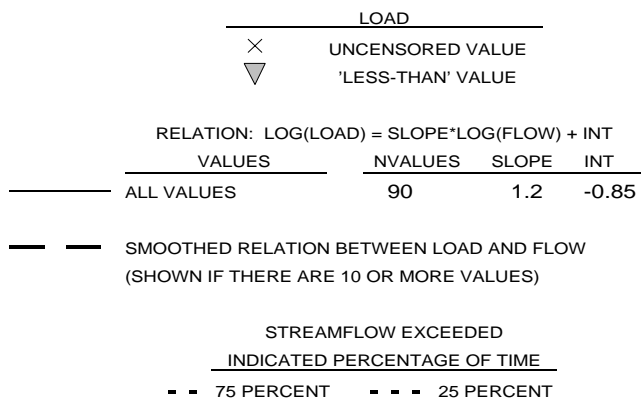
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

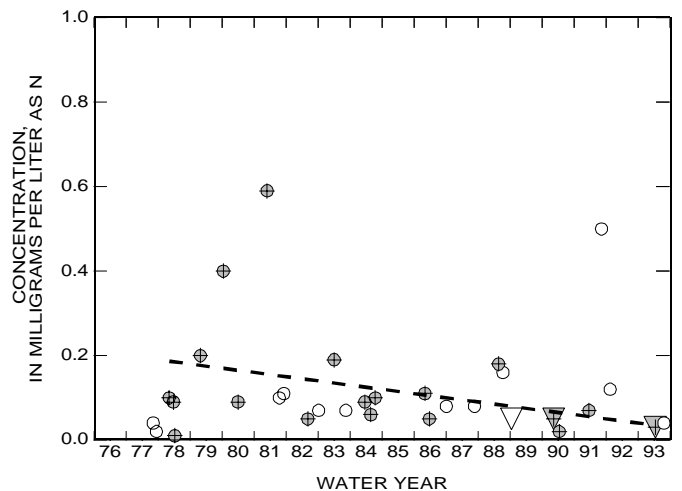
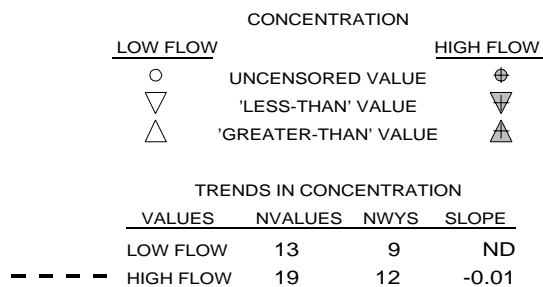
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



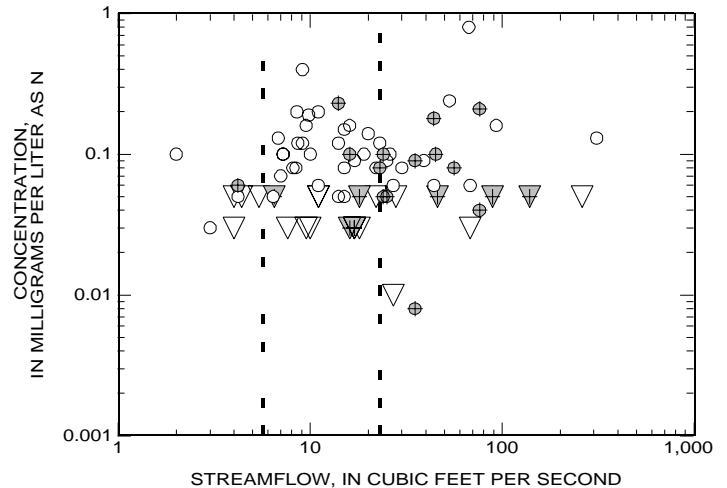
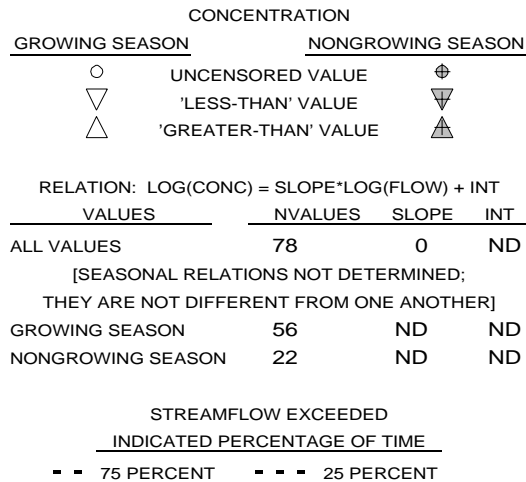
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



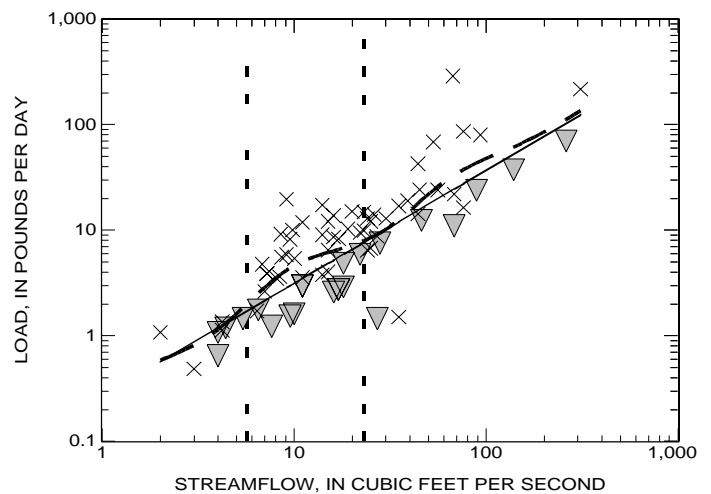
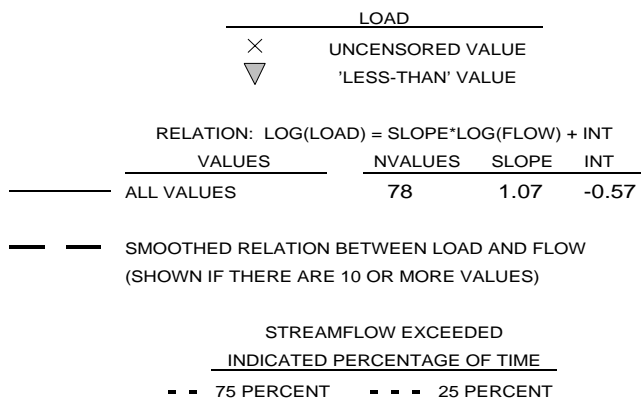
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

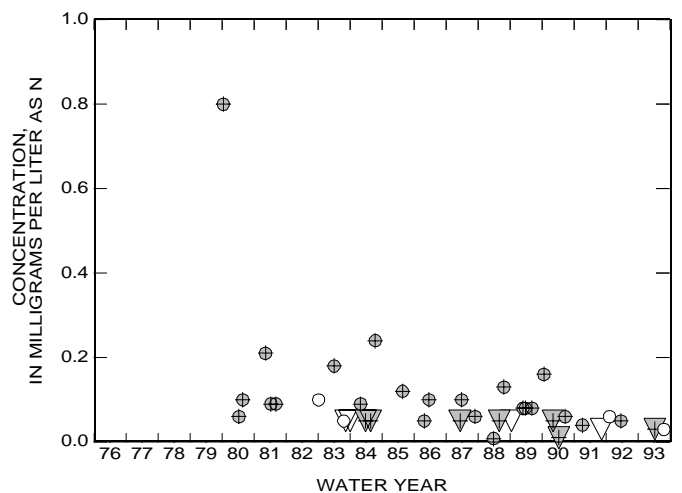
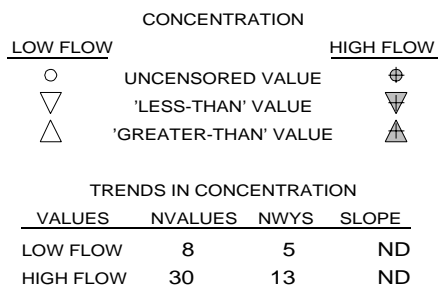
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



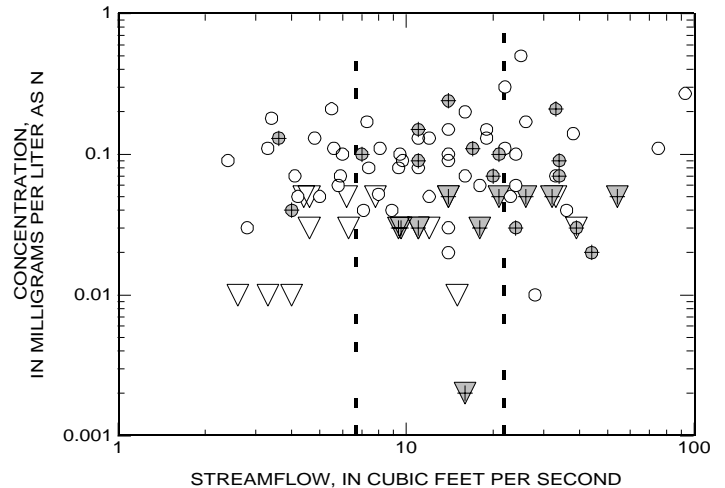
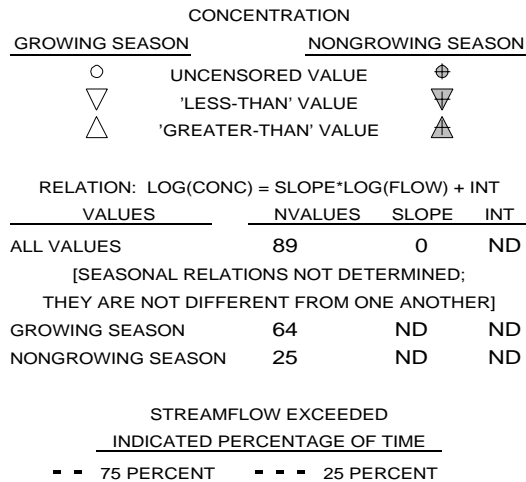
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



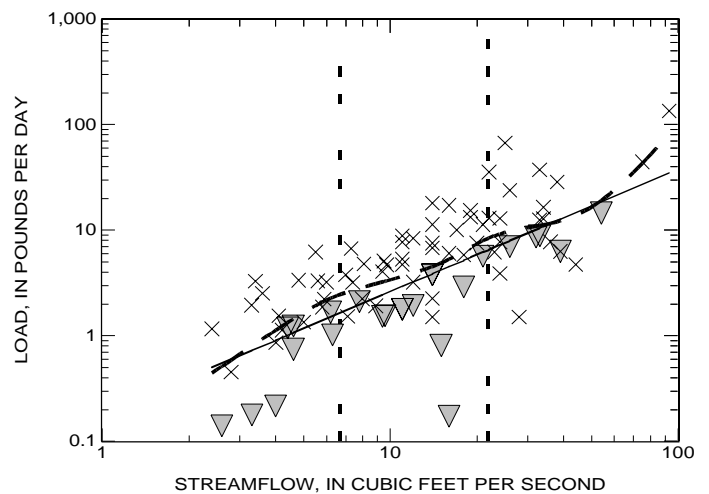
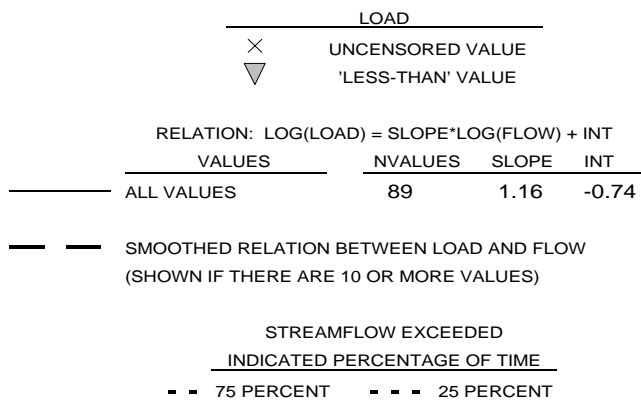
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

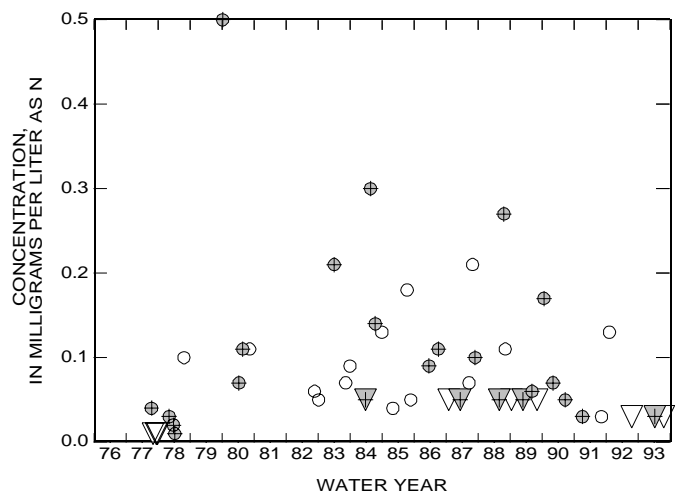
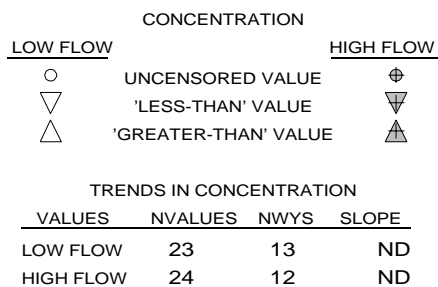
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



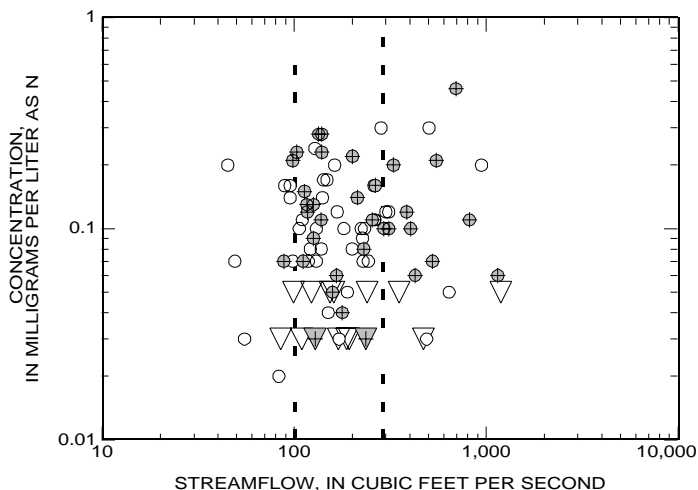
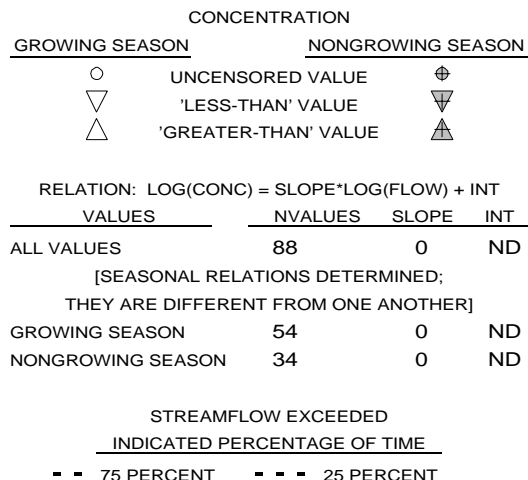
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



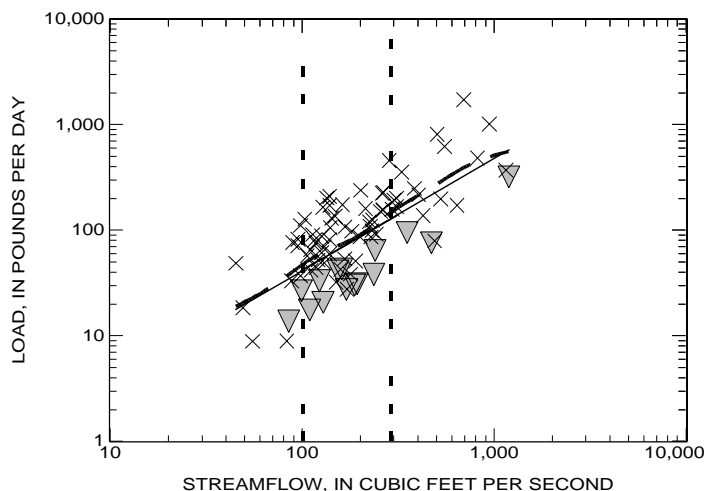
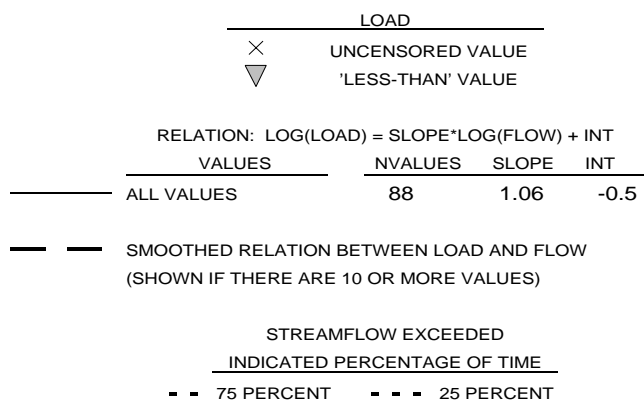
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

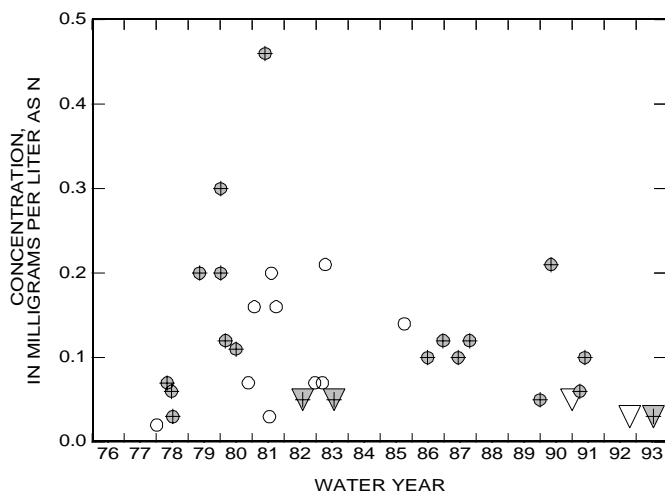
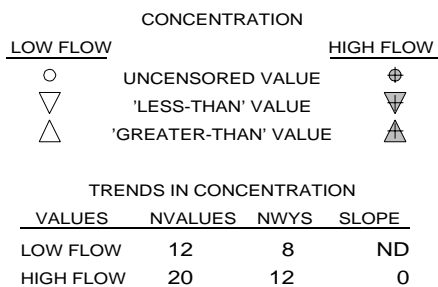
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



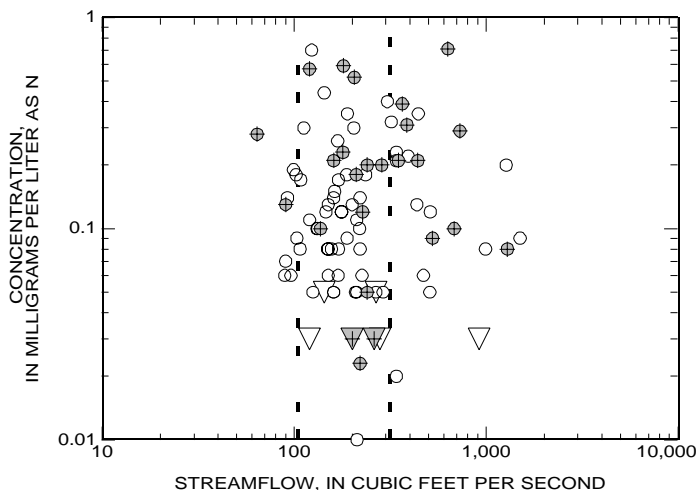
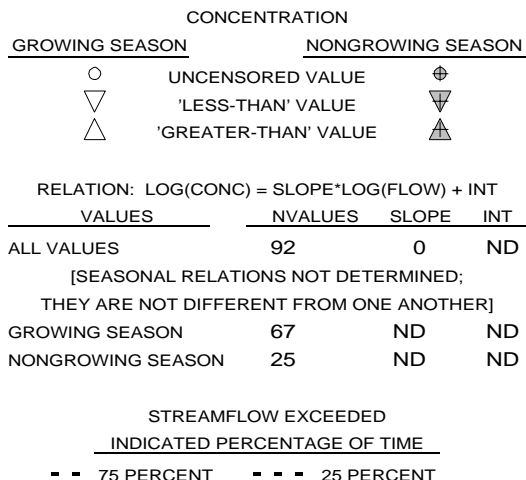
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



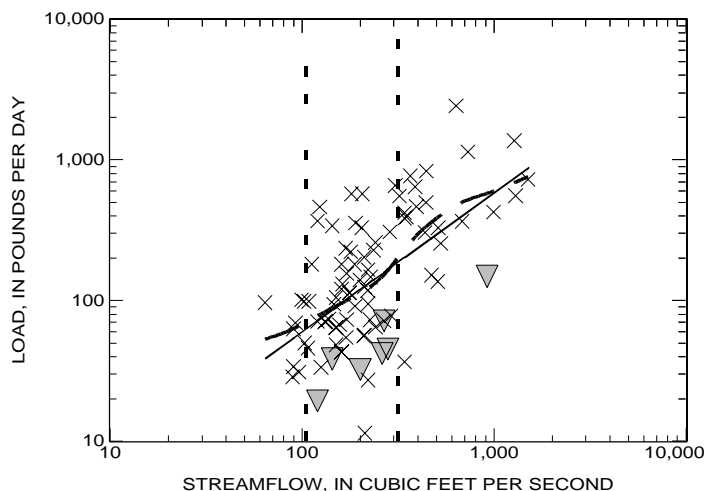
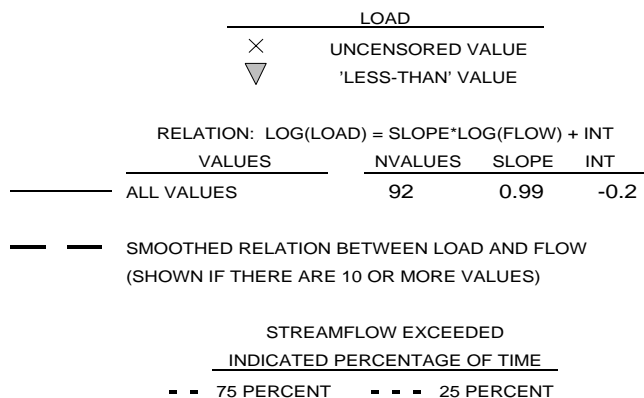
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

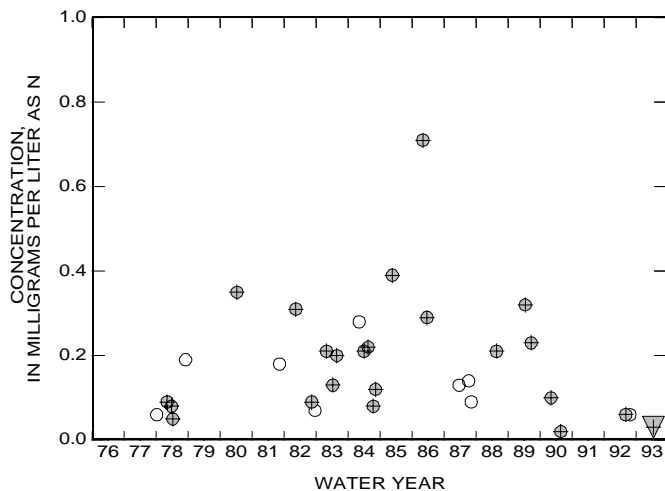
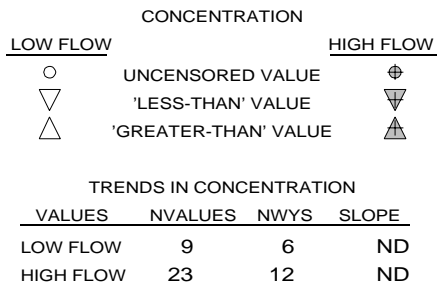
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



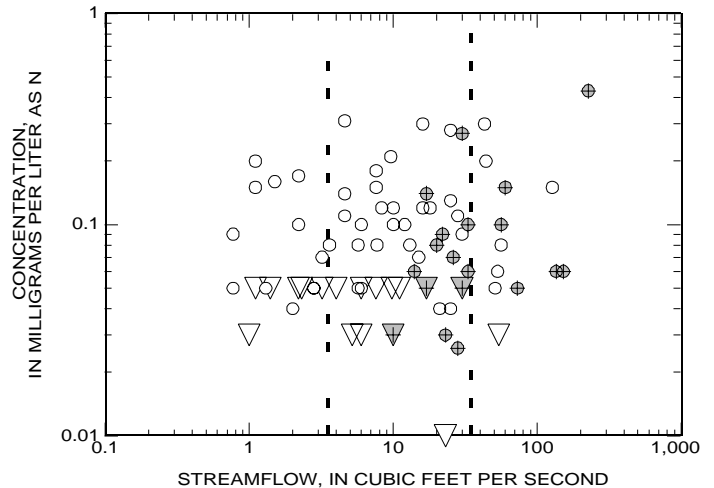
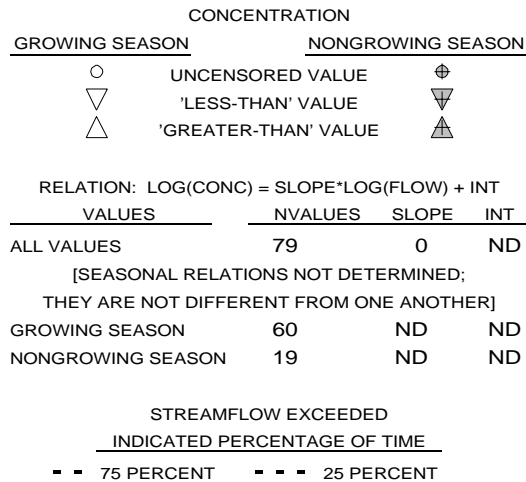
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



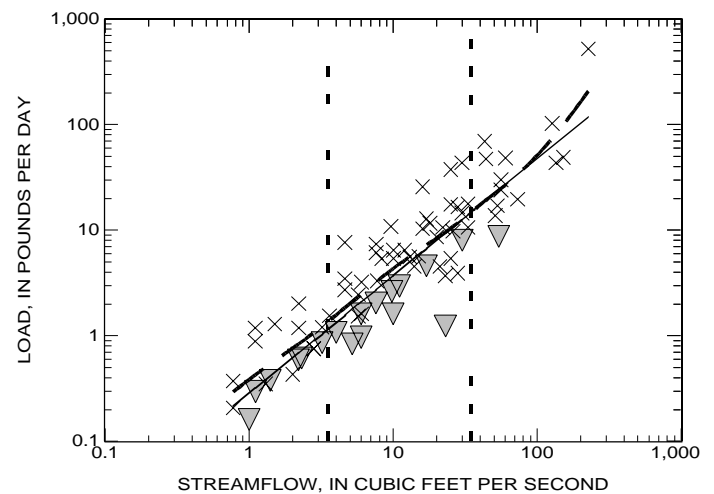
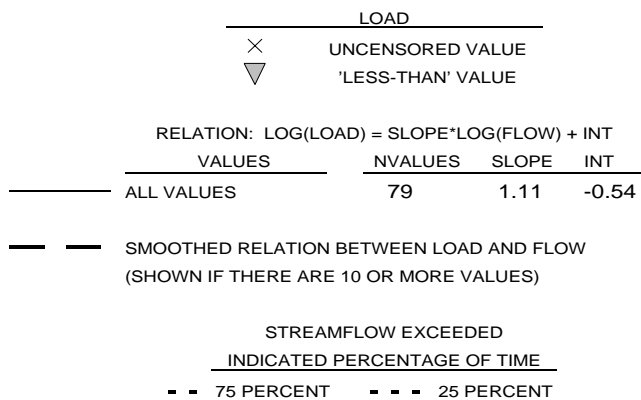
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

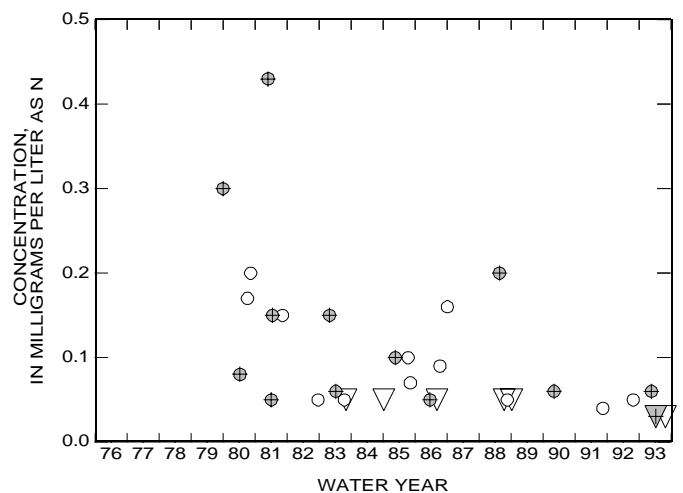
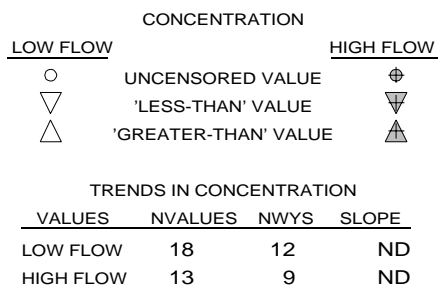
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



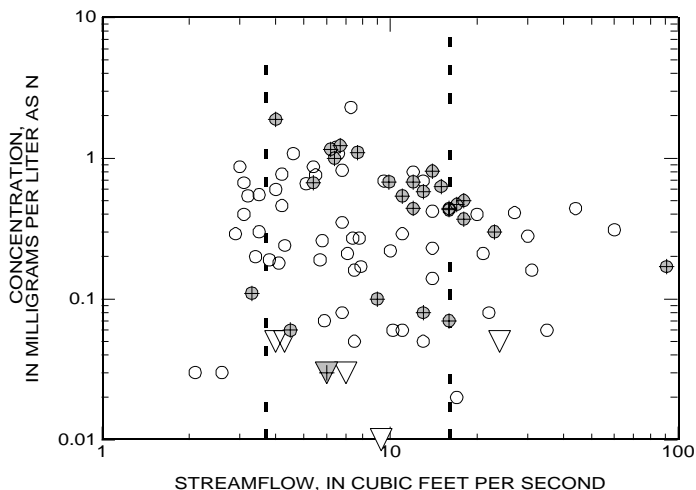
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL AMMONIA
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

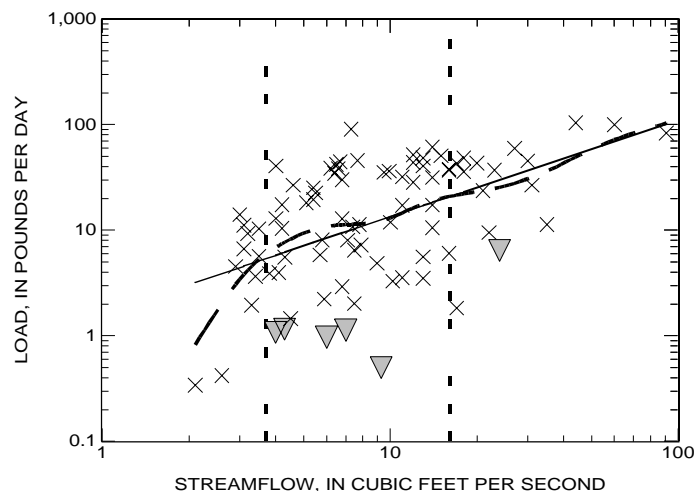
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	87	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	61	ND	ND
NONGROWING SEASON	26	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



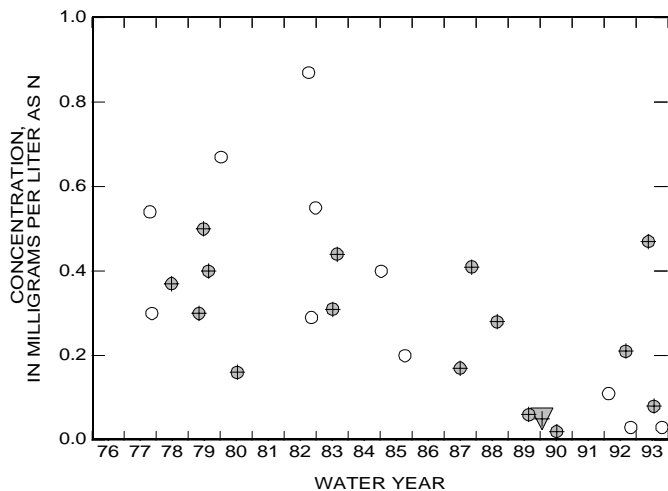
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	87	0.92	0.21
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

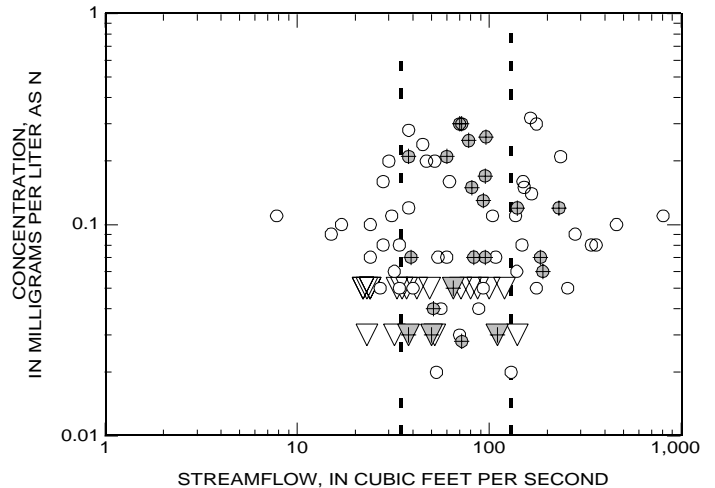
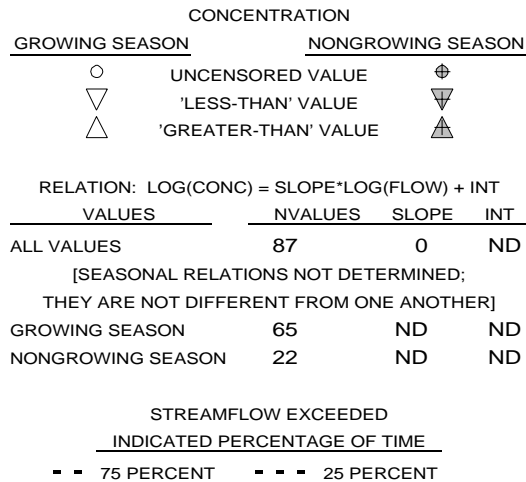
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	11	6	ND
HIGH FLOW	16	10	ND



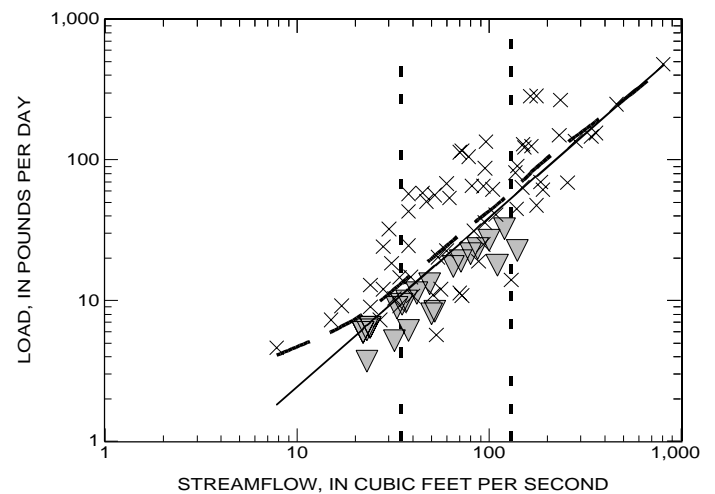
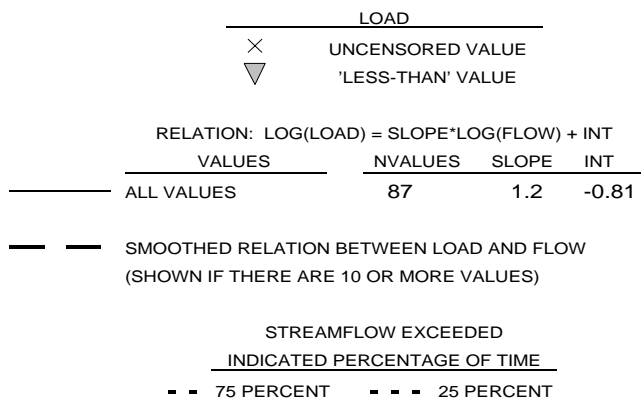
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

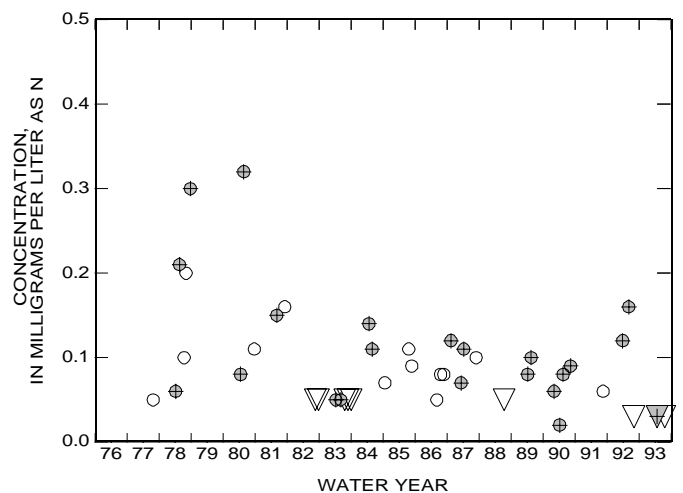
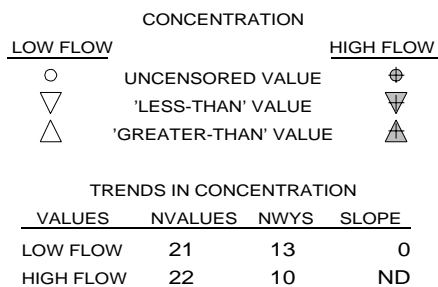
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



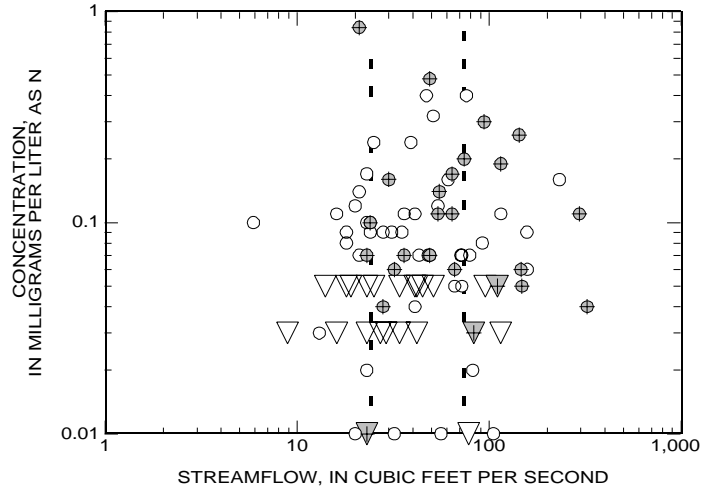
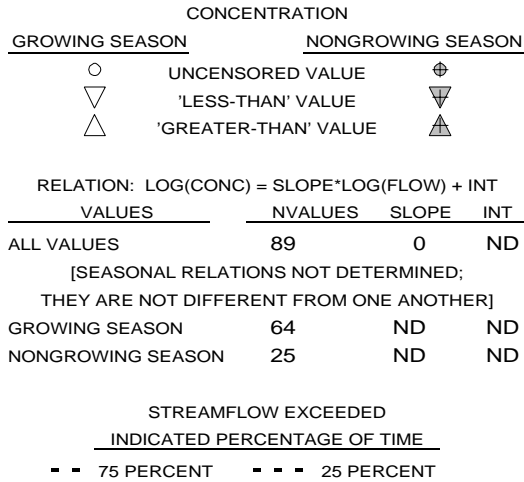
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



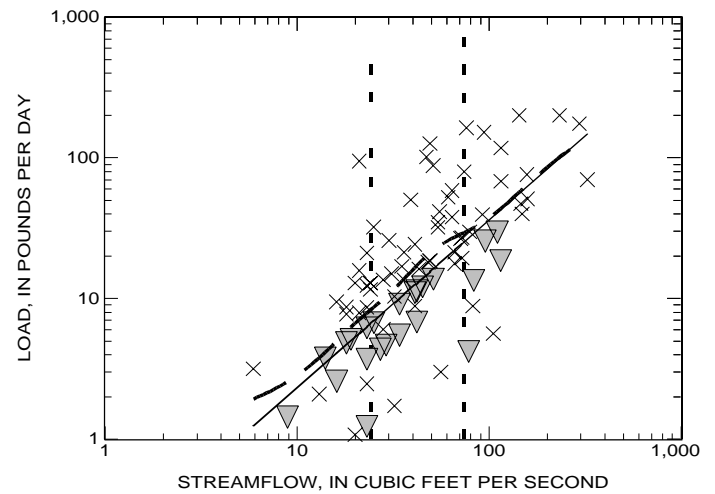
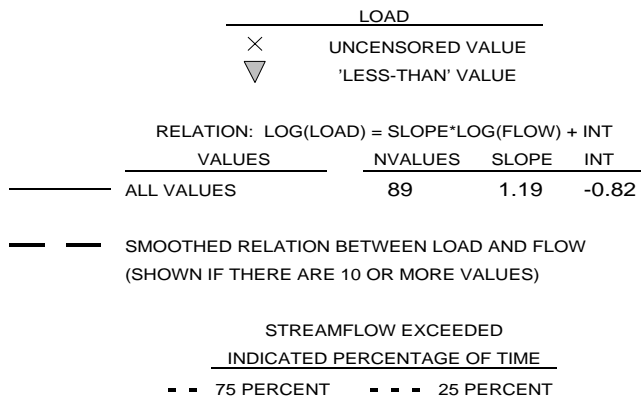
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

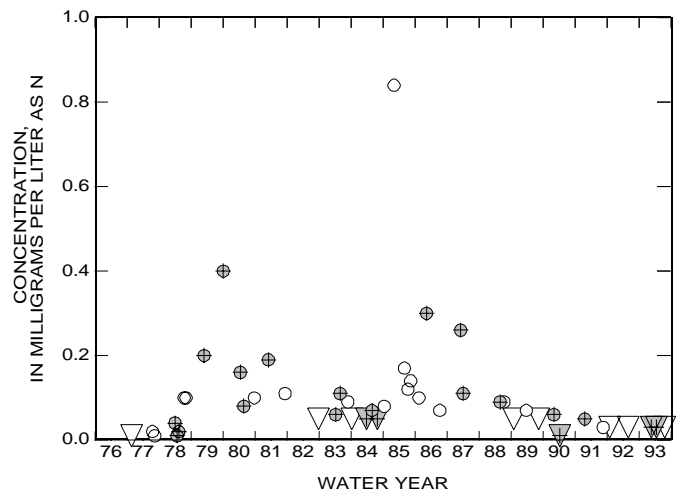
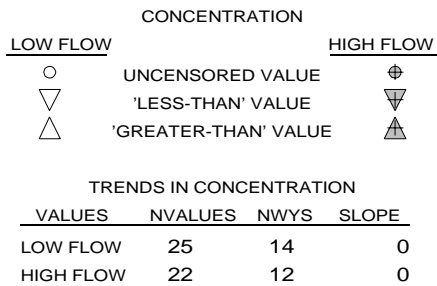
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



