PB2000-102434

Estimated Waterborne Commerce Statistics

For Calendar Year 1998

National Totals and Selected Inland Waterways

U.S. ARMY CORPS OF ENGINEERS

Navigation Data Center
Waterborne Commerce Statistics Center
November 30, 1999

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INTRODUCTION

In order to provide waterborne commerce information as soon as possible, the Waterborne Commerce Statistics Center (WCSC) has prepared this summary document of estimated waterborne commerce statistics for calendar year 1998. The foreign import and export estimates were furnished by the Bureau of the Census. The domestic national totals are based on CY98 data collected from vessel operating companies, estimates of tonnage still to be reported by delinquent vessel operating companies and on data collected at Corps locks. Both the foreign and domestic data are subject to correction and may differ slightly from the final figures to be released in October.

All graphs and tables (except page 1) show domestic tonnages (short tons). All graphs after page 1 include all internal tonnage, which is tonnage moving exclusively on waterways within the boundaries of the United States. The deep-draft sections of the Mississippi, the Columbia and the Gulf Intracoastal Waterway include some domestic coastwise data as well. This coastwise tonnage travels on these internal waterways and also Coastwise (the oceans or the Gulf of Mexico). All the data for the current year (1998) is either estimated or preliminary. The prior years' data (to 1998) are the actual compiled figures. Also, please note that rounding may result in commodity tonnages which do not add up to the totals for a waterway.

WCSC is also using the Internet to expedite release of statistics. Please visit our World Wide Web home page at:

www.wrsc.usace.army.mil/ndc/wcsc.htm.

There you will find the most timely WCSC statistics including this report, quarterly estimates and our monthly internal traffic indicators.

Many of our notices and products are being distributed via e-mail. If you would like to be added to our e-mail mailing list, please send your e-mail address to: Peggy.A.Galliano@MVNO2.usace.army.mil.

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Explanation of Commodity Groups for CY1982 to 1990

Coal

Petroleum: Crude petroleum and petroleum products

Chemicals

Metal: Metals, metal products, scrap, and metal ores

Non-Metal: Non-metallic products including sand, gravel, limestone, unworked stone, sulphur, and gypsum

Farm: Farm products, unprocessed foods, and flour

Wood: Wood, wood products, forest products, paper, and paper products

Other: This is a residual category consisting of all commodities not included in the named categories of each graph. Therefore, the "Other" category in the graph of the "Total Waterway or River" may not be the sum of the upbound and downbound "Other" category. When that happens, some of the other above named categories for the waterway may also not add up precisely.

Explanation of Commodity Groups for CY1991 to 1998 (changes are underlined)

Coal: Coal and <u>coke</u>

Petroleum: Crude petroleum and petroleum products (<u>no longer includes coke</u>)

Chemicals On page 4 (Commodities) only, liquid sulfur is included

Metal: Metals, metal products, scrap, and metal ores

Non-Metal: Non-metallic products including sand, gravel, limestone, unworked stone, sulphur, gypsum, <u>clay, and slag</u>

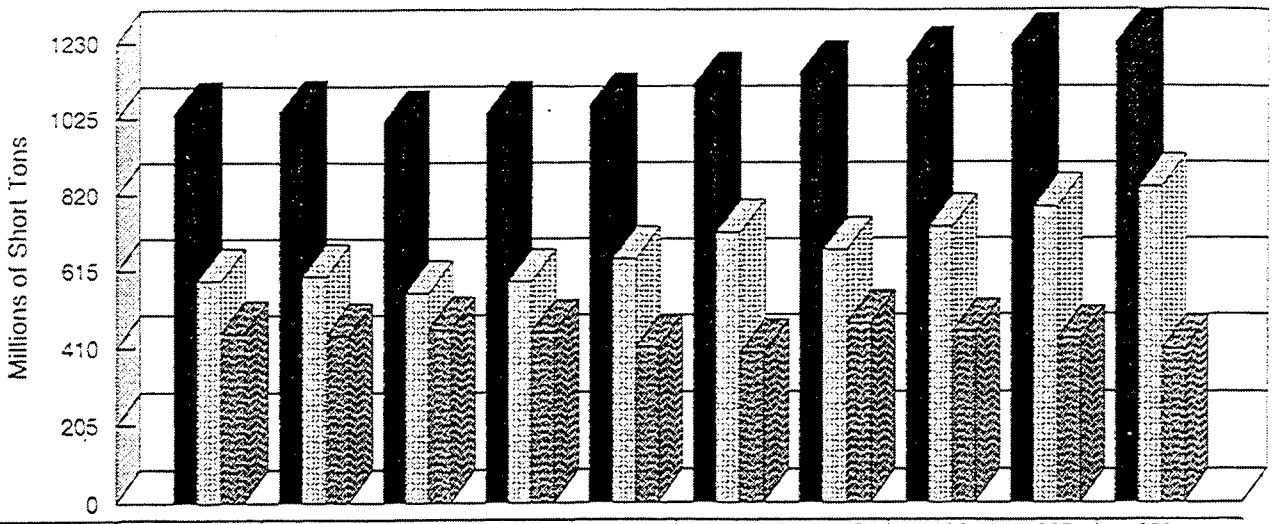
Farm: Farm products, flour, fibers, unprocessed and <u>processed foods, fish, and tobacco</u>

Wood: Wood, wood products, forest products, paper, and paper products

Other: This is a residual category consisting of all commodities not included in the named categories of each graph.

Foreign Waterborne Imports and Exports

1989-1998, Millions of Short Tons

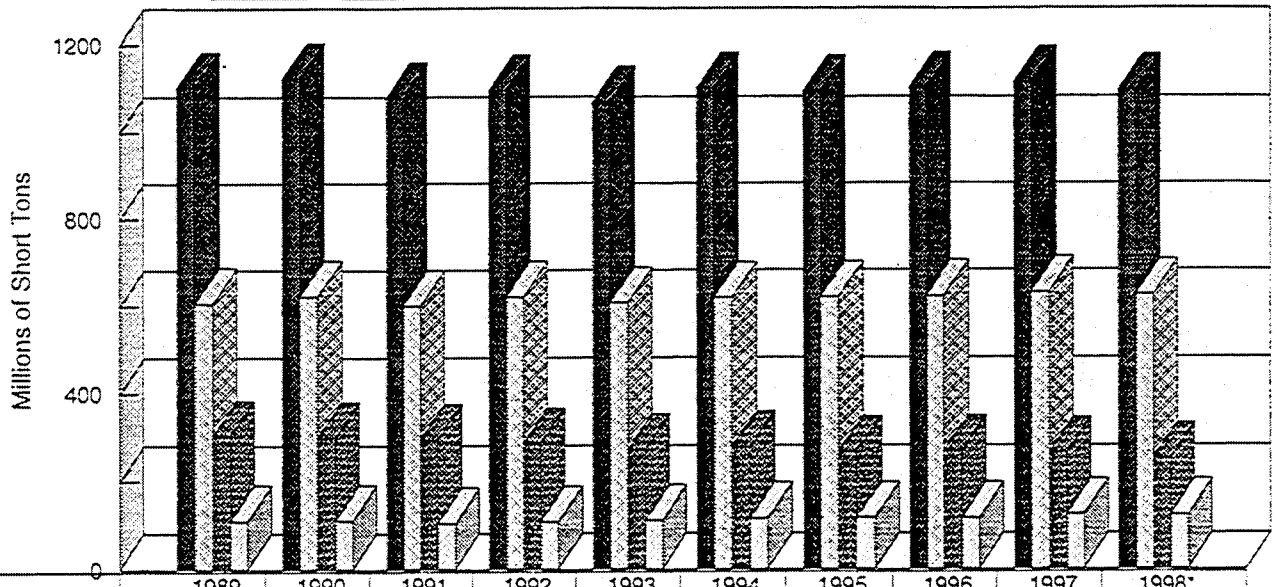


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
Total	1037.9	1041.6	1013.6	1037.5	1060.0	1115.7	1147.4	1183.4	1220.6	1245.4
Imports	589.5	600.0	555.4	586.7	648.8	719.5	672.7	732.6	768.3	840.7
Exports	448.4	441.6	458.2	450.8	411.3	396.2	474.7	450.8	432.3	404.7

1989-1998*, Millions of Short Tons

Domestic Waterborne Commerce of the U.S.