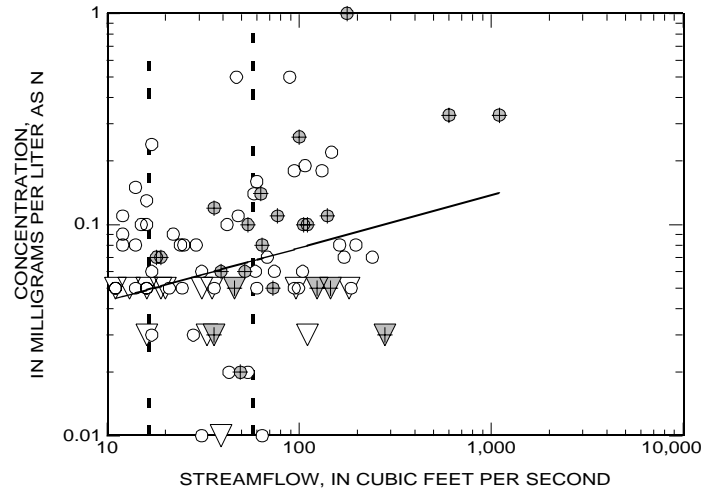
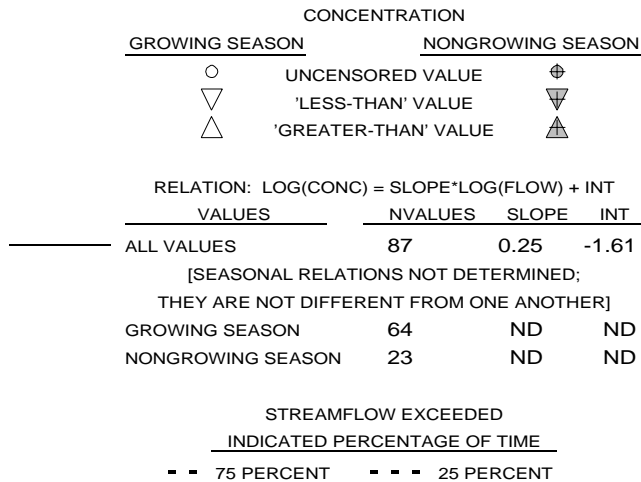
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



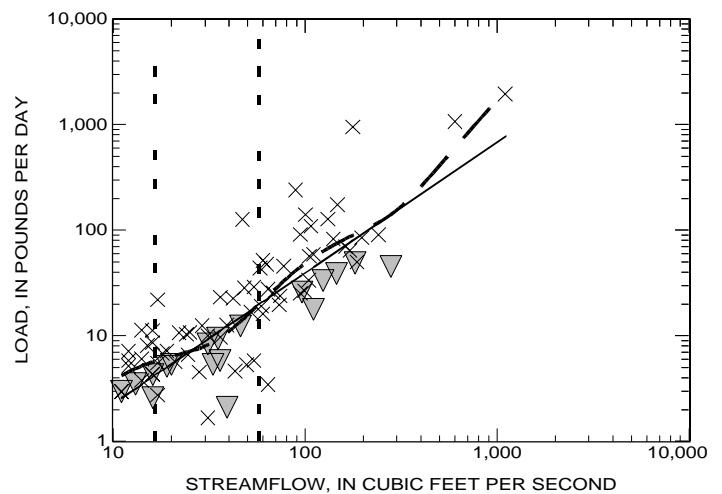
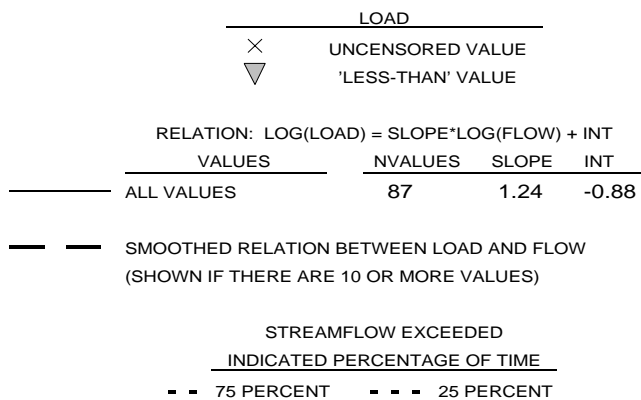
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

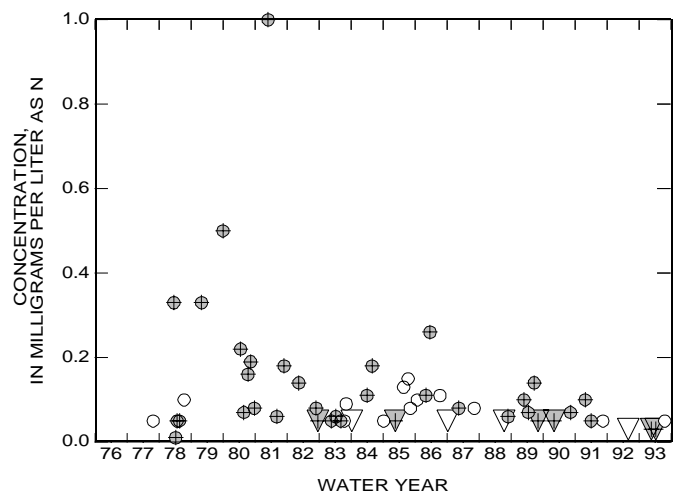
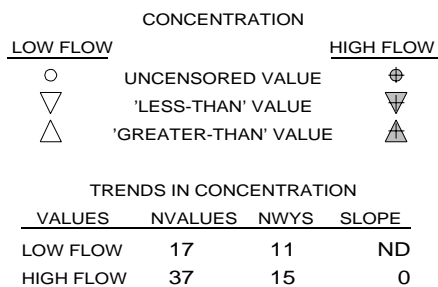
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



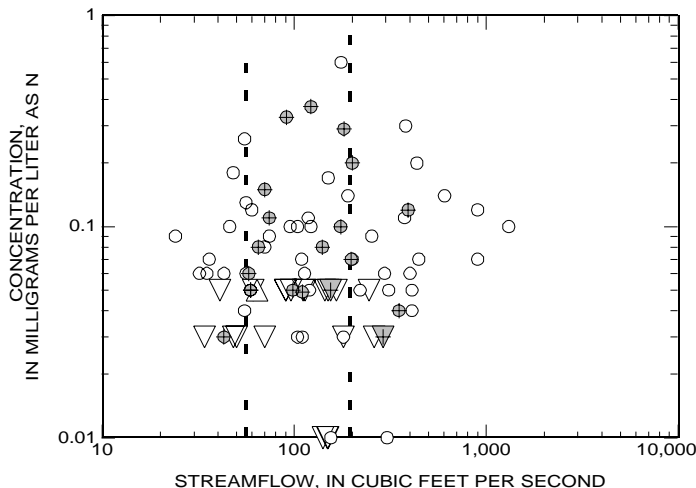
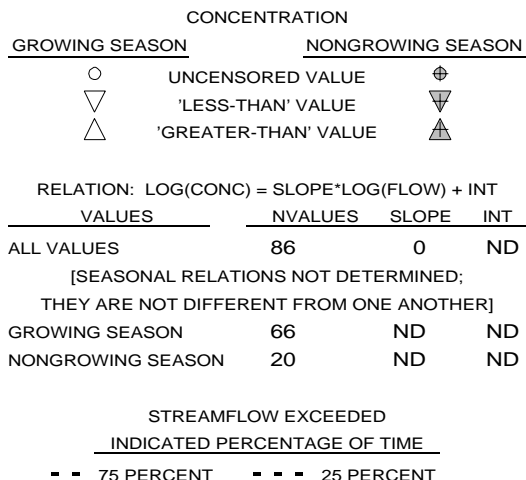
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



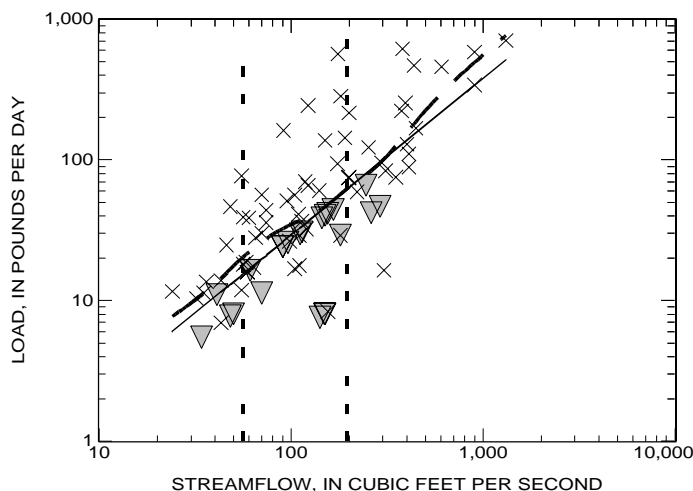
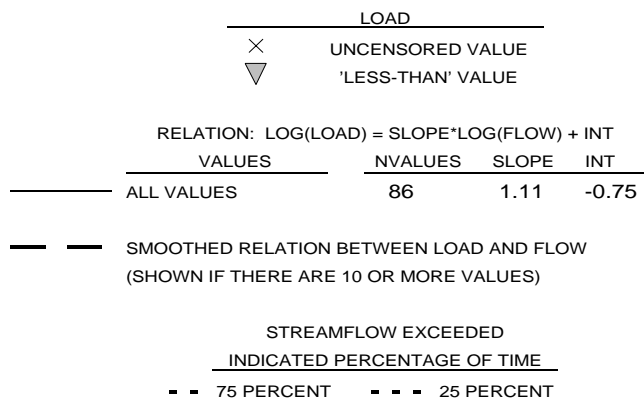
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

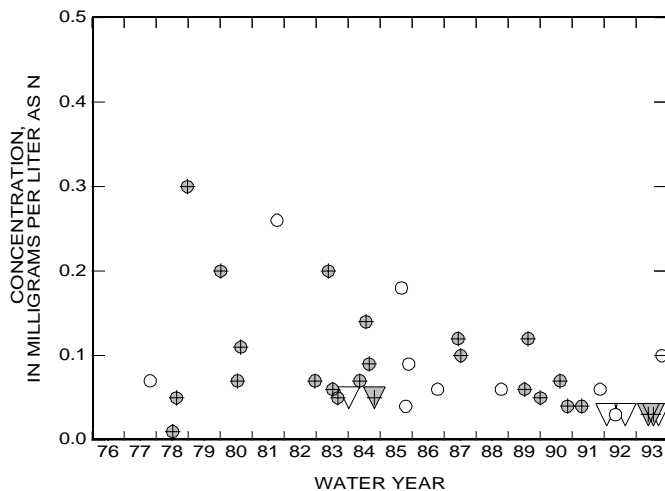
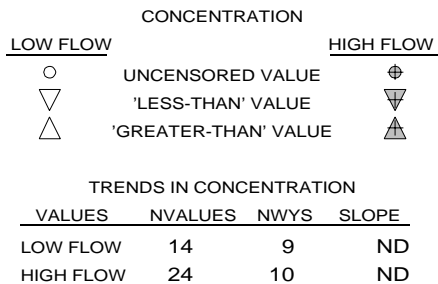
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



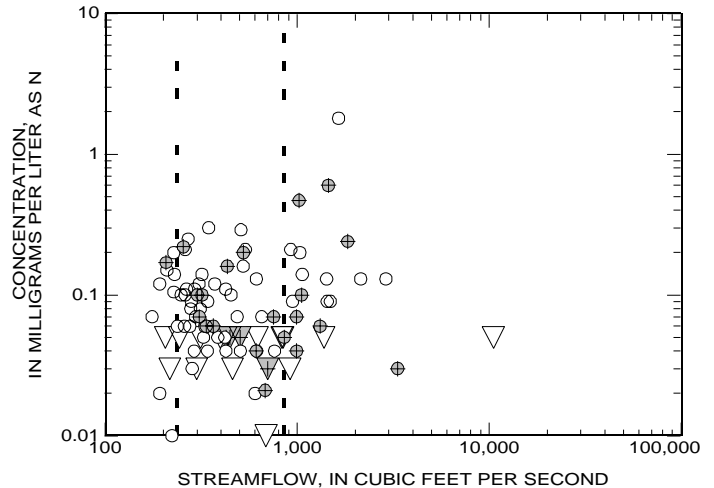
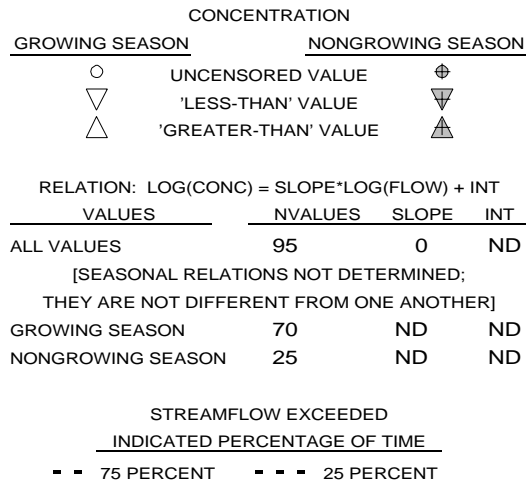
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



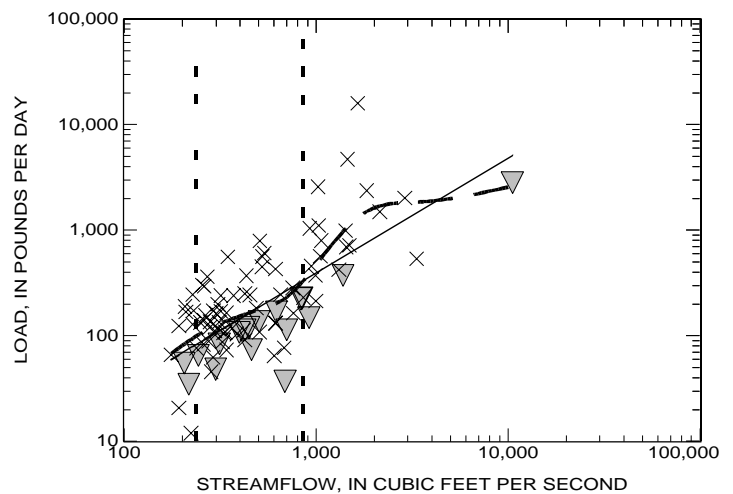
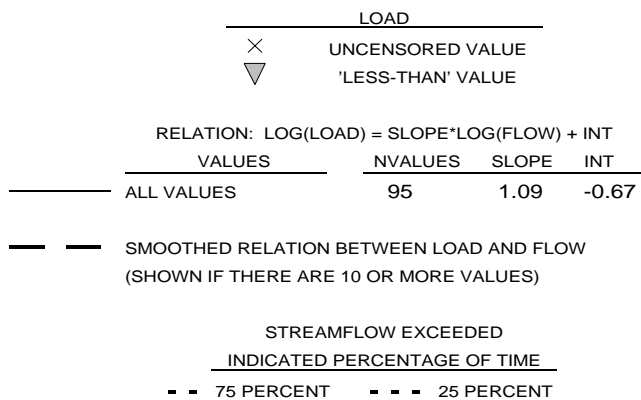
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

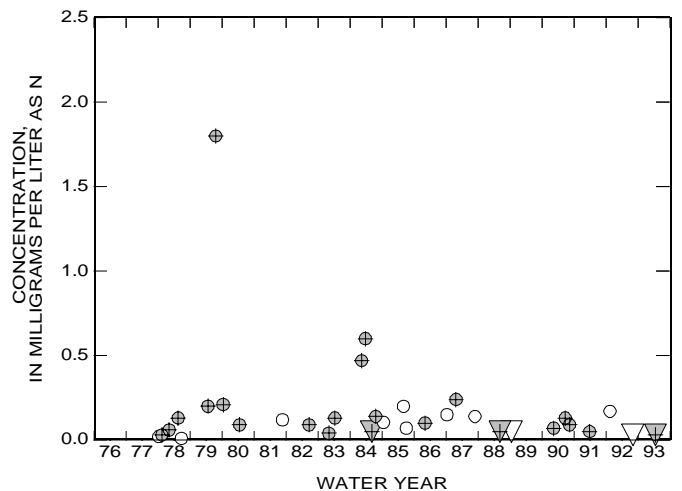
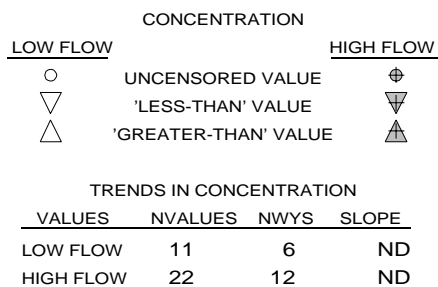
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



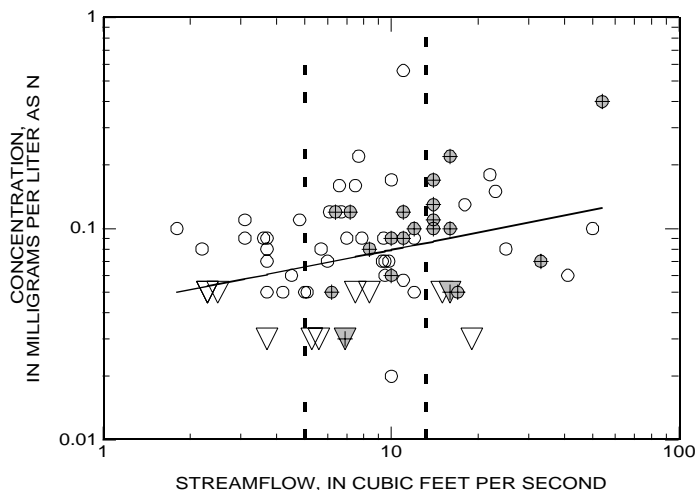
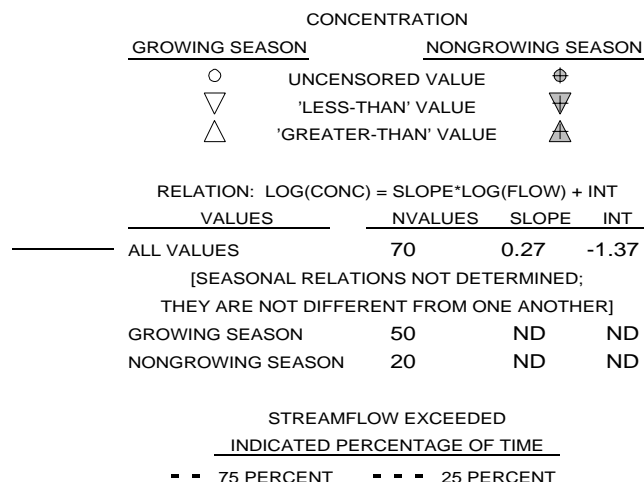
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



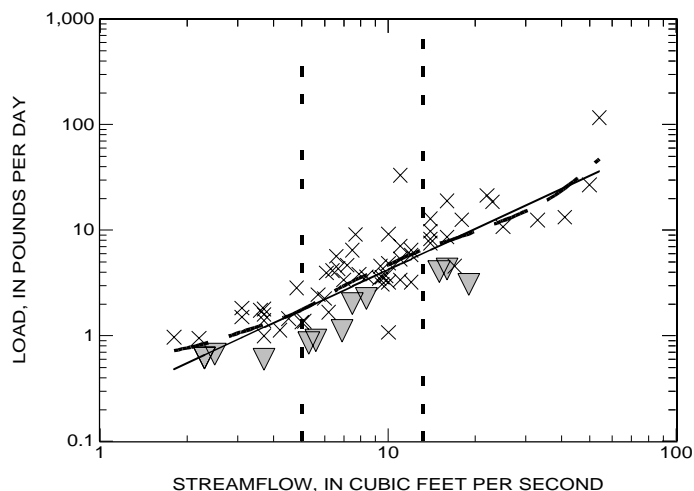
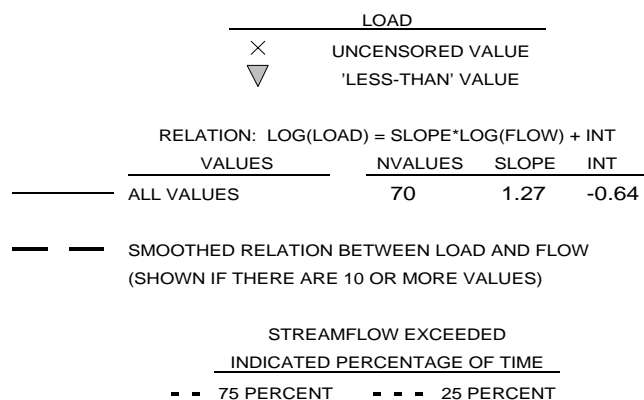
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

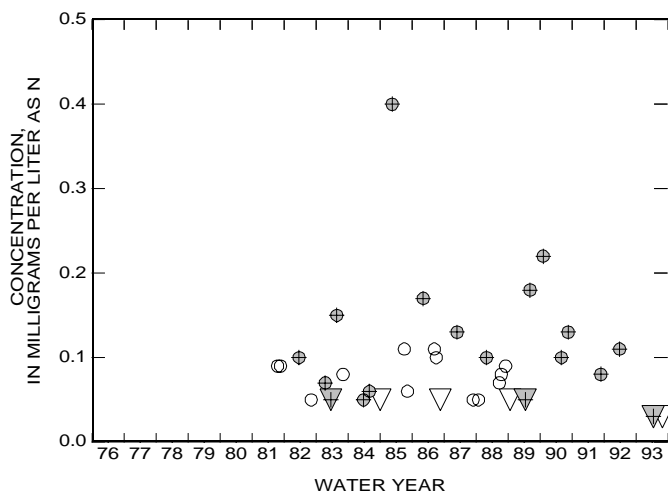
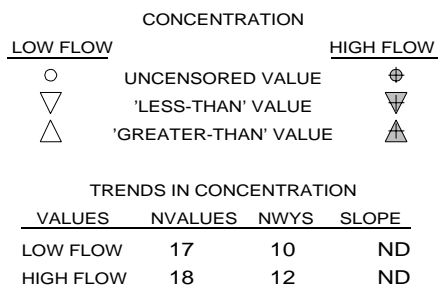
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



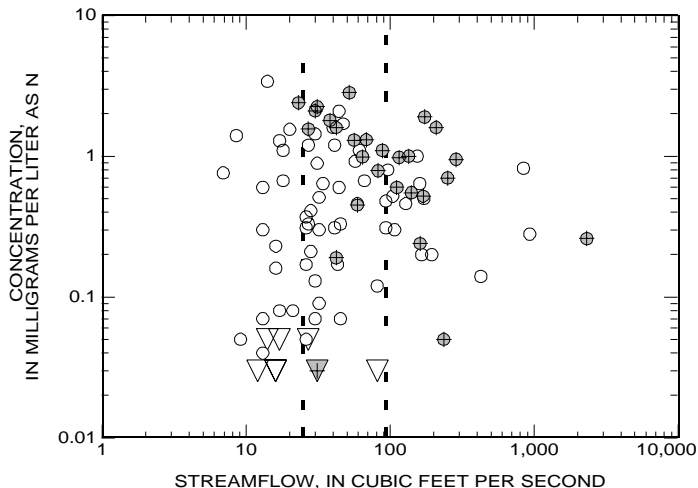
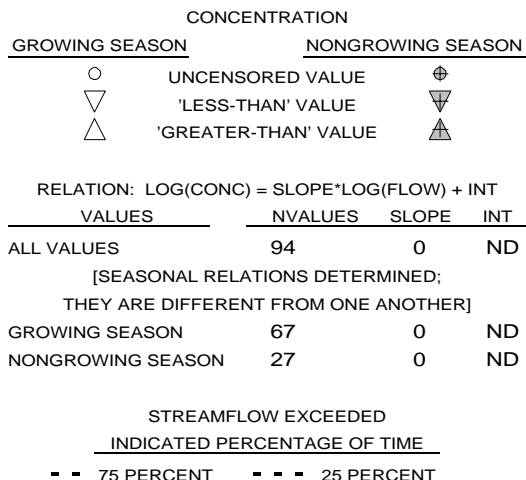
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



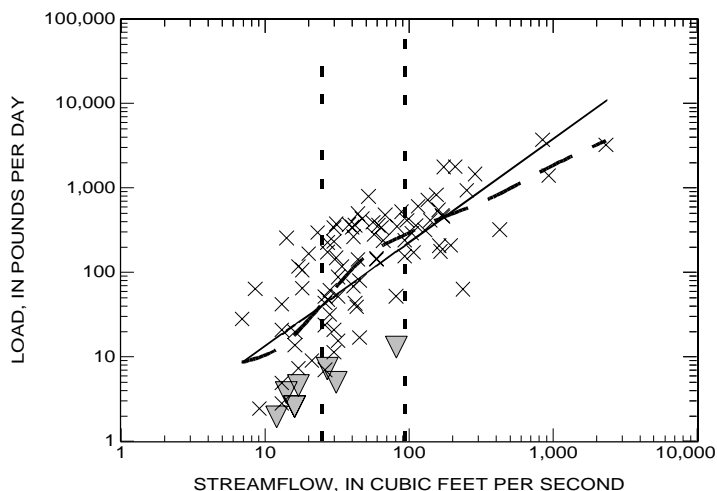
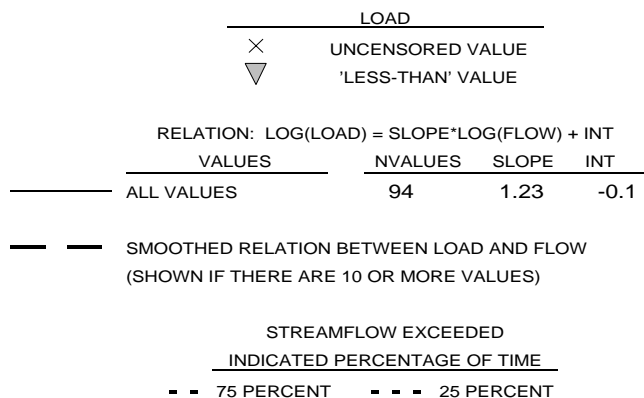
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

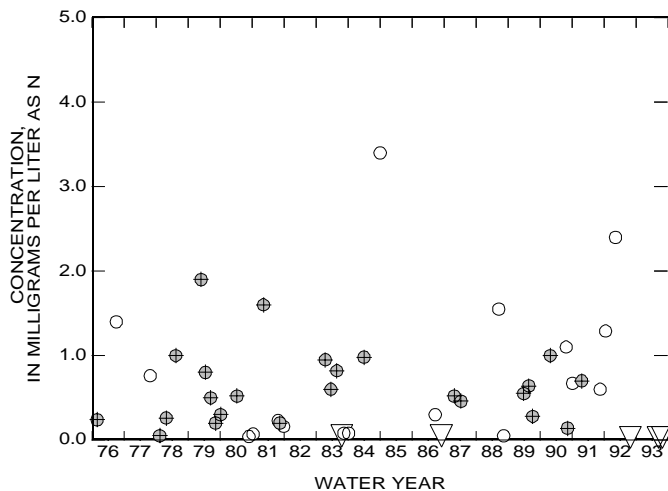
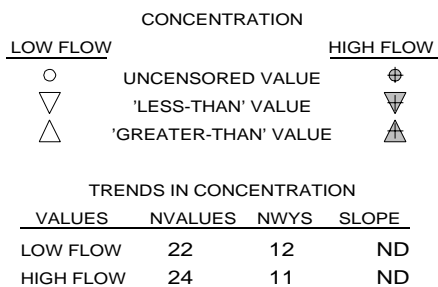
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



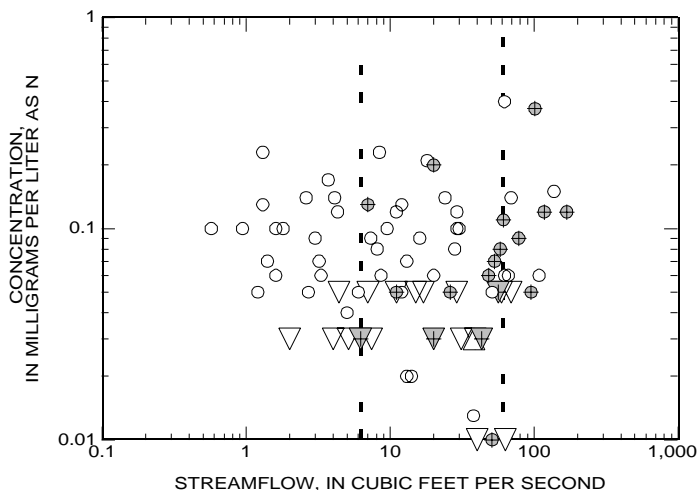
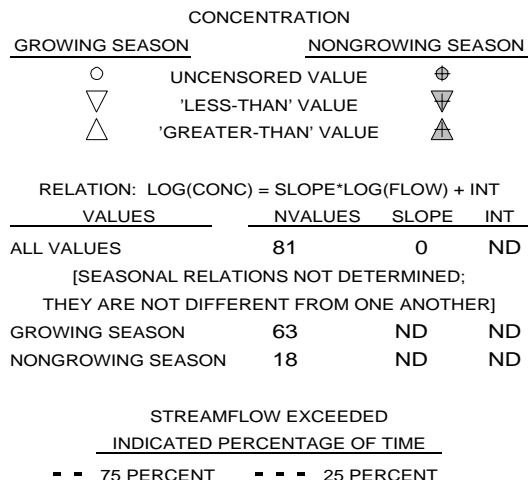
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



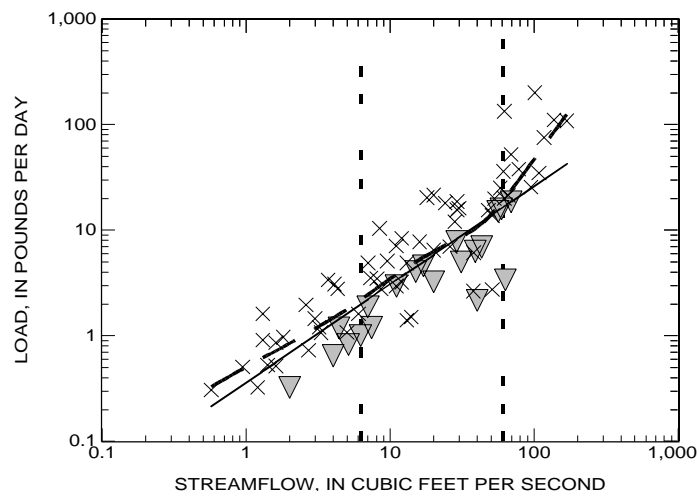
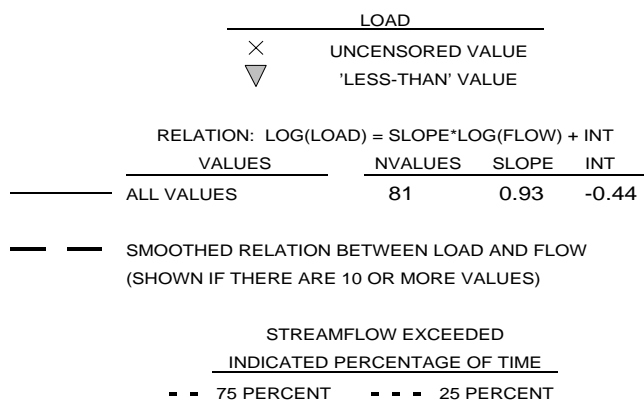
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

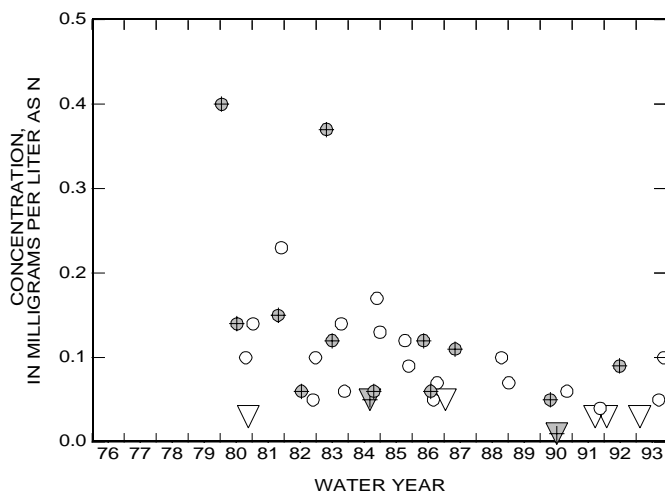
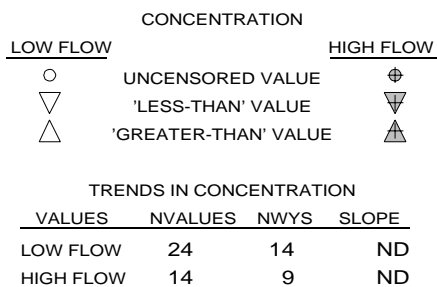
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



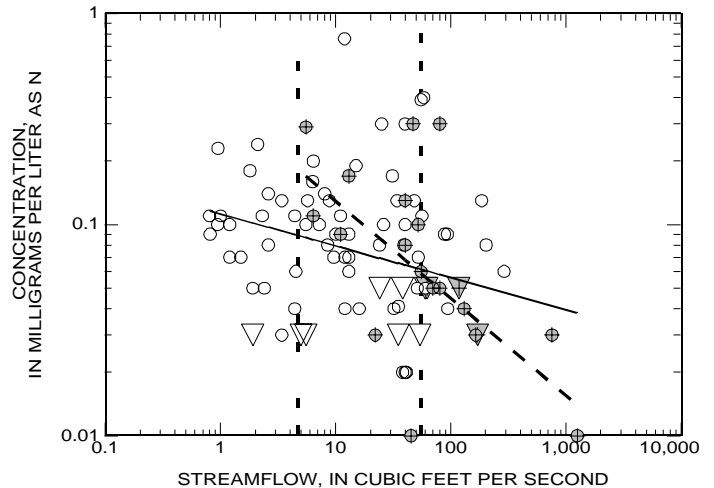
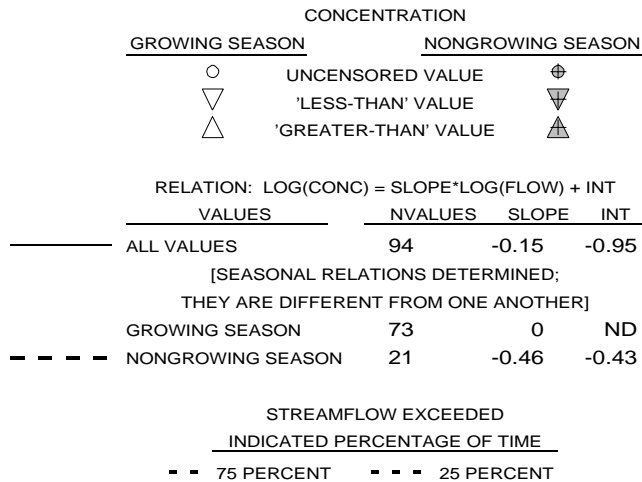
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



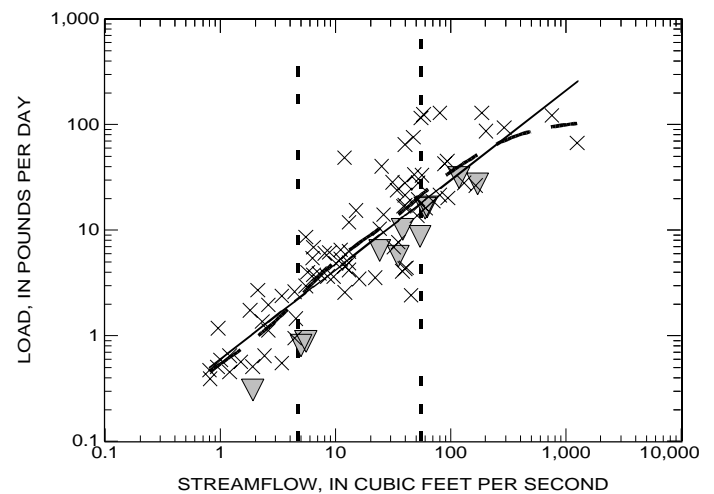
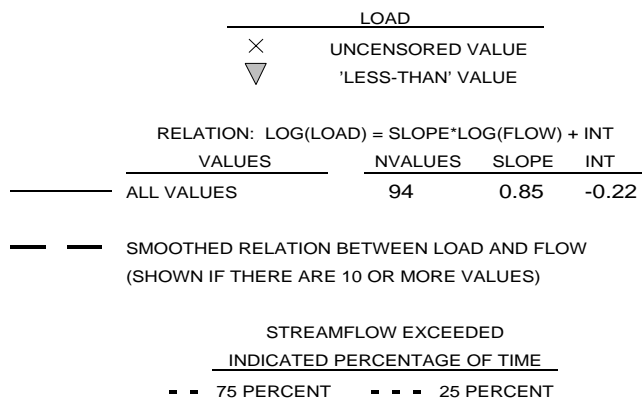
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

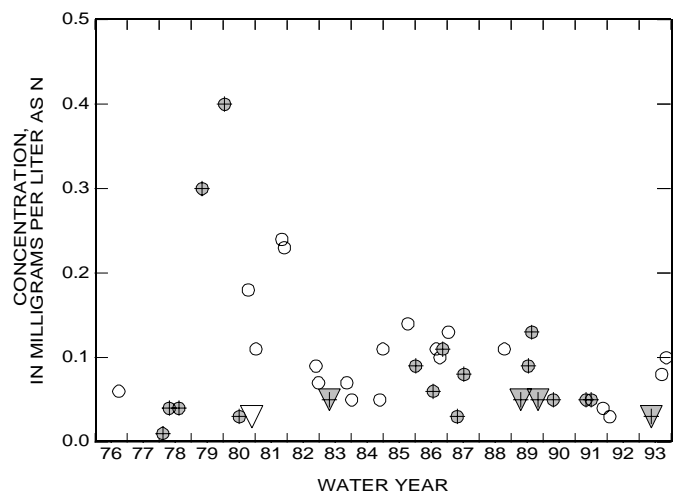
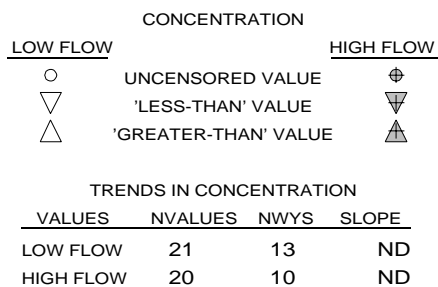
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



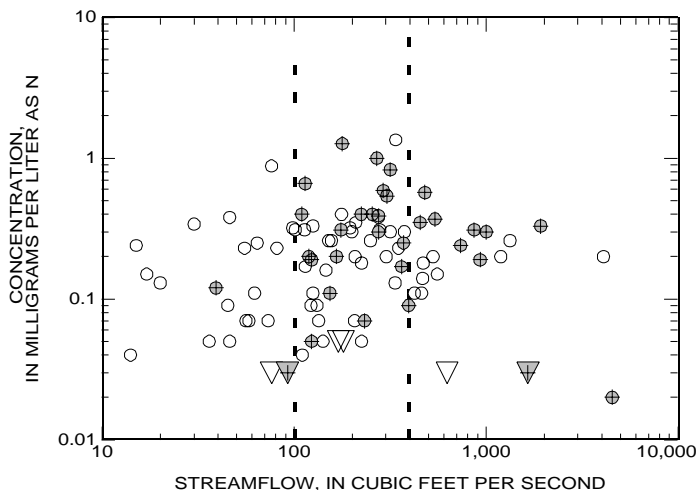
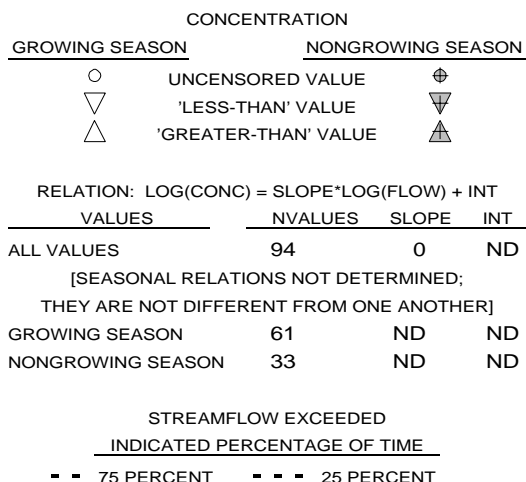
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



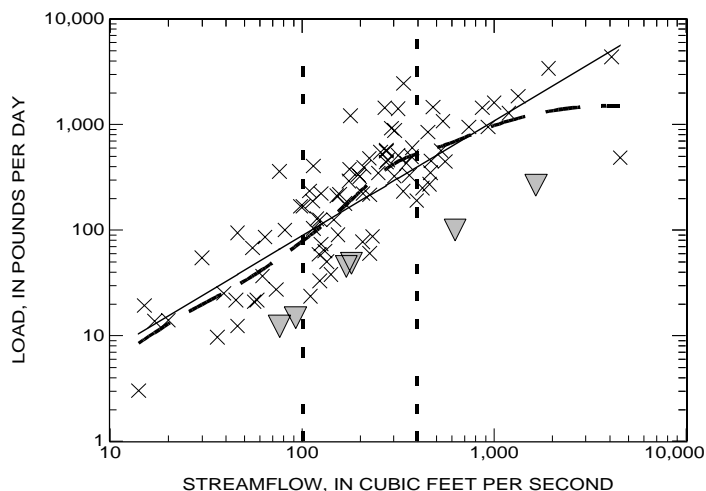
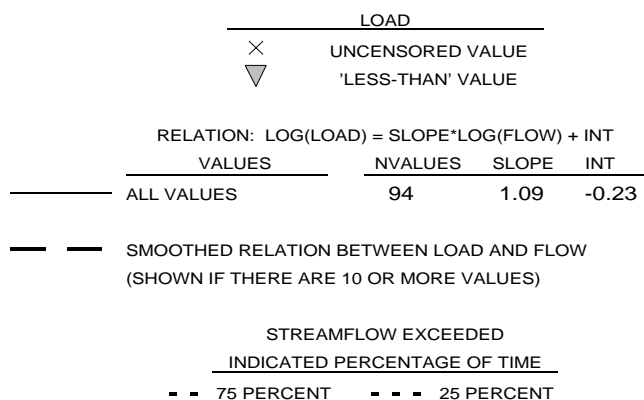
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

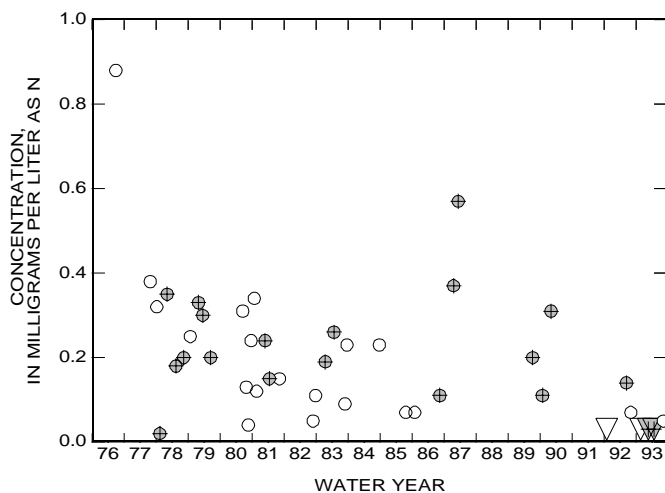
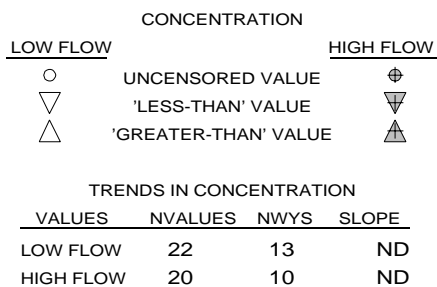
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



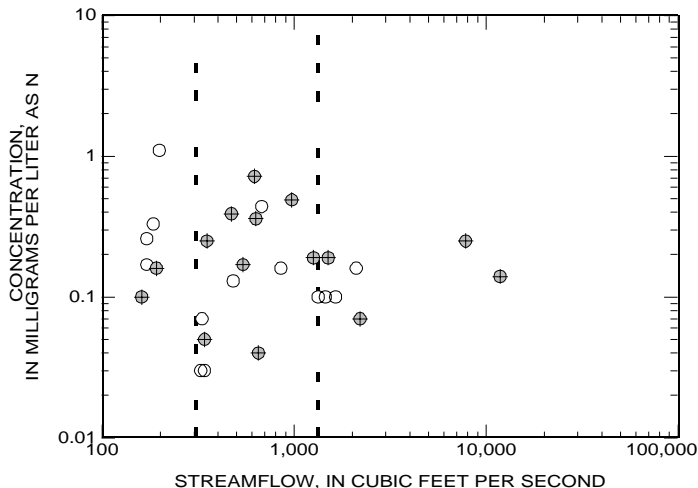
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL AMMONIA
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

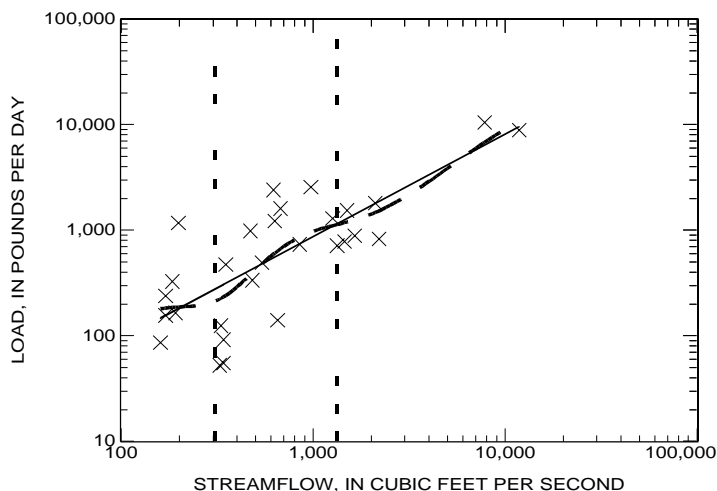
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	29	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	14	ND	ND
NONGROWING SEASON	15	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



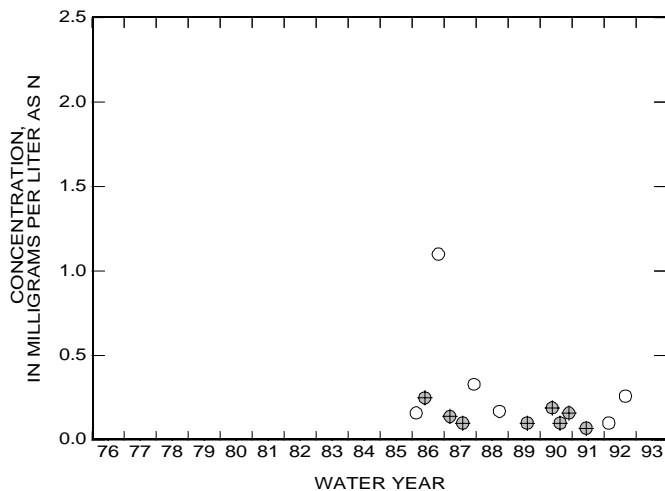
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	29	0.97	0.03
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

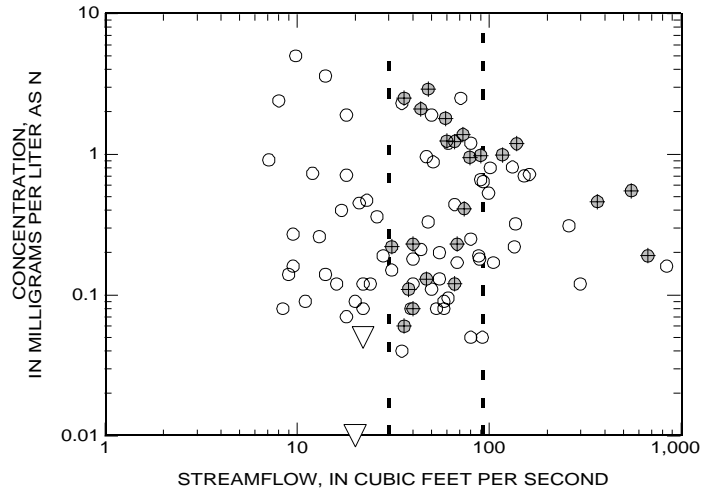
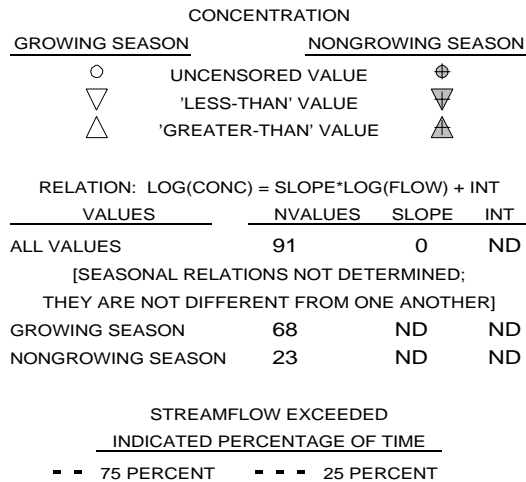
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	6	4	ND
HIGH FLOW	8	5	ND



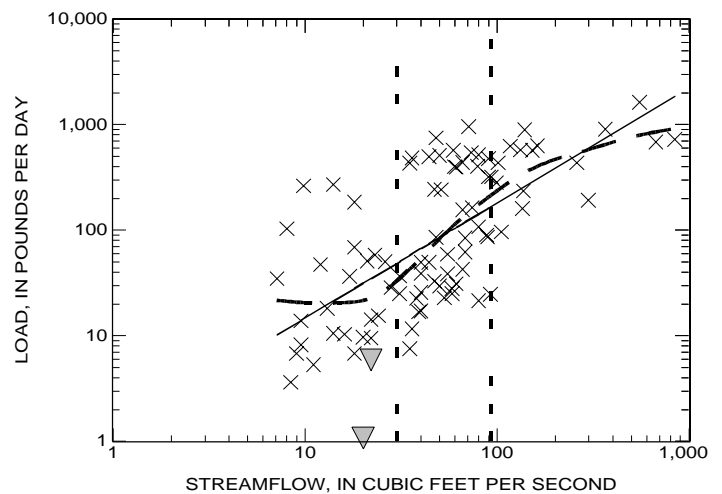
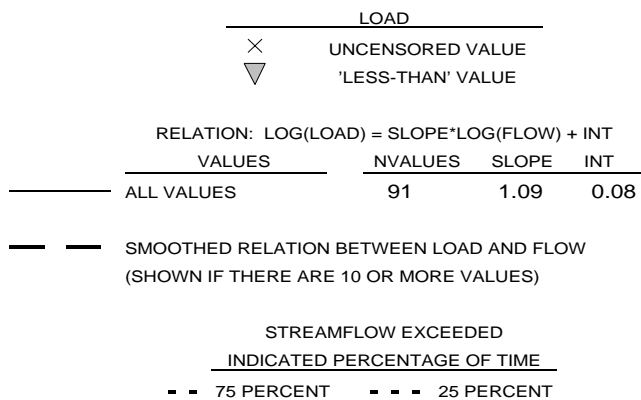
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

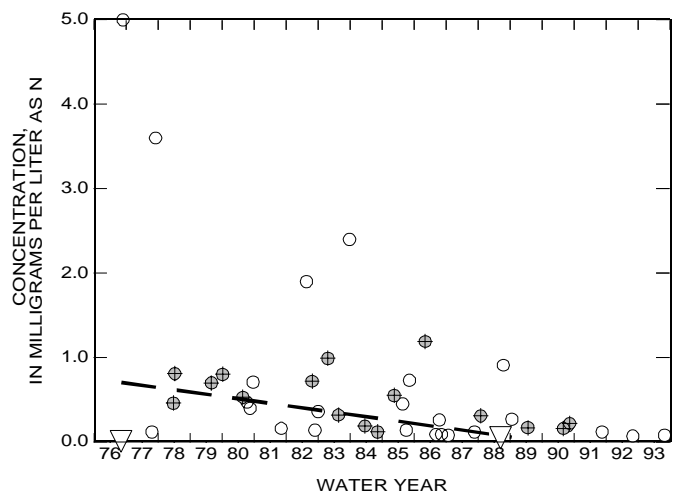
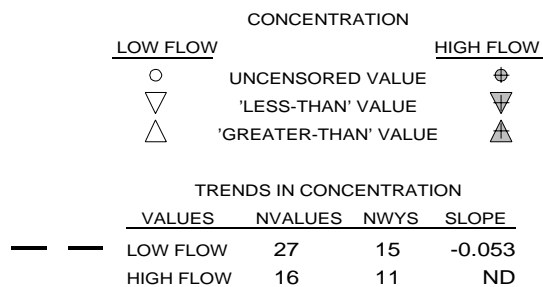
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



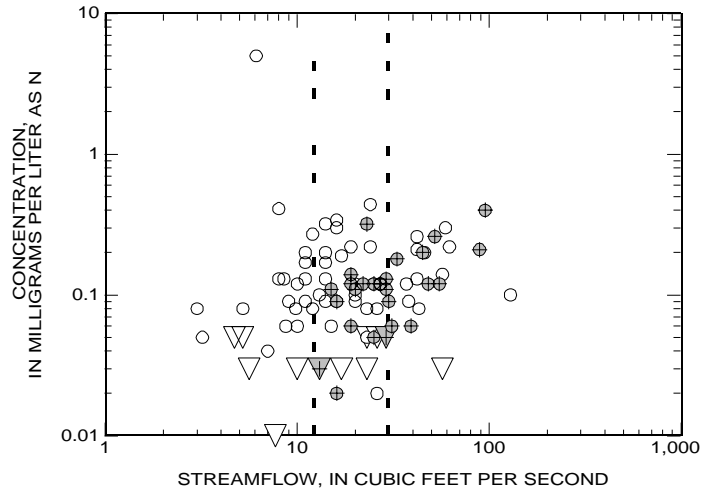
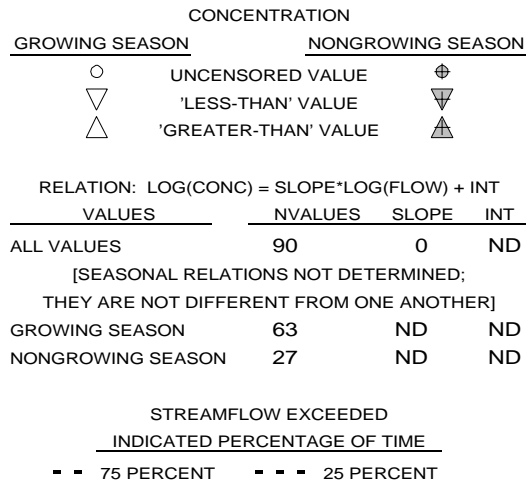
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



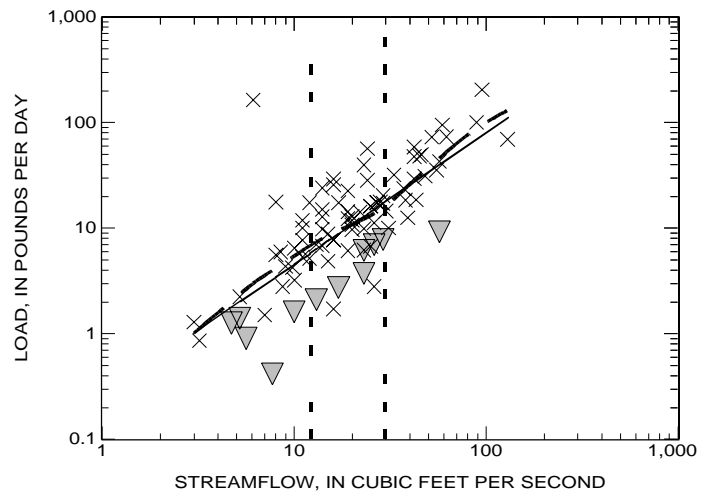
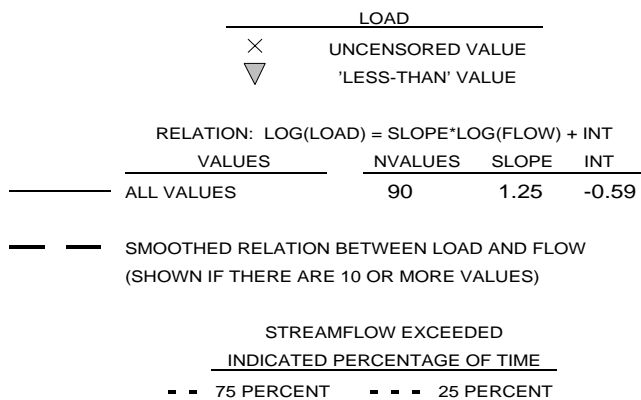
APPENDIX 15. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL AMMONIA
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

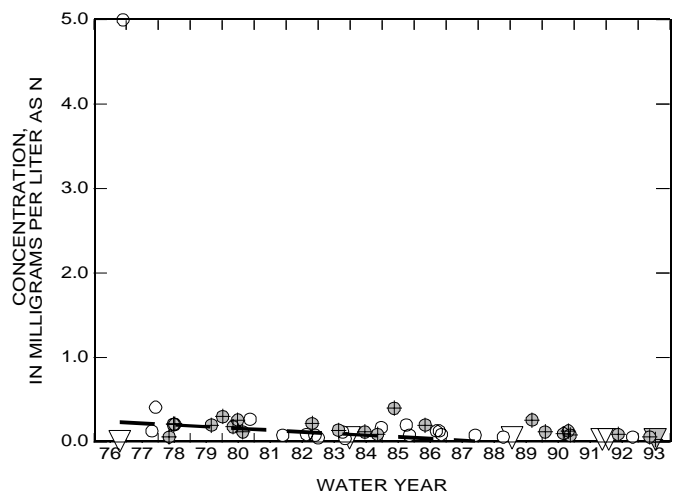
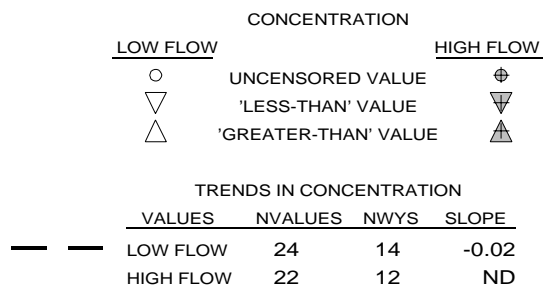
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



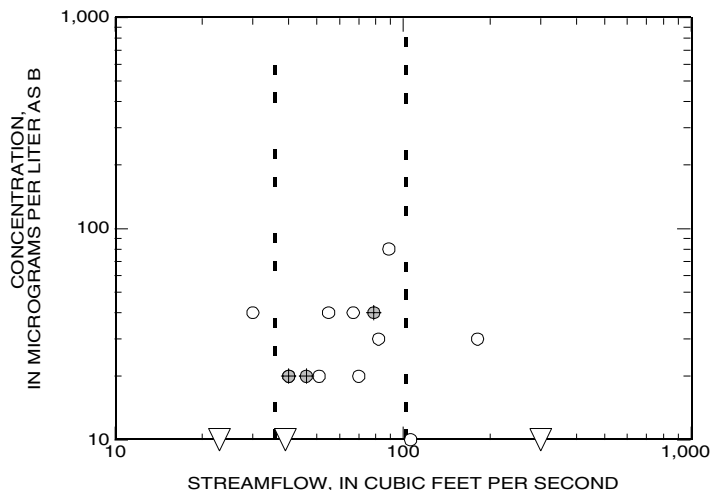
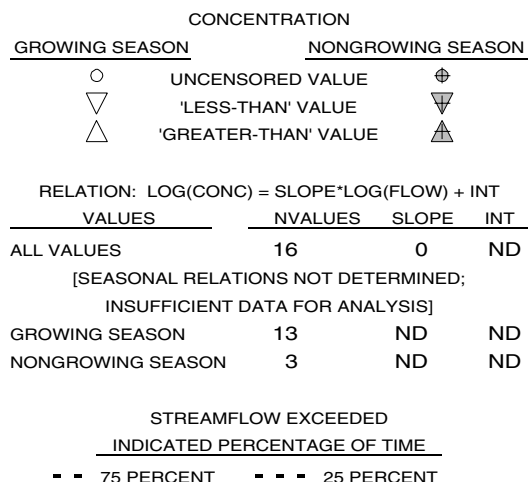
Appendix 16 - Total boron

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Bleckwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

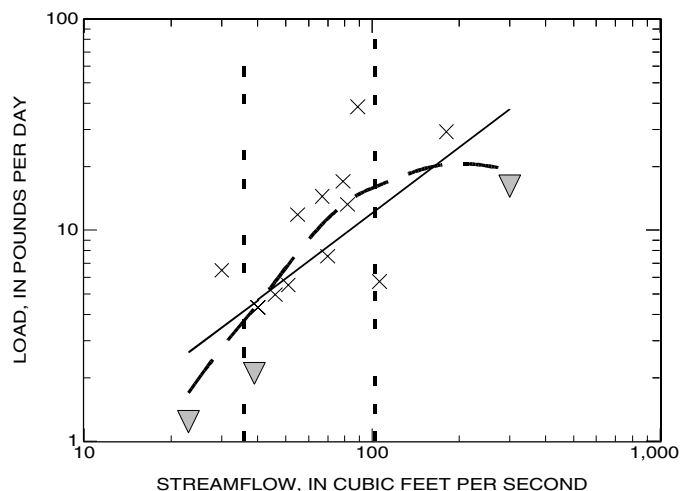
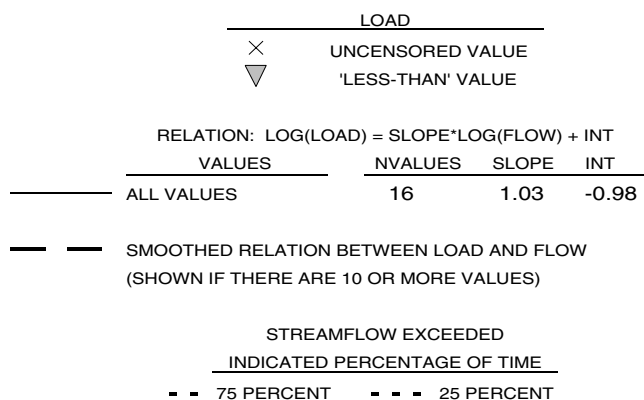
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

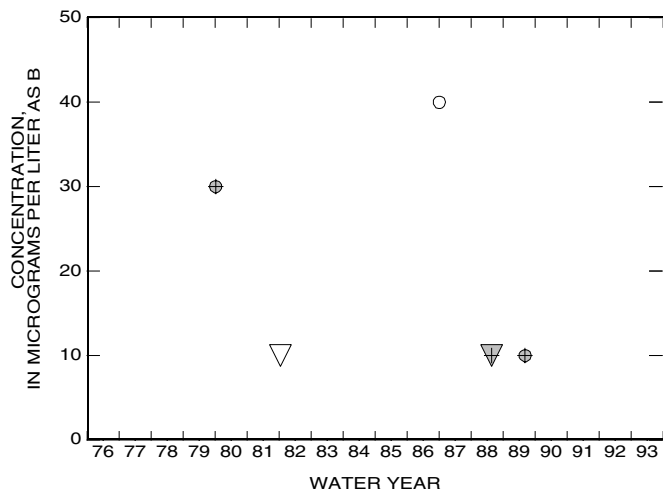
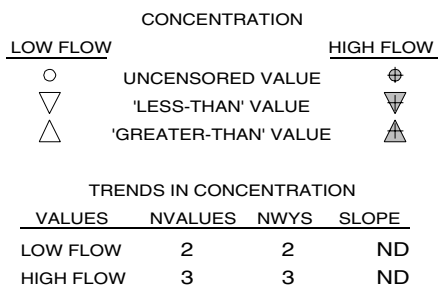
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



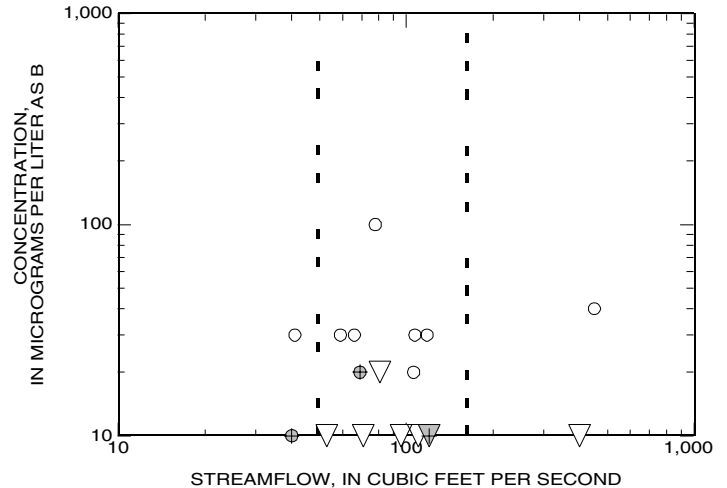
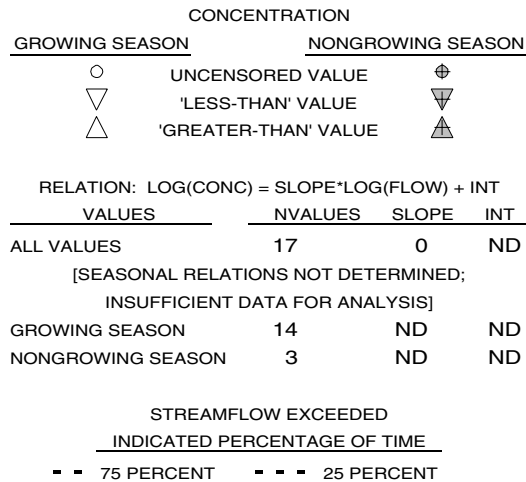
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



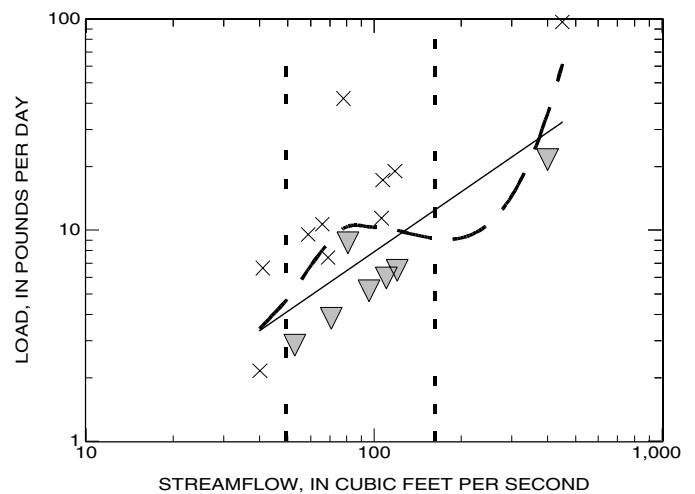
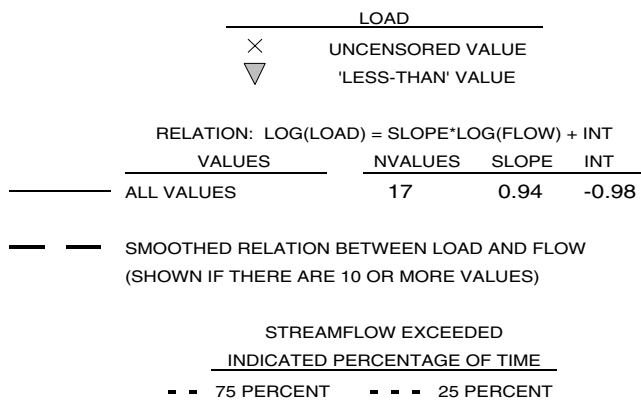
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

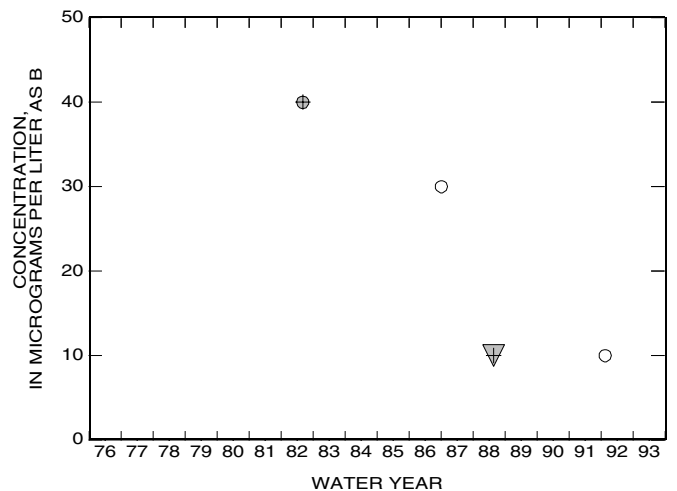
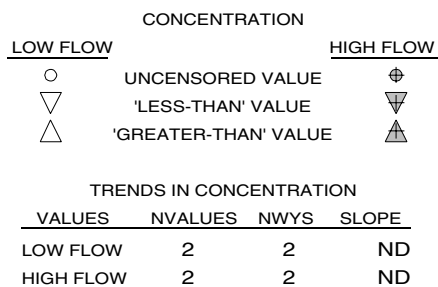
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



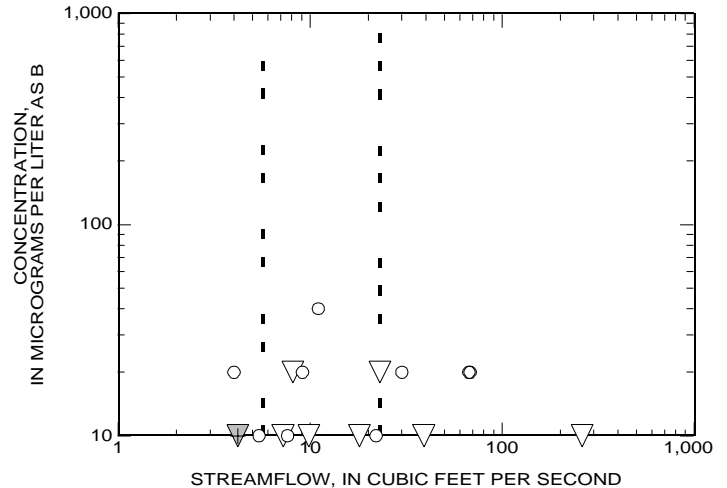
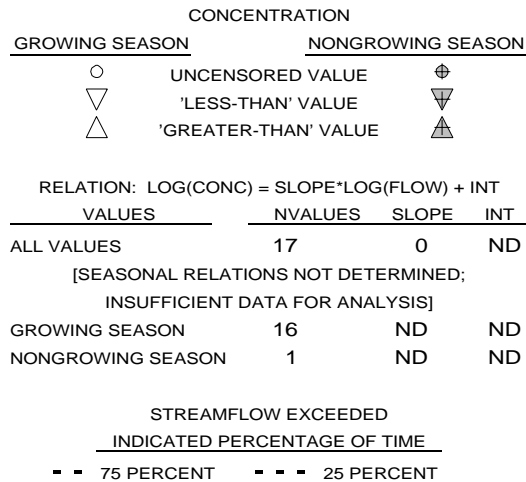
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



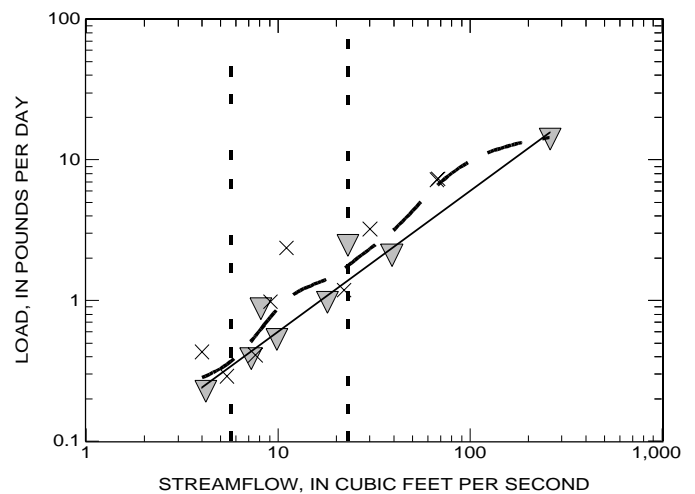
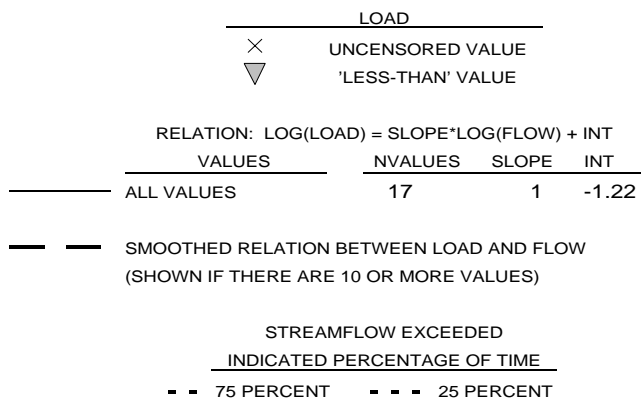
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

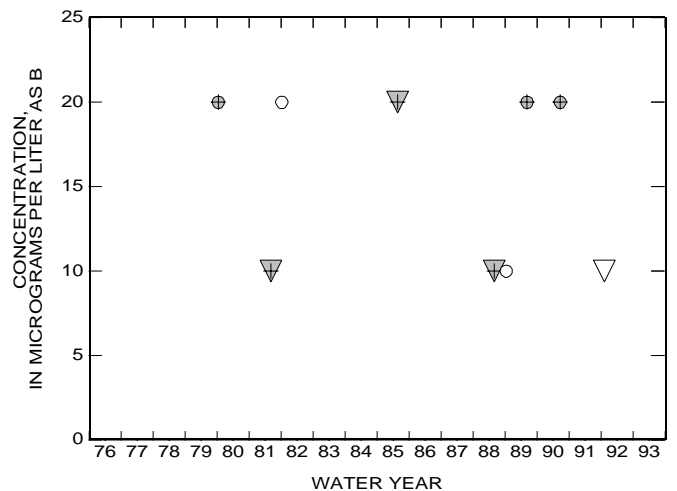
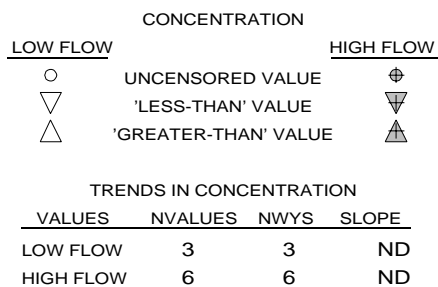
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



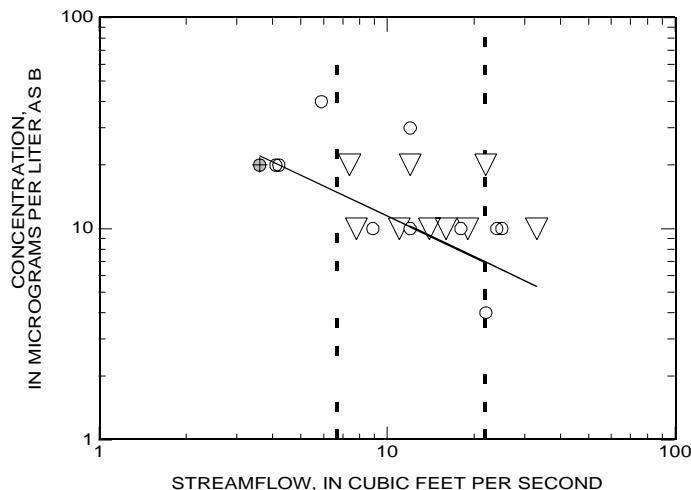
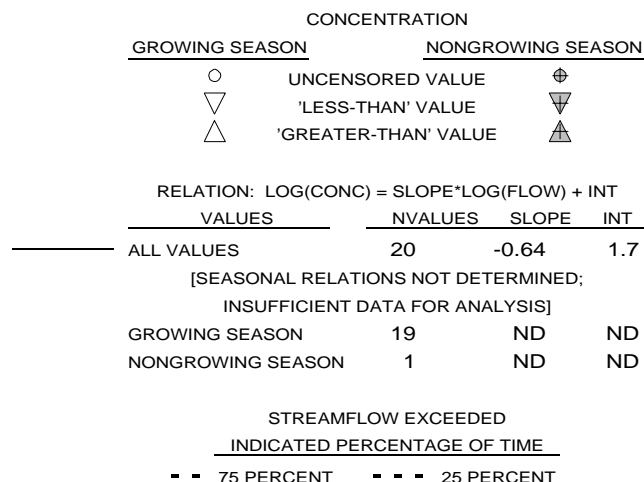
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



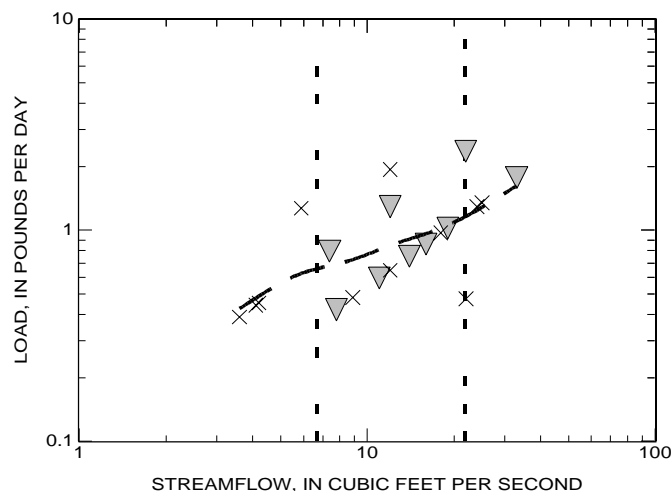
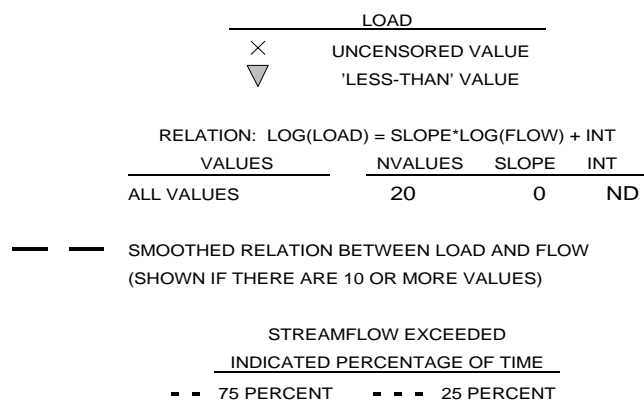
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

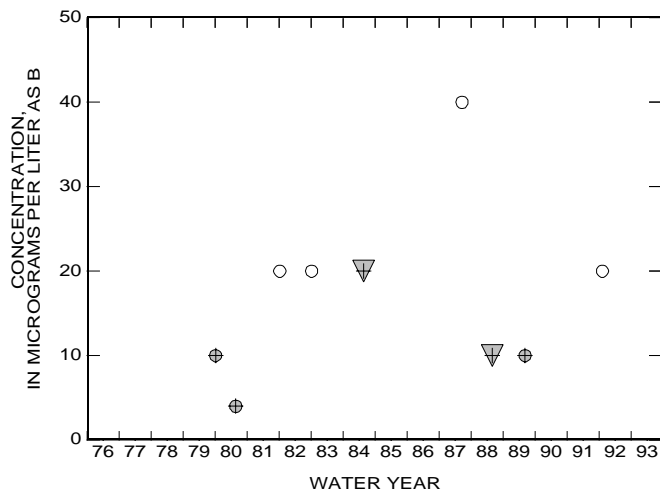
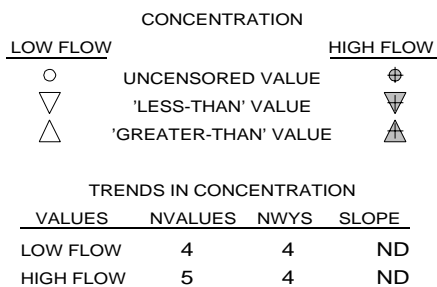
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

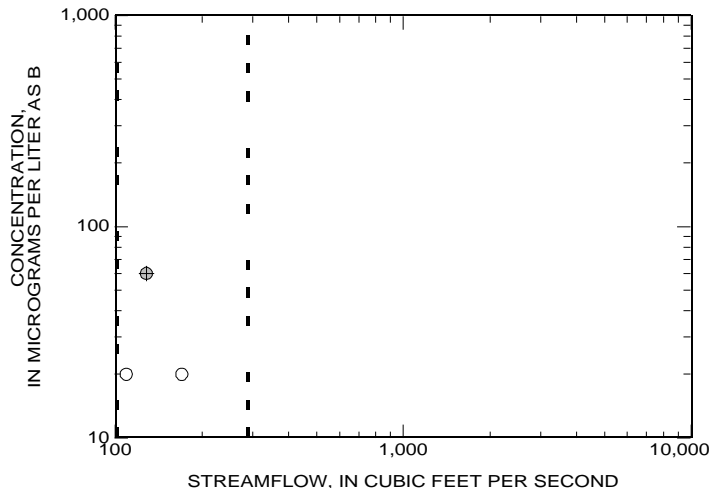


APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

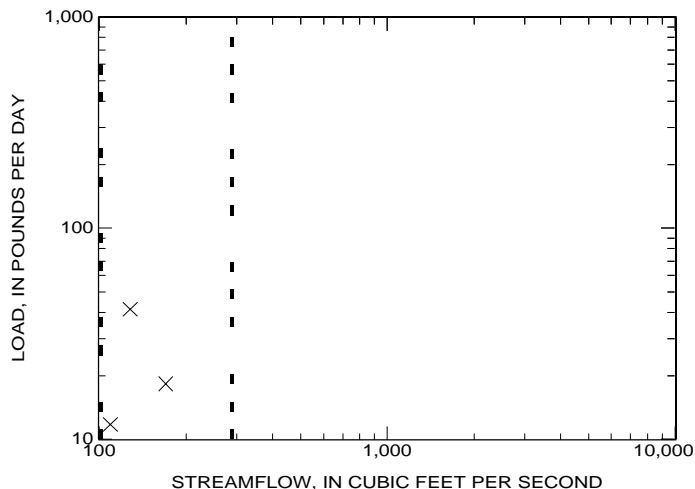
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: $\text{LOG}(\text{CONC}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	3	ND	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	2	ND	ND
NONGROWING SEASON	1	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



RELATION OF LOAD TO STREAMFLOW

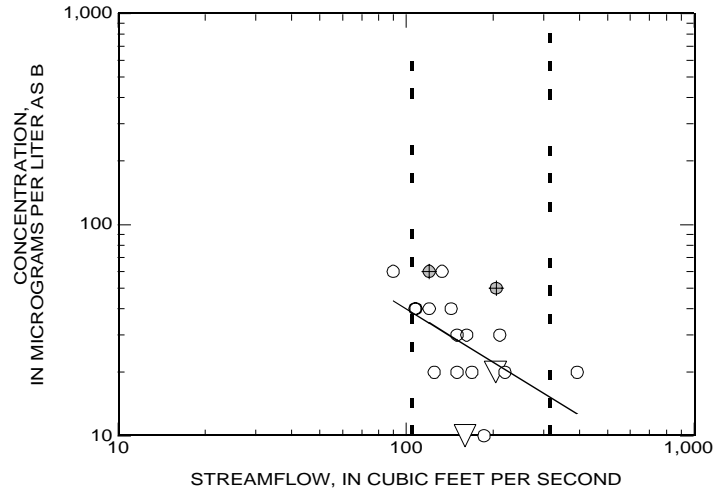
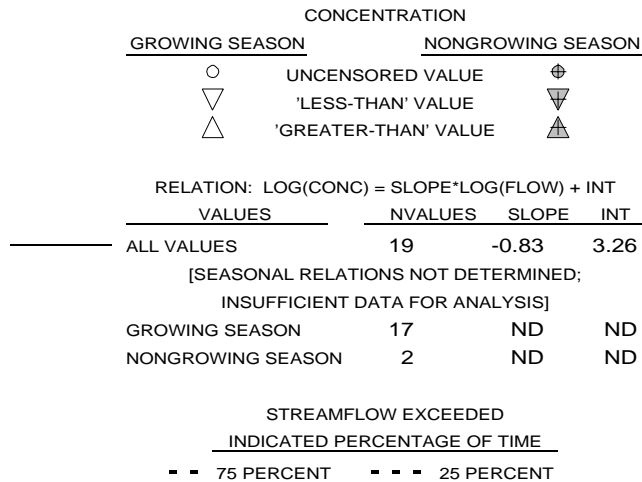
LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: $\text{LOG}(\text{LOAD}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	3	ND	ND
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



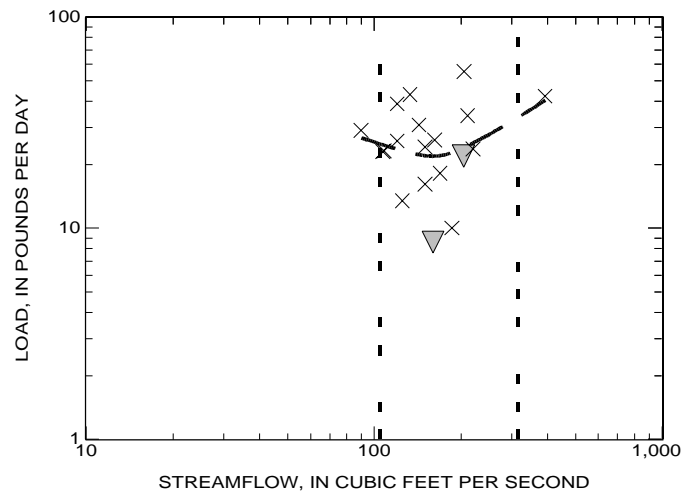
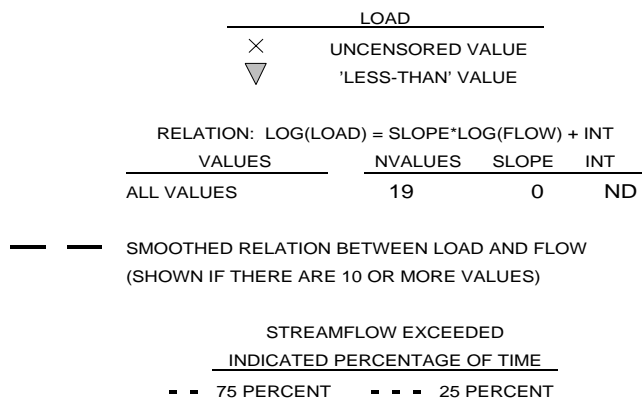
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

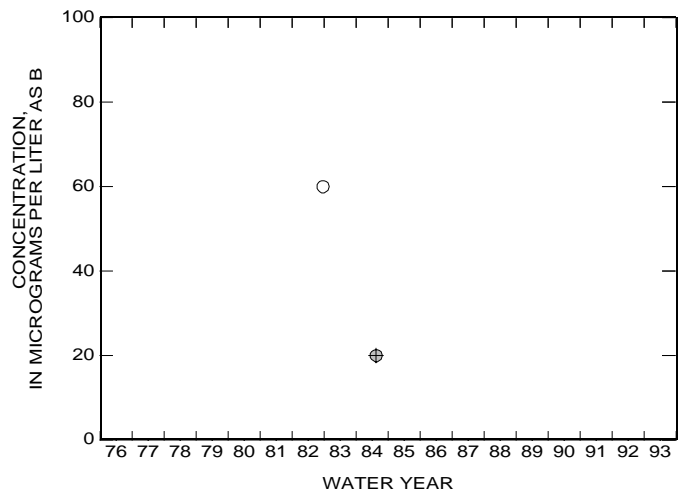
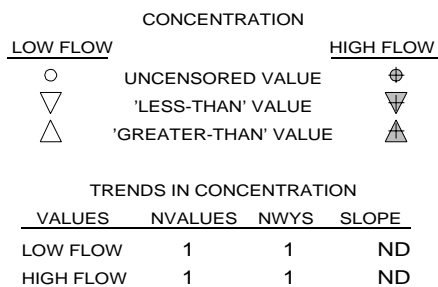
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



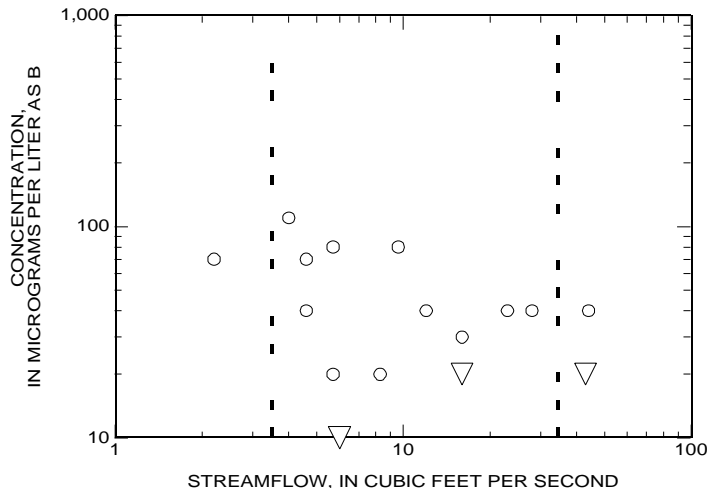
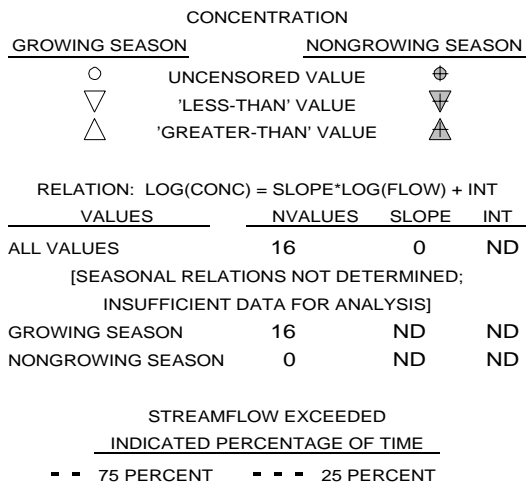
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