1989-1998*, Millions of Short Tons, by type of traffic



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
Total**	1102.5	1122.3	1078.6	1094.6	1068.2	1099.0	1093.0	1100.7	1112.6	1094.1
Internal	606.0	622.6	600.4	621.0	607.3	618.4	620.3	622.1	630.6	623.9
Coastwise	302.0	298.6	294.5	285.1	271.7	277.0	266.6	267.4	263.1	249.6
Lakewise	109.1	110.2	103.4	107.4	109.9	114.8	116.1	114.9	123.0	122.2

**Total also includes local and intraterritorial traffic

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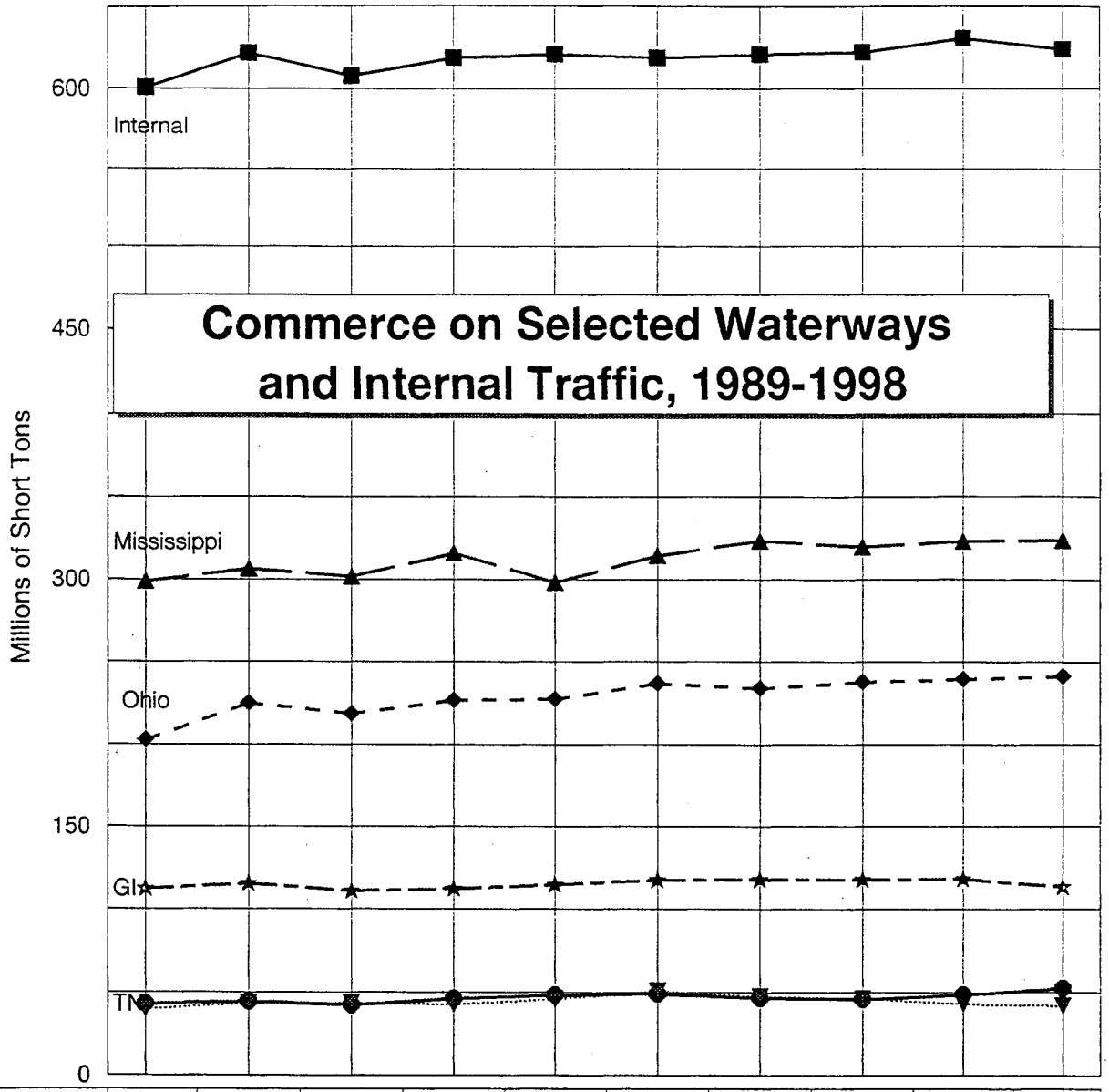


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total Internal	600.39	621.04	607.25	618.41	620.32	618.41	620.32	622.08	630.58	623.94
▲Mississippi**	298.87	306.19	301.67	315.71	298.26	314.58	323.02	319.57	322.76	323.40
◆Ohio	202.67	224.70	218.32	226.39	227.24	236.66	234.06	237.69	239.76	241.35
●Tennessee	43.06	44.51	42.09	46.08	48.16	49.14	46.39	45.53	48.61	52.30
▼Illinois	39.67	43.30	43.11	42.67	45.64	50.88	47.43	46.24	42.99	41.71
★GIWW**	112.36	115.38	110.83	112.19	114.94	117.61	117.96	118.03	118.11	113.56

Moved solely within the boundaries of the U.S.
**Includes domestic coastwise tonnage.