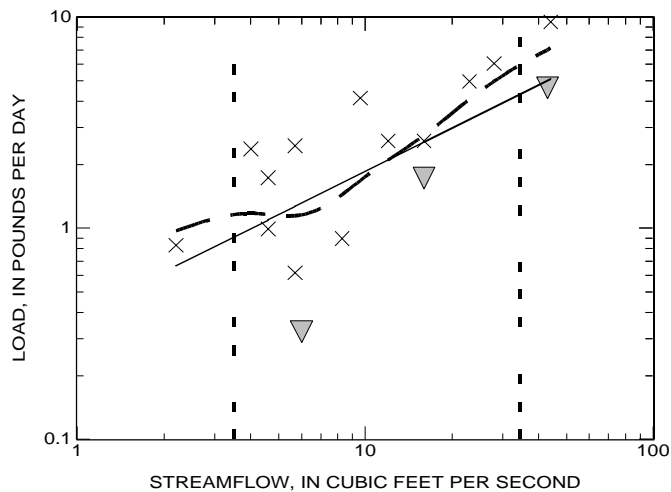
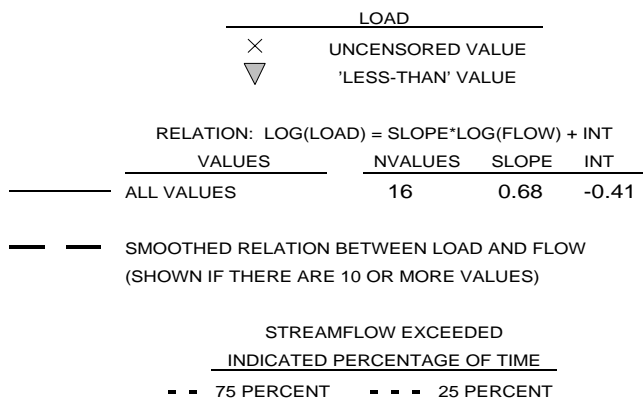
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

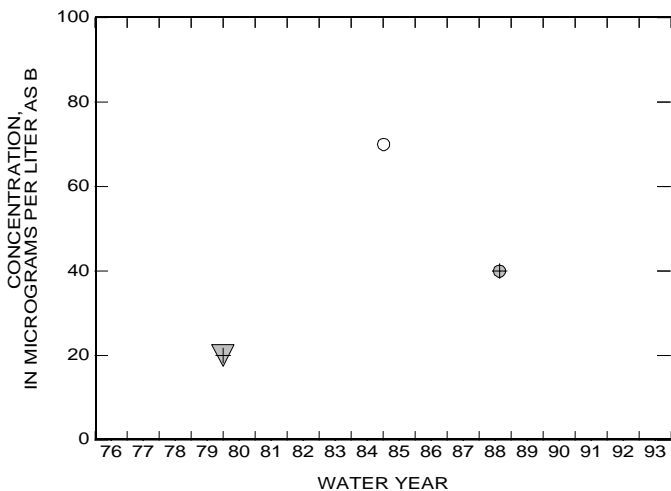
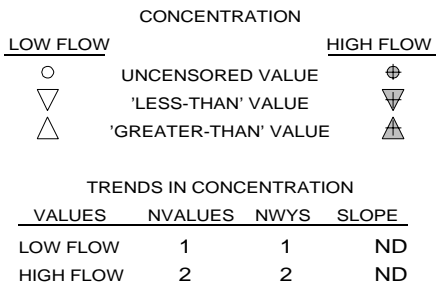
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



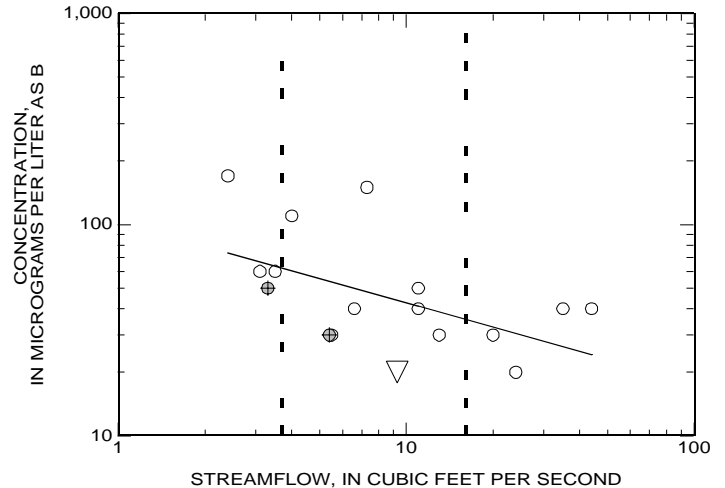
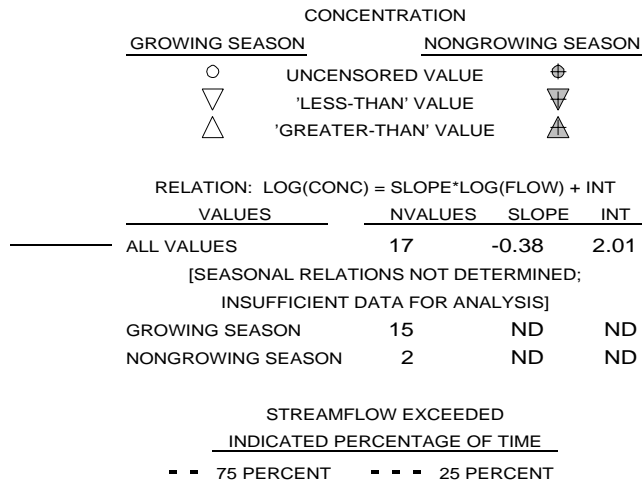
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



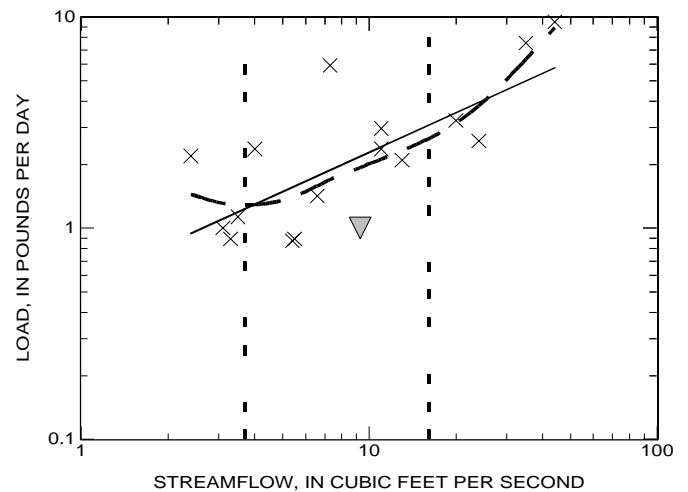
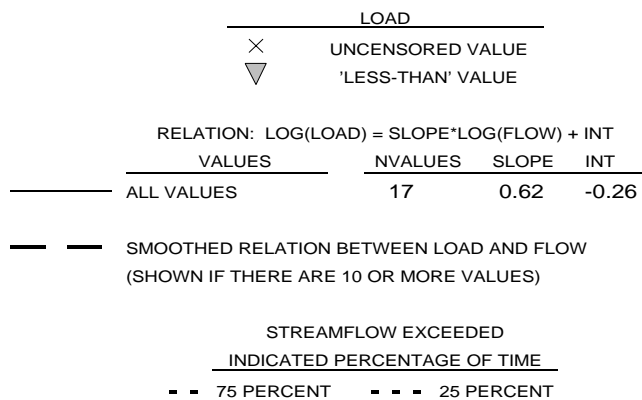
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

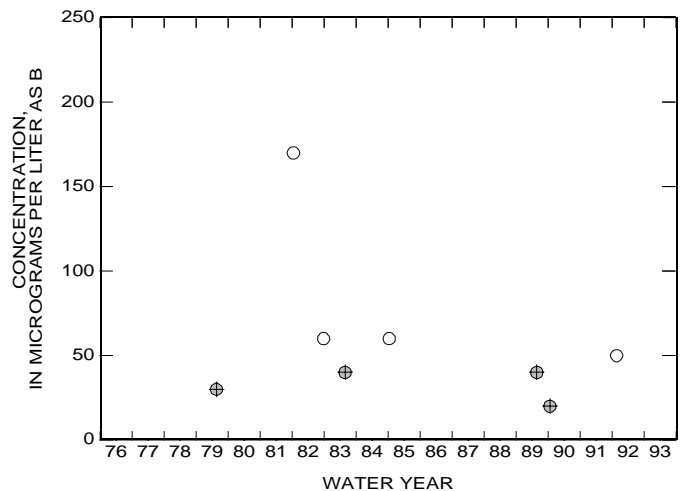
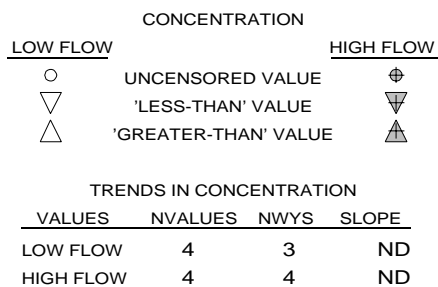
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



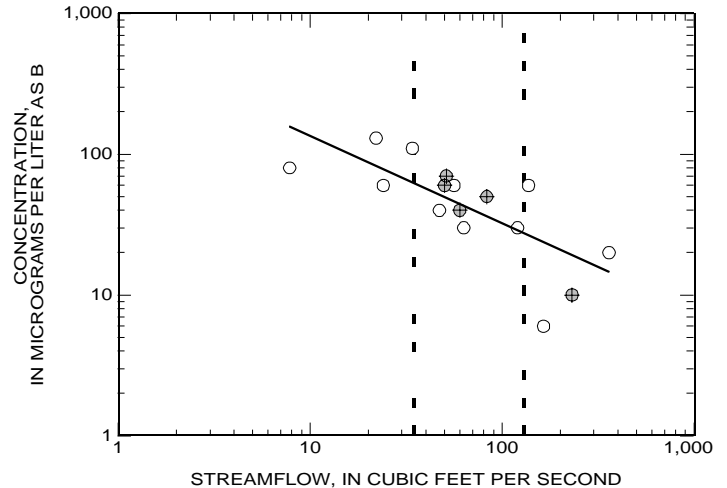
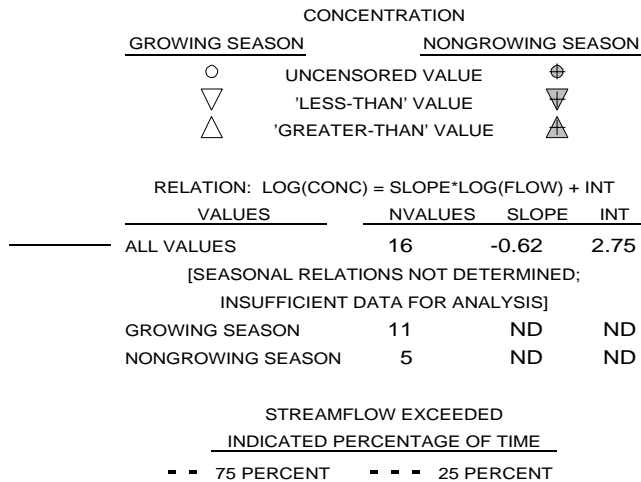
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



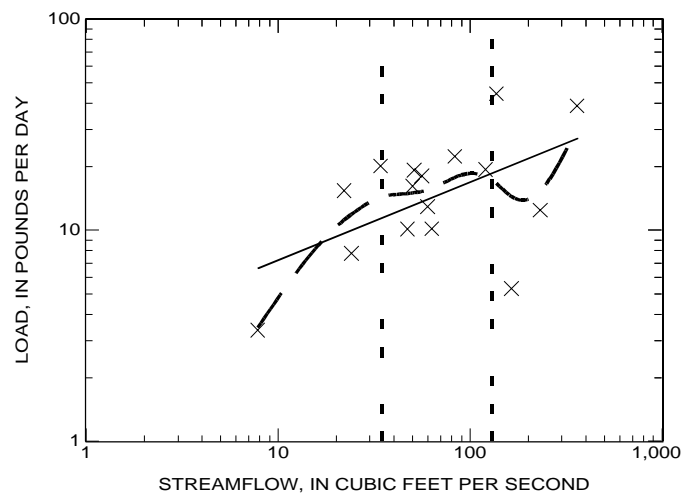
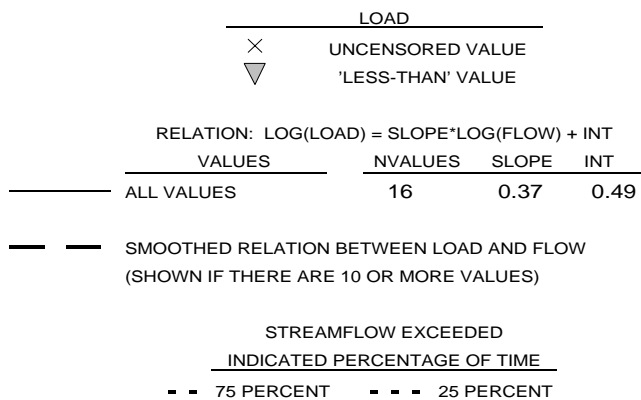
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

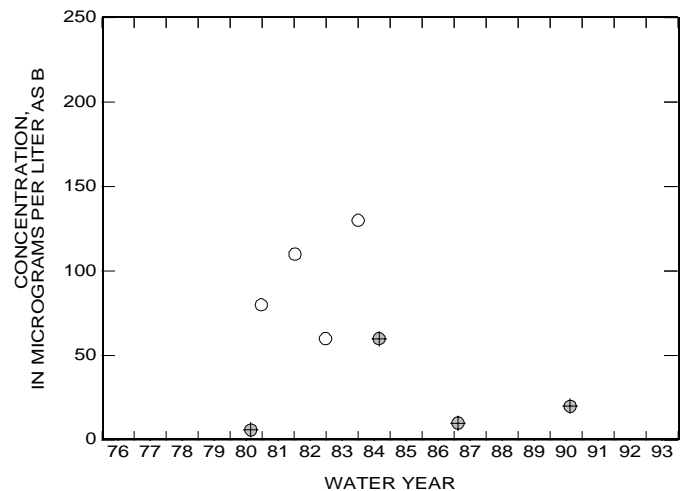
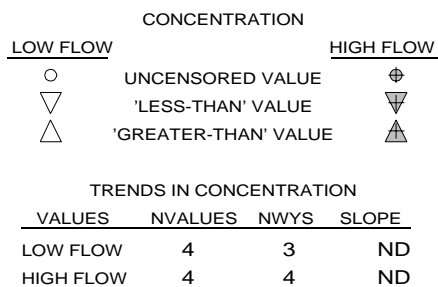
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



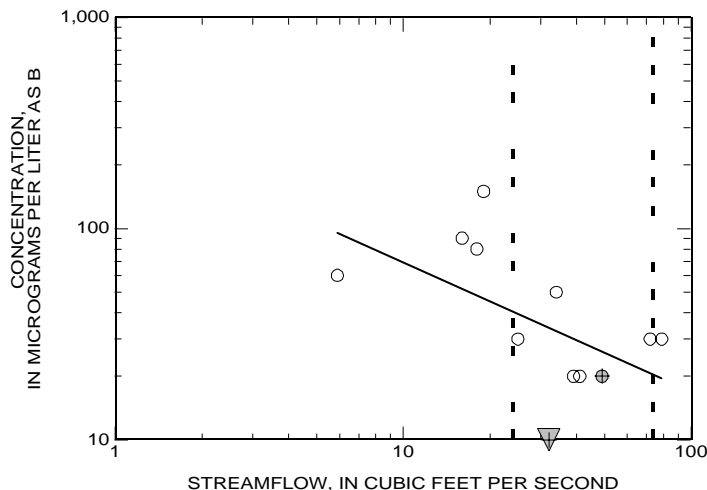
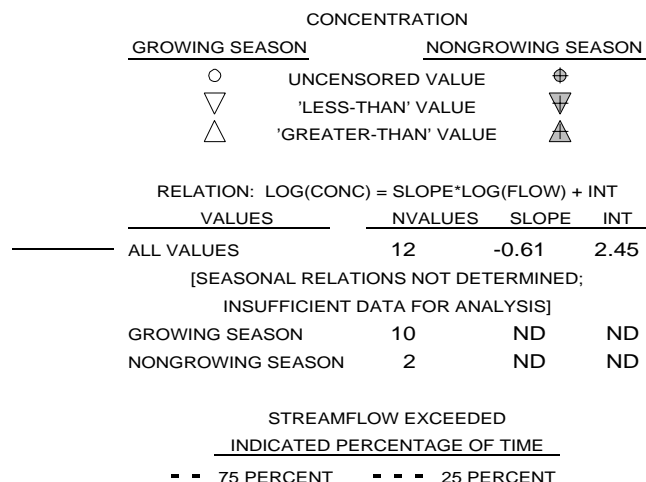
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



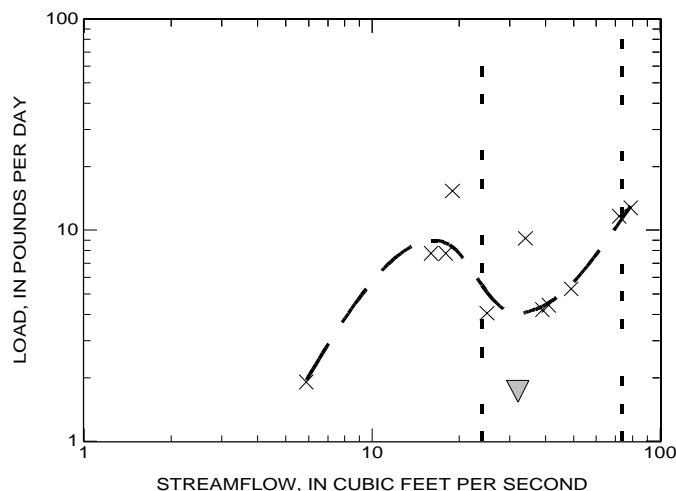
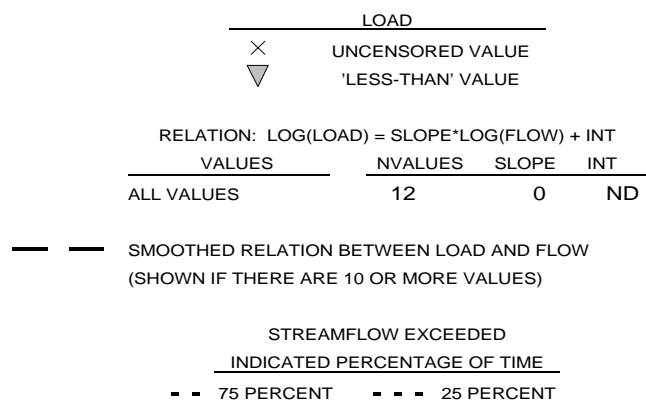
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

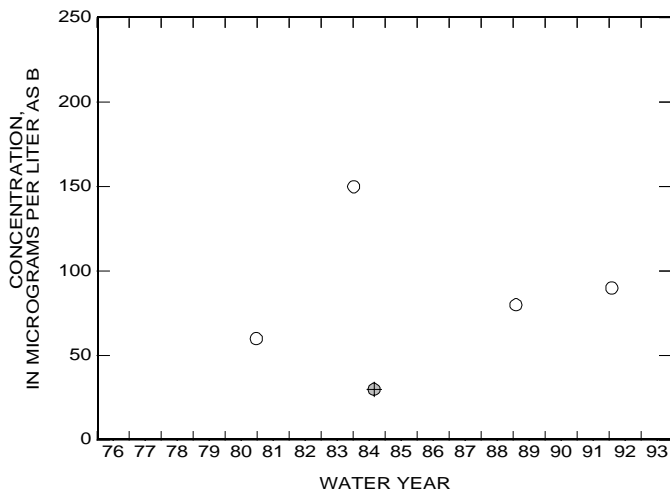
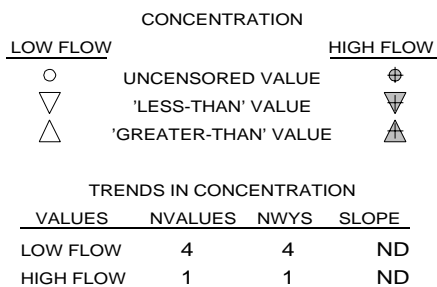
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

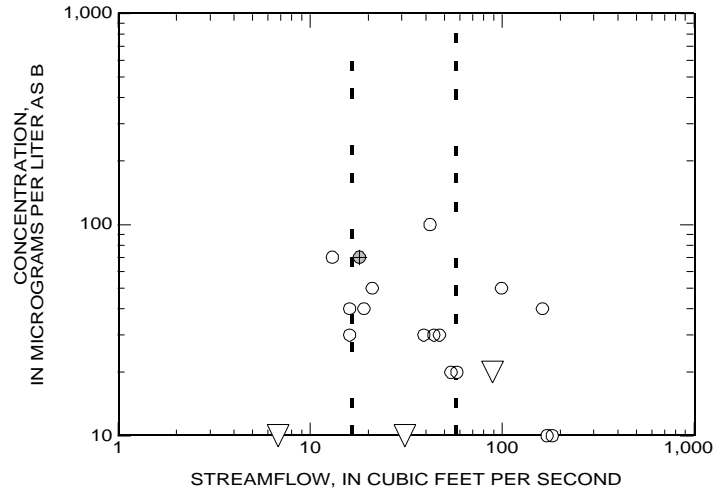


APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

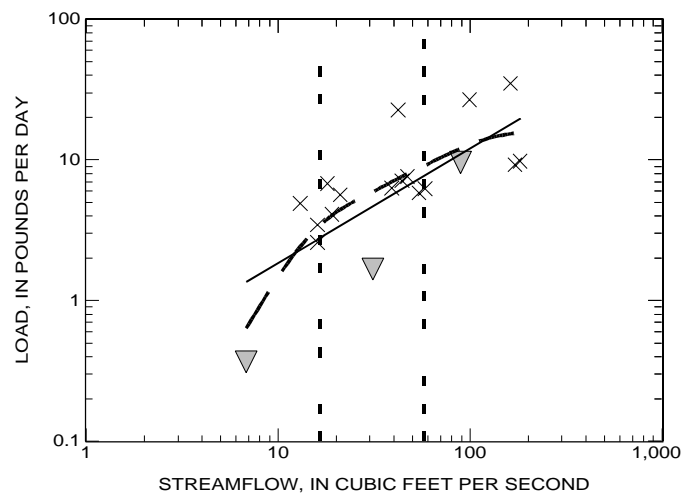
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	19	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	18	ND	ND
NONGROWING SEASON	1	ND	ND
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
- - -	75 PERCENT	- - -	25 PERCENT



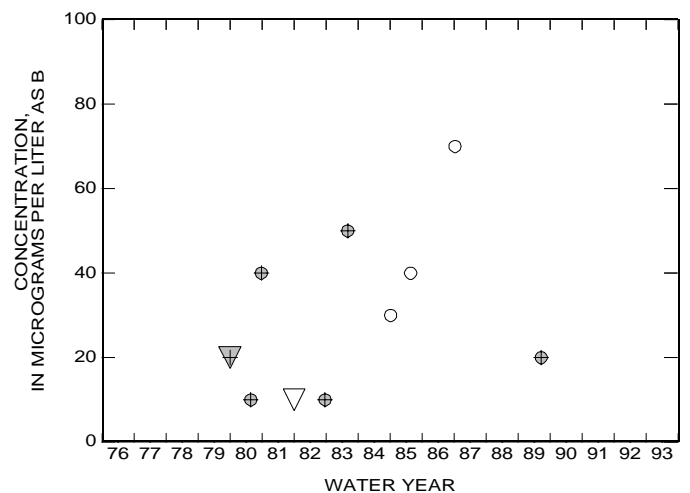
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	19	0.81	-0.54
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
- - -	75 PERCENT	- - -	25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

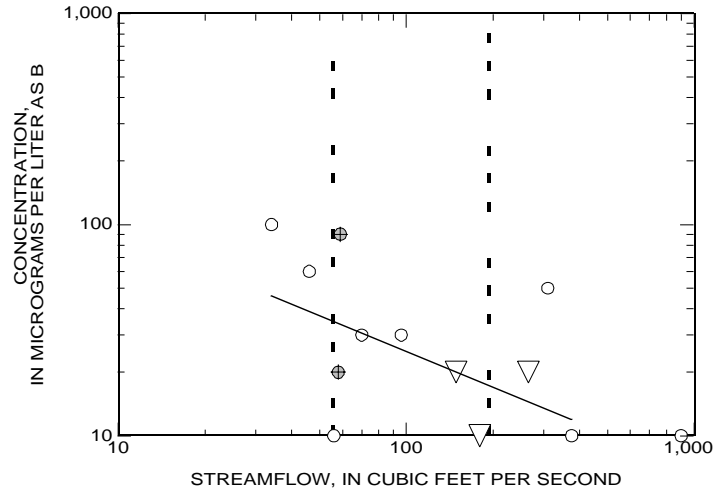
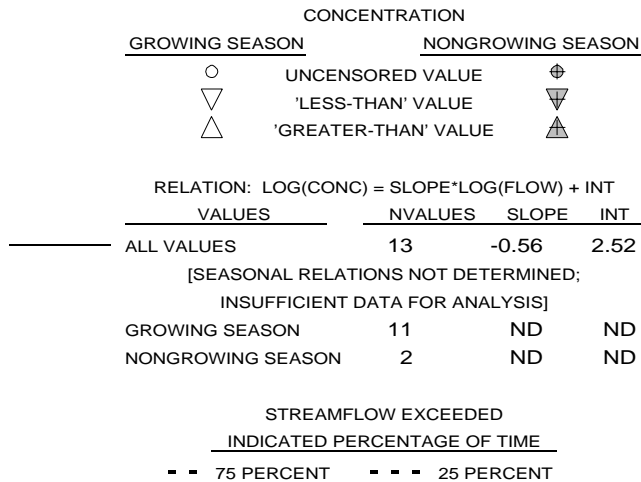
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	3	ND
HIGH FLOW	6	5	ND



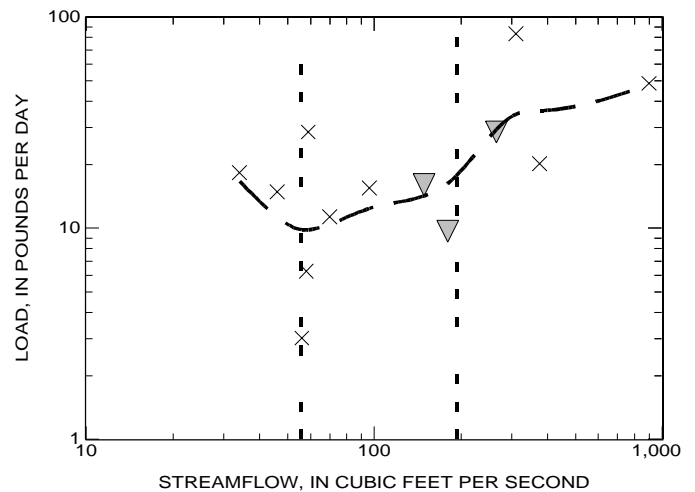
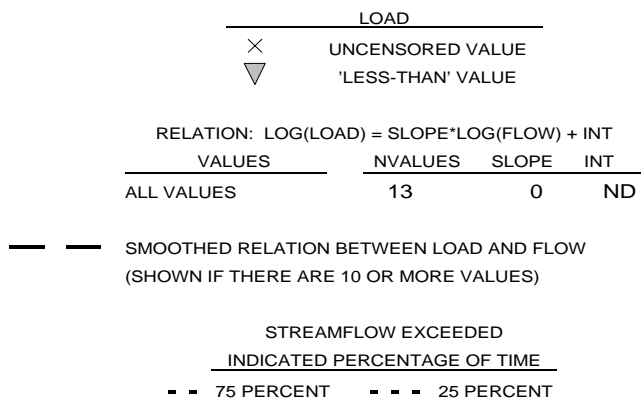
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

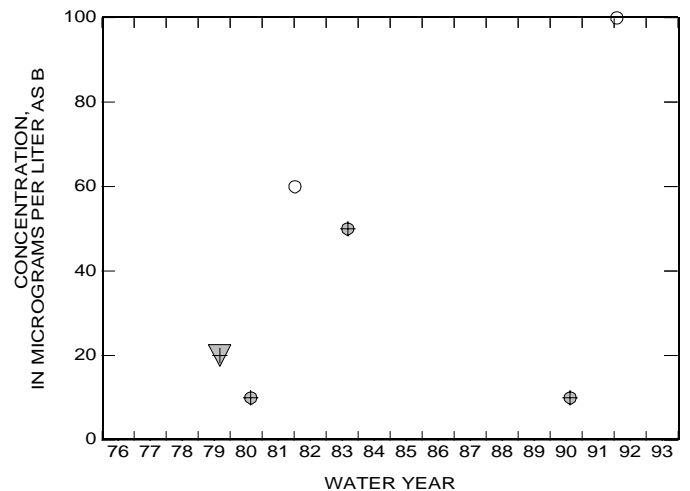
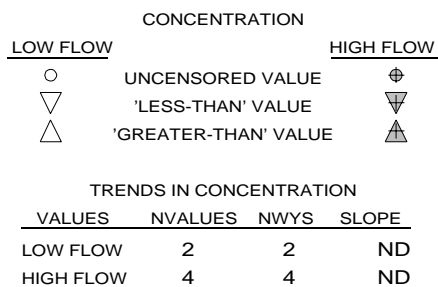
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



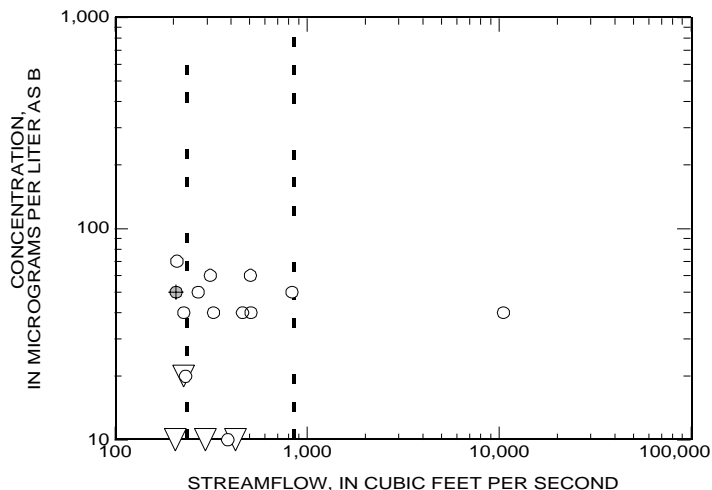
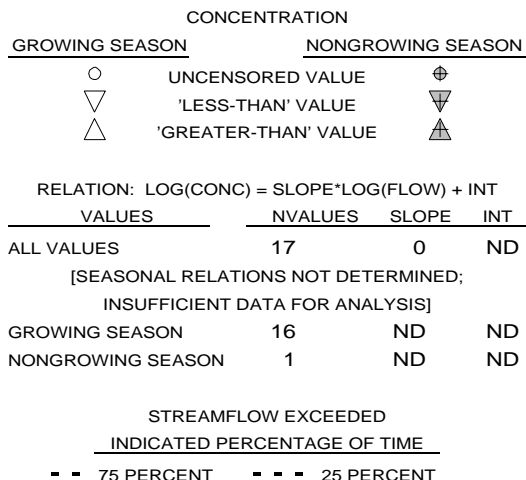
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



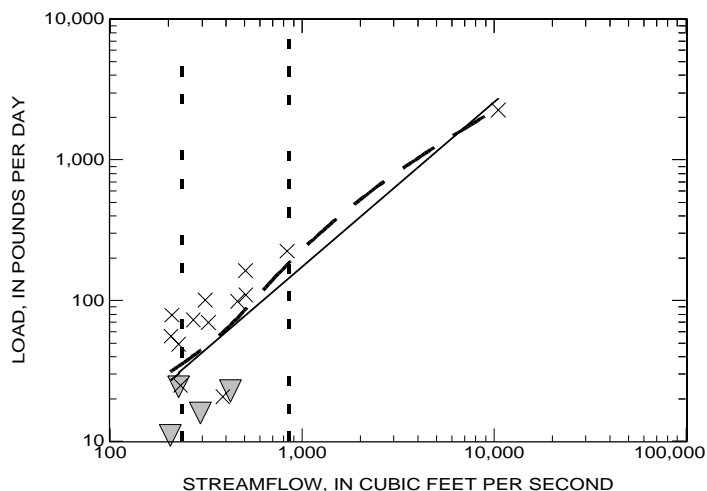
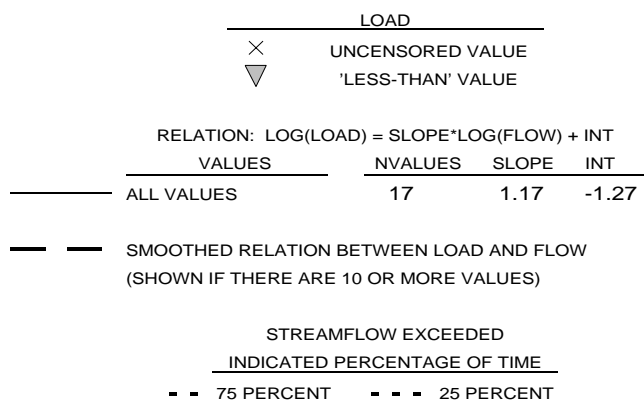
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

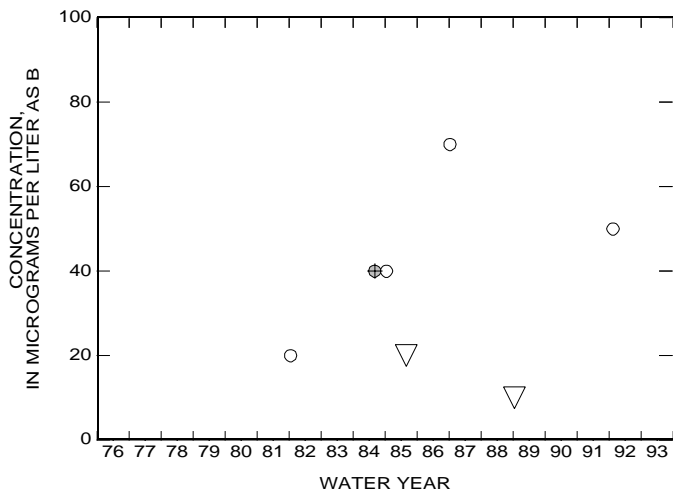
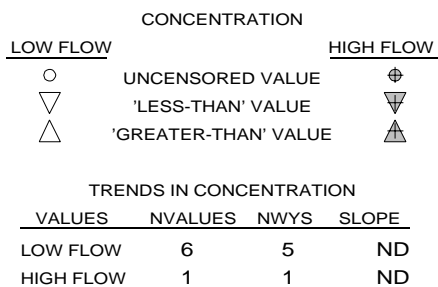
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



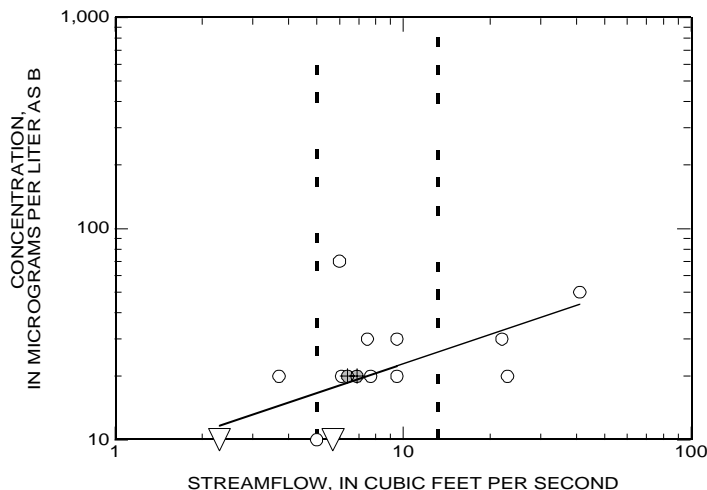
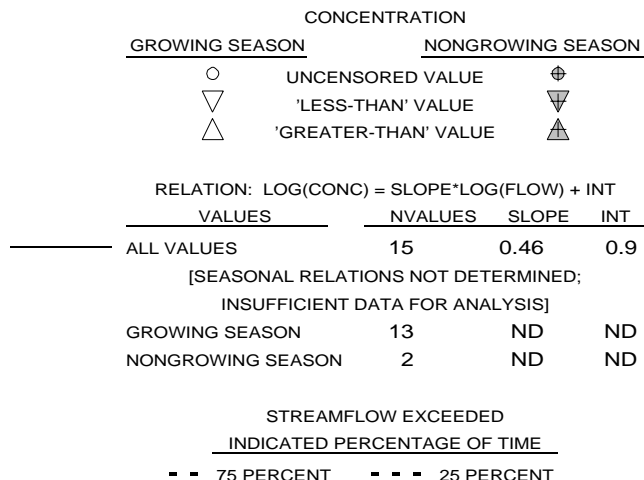
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



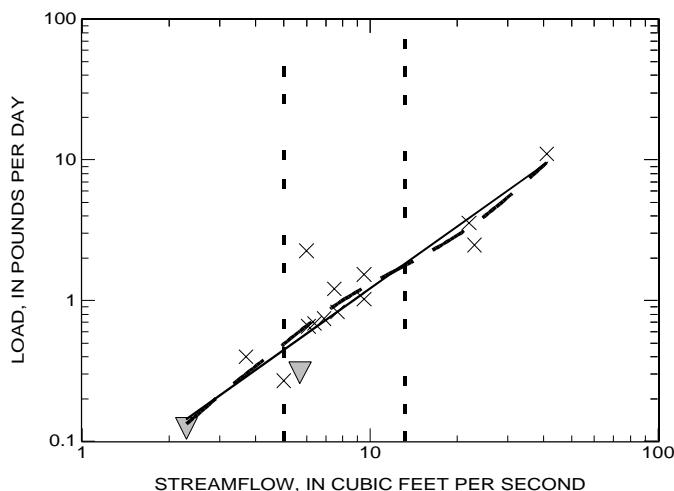
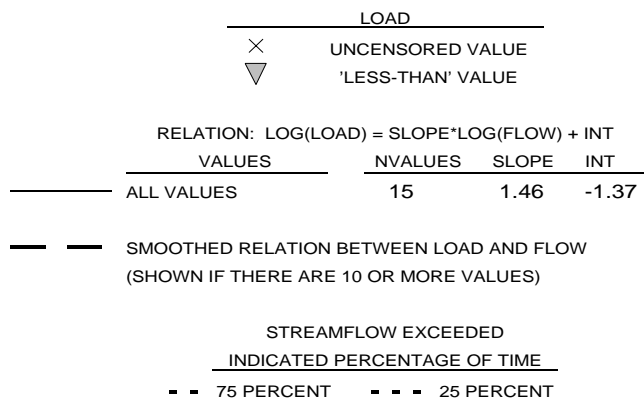
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

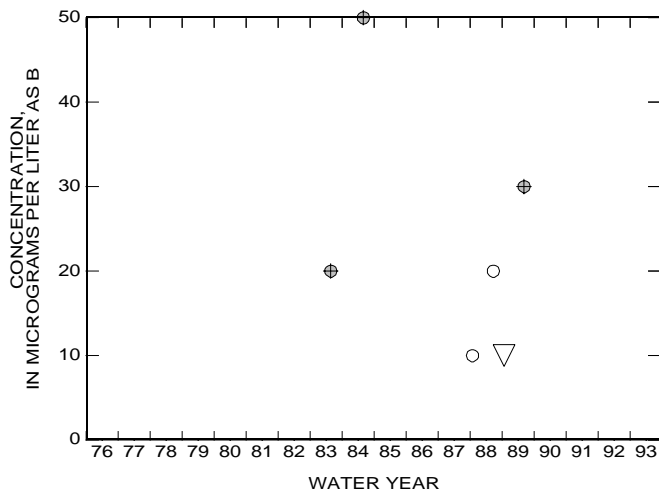
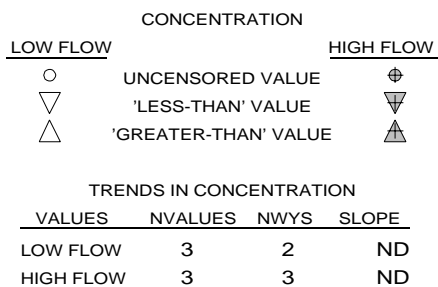
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

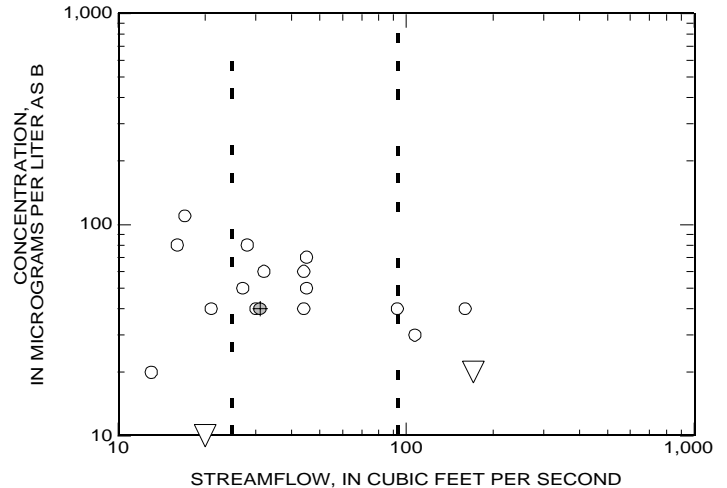


APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

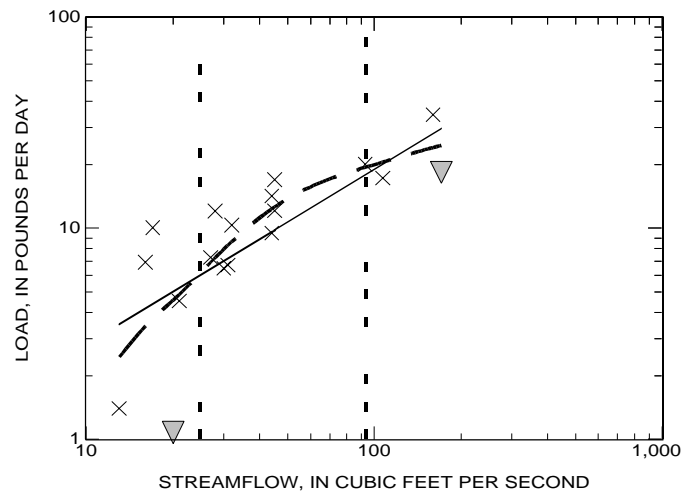
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	18	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	17	ND	ND
NONGROWING SEASON	1	ND	ND
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



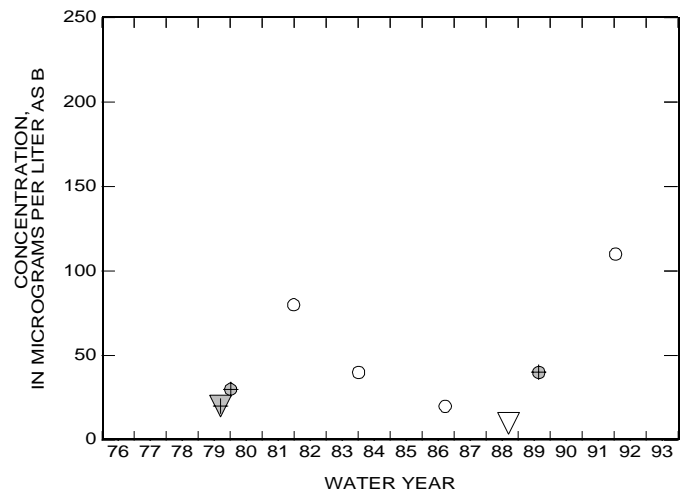
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	18	0.83	-0.38
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
- - -			
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

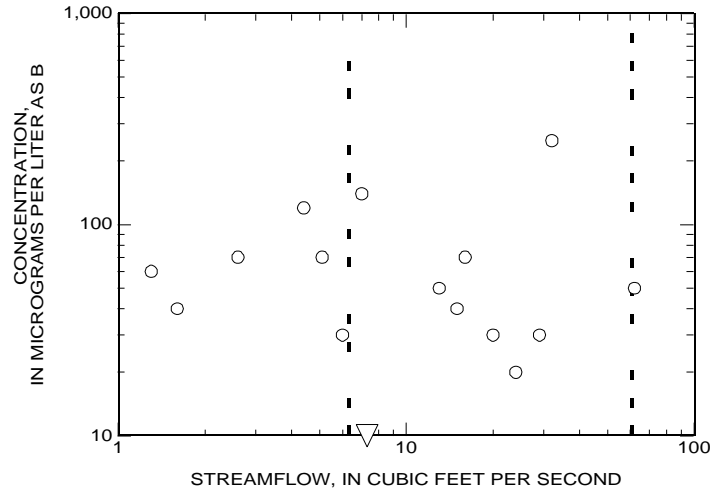
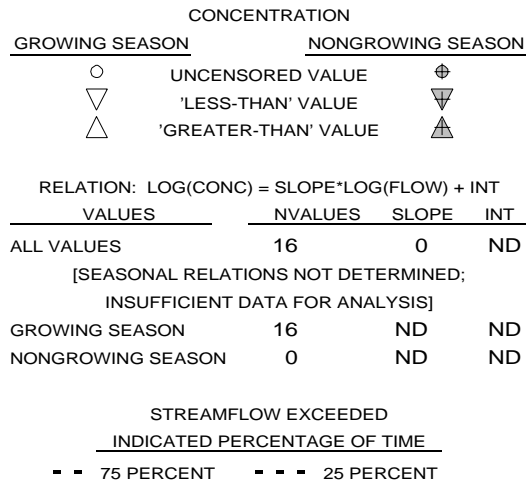
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	5	5	ND
HIGH FLOW	3	3	ND



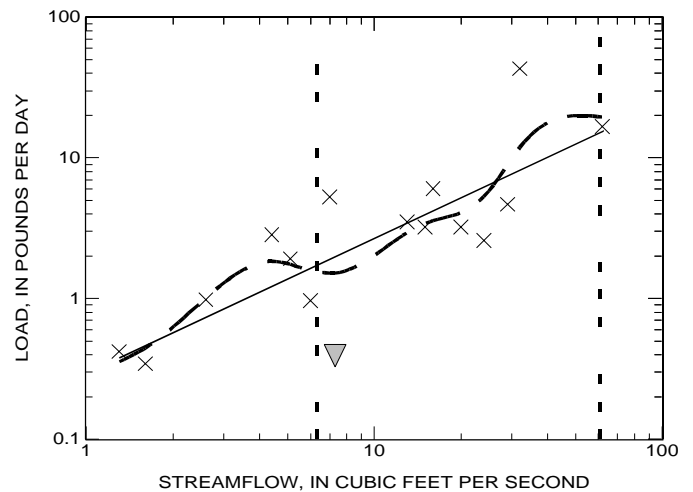
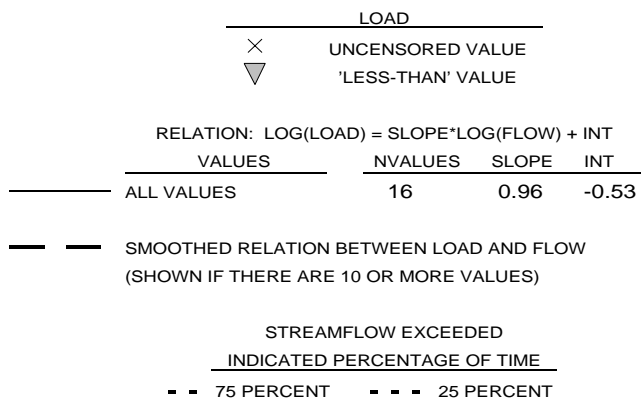
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

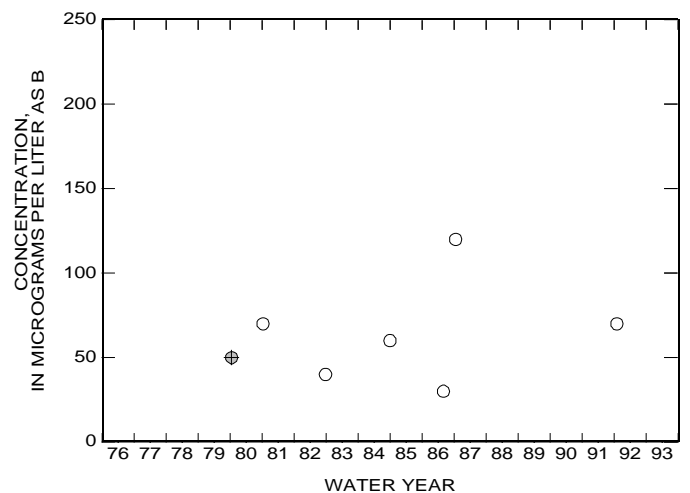
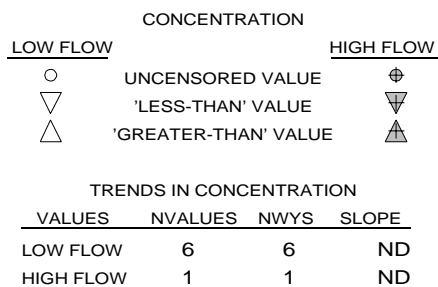
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



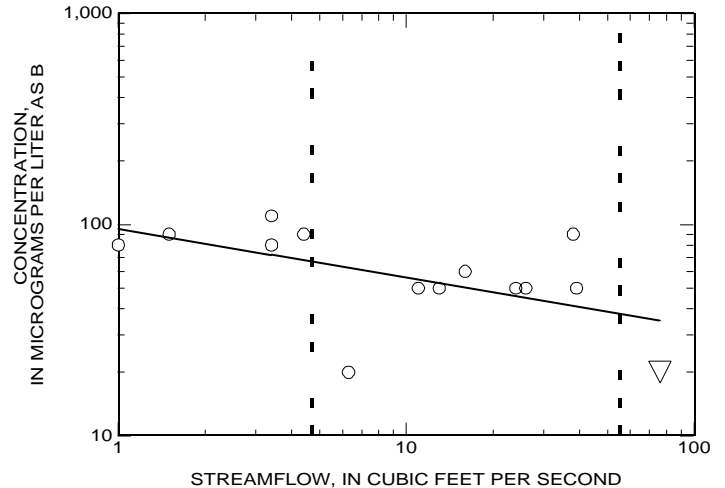
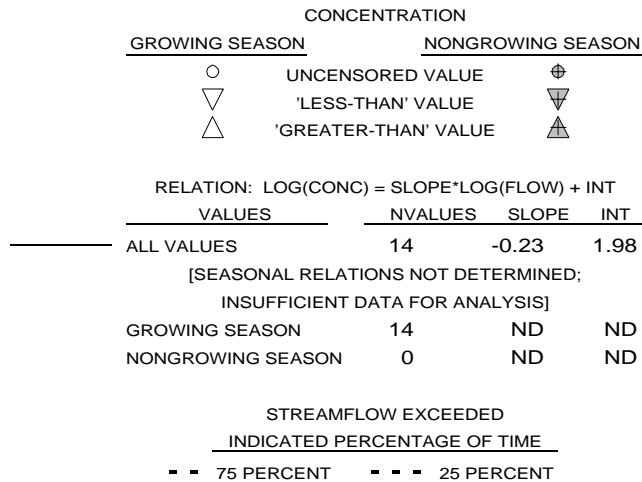
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



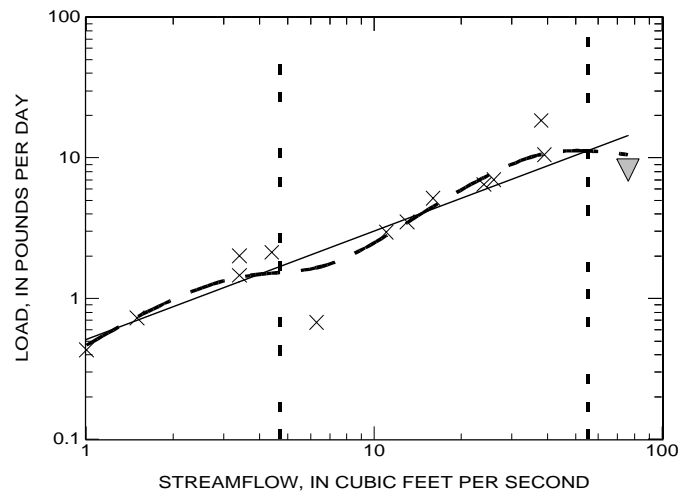
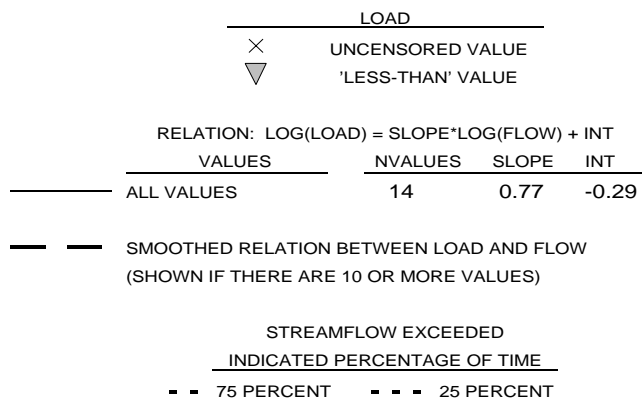
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

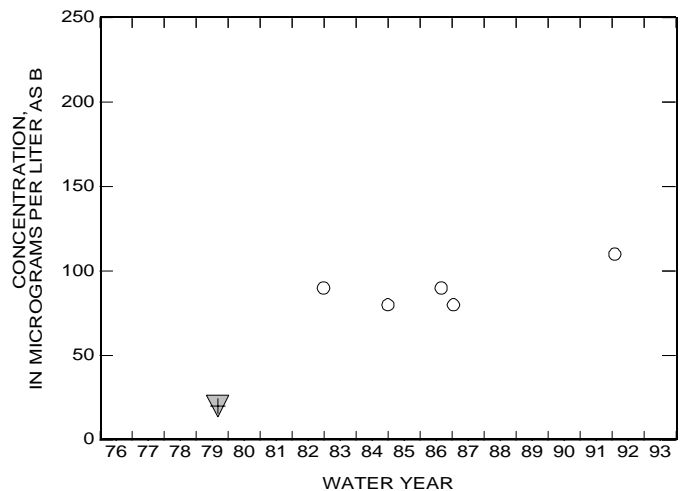
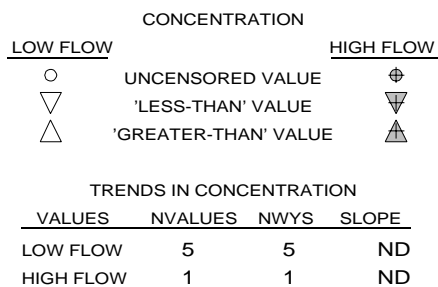
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



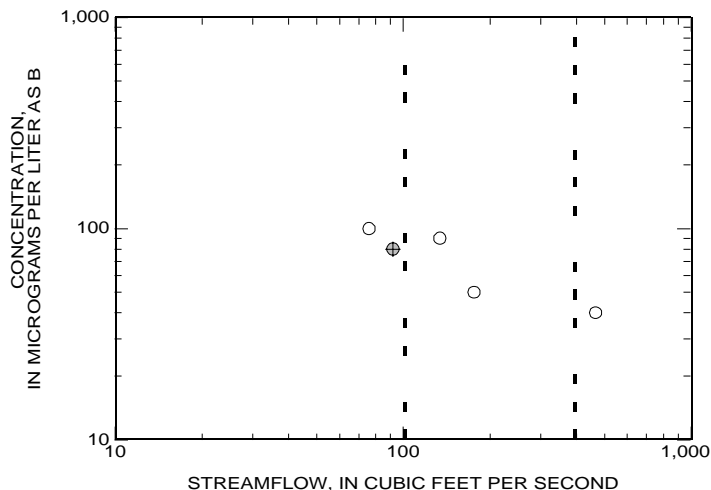
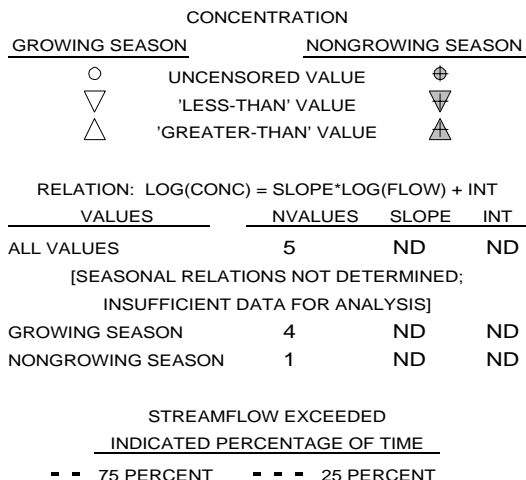
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



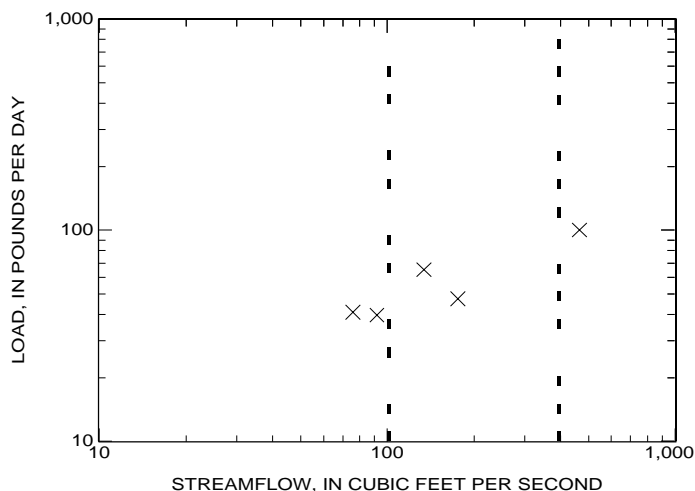
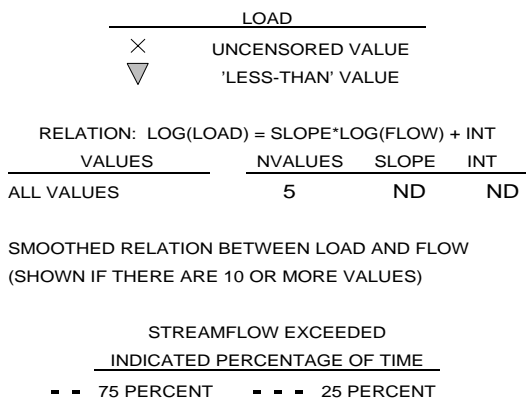
APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL BORON
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

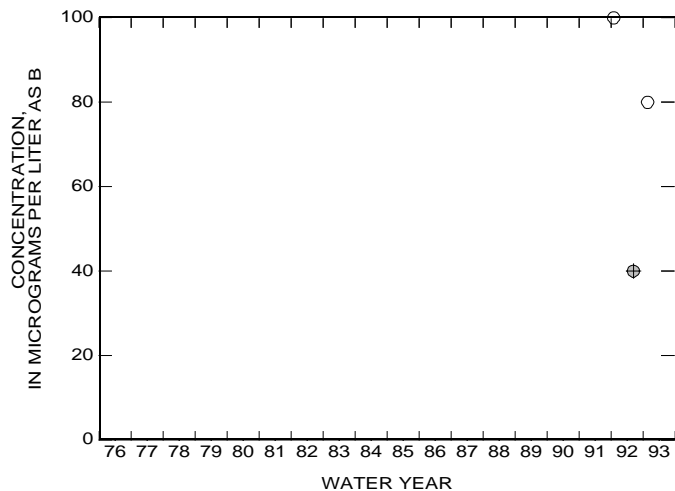
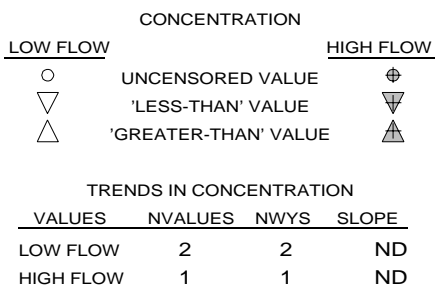
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



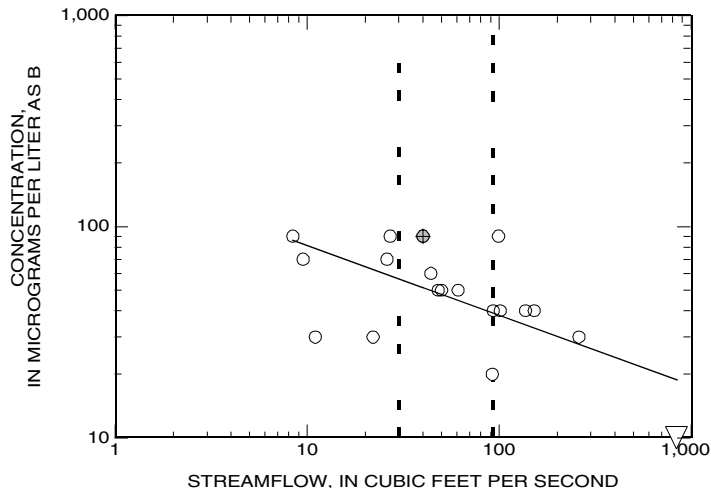
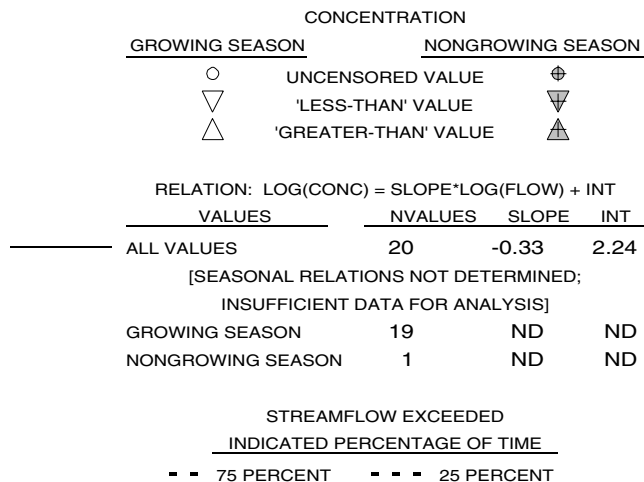
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APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time

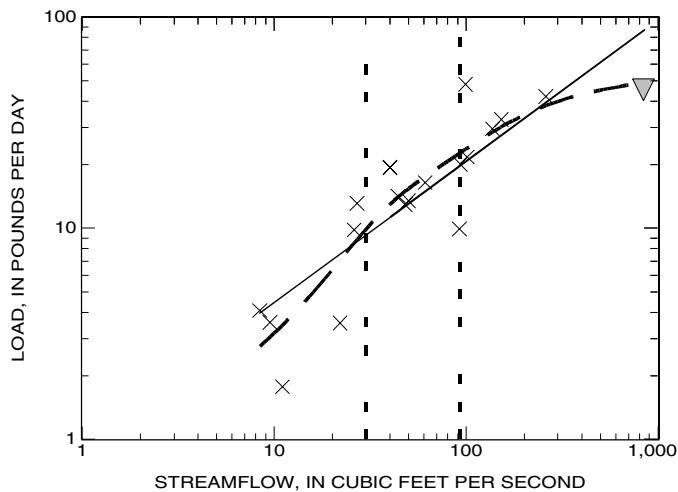
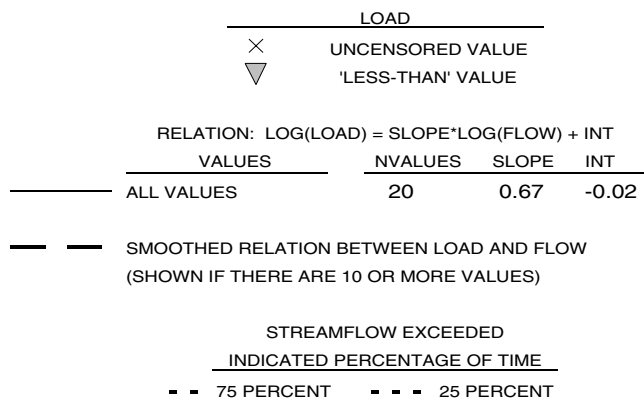
TOTAL BORON
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

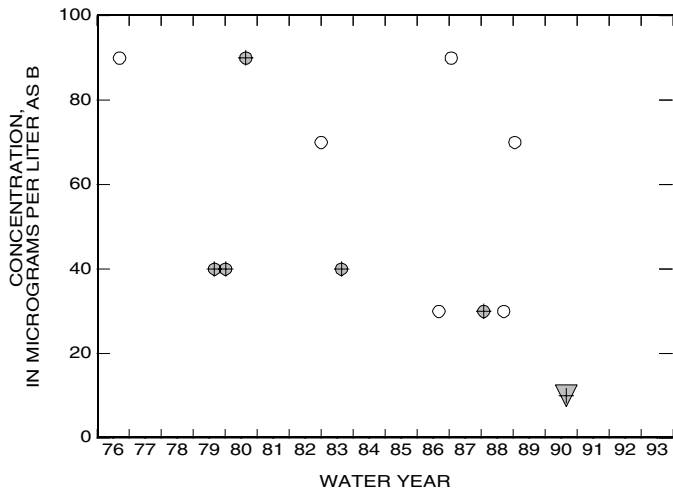
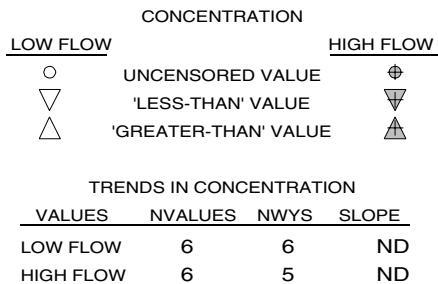
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



APPENDIX 16. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL BORON
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

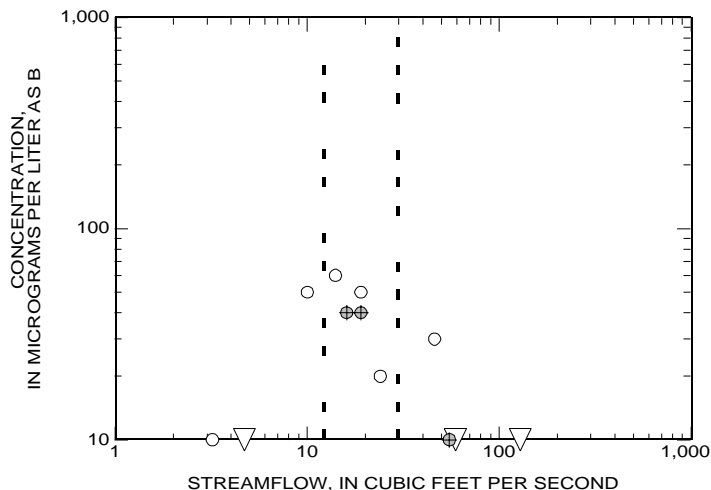
[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	12	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	9	ND	ND
NONGROWING SEASON	3	ND	ND

STREAMFLOW EXCEEDED	
INDICATED PERCENTAGE OF TIME	
--- 75 PERCENT	--- 25 PERCENT



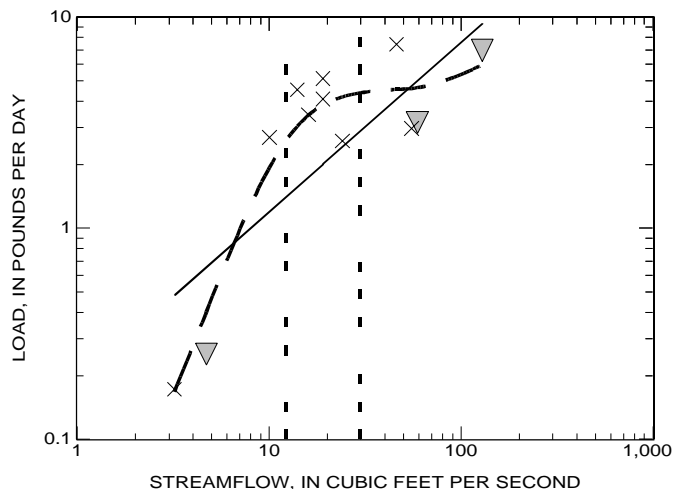
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		

RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	12	0.8	-0.72

— — — SMOOTHED RELATION BETWEEN LOAD AND FLOW
(SHOWN IF THERE ARE 10 OR MORE VALUES)

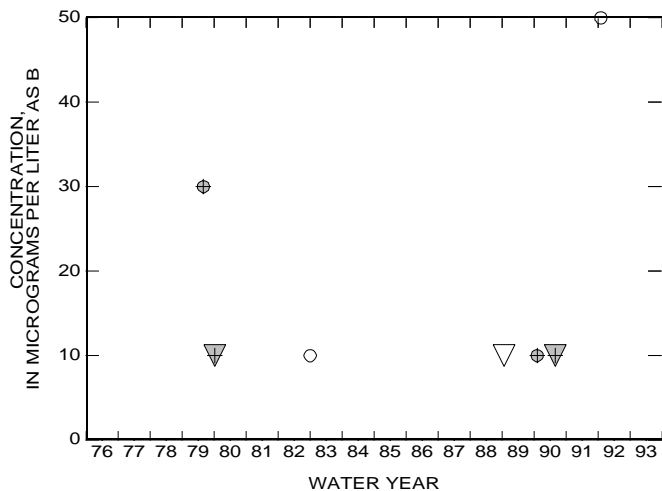
STREAMFLOW EXCEEDED	
INDICATED PERCENTAGE OF TIME	
--- 75 PERCENT	--- 25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	3	3	ND
HIGH FLOW	4	3	ND



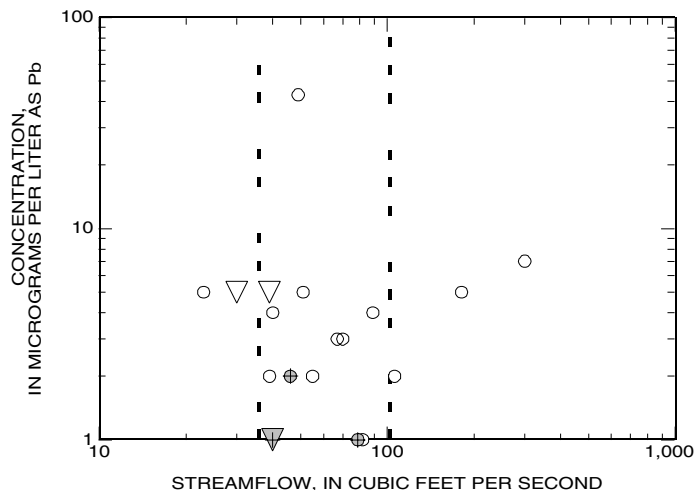
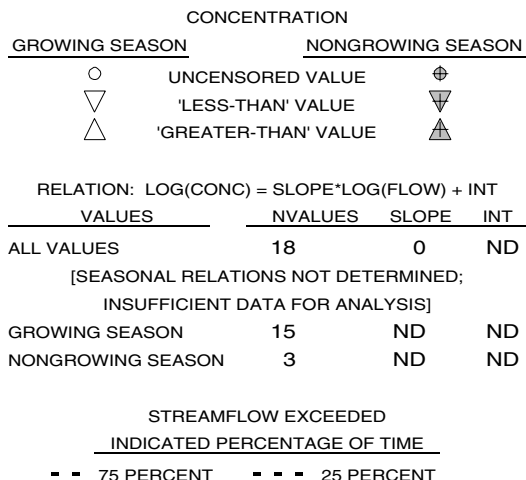
Appendix 17 - Total lead

<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Blackwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

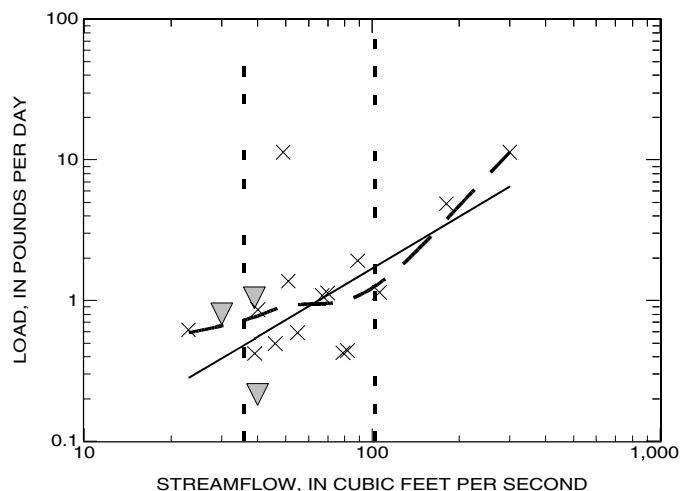
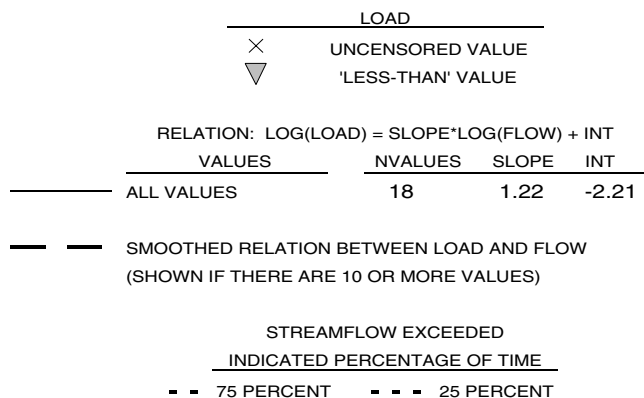
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

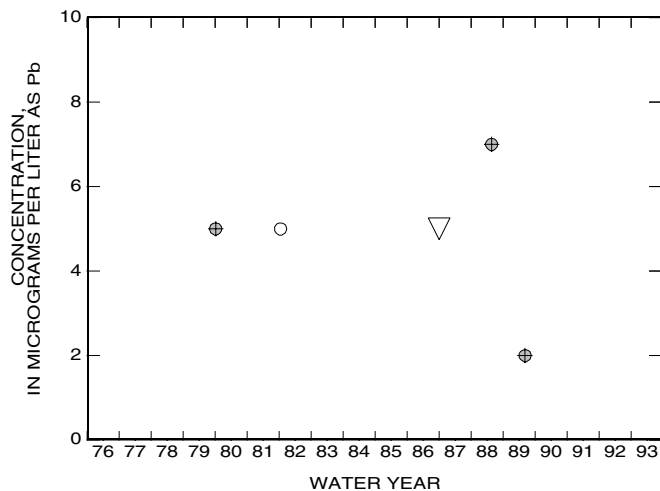
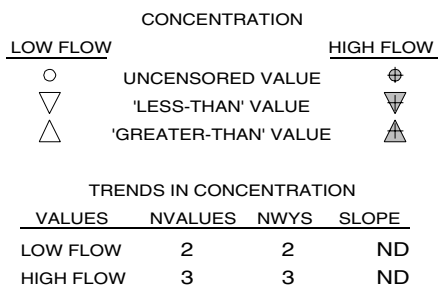
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

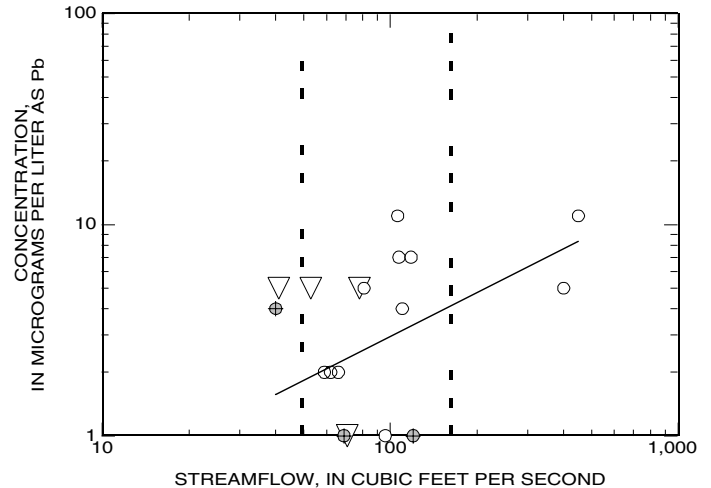
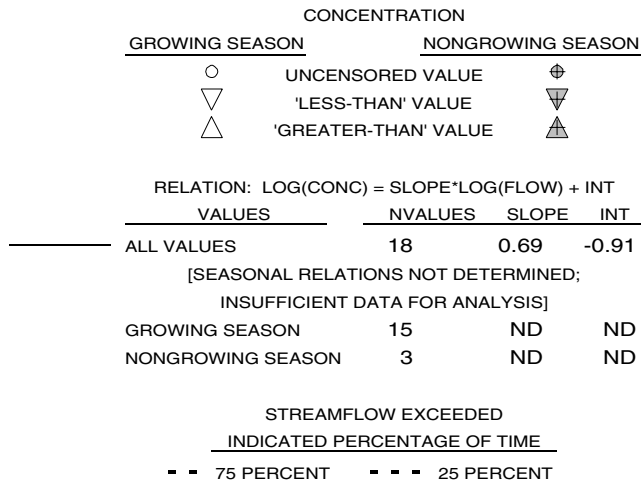


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

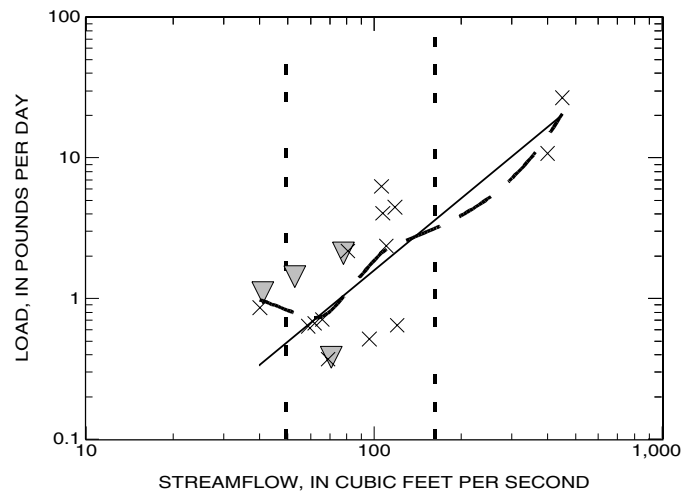
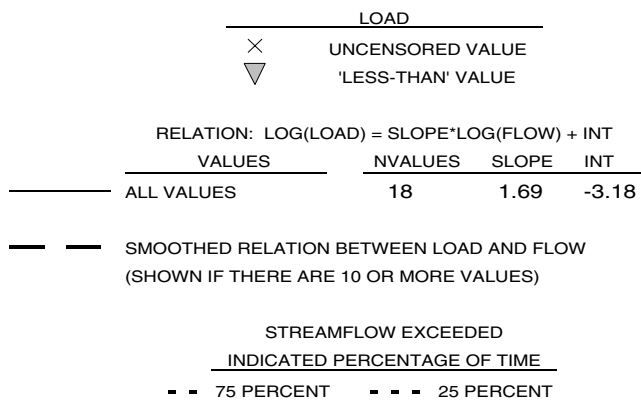
TOTAL LEAD
01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

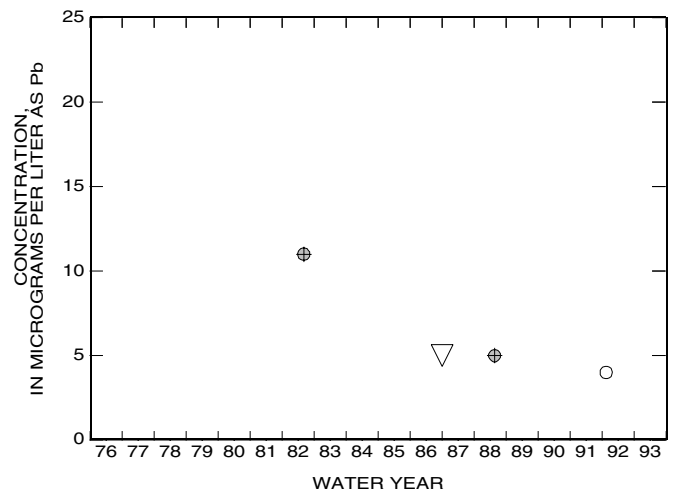
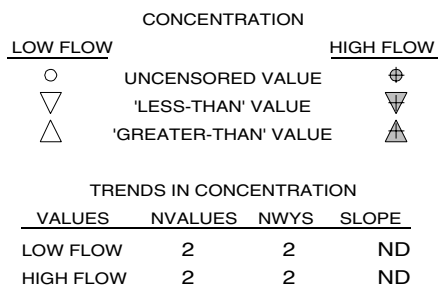
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



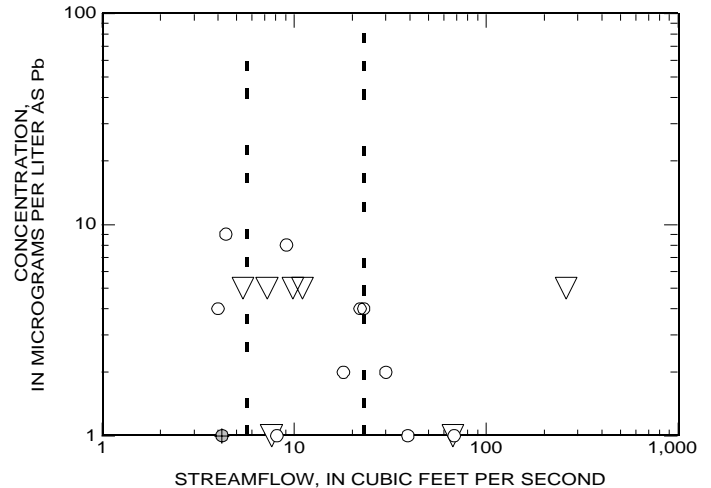
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL LEAD
01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

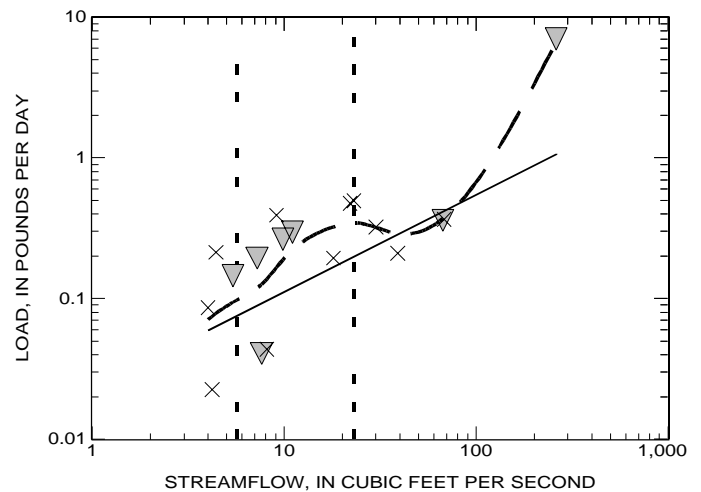
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	18	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	17	ND	ND
NONGROWING SEASON	1	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - -	75 PERCENT	- - -	25 PERCENT



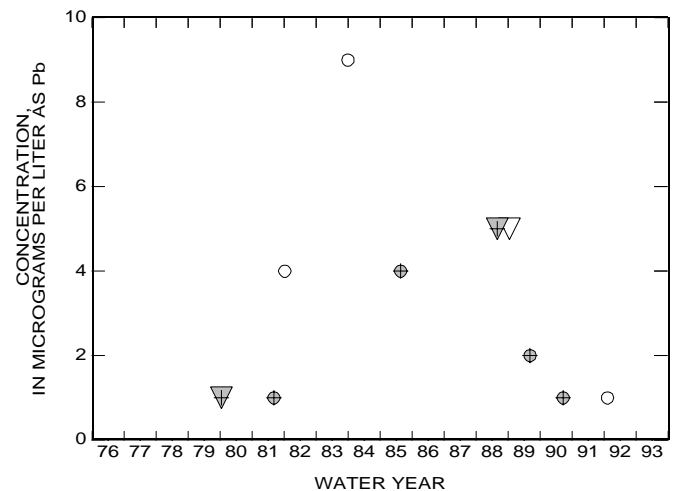
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	18	0.69	-1.64
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - -	75 PERCENT	- - -	25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

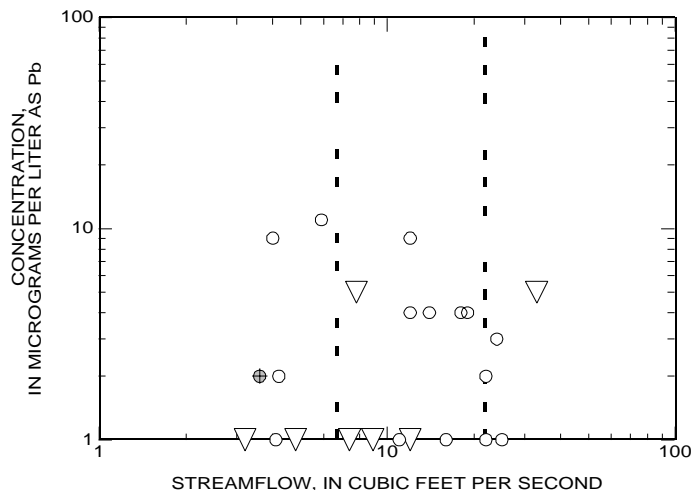
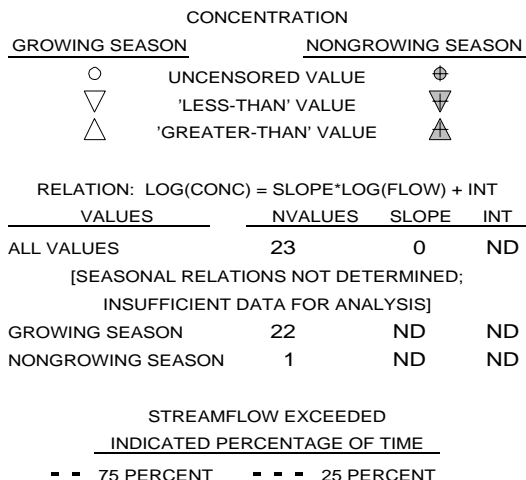
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	4	ND
HIGH FLOW	6	6	ND



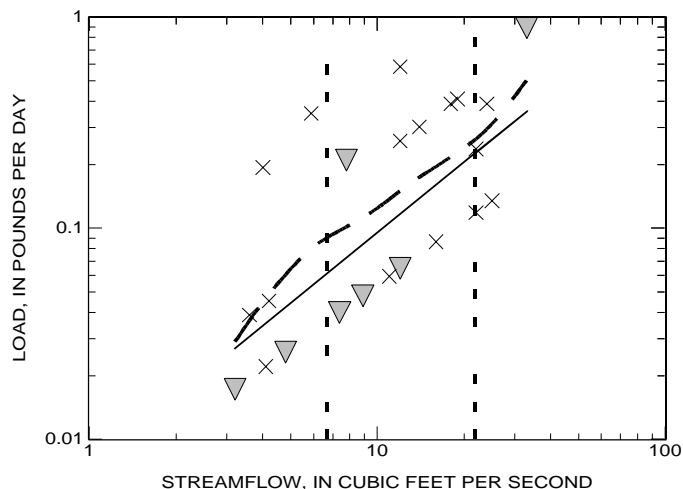
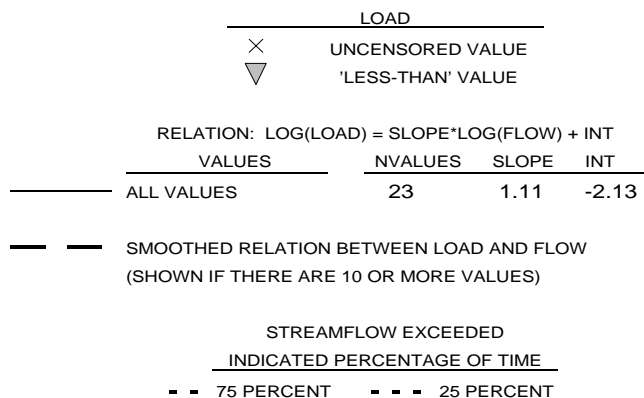
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