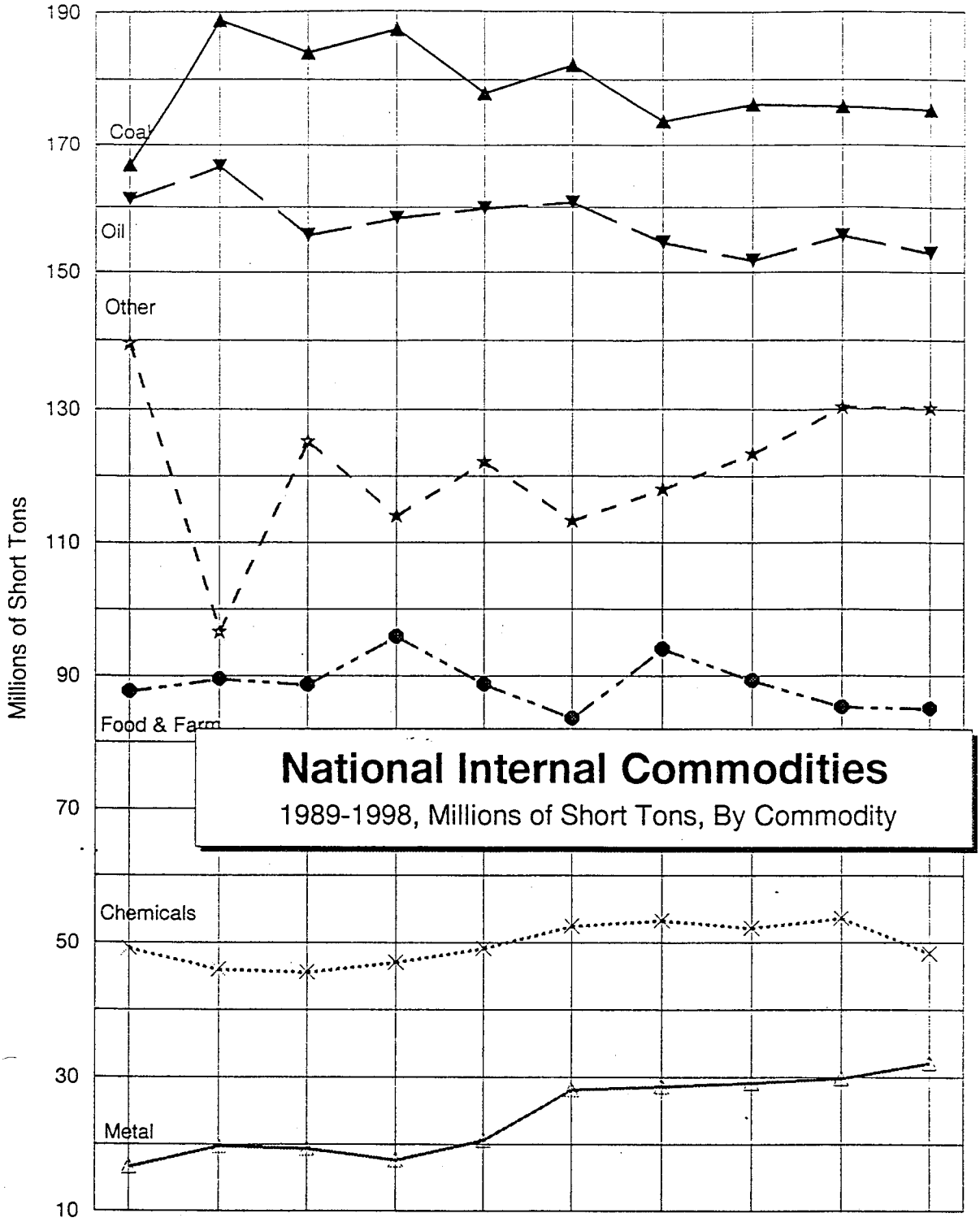
DOMESTIC U.S. WATERBORNE TRAFFIC

ANNUAL TONNAGE COMPARISONS: 1998* vs 1997

(Millions of Short Tons)

	97	98*	Percent Change
National Domestic Totals	1112.5	1094.1	-1.7
National Lakewise Totals	122.7	122.2	-0.5
National Coastwise Totals	263.1	249.6	-5.1
National Internal Totals:	630.6	623.9	-1.0
National Internal Commodities			
Food and Farm	85.2	85.0	-0.3
Coal	176.0	175.4	-0.4
Chemicals	53.6	48.4	-9.8
Petroleum	155.5	152.9	-1.7
Metal	29.9	32.2	7.7
Other	130.3	130.1	-0.2
Waterways			
Alabama-Coosa River	0.7	0.7	-5.9
Allegheny River	3.9	3.9	-0.6
Apalachicola River	0.5	0.4	-17.4
Atchafalaya River (Upper)	10.6	12.4	17.0
Atlantic Intracoastal	3.6	3.8	5.1
Big Sandy River	18.2	19.8	9.0
Black Warrior River	24.4	24.0	-1.6
Columbia River**	19.1	17.2	-10.3
Cumberland River	23.7	23.3	-1.8
Green and Barren Rivers	7.3	6.0	-17.4
Gulf Intracoastal**	118.1	113.6	-3.8
Illinois Waterway	43.0	41.7	-3.0
Kanawha River	24.8	23.0	-7.4
McClellan-Kerr Wtwy	11.2	12.0	7.9
Mississippi River**	322.8	323.4	0.2
Missouri River	8.2	8.3	2.1
Monongahela River	37.2	36.8	-1.1
Ohio River	239.8	241.3	0.7
Snake River	6.1	5.8	-4.3
Tennessee River	48.6	52.3	7.6
Tennessee Tombigbee	8.2	8.5	3.2

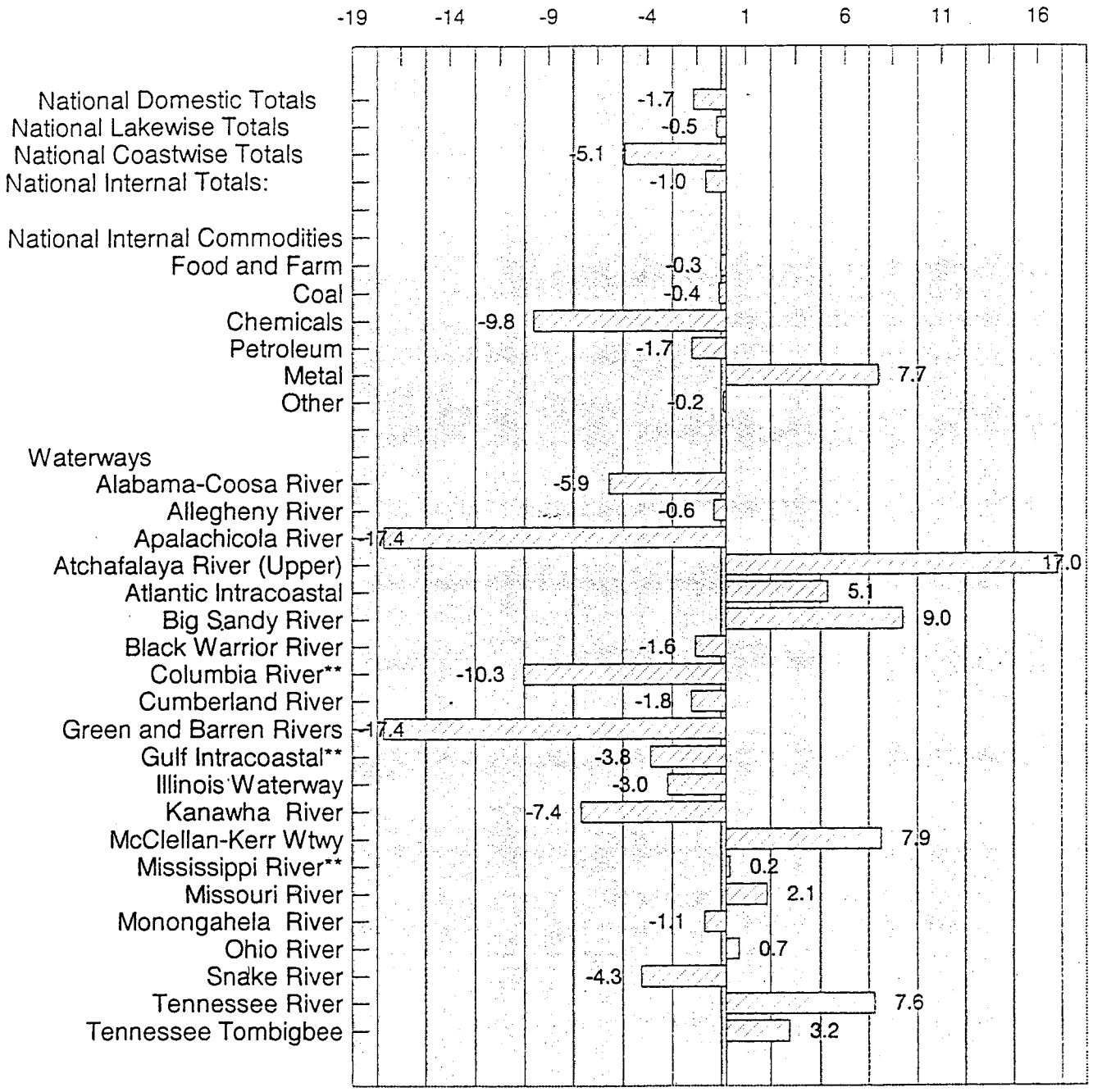
*Preliminary on Nov. 29, 1999 **Includes domestic coastwise tonnage.
Rounding may cause slight discrepancies in the data. National Domestic totals equal lakewise plus coastwise plus internal plus intraport plus interterritorial.
"Other" is nonmetals, wood products, cement, lime and sea shells.
Internal: Moved solely within the boundaries of the U. S.