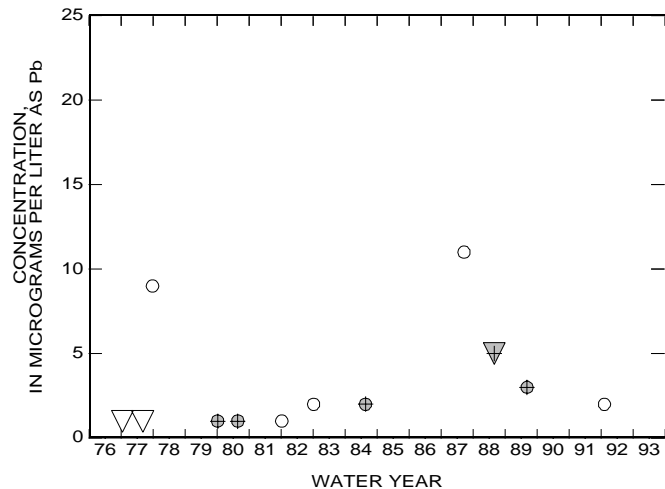
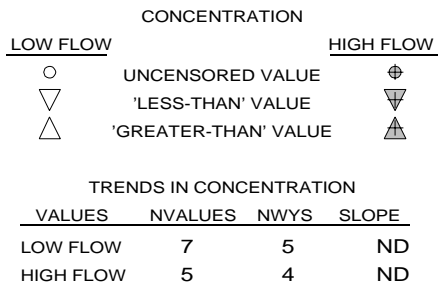
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

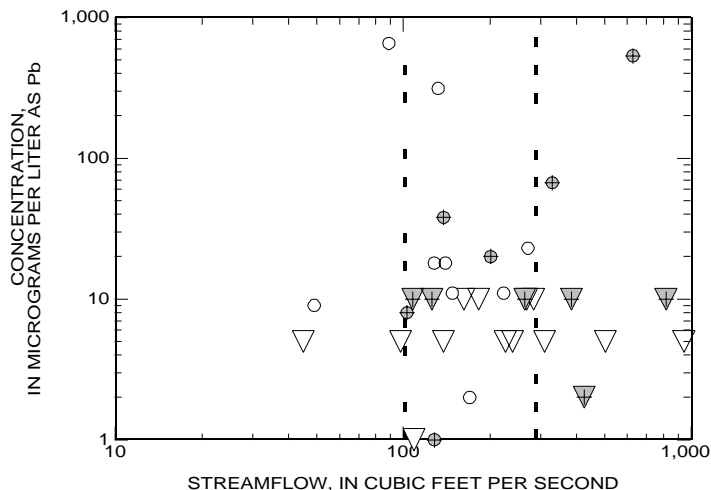


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

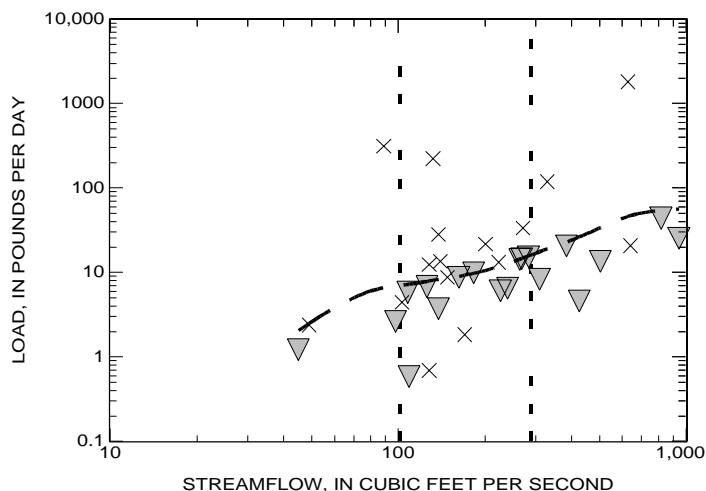
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	36	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	24	ND	ND
NONGROWING SEASON	12	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



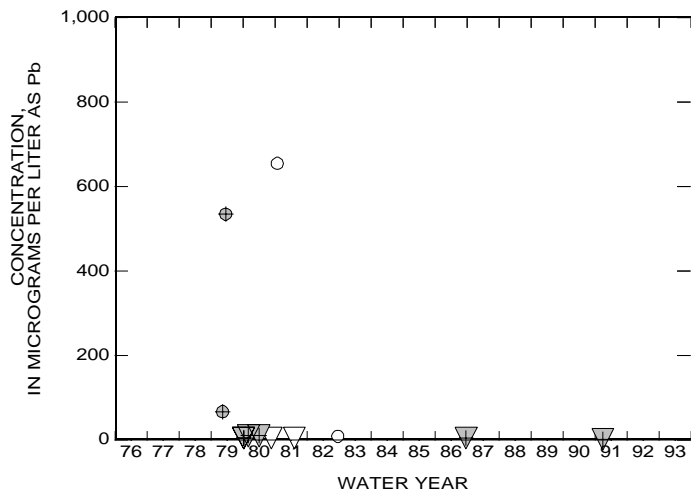
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	36	0	ND
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	3	ND
HIGH FLOW	9	5	ND

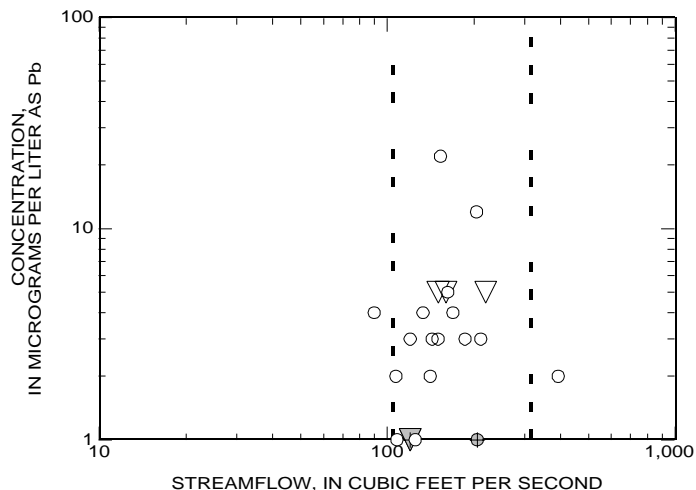


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

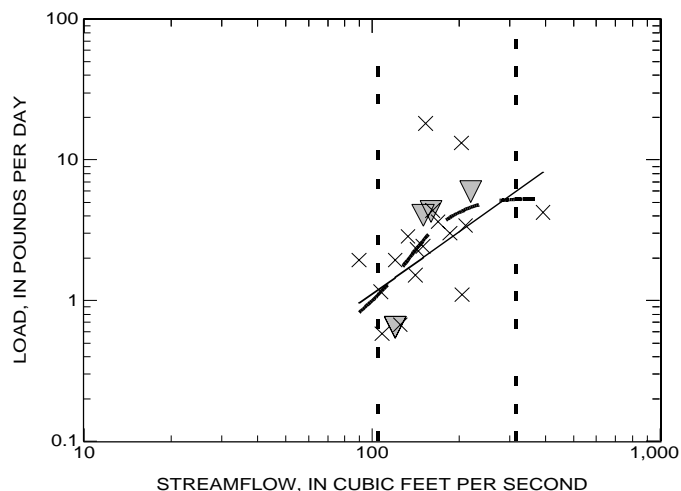
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	22	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	20	ND	ND
NONGROWING SEASON	2	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



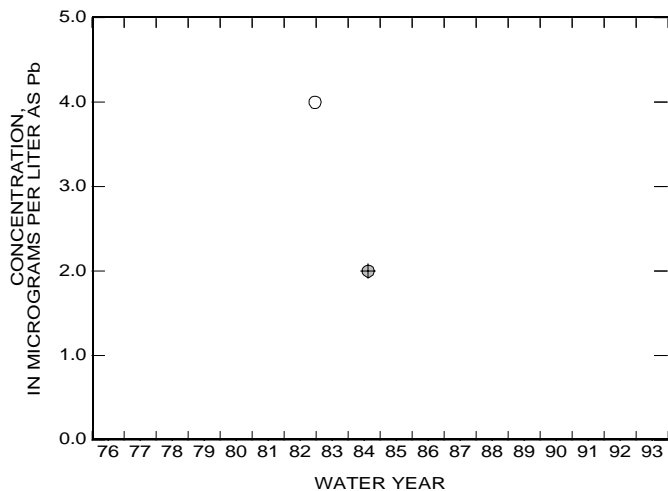
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	22	1.45	-2.85
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
- - -			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	1	1	ND
HIGH FLOW	1	1	ND

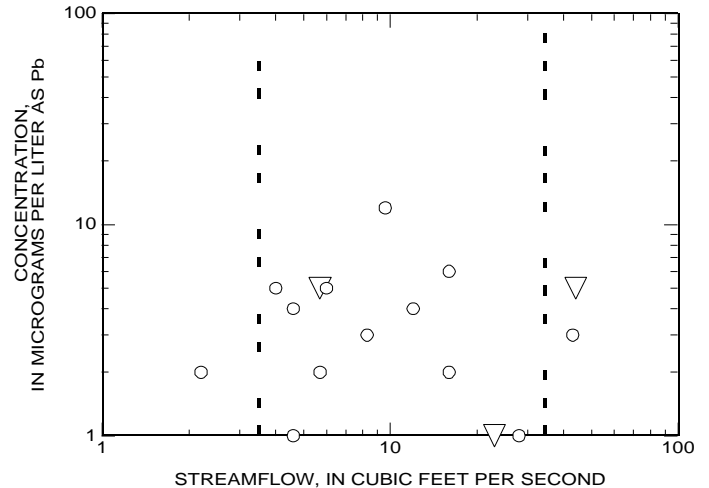


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

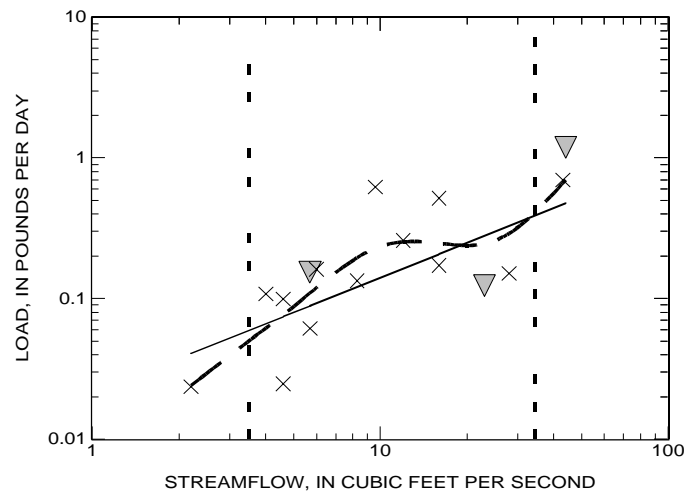
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	16	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	16	ND	ND
NONGROWING SEASON	0	ND	ND
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	--- 25 PERCENT		



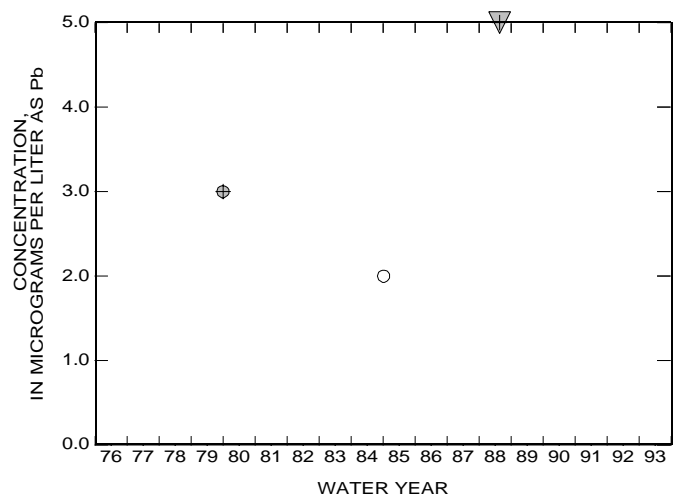
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	16	0.82	-1.67
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
--- 75 PERCENT --- 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	1	1	ND
HIGH FLOW	2	2	ND

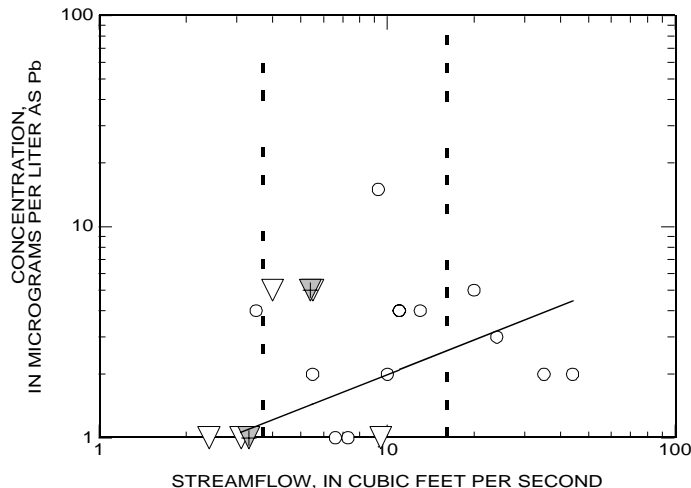
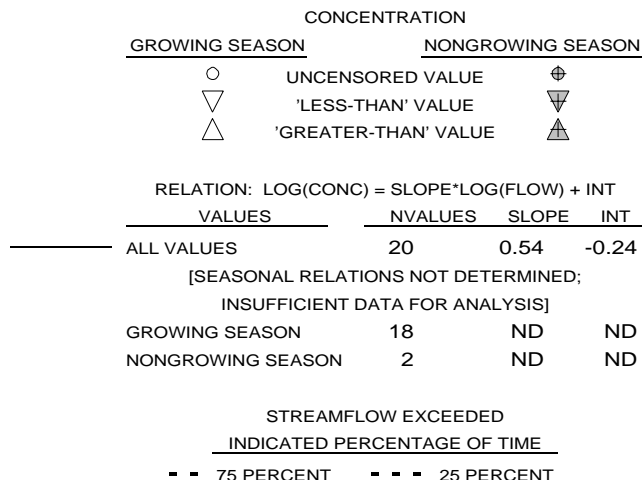


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

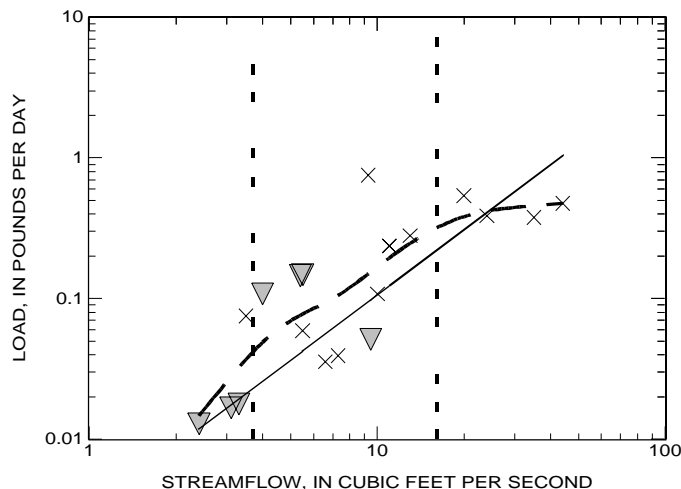
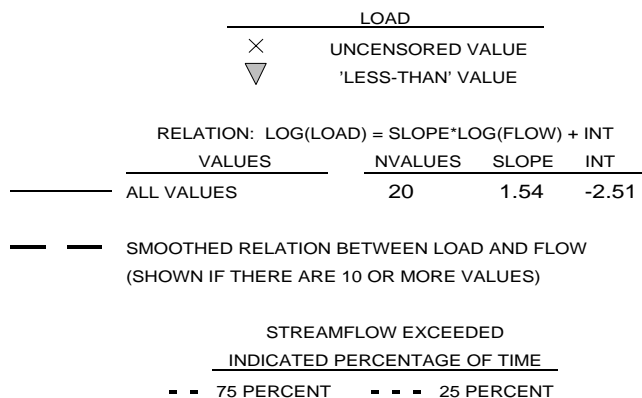
TOTAL LEAD
01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

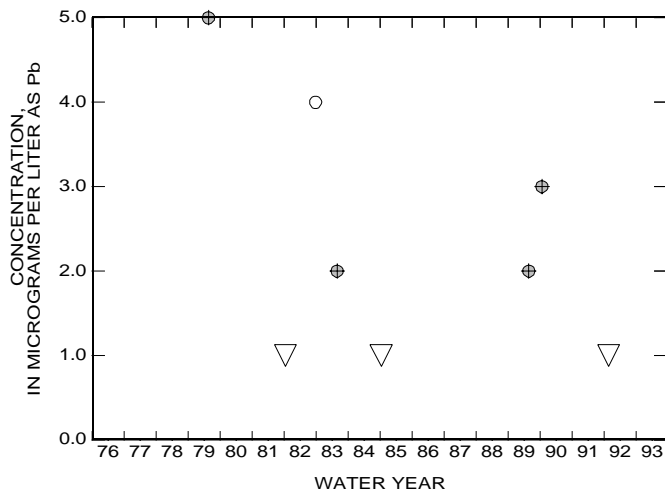
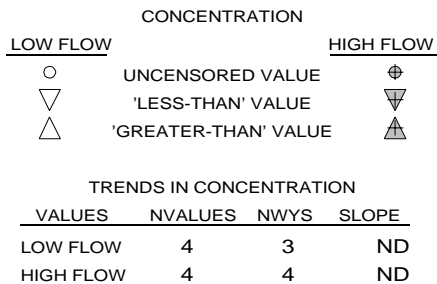
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



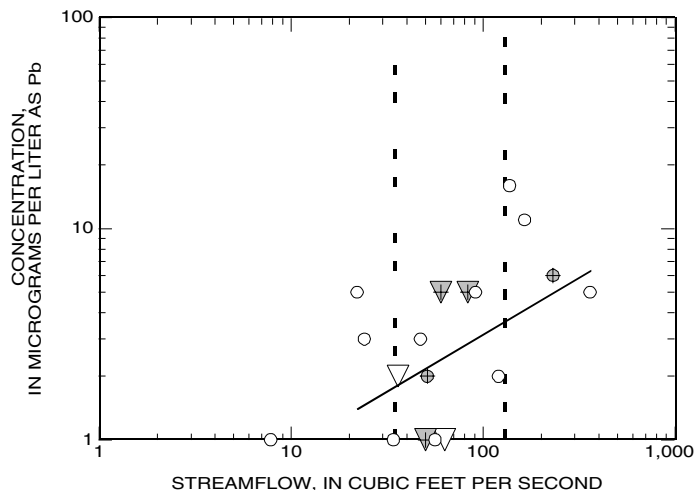
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL LEAD
01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

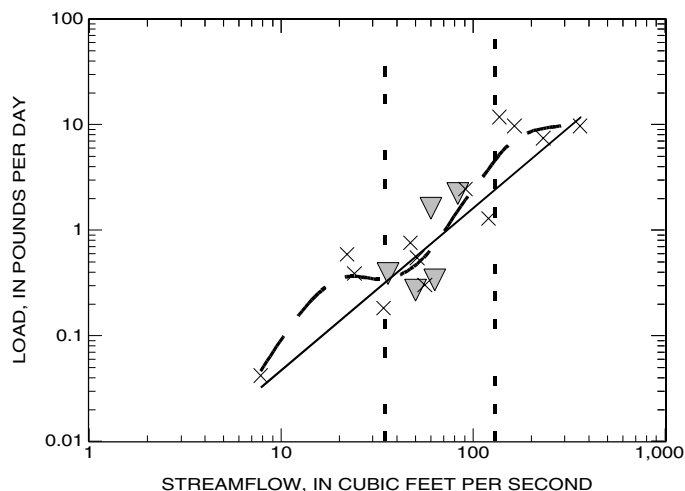
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: $\text{LOG}(\text{CONC}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	18	0.54	-0.58
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	13	ND	ND
NONGROWING SEASON	5	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - -	75 PERCENT	- - -	25 PERCENT



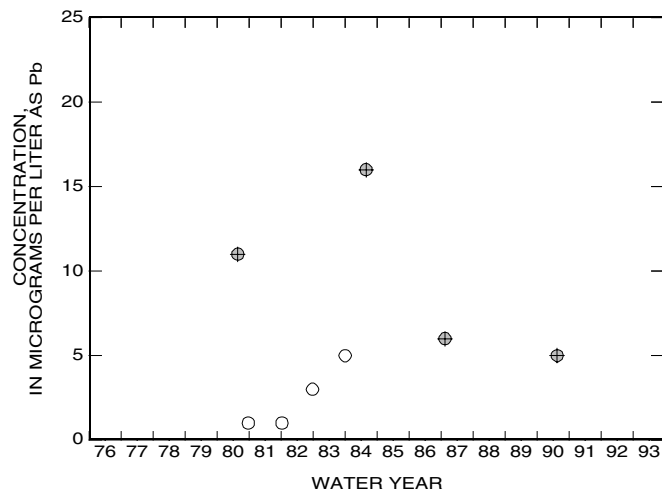
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: $\text{LOG}(\text{LOAD}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	18	1.54	-2.86
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - -	75 PERCENT	- - -	25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

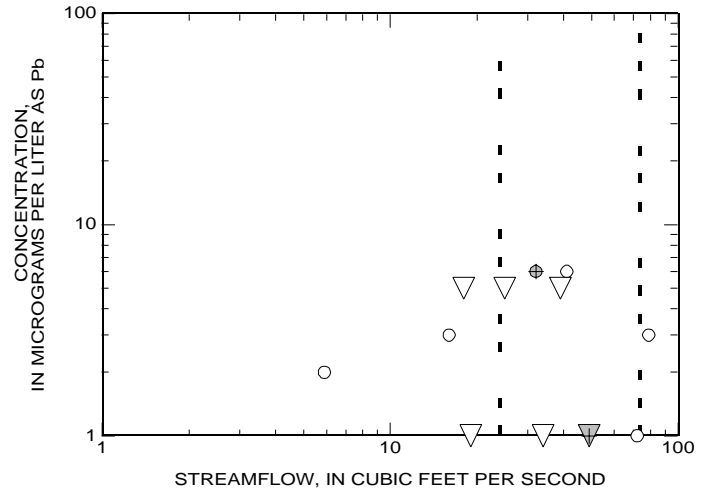
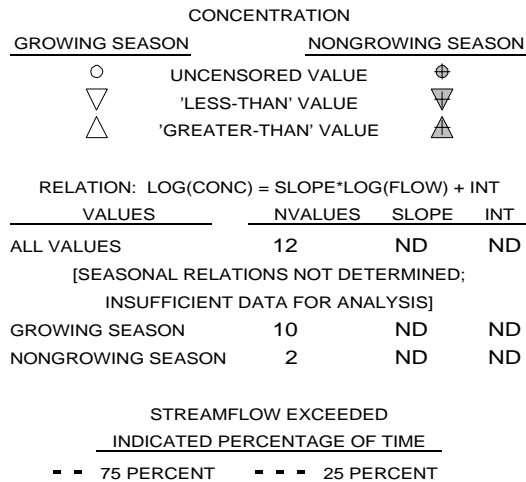
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	3	ND
HIGH FLOW	4	4	ND



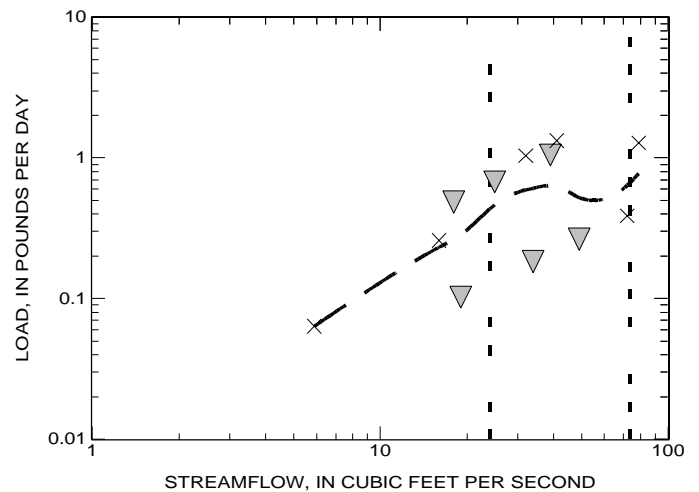
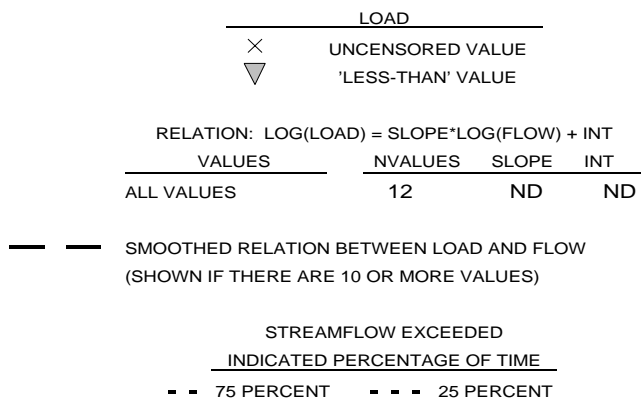
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

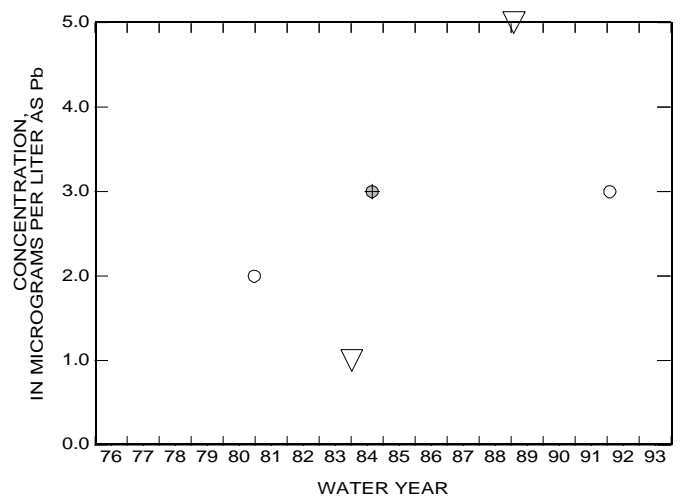
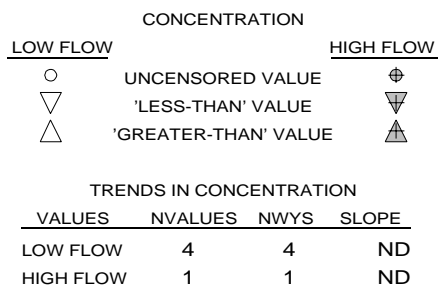
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



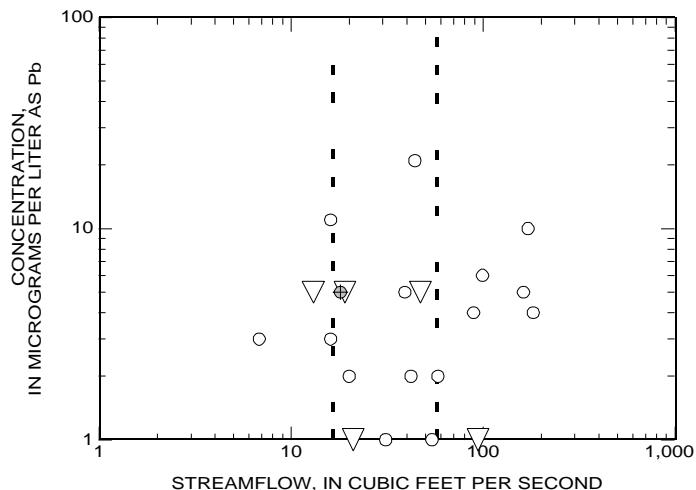
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL LEAD
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

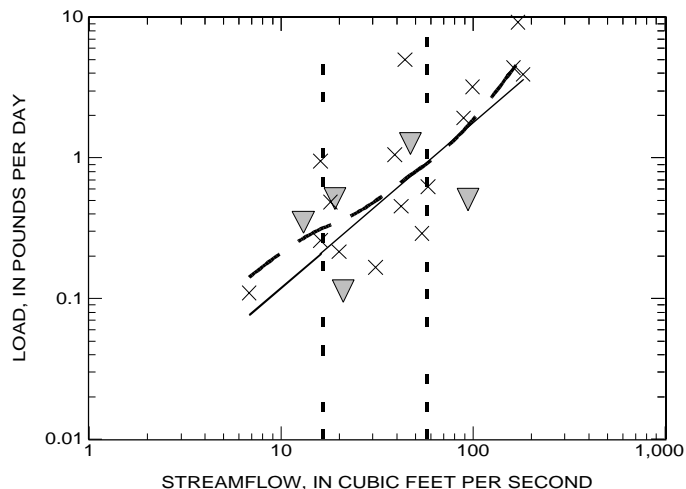
CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: $\text{LOG}(\text{CONC}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	21	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	20	ND	ND
NONGROWING SEASON	1	ND	ND
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	---	---	---
	---	---	---



RELATION OF LOAD TO STREAMFLOW

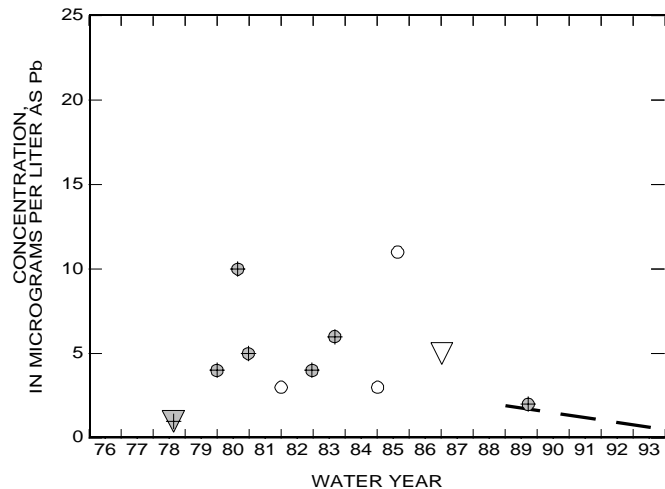
LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: $\text{LOG}(\text{LOAD}) = \text{SLOPE} \cdot \text{LOG}(\text{FLOW}) + \text{INT}$			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	21	1.17	-2.09
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			

STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
--- 75 PERCENT	---	---	---
	---	---	---



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

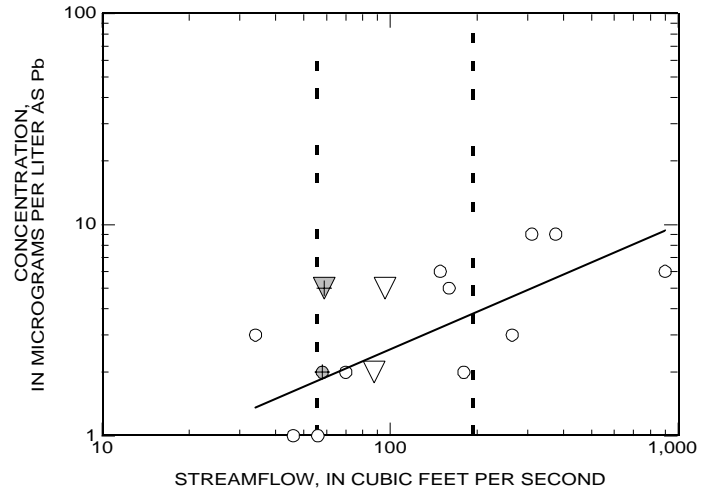
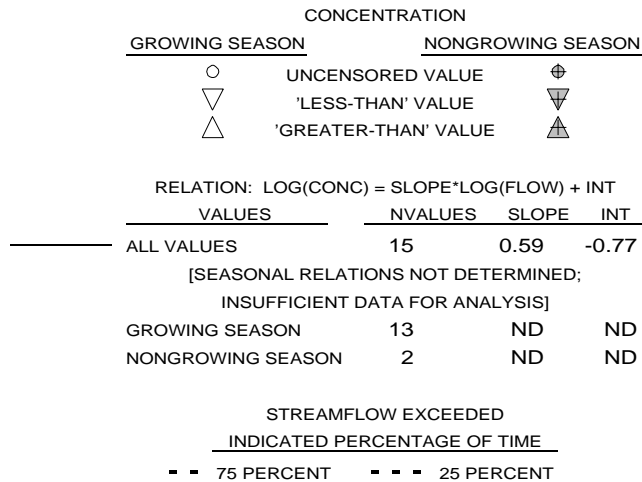
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	4	3	ND
HIGH FLOW	7	6	ND



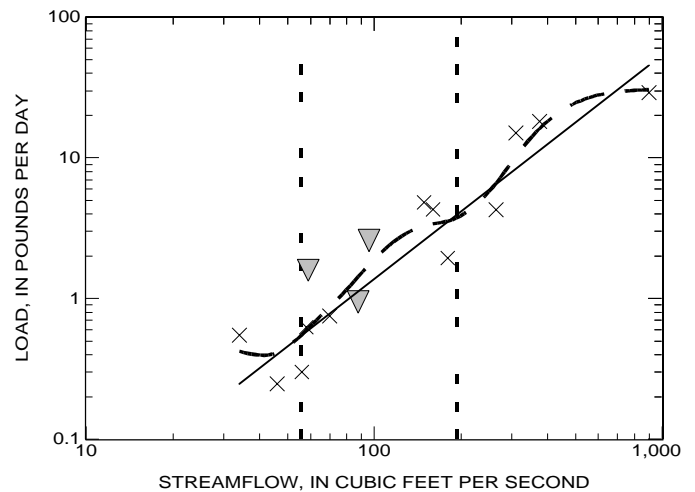
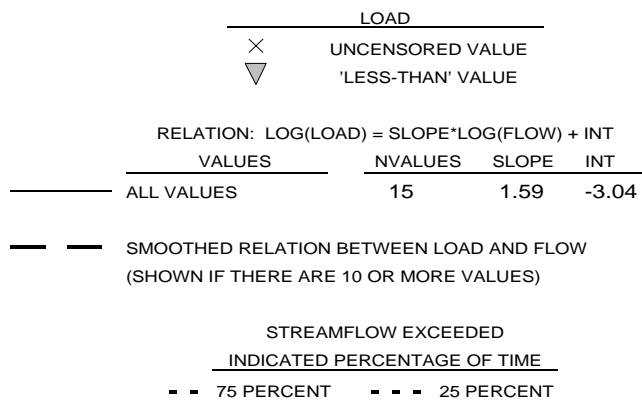
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

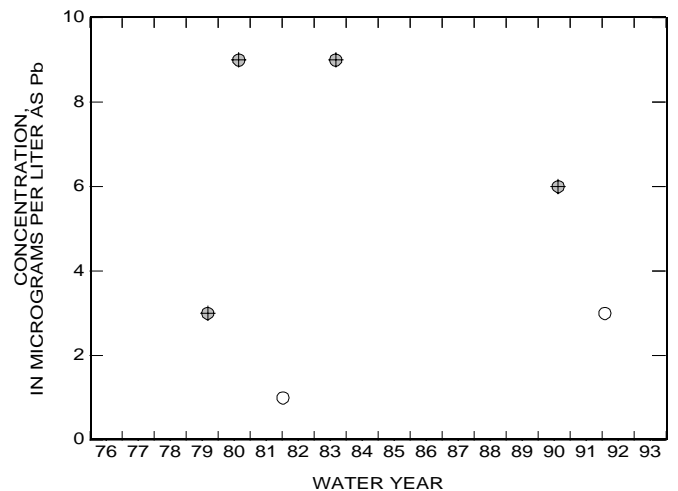
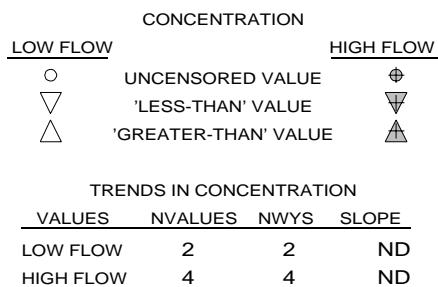
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



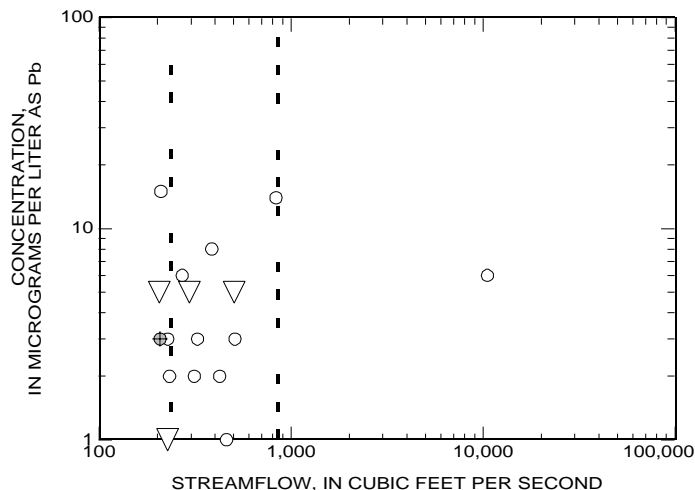
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL LEAD
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

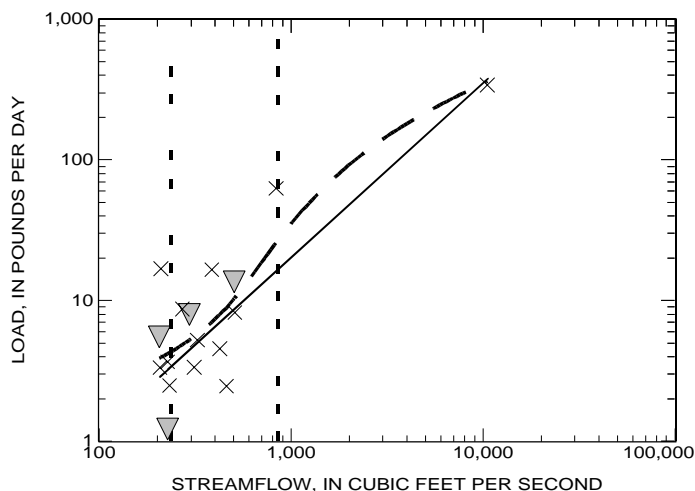
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	17	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	16	ND	ND
NONGROWING SEASON	1	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - - 75 PERCENT		- - - 25 PERCENT	



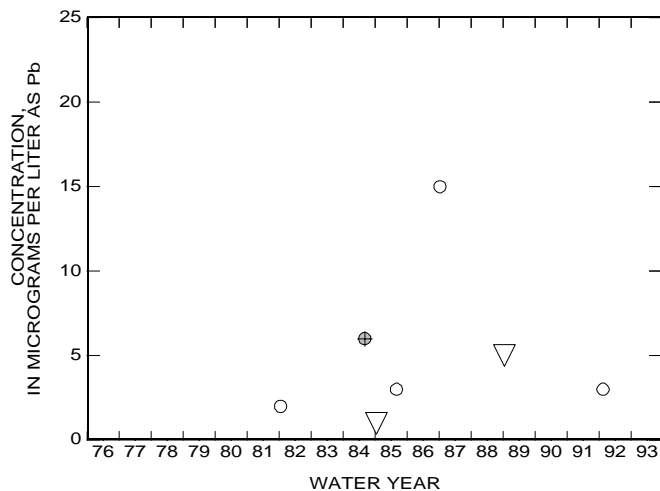
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	17	1.24	-2.41
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	6	5	ND
HIGH FLOW	1	1	ND

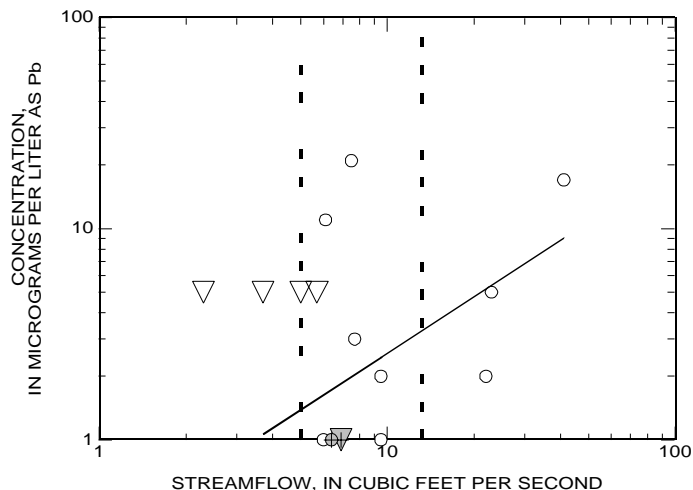
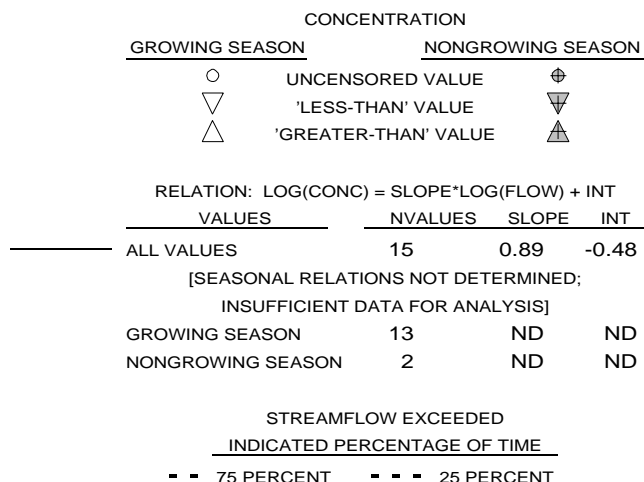


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

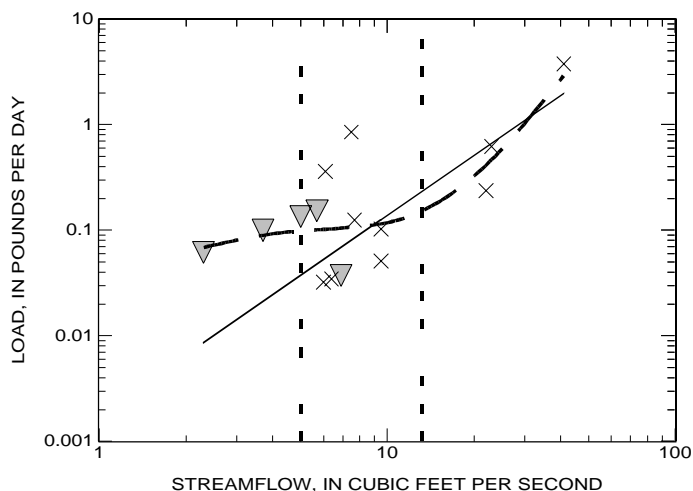
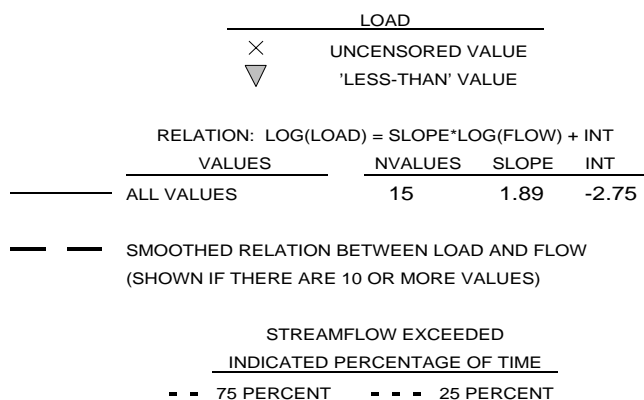
TOTAL LEAD
01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

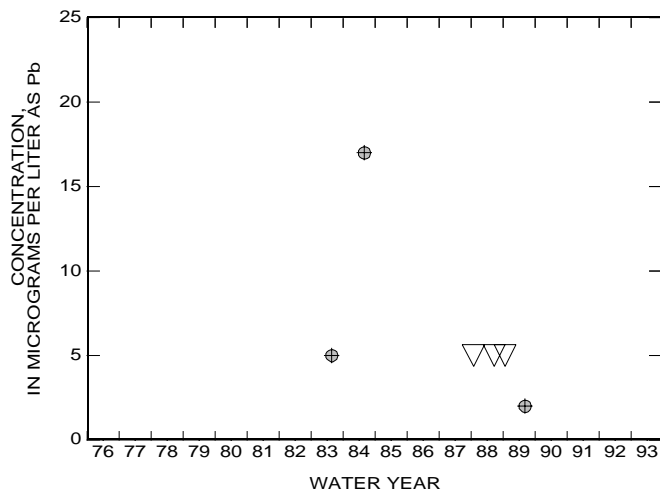
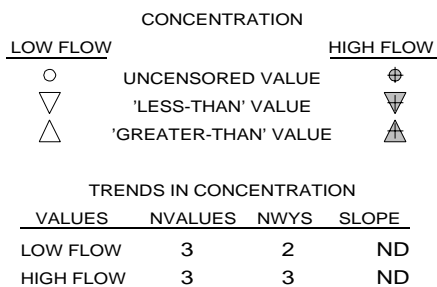
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