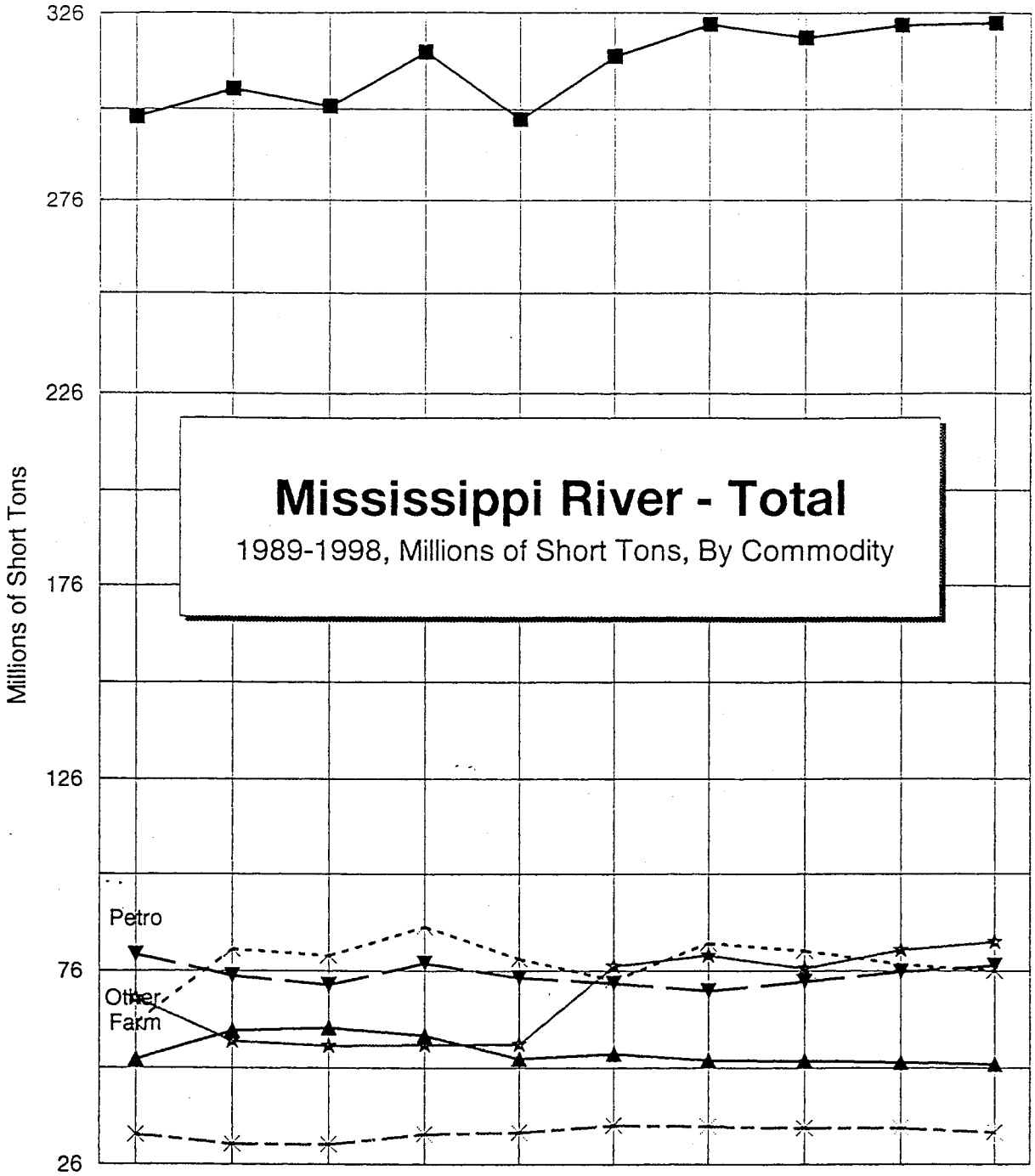
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
▲Coal	166.76	188.82	183.97	187.42	177.96	182.15	173.72	176.30	175.93	175.37
▼Oil & Oil Products	161.27	166.58	155.66	158.34	159.83	160.79	154.50	151.79	155.53	152.85
★Other	139.59	96.61	125.24	114.02	122.14	113.24	117.95	123.41	130.26	130.10
●Food & Farm	87.65	89.49	88.65	95.80	88.68	83.51	93.99	89.28	85.24	85.03
×Chemicals	49.15	46.00	45.55	47.07	49.18	52.47	53.33	52.13	53.58	48.36
△Metal	16.63	19.75	19.33	17.69	20.62	28.16	28.59	29.17	29.90	32.22

DOMESTIC U.S. WATERBORNE TRAFFIC

TONNAGE COMPARISONS: 1998* vs 1997

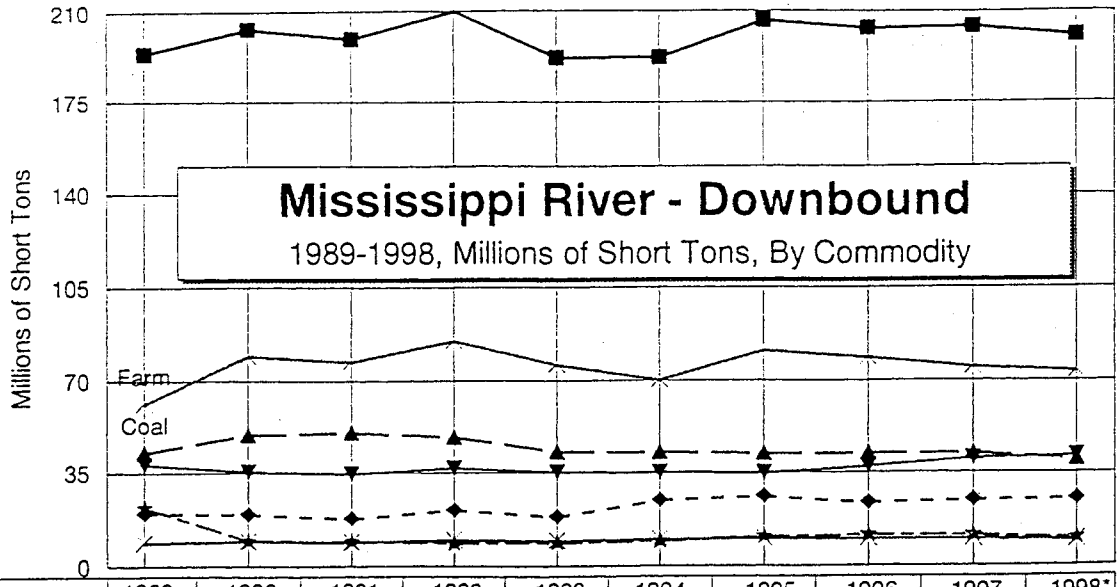


*November 30, 1999 **Includes domestic coastwise tonnage.
Internal: Moved solely within the boundaries of the U. S.



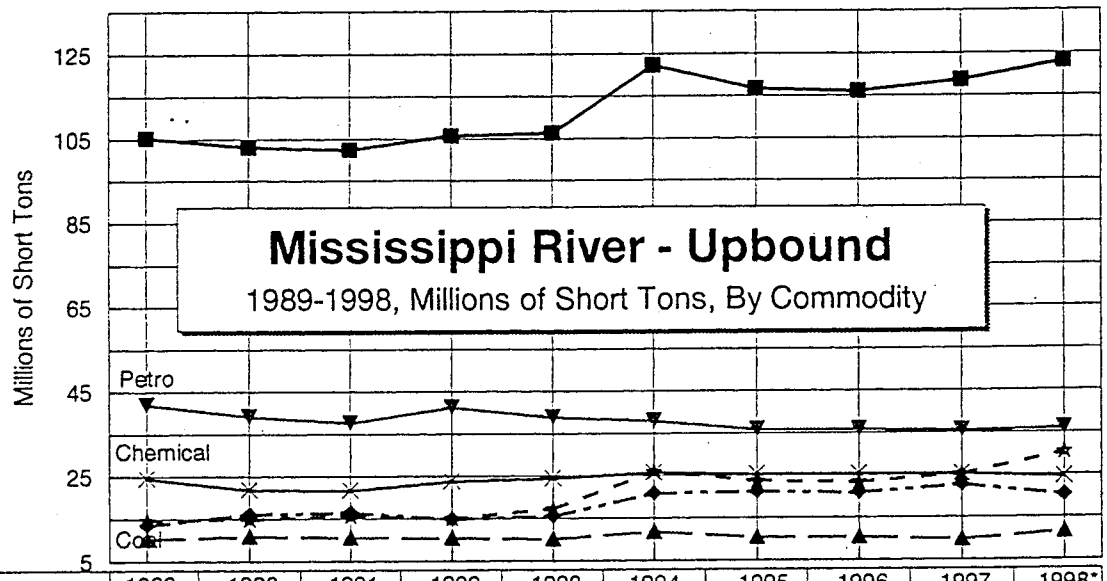
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	298.87	306.19	301.67	315.71	298.26	314.58	323.02	319.57	322.76	323.40
☆Other	69.11	57.90	56.67	57.04	57.18	77.36	80.17	76.72	81.49	83.66
⅄Farm	62.58	81.62	79.97	87.52	79.17	73.69	83.33	81.29	77.66	76.18
▼Petro	80.30	74.80	72.47	78.03	74.33	72.93	70.81	73.26	75.80	77.40
▲Coal	53.20	60.55	61.36	59.28	53.33	54.63	52.91	52.87	52.35	51.92
✳Chemical	33.68	31.31	31.21	33.85	34.26	35.96	35.80	35.42	35.45	34.24

Domestic Tonnage



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	193.63	203.18	199.28	210.04	191.98	192.29	206.32	203.48	204.10	200.36
- Farm	61.38	79.30	77.06	85.00	76.10	70.13	81.20	78.53	75.10	73.53
▲ Coal	42.92	49.55	50.69	48.71	43.18	42.80	42.43	42.44	42.43	40.14
▼ Petro	38.17	35.61	34.77	36.73	35.43	35.01	34.91	37.33	40.17	41.40
◆ Nonmetal	19.79	19.70	17.98	21.02	18.53	24.72	26.28	23.59	24.67	25.20
- Chemical	9.03	9.36	9.33	9.93	9.75	10.14	10.37	10.04	10.14	9.66
★ Other	22.34	9.67	9.44	8.64	8.99	9.48	11.13	11.56	11.60	10.44

Domestic Tonnage

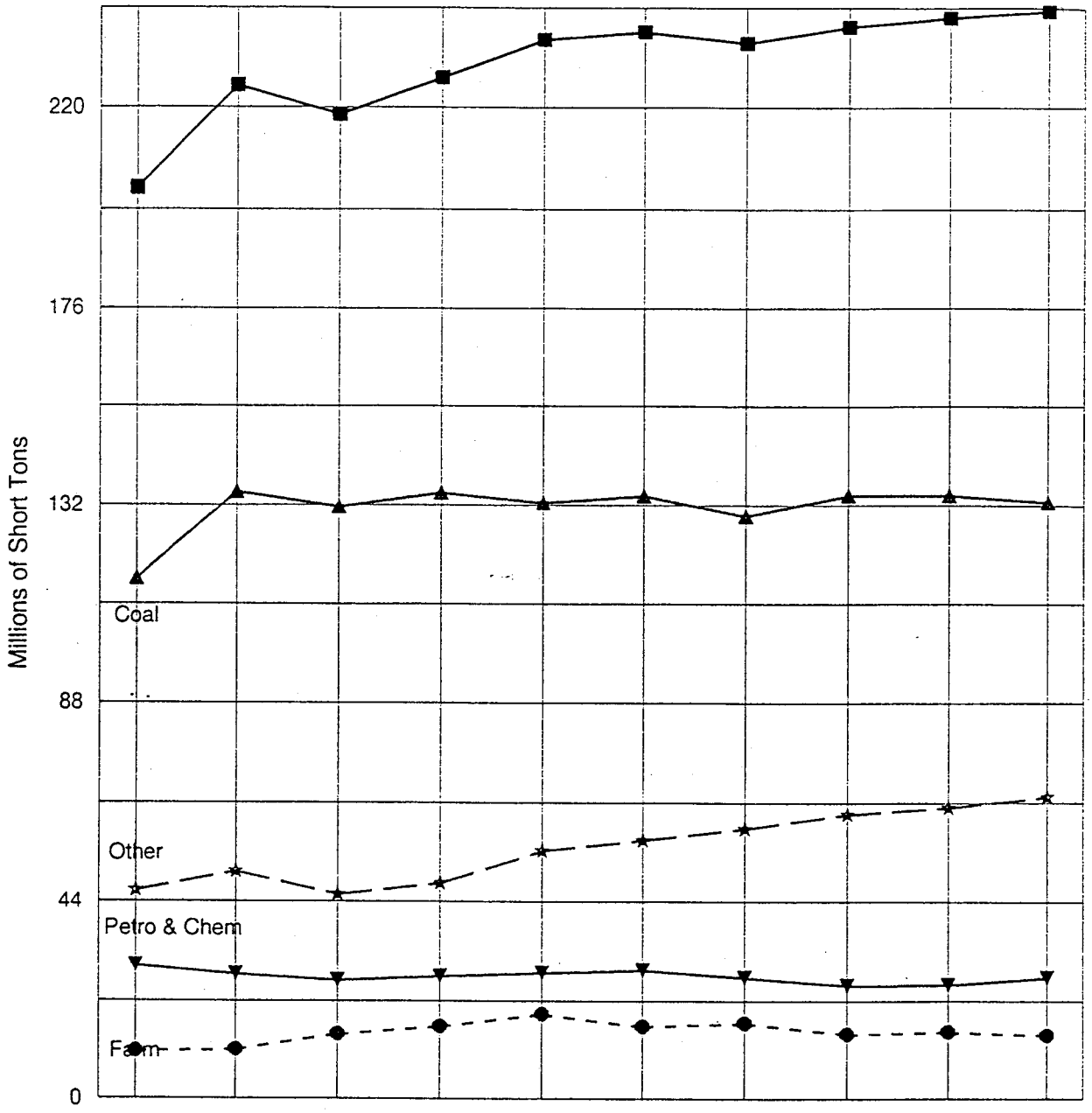


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	105.25	103.01	102.39	105.67	106.28	122.29	116.70	116.08	118.65	123.04
▼ Petro	42.13	39.19	37.69	41.29	38.90	37.91	35.90	35.93	35.63	36.00
× Chemical	24.65	21.95	21.87	23.92	24.51	25.82	25.43	25.38	25.31	24.58
★ Other	14.75	14.87	15.64	14.99	17.29	25.91	23.76	23.44	25.16	30.42
◆ Nonmetal	13.44	15.99	16.52	14.91	15.44	20.82	21.13	20.90	22.62	20.26
▲ Coal	10.28	11.00	10.67	10.57	10.14	11.83	10.48	10.43	9.92	11.78