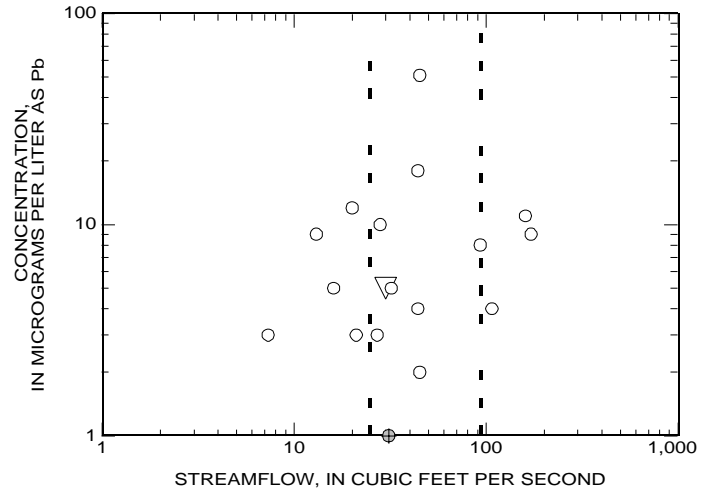
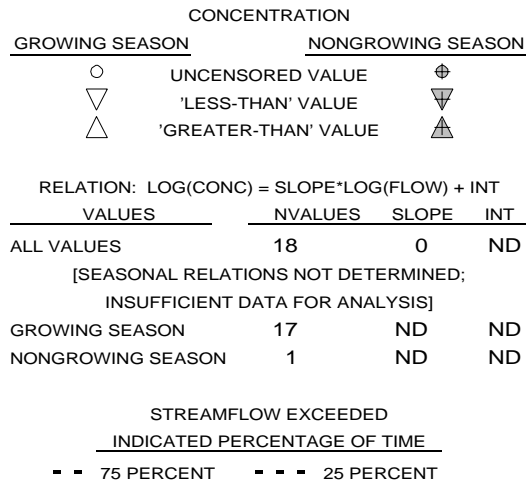
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



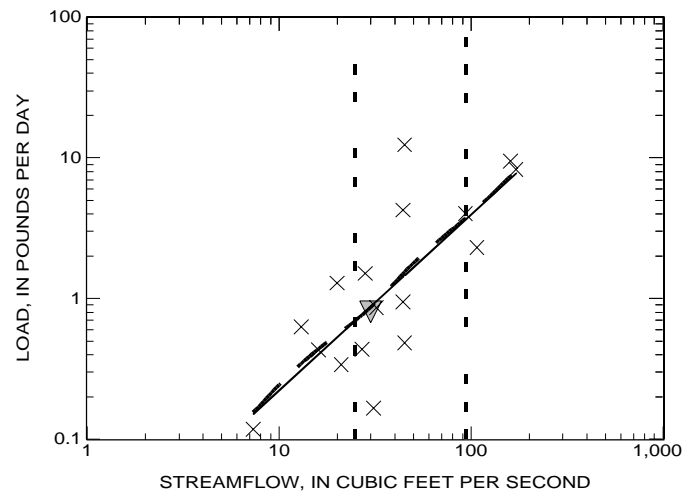
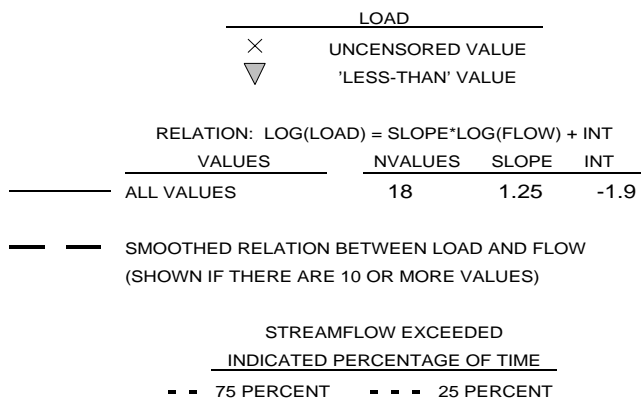
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

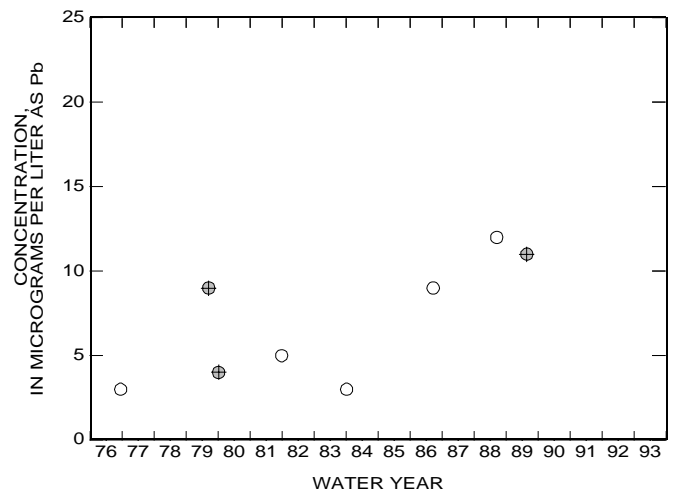
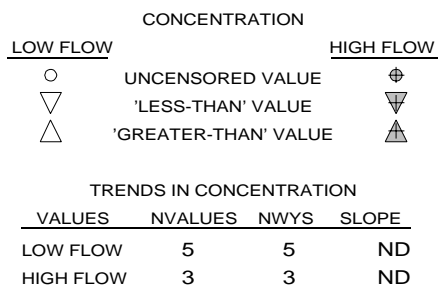
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

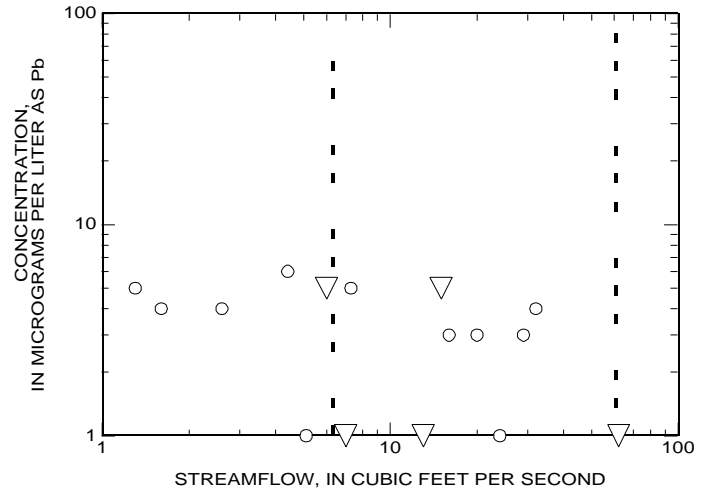


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

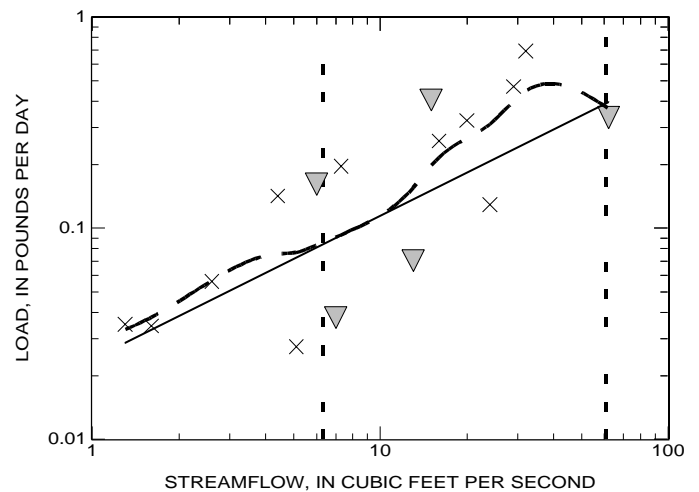
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	16	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	16	ND	ND
NONGROWING SEASON	0	ND	ND
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



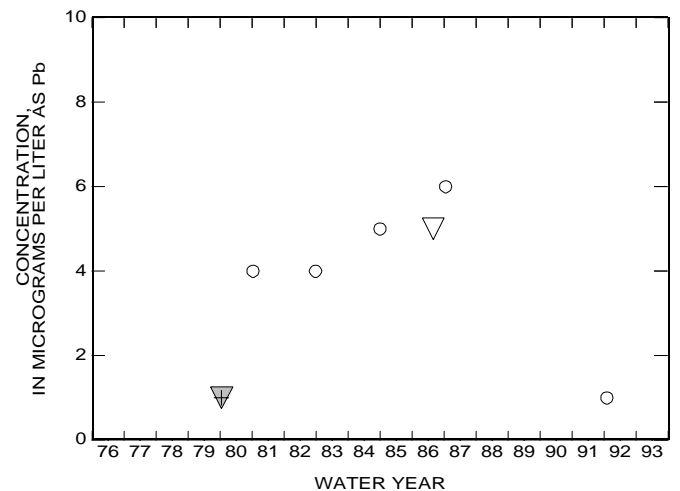
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		
RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	16	0.68	-1.62
SMOOTHED RELATION BETWEEN LOAD AND FLOW (SHOWN IF THERE ARE 10 OR MORE VALUES)			
- - -			
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

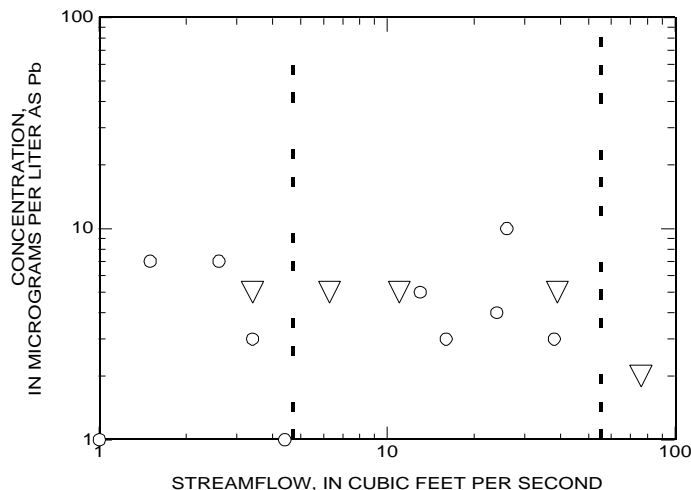
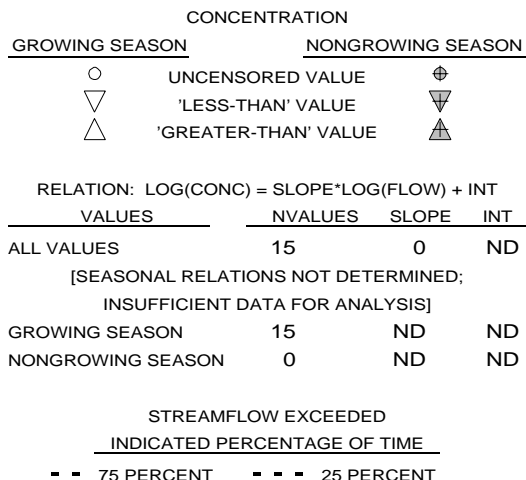
CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	6	6	ND
HIGH FLOW	1	1	ND



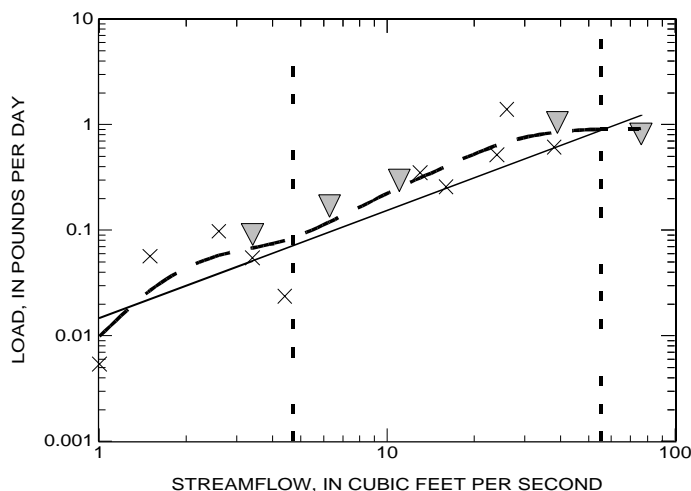
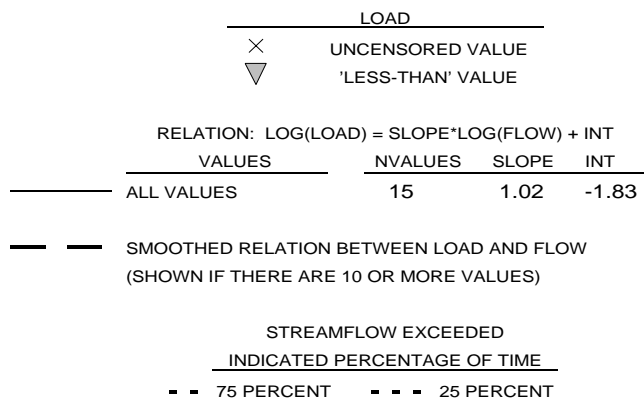
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

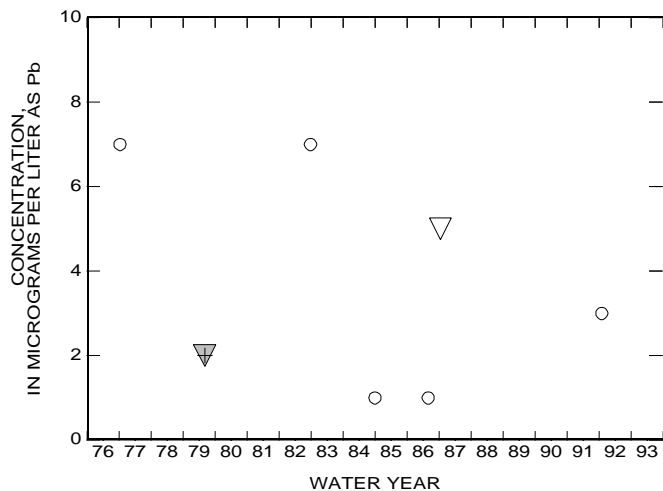
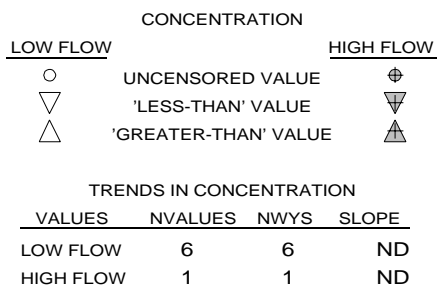
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



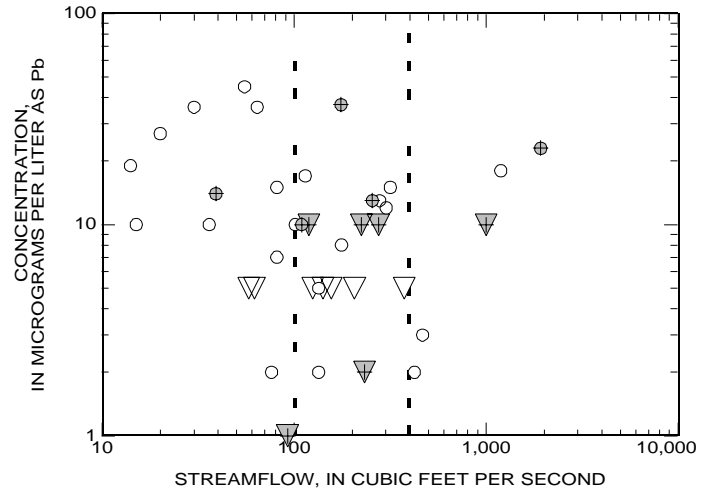
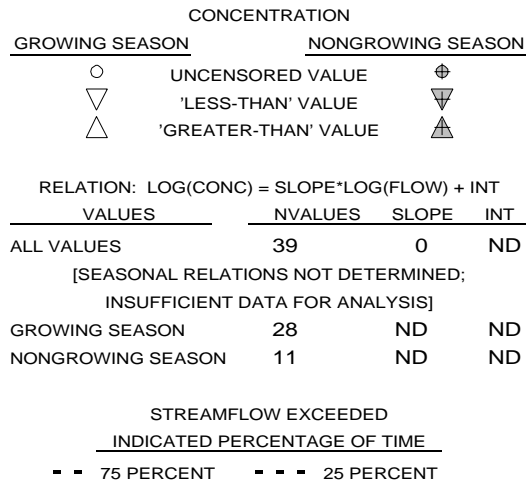
TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



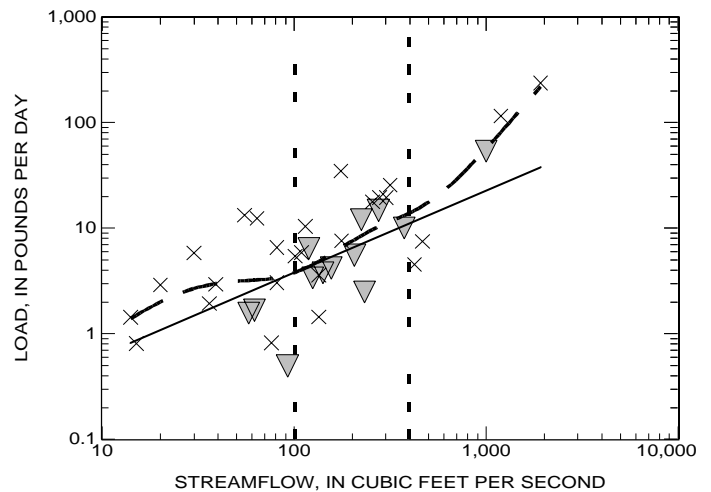
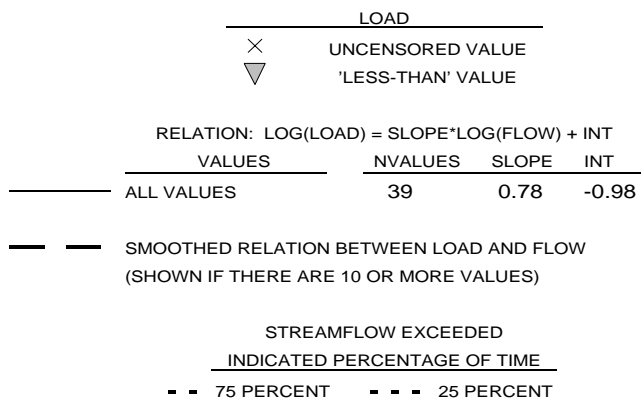
APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time
TOTAL LEAD
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

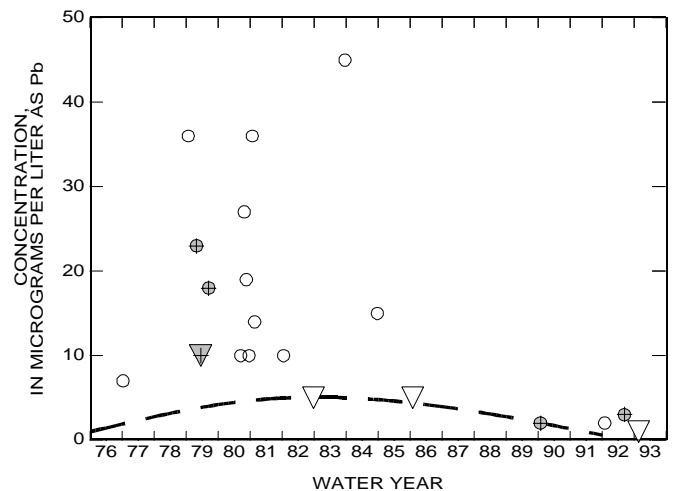
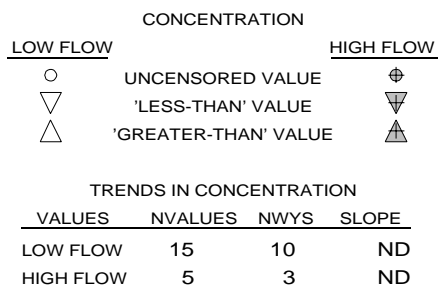
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

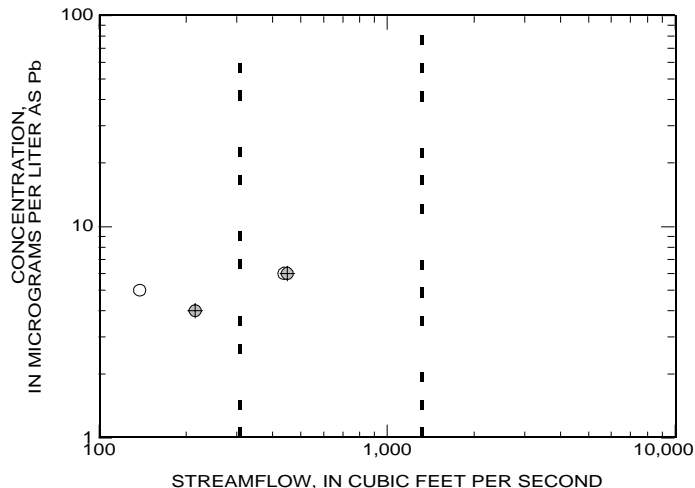
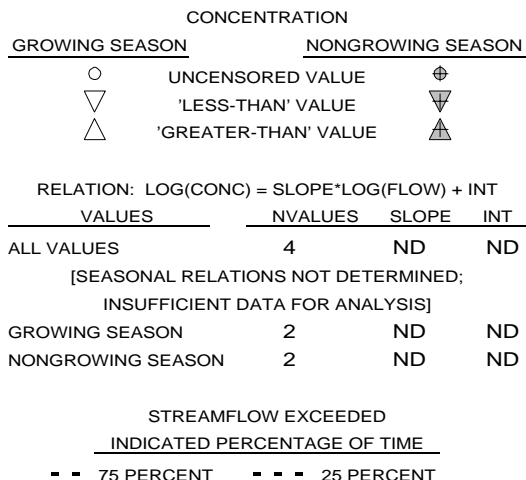


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

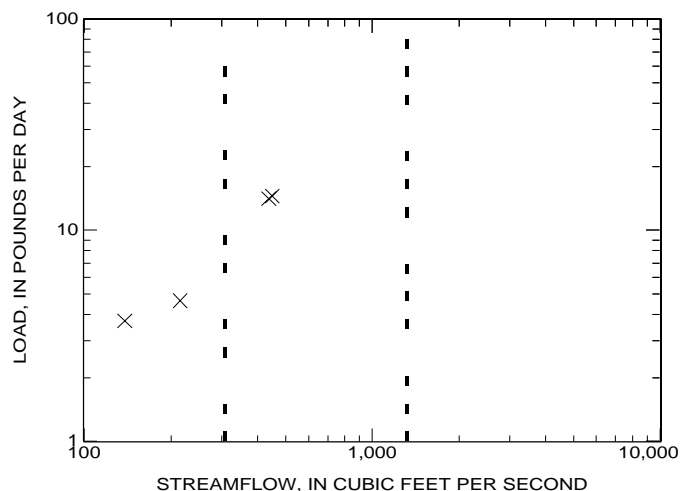
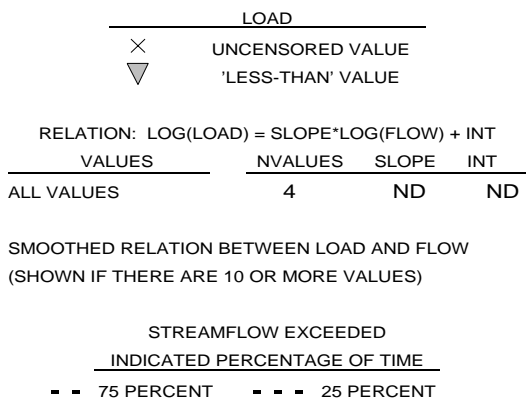
TOTAL LEAD
01403300 RARITAN RIVER AT QUEENS BRIDGE, AT BOUND BROOK, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

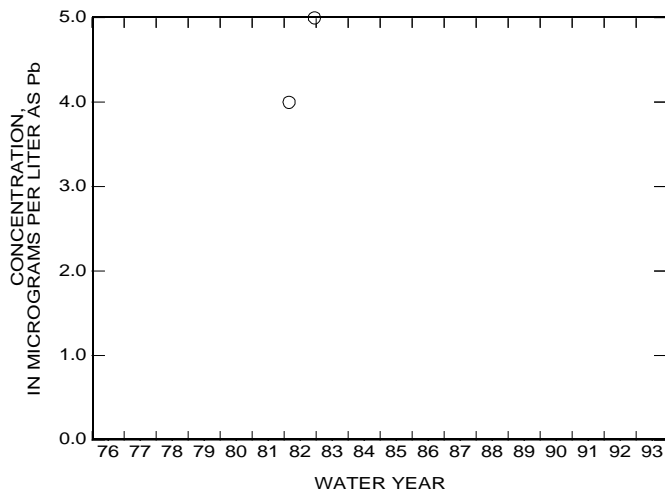
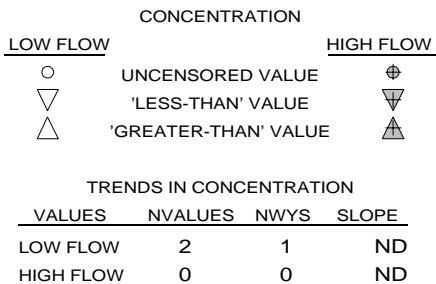
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

TOTAL LEAD
01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

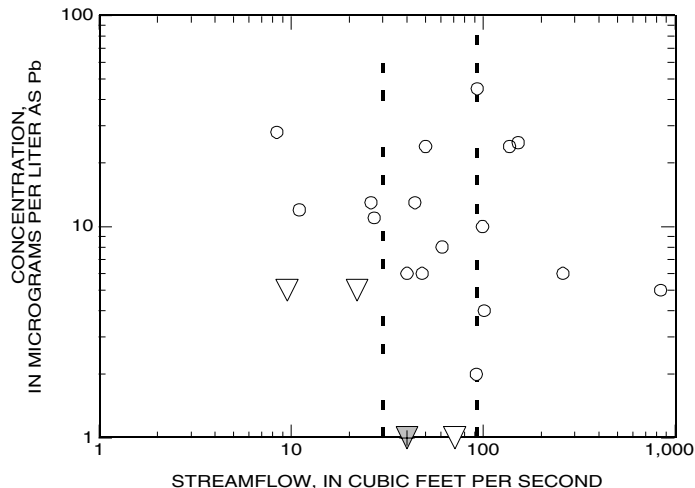
[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	21	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	20	ND	ND
NONGROWING SEASON	1	ND	ND

STREAMFLOW EXCEEDED	
INDICATED PERCENTAGE OF TIME	
--- 75 PERCENT	--- 25 PERCENT



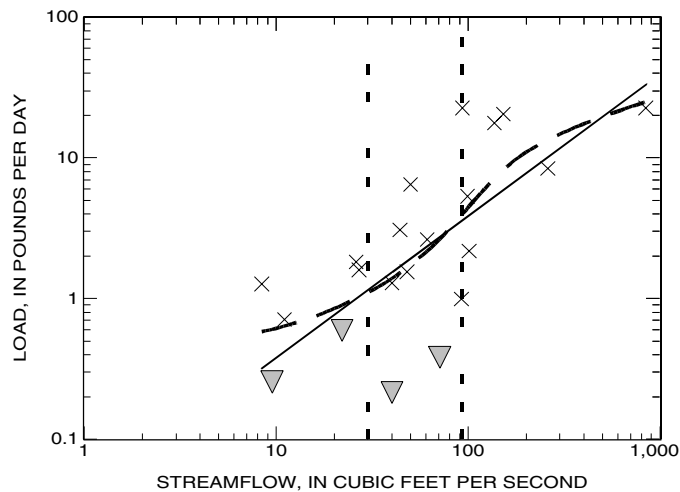
RELATION OF LOAD TO STREAMFLOW

LOAD			
×	UNCENSORED VALUE		
▽	'LESS-THAN' VALUE		

RELATION: LOG(LOAD) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	21	1.01	-1.43

— — — SMOOTHED RELATION BETWEEN LOAD AND FLOW
(SHOWN IF THERE ARE 10 OR MORE VALUES)

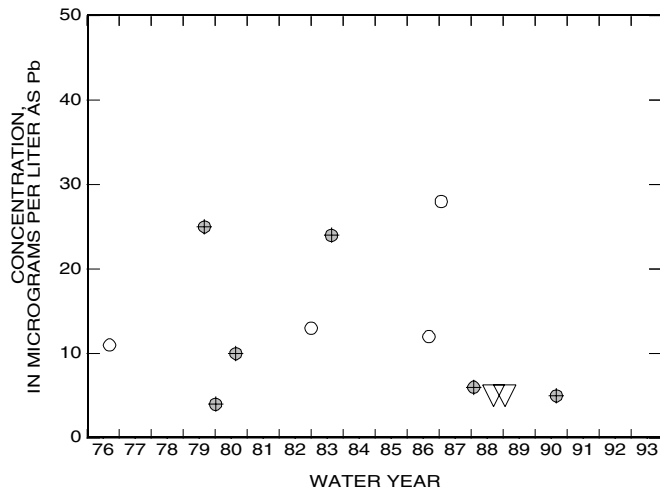
STREAMFLOW EXCEEDED	
INDICATED PERCENTAGE OF TIME	
--- 75 PERCENT	--- 25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	

TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	6	6	ND
HIGH FLOW	6	5	ND

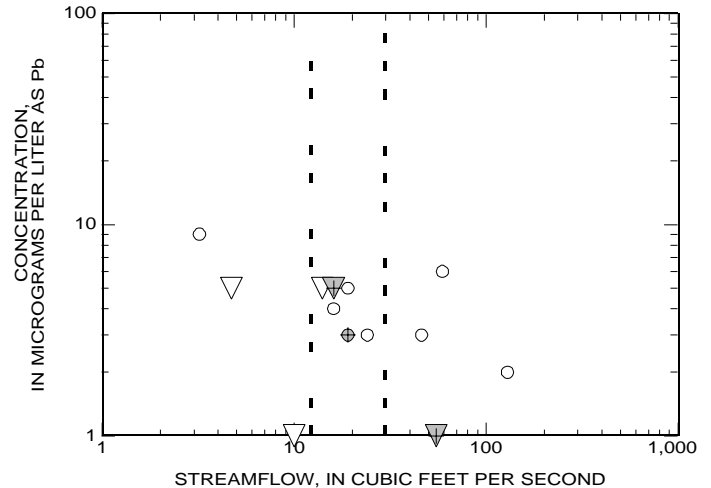
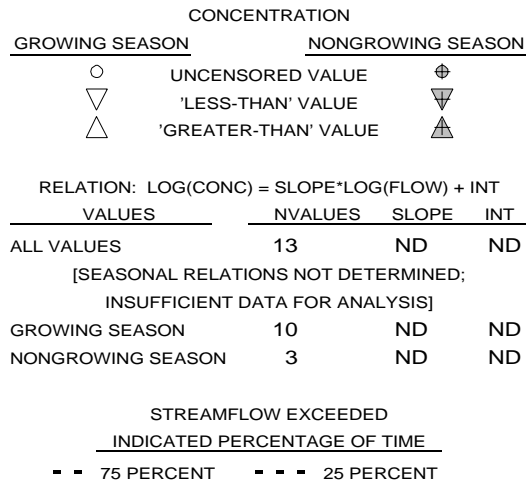


APPENDIX 17. Relations of constituent concentration and load to streamflow and trends in concentration with time

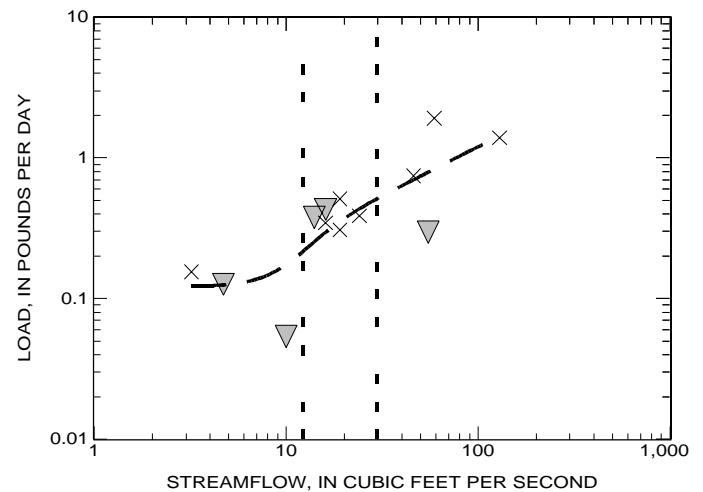
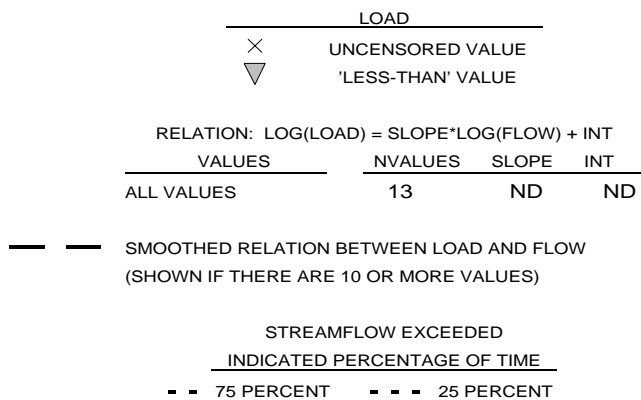
TOTAL LEAD
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

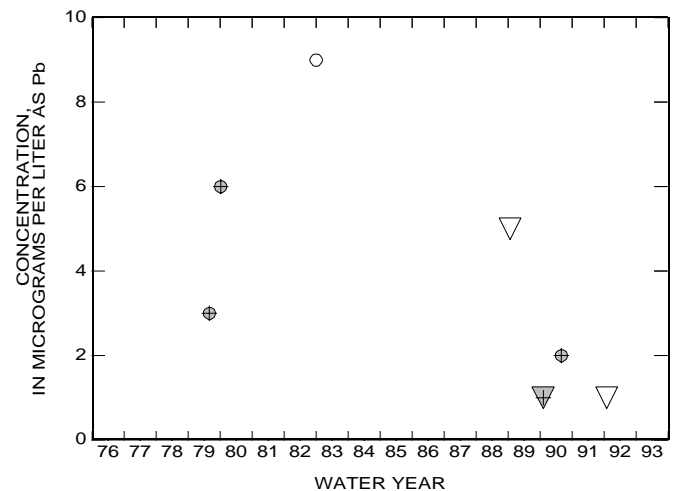
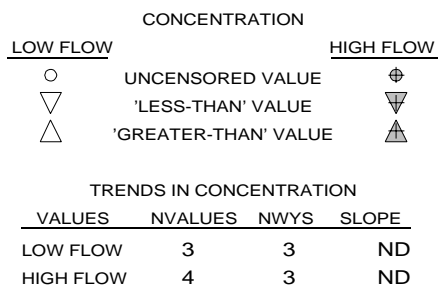
RELATION OF CONCENTRATION TO STREAMFLOW



RELATION OF LOAD TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS



Appendix 18 - Fecal coliform bacteria

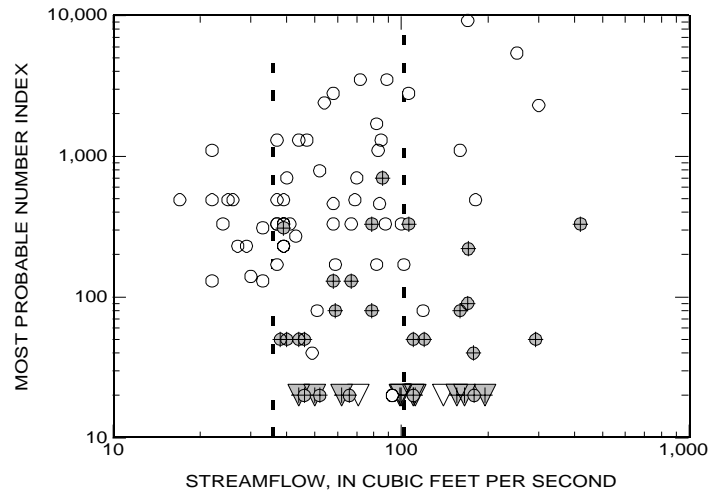
<u>Station number</u>	<u>Station name</u>
01396280	SB Raritan River at Middle Valley, N.J.
01396535	SB Raritan River at Arch St, at High Bridge, N.J.
01396588	Spruce Run near Glen Gardner, N.J.
01396660	Mulhockaway Creek at Van Syckel, N.J.
01397000	SB Raritan River at Stanton Station, N.J.
01397400	SB Raritan River at Three Bridges, N.J.
01398000	Neshanic River at Reaville, N.J.
01398260	NB Raritan River near Chester, N.J.
01399120	NB Raritan River at Burnt Mills, N.J.
01399500	Lamington (Black) River near Pottersville, N.J.
01399700	Rockaway Creek at Whitehouse, N.J.
01399780	Lamington River at Burnt Mills, N.J.
01400500	Raritan River at Manville, N.J.
01400540	Millstone River near Manalapan, N.J.
01400650	Millstone River at Grovers Mill, N.J.
01401000	Stony Brook at Princeton, N.J.
01401600	Beden Brook near Rocky Hill, N.J.
01402000	Millstone River at Bleckwells Mills, N.J.
01403300	Raritan River at Queens Bridge, at Bound Brook, N.J.
01405302	Matchaponix Brook at Mundy Ave, at Spotswood, N.J.
01405340	Manalapan Brook at Federal Rd, near Manalapan, N.J.

APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01396280 SB RARITAN RIVER AT MIDDLE VALLEY, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

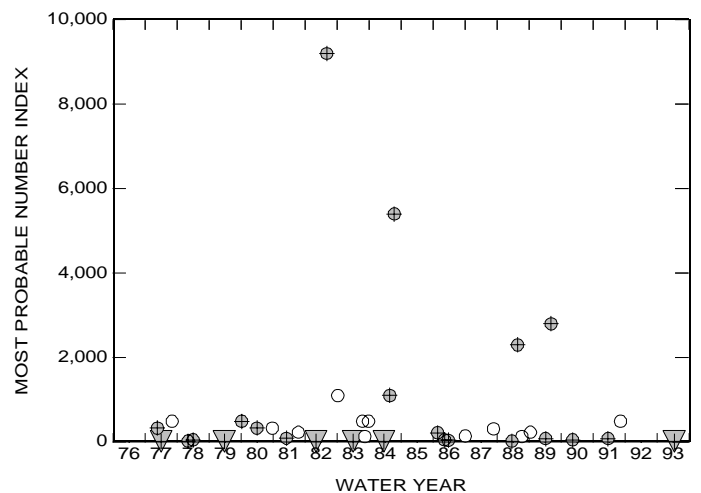
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	94	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	59	0	ND
NONGROWING SEASON	35	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	12	8	ND
HIGH FLOW	24	14	0

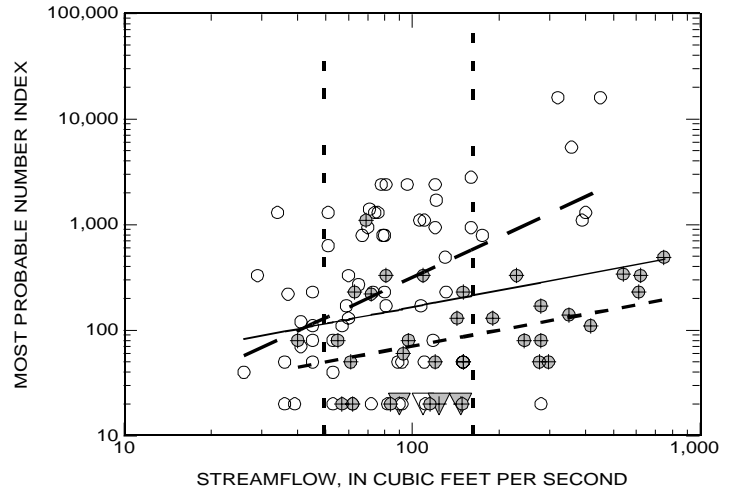


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01396535 SB RARITAN RIVER AT ARCH ST, AT HIGH BRIDGE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

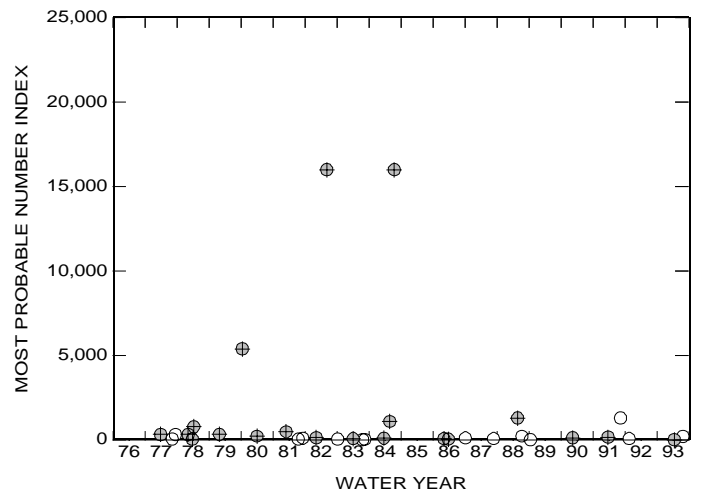
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	100	0.52	1.18	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
— — —	GROWING SEASON	64	1.27	-0.04
- - - -	NONGROWING SEASON	36	0.5	0.85
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - - -	75 PERCENT	- - - -	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

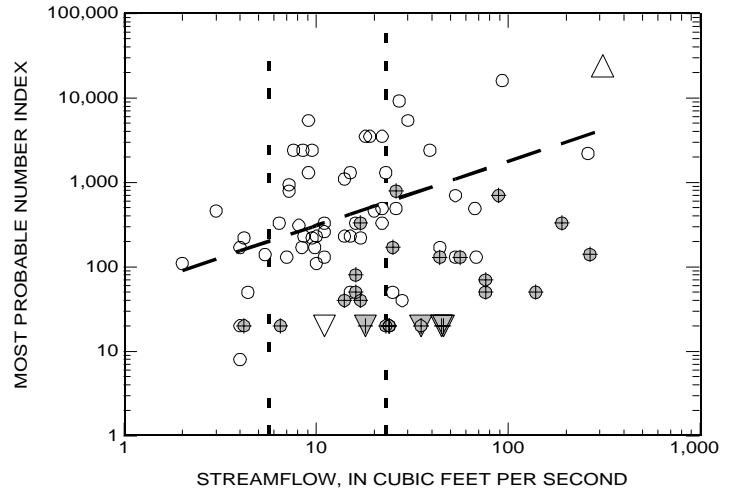
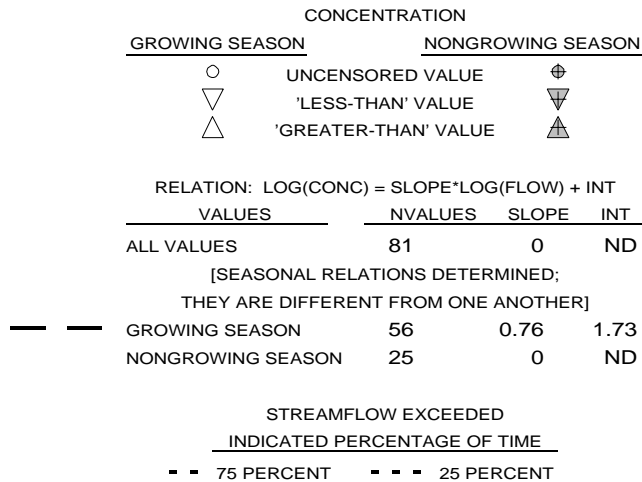
CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	14	9	ND	
HIGH FLOW	20	13	0	



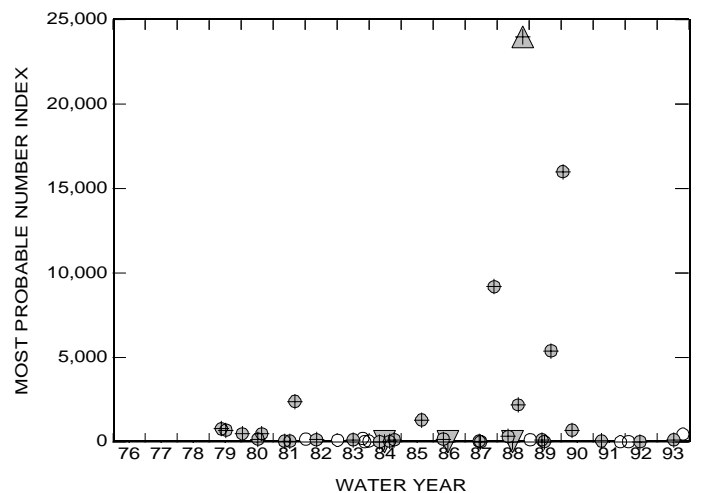
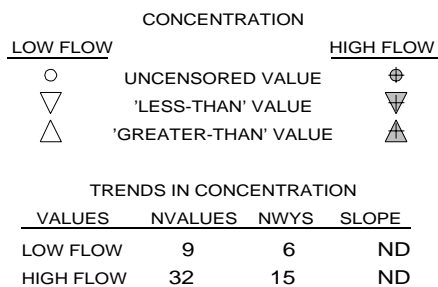
APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01396588 SPRUCE RUN NEAR GLEN GARDNER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