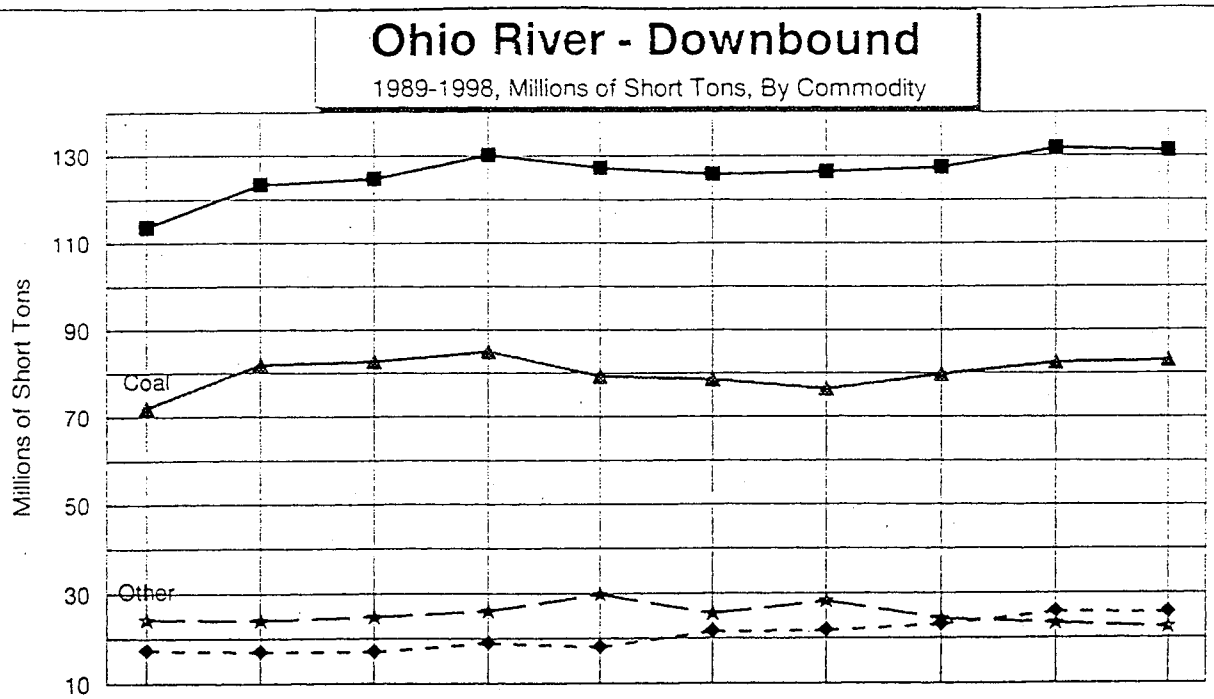
Domestic Tonnage

Ohio River - Total

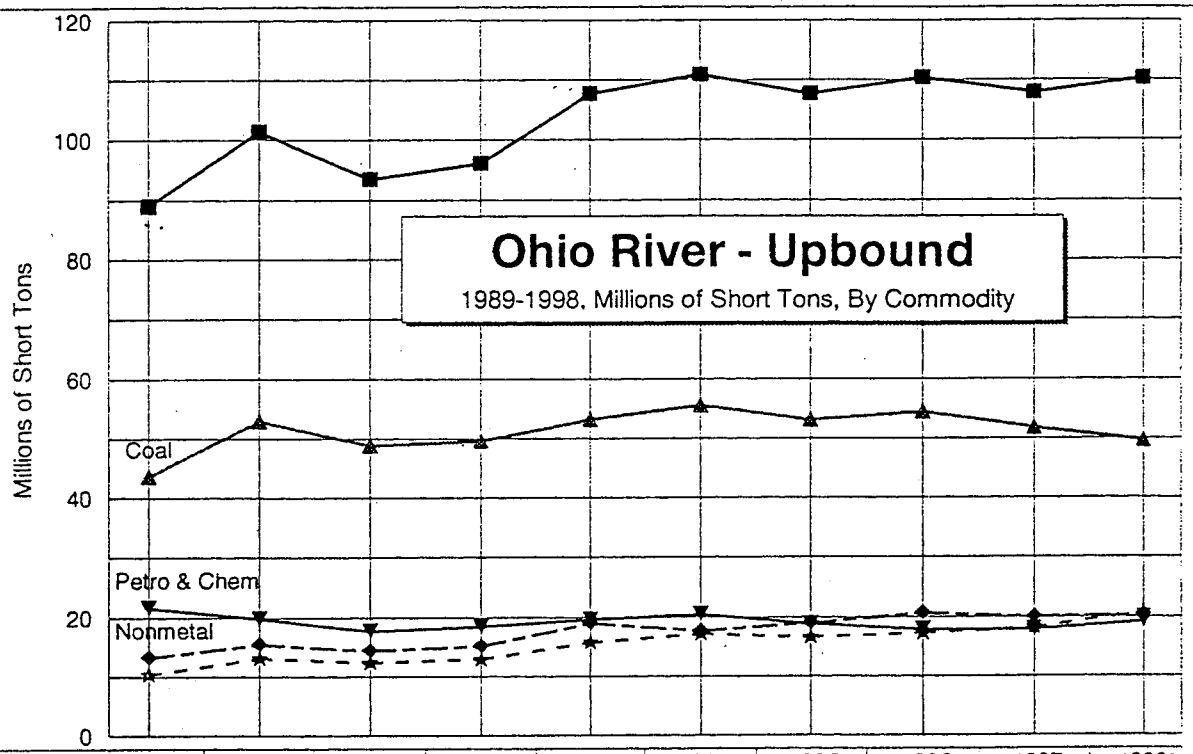
1989-1998, Millions of Short Tons, By Commodity



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	202.67	224.70	218.32	226.39	234.88	236.66	234.06	237.69	239.76	241.35
▲Coal	115.64	134.97	131.58	134.65	132.42	134.02	129.46	134.14	134.19	132.69
☆Other	46.58	50.68	45.64	48.06	55.22	57.60	60.32	63.47	64.93	67.25
▼Petro & Chem	29.77	27.95	26.49	27.34	28.24	28.78	27.25	25.50	25.57	27.17
●Farm	10.68	11.10	14.60	16.34	18.99	16.25	17.04	14.58	15.07	14.24



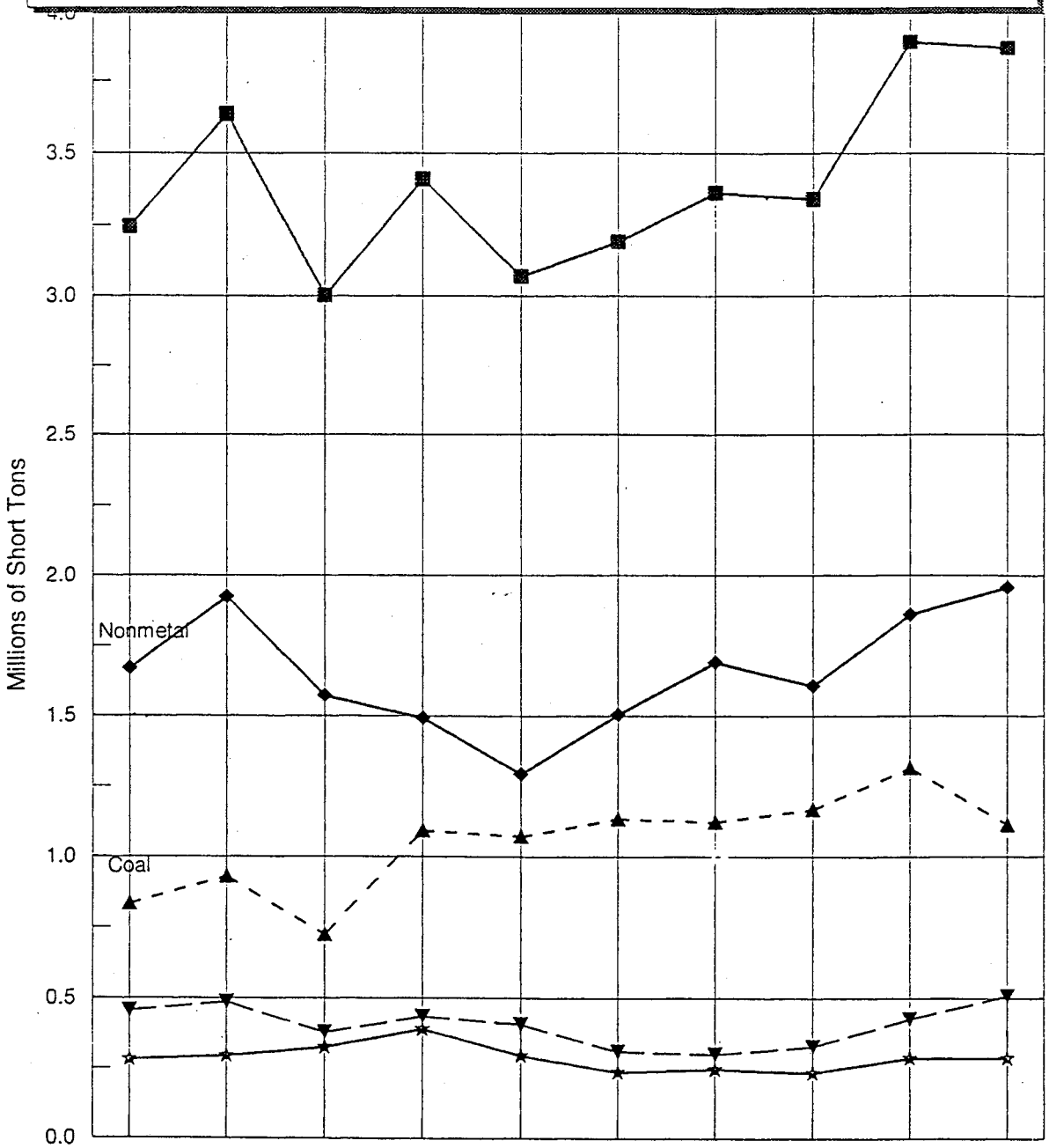
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	113.69	123.29	124.83	130.24	127.23	125.79	126.45	127.40	131.82	131.20
▲ Coal	72.01	82.02	82.76	85.09	79.29	78.55	76.37	79.74	82.48	83.01
★ Other	24.29	24.17	24.90	26.13	29.79	25.64	28.33	24.48	23.44	22.47
◆ Nonmetal	17.39	17.10	17.18	19.02	18.15	21.60	21.75	23.17	25.90	25.72



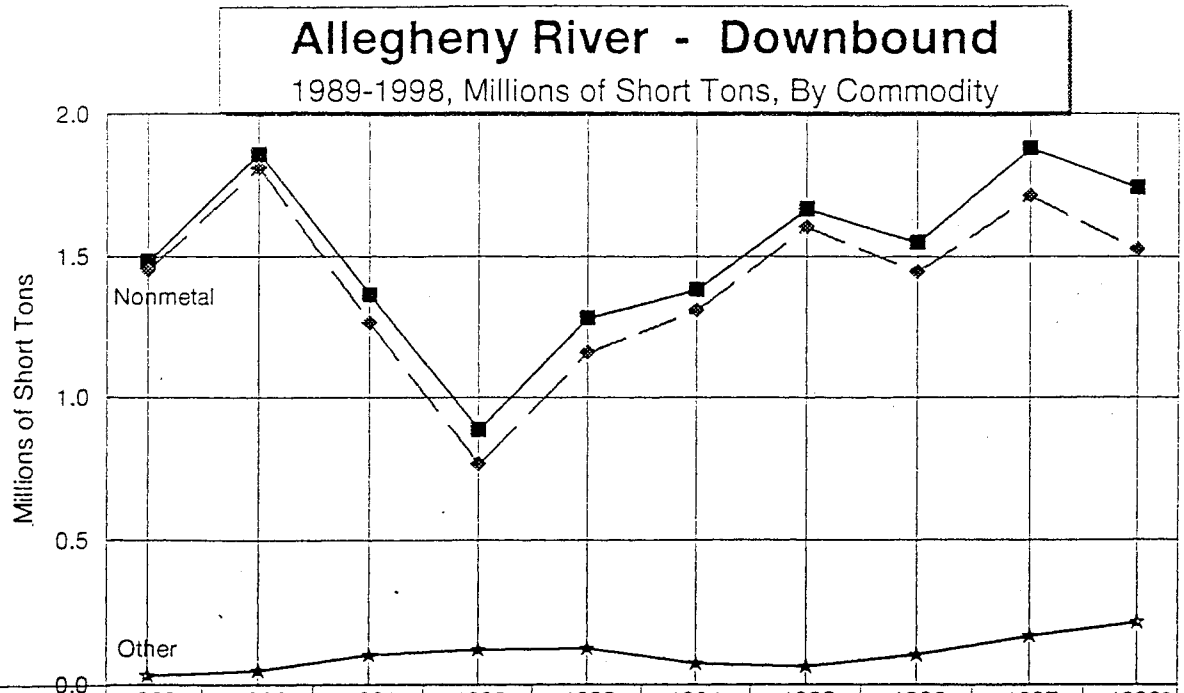
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	88.98	101.40	93.48	96.15	107.65	110.87	107.61	110.29	107.94	110.15
▲ Coal	43.63	52.94	48.82	49.56	53.13	55.47	53.09	54.40	51.71	49.68
▼ Petro & Chem	21.68	19.81	17.73	18.51	19.64	20.53	18.87	17.92	17.90	19.24
◆ Nonmetal	13.28	15.47	14.46	15.16	19.01	17.71	19.01	20.71	20.06	20.39
★ Other	10.40	13.17	12.47	12.92	15.87	17.16	16.65	17.25	18.27	20.84

Allegheny River - Total

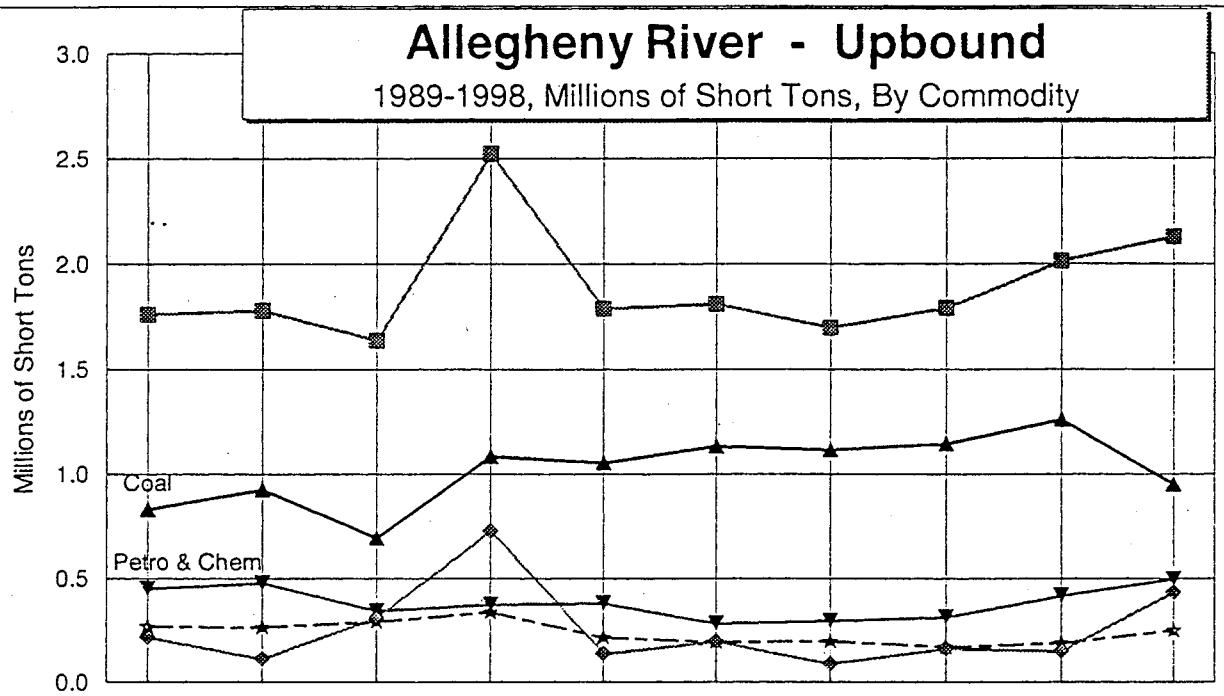
1989-1998, Millions of Short Tons, By Commodity