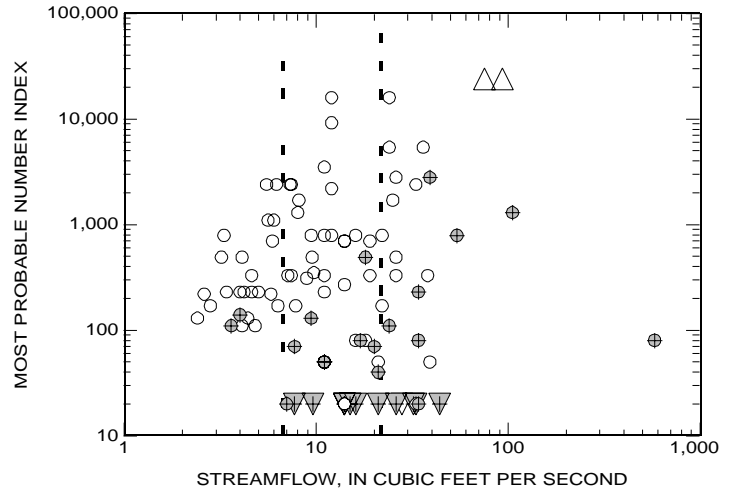


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

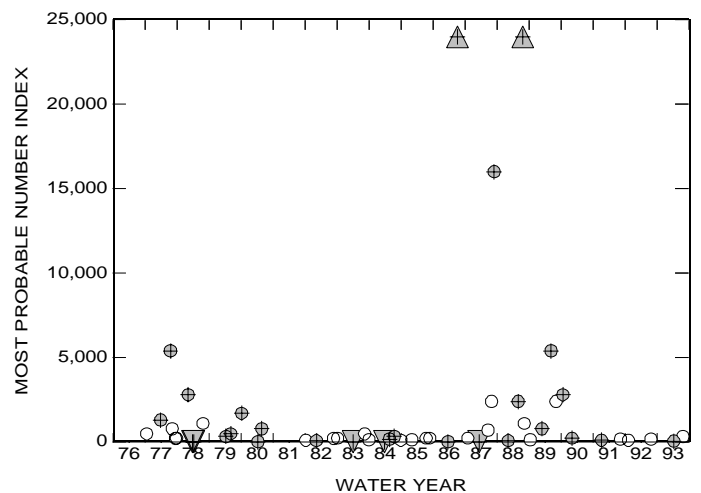
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	100	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	69	0	ND
NONGROWING SEASON	31	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	24	12	ND
HIGH FLOW	28	14	0

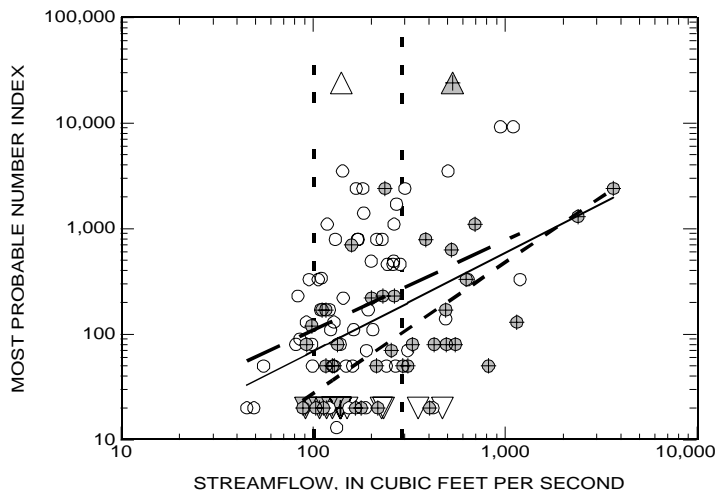


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01397000 SB RARITAN RIVER AT STANTON STATION, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

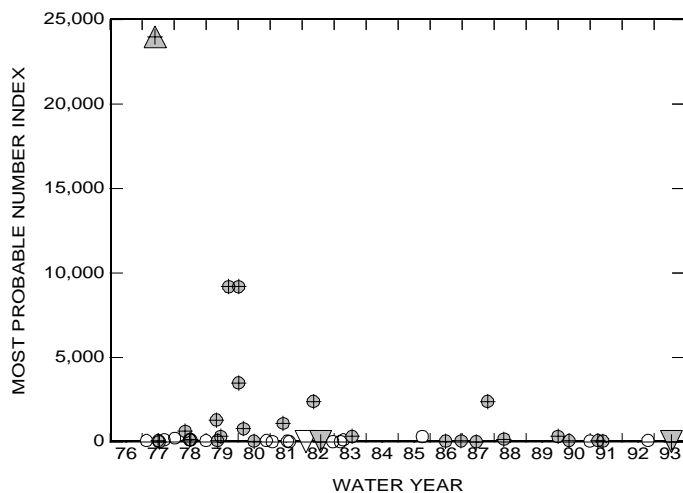
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	108	0.93	-0.02	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
— — —	GROWING SEASON	63	0.85	0.34
- - -	NONGROWING SEASON	45	1.24	-1.04
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - -	75 PERCENT	- - -	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	15	9	ND	
HIGH FLOW	28	14	0	

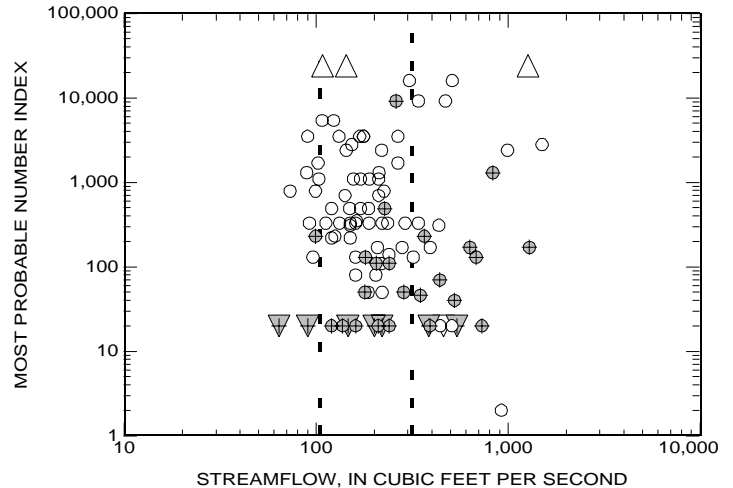


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01397400 SB RARITAN RIVER AT THREE BRIDGES, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

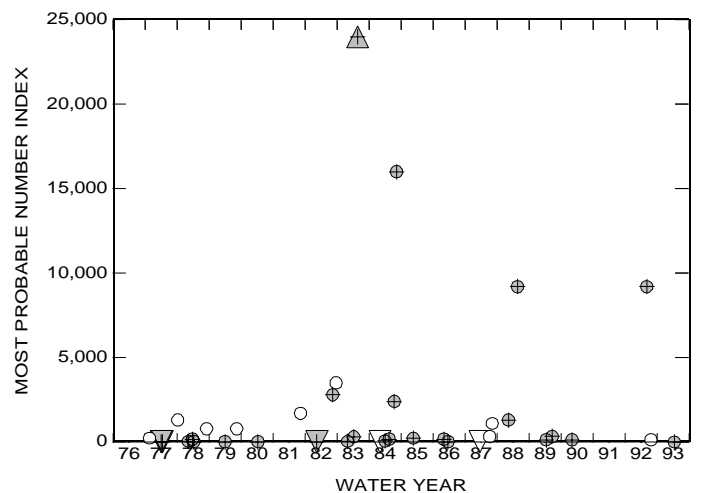
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	100	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	70	0	ND
NONGROWING SEASON	30	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	11	8	ND
HIGH FLOW	26	14	0

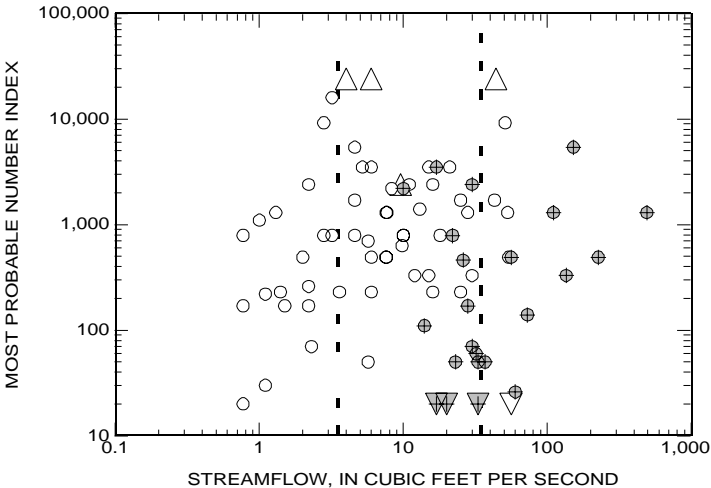


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01398000 NESHANIC RIVER AT REAVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

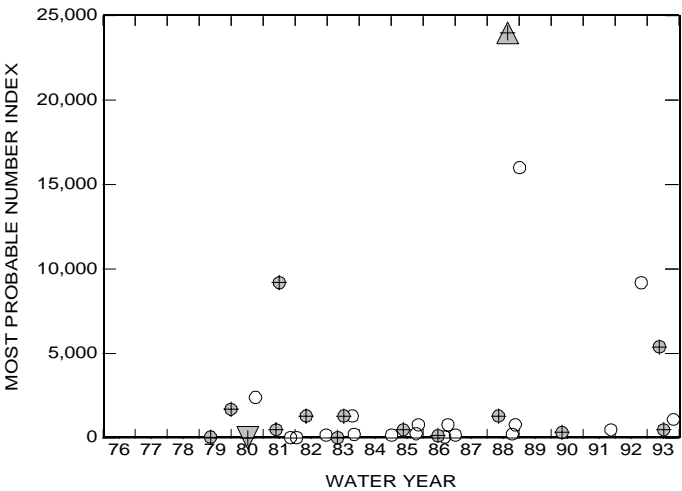
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	81	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	58	0	ND
NONGROWING SEASON	23	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
— —	75 PERCENT	— —	25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	18	12	ND
HIGH FLOW	15	10	ND

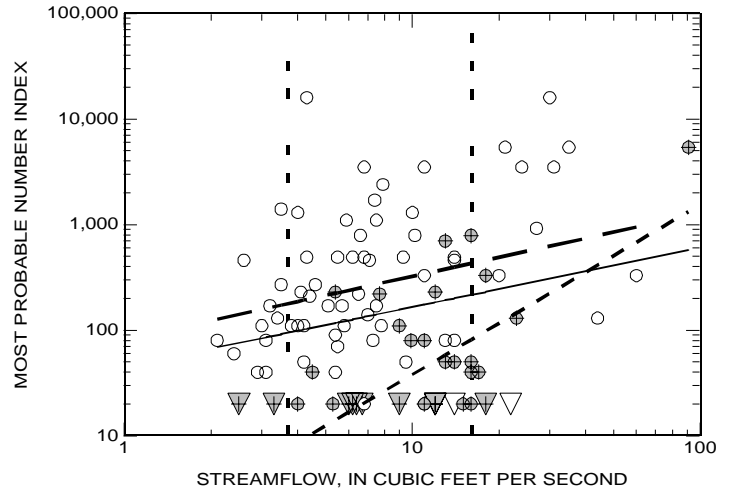


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01398260 NB RARITAN RIVER NEAR CHESTER, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

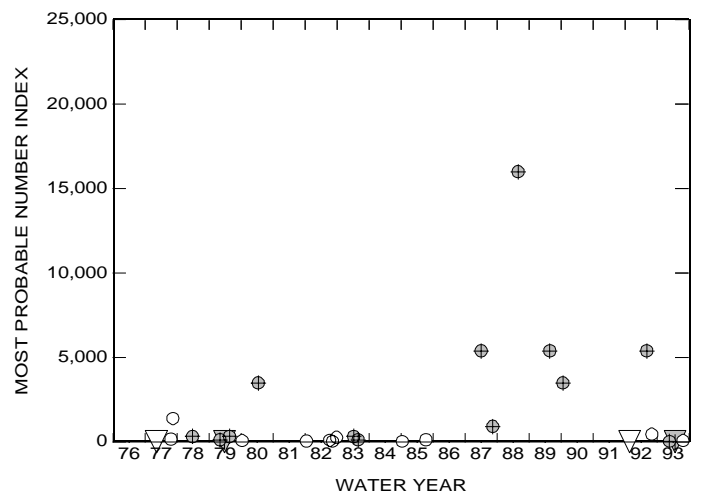
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	98	0.56	1.66	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
— — —	GROWING SEASON	66	0.6	1.91
- - - -	NONGROWING SEASON	32	1.61	-0.03
STREAMFLOW EXCEEDED INDICATED PERCENTAGE OF TIME				
- - -	75 PERCENT	- - -	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	13	6	ND	
HIGH FLOW	15	10	ND	

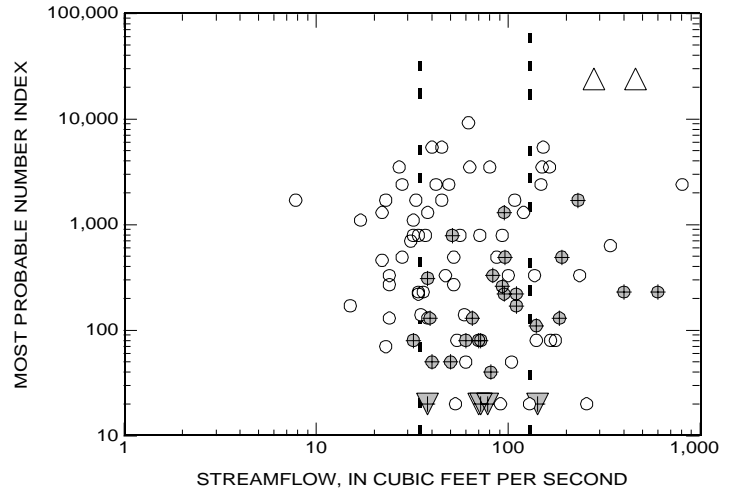


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01399120 NB RARITAN RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

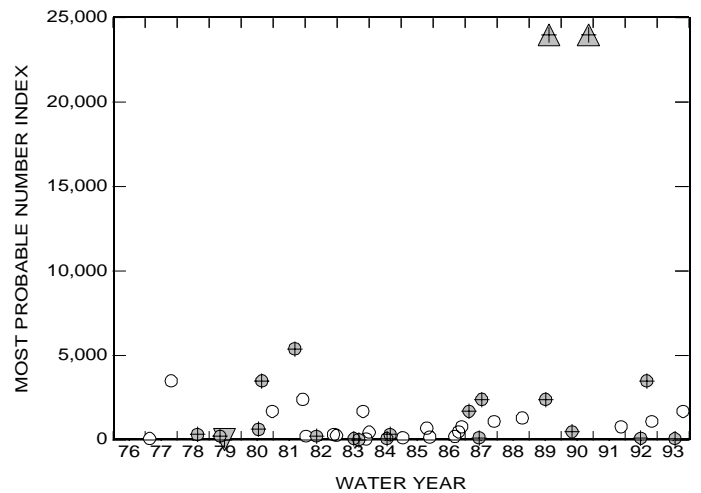
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	93	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	65	0	ND
NONGROWING SEASON	28	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	21	12	ND
HIGH FLOW	21	12	0

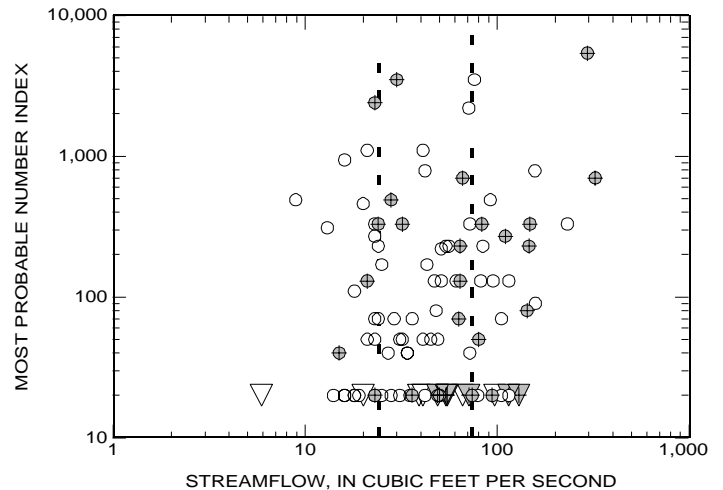


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

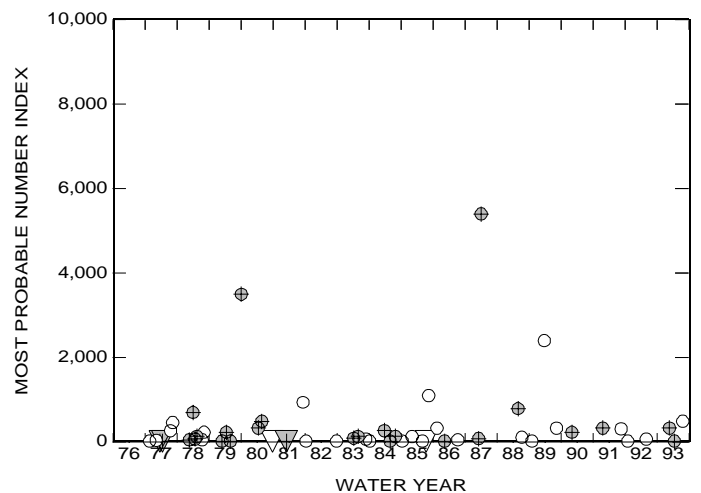
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	99	0	ND
[SEASONAL RELATIONS NOT DETERMINED; THEY ARE NOT DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	68	ND	ND
NONGROWING SEASON	31	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT - - - 25 PERCENT			



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	27	14	0
HIGH FLOW	26	13	0

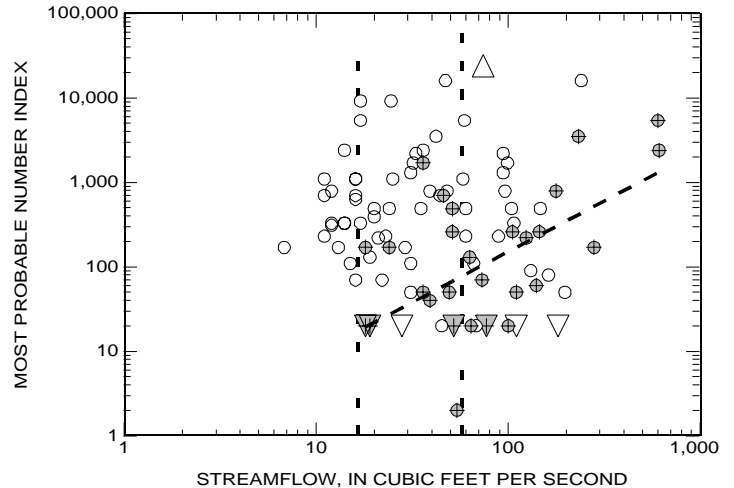


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01399700 ROCKAWAY CREEK AT WHITEHOUSE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

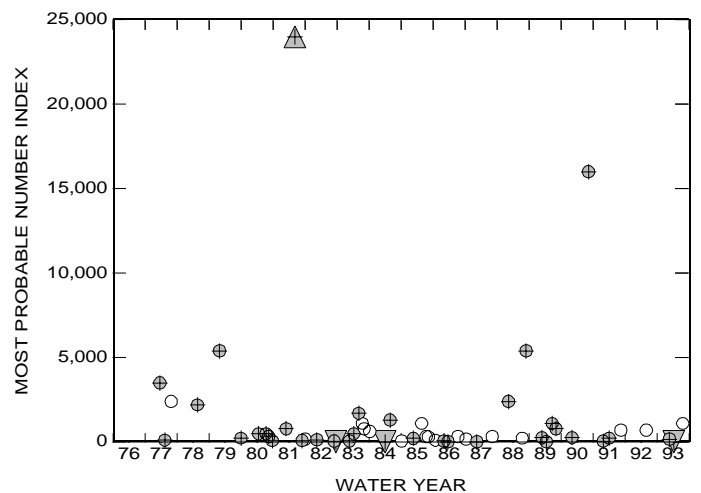
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	93	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	65	0	ND
NONGROWING SEASON	28	1.2	-0.22
- - - - -			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - - - - 75 PERCENT		- - - - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	17	11	ND
HIGH FLOW	36	16	0

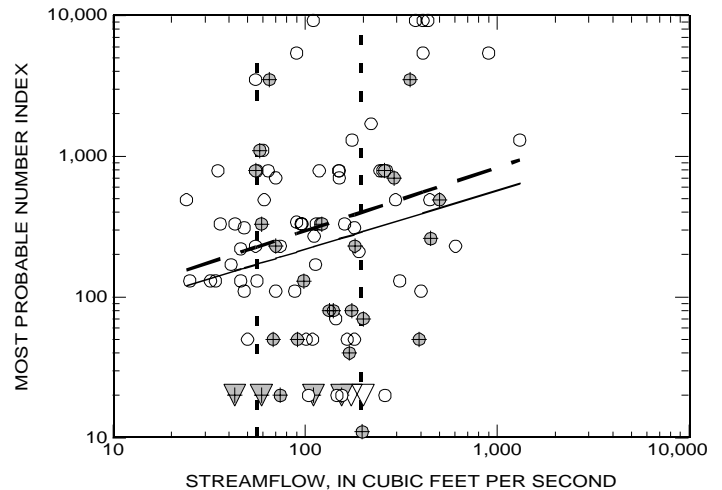


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01399780 LAMINGTON RIVER AT BURNT MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

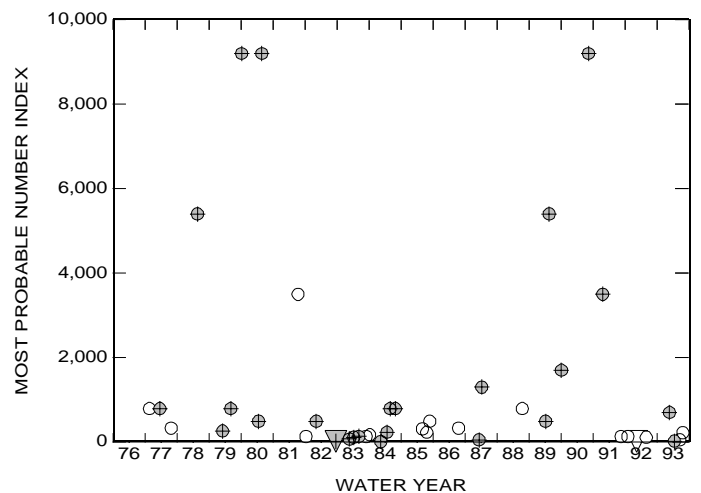
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	94	0.42	1.5	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
GROWING SEASON	67	0.45	1.57	
NONGROWING SEASON	27	0	ND	
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
— —	75 PERCENT	— —	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	17	11	ND	
HIGH FLOW	25	12	0	

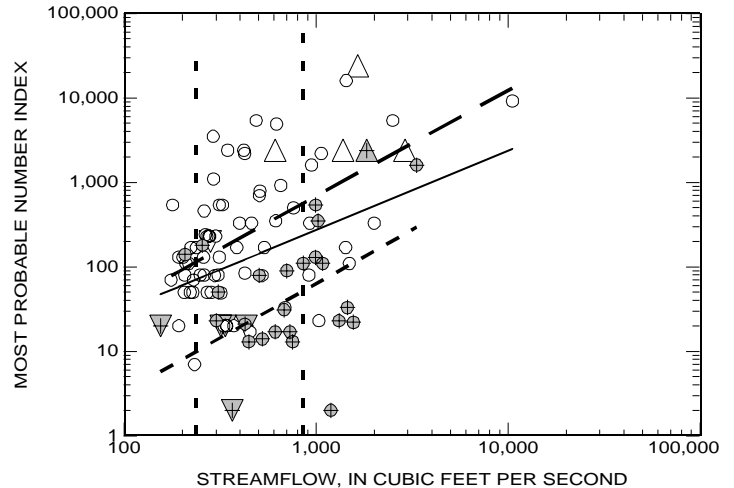


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01400500 RARITAN RIVER AT MANVILLE, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

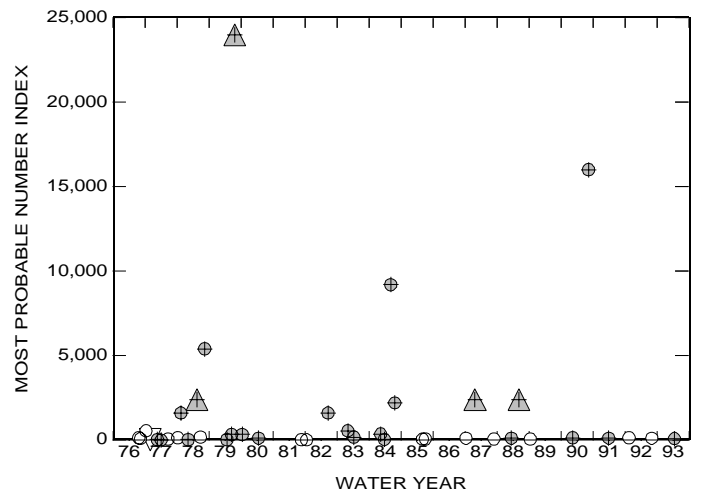
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	101	0.94	-0.38	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
— — —	GROWING SEASON	72	1.25	-0.91
- - -	NONGROWING SEASON	29	1.28	-2.04
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - -	75 PERCENT	- - -	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	16	9	ND	
HIGH FLOW	25	12	0	

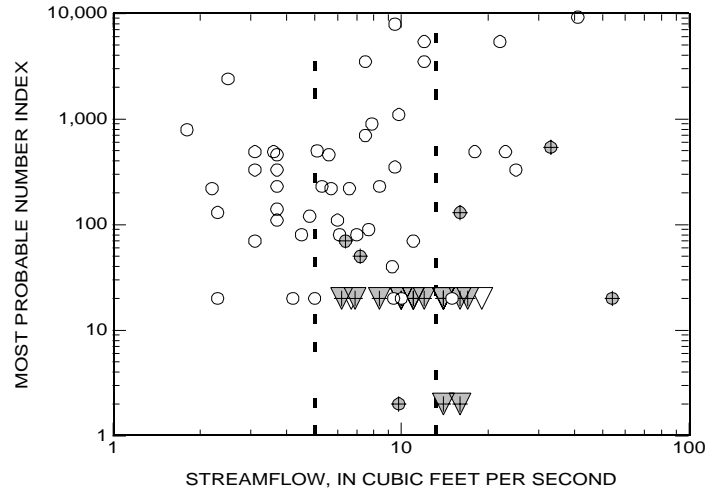


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01400540 MILLSTONE RIVER NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

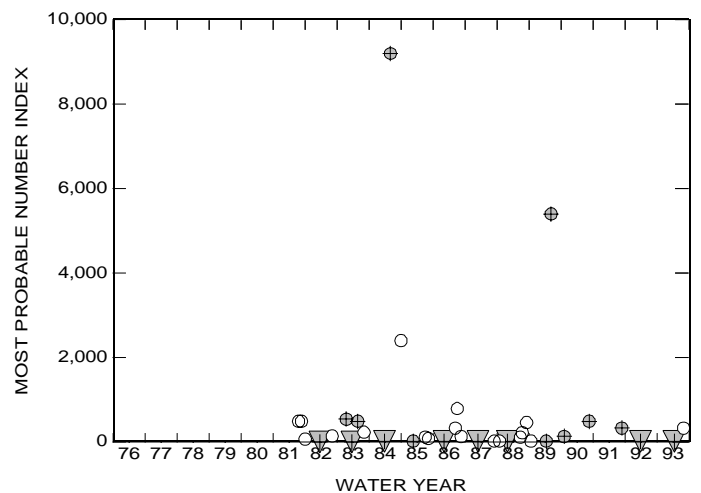
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	70	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	49	ND	ND
NONGROWING SEASON	21	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	18	10	ND
HIGH FLOW	17	12	ND

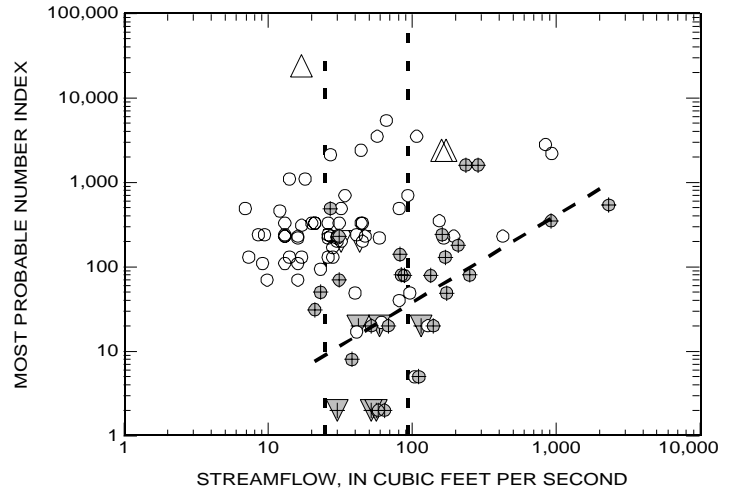


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01400650 MILLSTONE RIVER AT GROVERS MILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

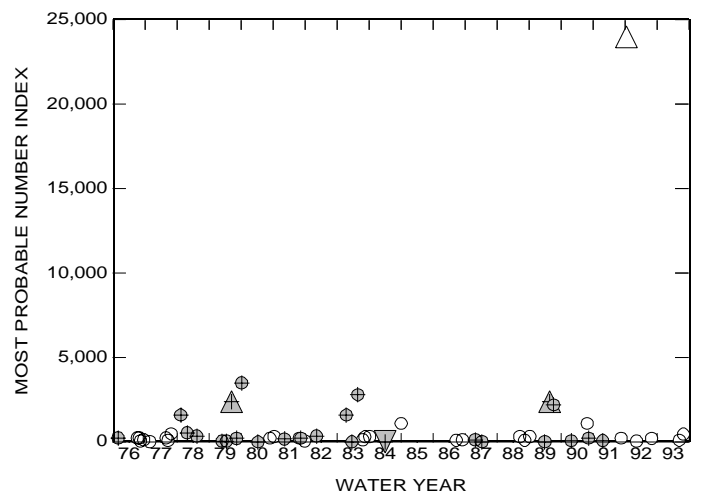
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	101	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	70	0	ND
NONGROWING SEASON	31	1.03	-0.48
-- -- --			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
-- -- 75 PERCENT		-- -- 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	28	13	ND
HIGH FLOW	25	12	ND

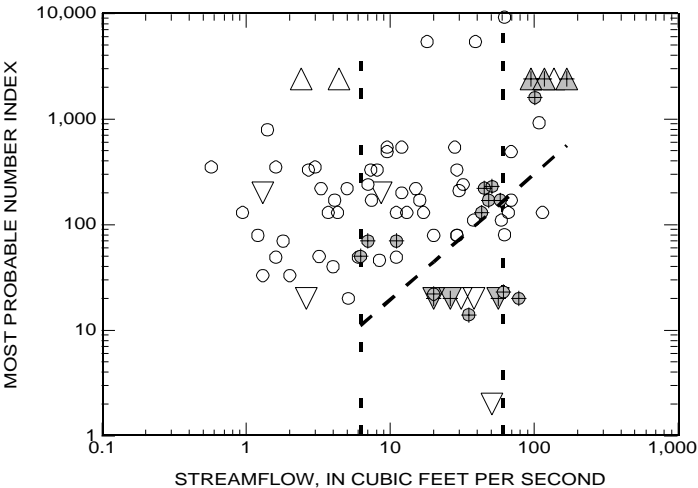


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01401000 STONY BROOK AT PRINCETON, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

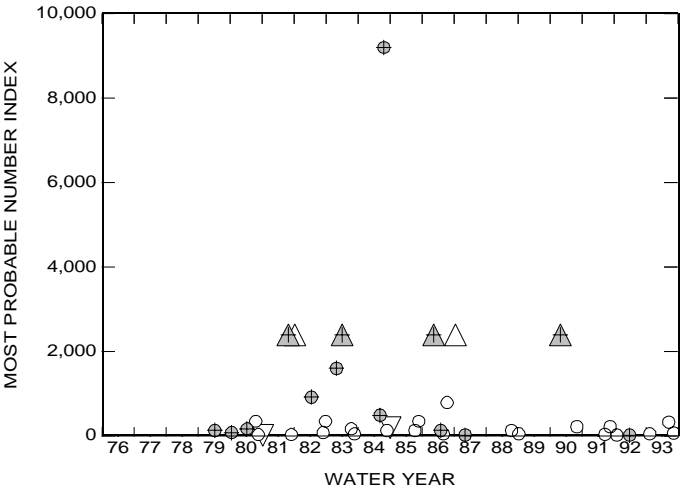
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	81	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	62	0	ND
NONGROWING SEASON	19	1.19	0.1
- - - - -			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - - - -	75 PERCENT	- - - - -	25 PERCENT



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	25	14	ND
HIGH FLOW	14	10	ND

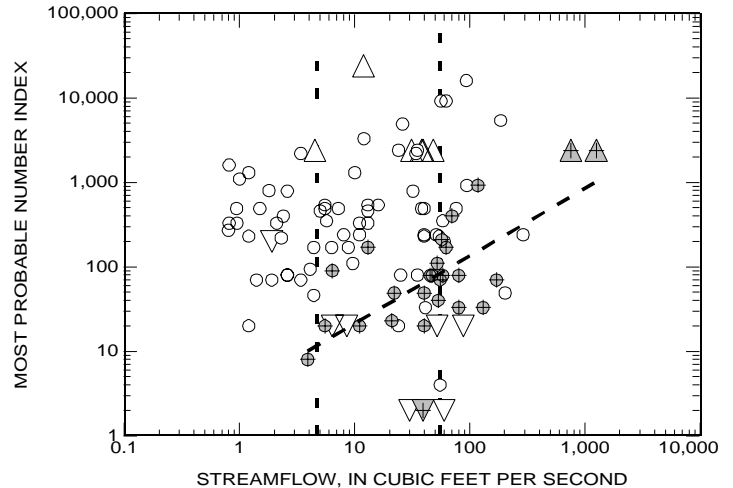


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01401600 BEDEN BROOK NEAR ROCKY HILL, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

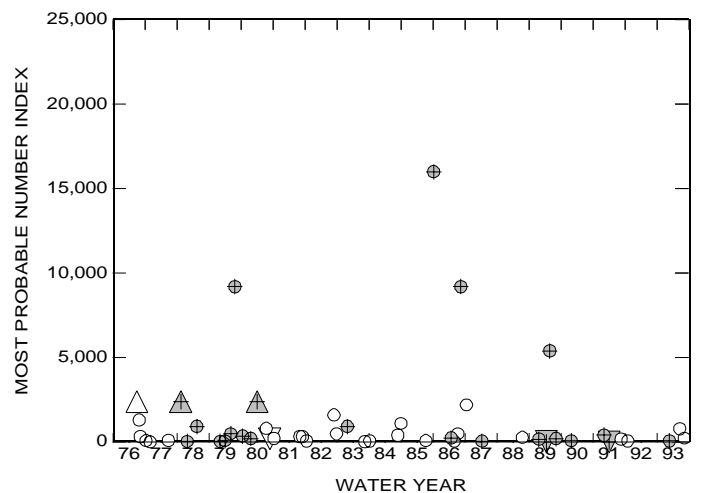
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	106	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	80	0	ND
NONGROWING SEASON	26	0.8	0.53
- - - - -			
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - - - -		- - - - -	
75 PERCENT		25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	27	14	0
HIGH FLOW	23	10	ND

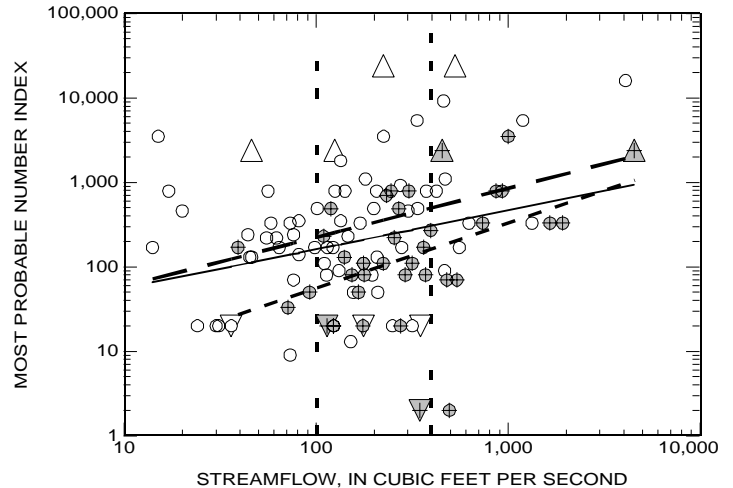


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

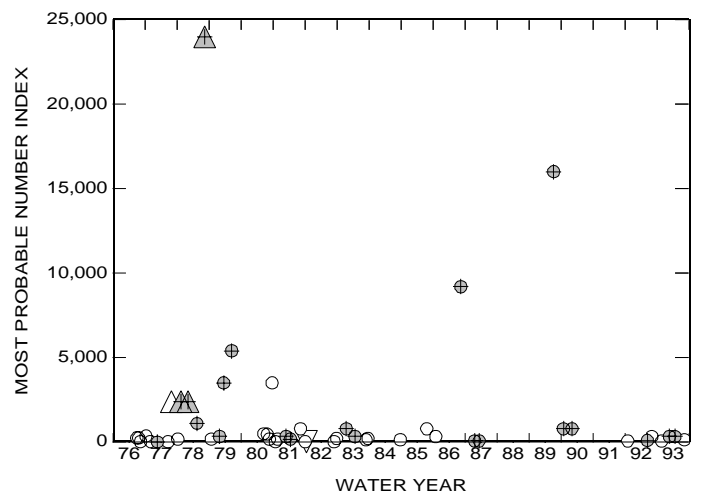
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION				
GROWING SEASON		NONGROWING SEASON		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT				
VALUES	NVALUES	SLOPE	INT	
ALL VALUES	107	0.46	1.29	
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]				
— — —	GROWING SEASON	69	0.58	1.19
- - - -	NONGROWING SEASON	38	0.77	0.21
STREAMFLOW EXCEEDED				
INDICATED PERCENTAGE OF TIME				
- - - -	75 PERCENT	- - - -	25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION				
LOW FLOW		HIGH FLOW		
○	UNCENSORED VALUE	⊕		
▽	'LESS-THAN' VALUE	▽		
△	'GREATER-THAN' VALUE	△		
TRENDS IN CONCENTRATION				
VALUES	NVALUES	NWYS	SLOPE	
LOW FLOW	29	13	ND	
HIGH FLOW	21	11	ND	



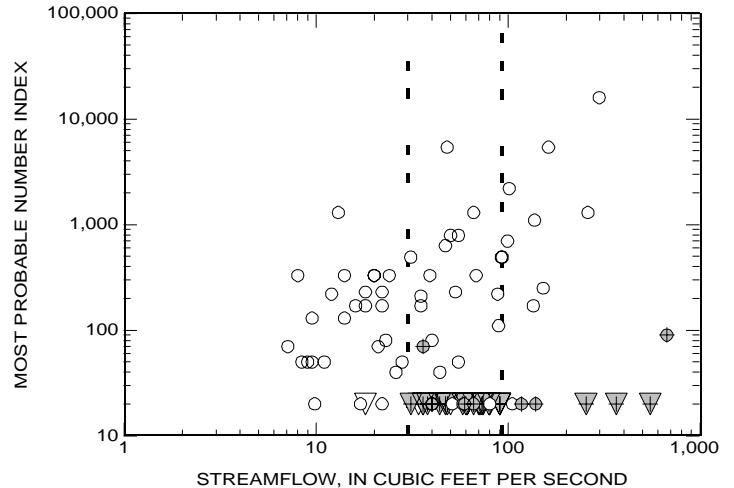
No data for this station

APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
 FECAL COLIFORM BACTERIA
 01405302 MATCHAPONIX BROOK AT MUNDY AVE, AT SPOTSWOOD, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO3, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

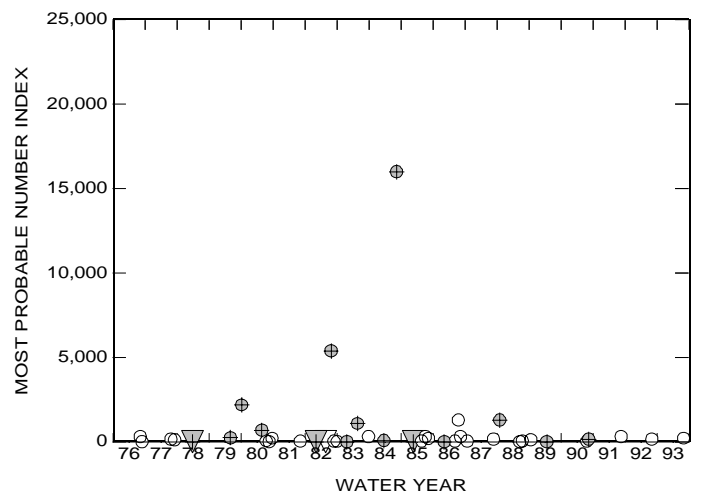
RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	93	0	ND
[SEASONAL RELATIONS NOT DETERMINED; INSUFFICIENT DATA FOR ANALYSIS]			
GROWING SEASON	68	ND	ND
NONGROWING SEASON	25	ND	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	27	15	0
HIGH FLOW	15	11	ND

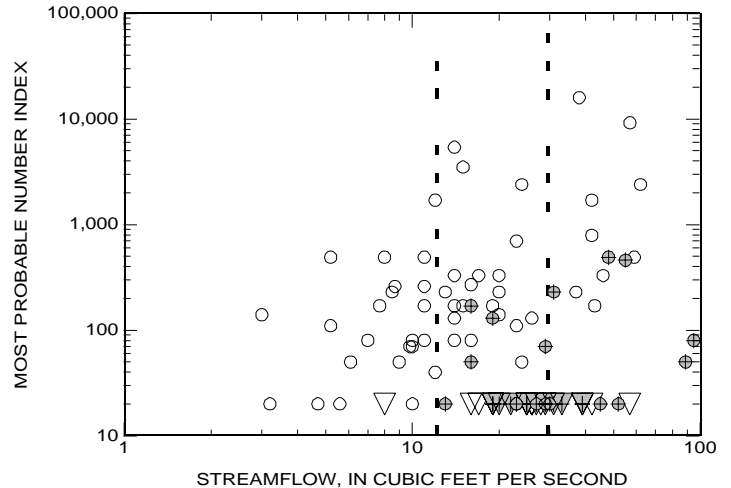


APPENDIX 18. Relations of constituent concentration and load to streamflow and trends in concentration with time
FECAL COLIFORM BACTERIA
01405340 MANALAPAN BROOK AT FEDERAL RD, NEAR MANALAPAN, N.J.

[NVALUES, number of values; LOG, base-10 logarithm; CONC, concentration in indicated units; INT, intercept; FLOW, streamflow in cubic feet per second; NWYS, number of water years during which at least one measurement was made; a slope value of '0' indicates that the slope is not significantly different from zero; ND, not determined; CaCO₃, calcium carbonate; C, carbon; N, nitrogen; P, phosphorus; Pb, lead; B, boron; Cl, chloride; Na, sodium; MOST PROBABLE NUMBER INDEX is per 100 milliliters]

RELATION OF CONCENTRATION TO STREAMFLOW

CONCENTRATION			
GROWING SEASON		NONGROWING SEASON	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
RELATION: LOG(CONC) = SLOPE*LOG(FLOW) + INT			
VALUES	NVALUES	SLOPE	INT
ALL VALUES	92	0	ND
[SEASONAL RELATIONS DETERMINED; THEY ARE DIFFERENT FROM ONE ANOTHER]			
GROWING SEASON	64	0	ND
NONGROWING SEASON	28	0	ND
STREAMFLOW EXCEEDED			
INDICATED PERCENTAGE OF TIME			
- - 75 PERCENT		- - - 25 PERCENT	



TRENDS IN LOW- AND HIGH-FLOW CONCENTRATIONS

CONCENTRATION			
LOW FLOW		HIGH FLOW	
○	UNCENSORED VALUE	⊕	
▽	'LESS-THAN' VALUE	▽	
△	'GREATER-THAN' VALUE	△	
TRENDS IN CONCENTRATION			
VALUES	NVALUES	NWYS	SLOPE
LOW FLOW	24	14	0
HIGH FLOW	23	13	0