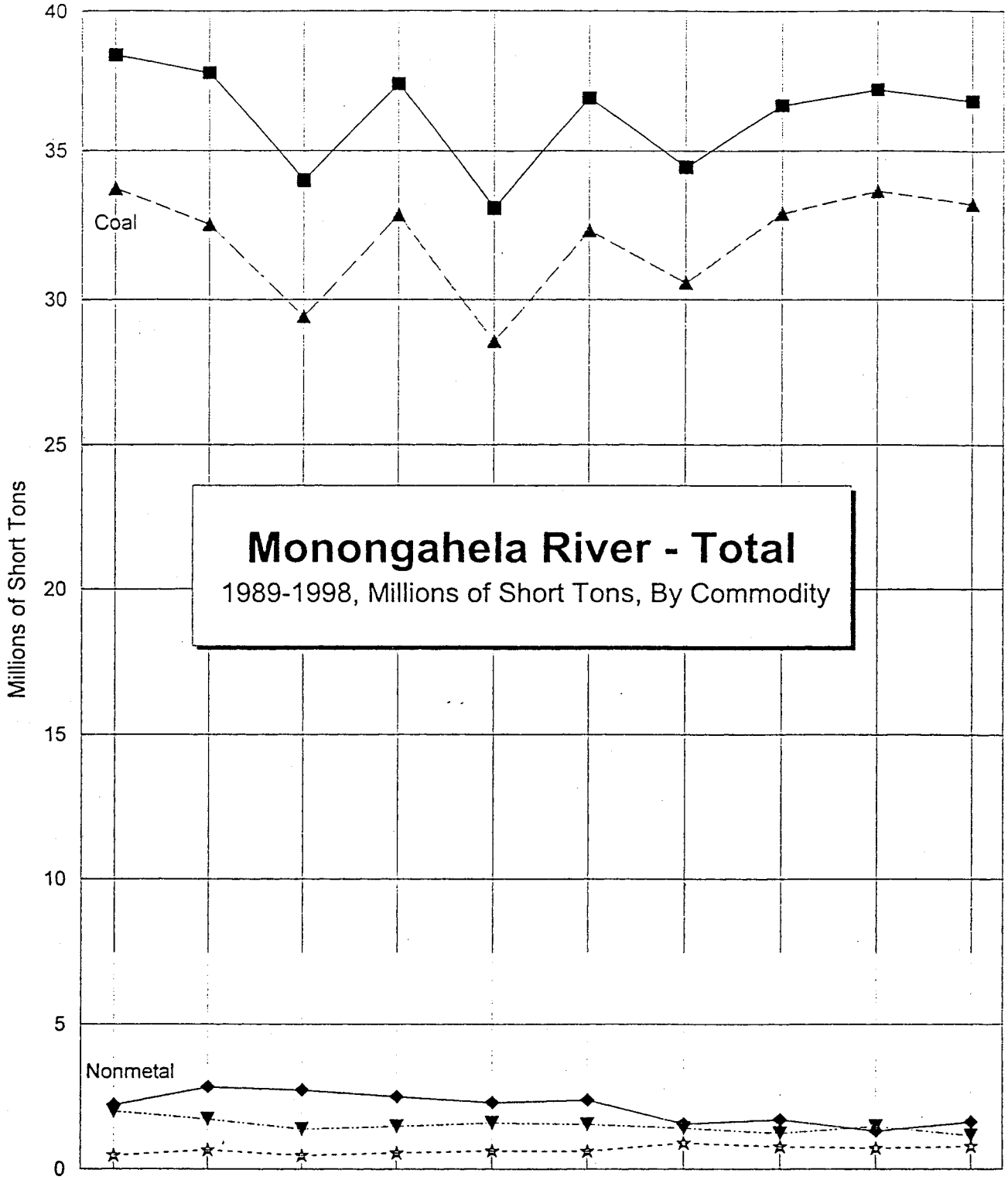
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	3.24	3.64	3.00	3.41	3.07	3.19	3.36	3.34	3.89	3.87
◆ Nonmetal	1.67	1.92	1.57	1.49	1.29	1.51	1.69	1.61	1.86	1.96
▲ Coal	0.84	0.93	0.73	1.09	1.07	1.14	1.12	1.17	1.32	1.11
▼ Petro & Chem	0.46	0.49	0.38	0.43	0.41	0.31	0.30	0.33	0.43	0.51
☆ Other	0.28	0.30	0.33	0.39	0.30	0.24	0.25	0.24	0.29	0.29



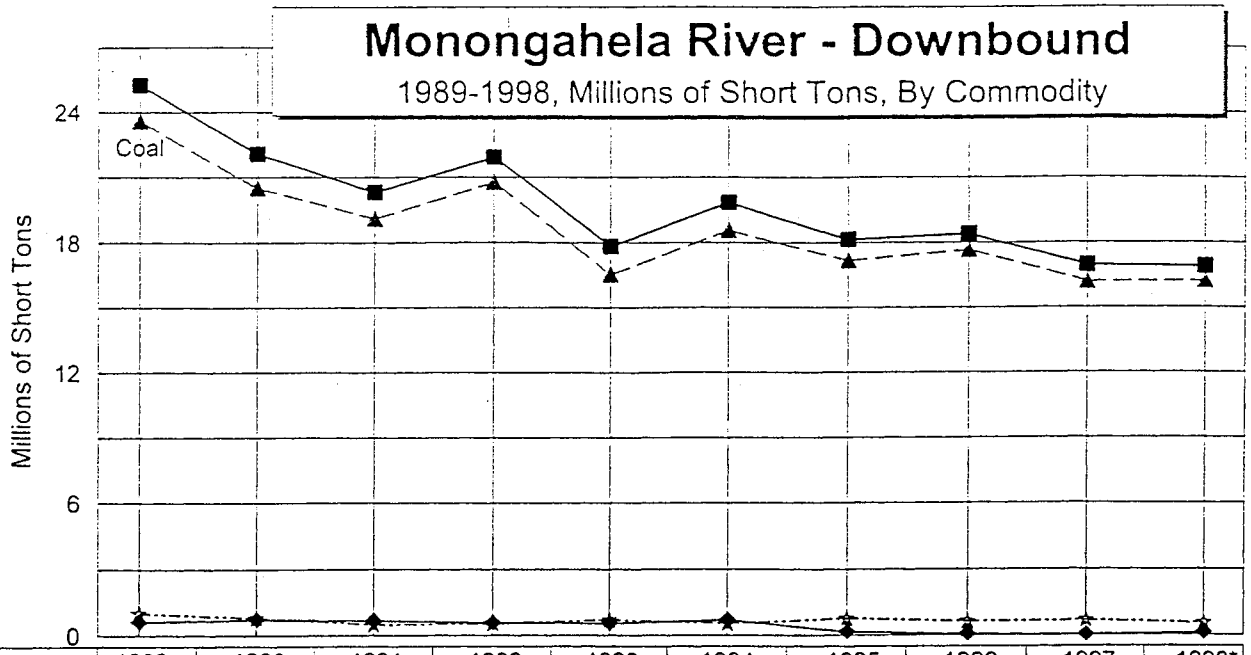
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	1.48	1.86	1.37	0.89	1.28	1.38	1.67	1.55	1.88	1.74
◆ Nonmetal	1.45	1.81	1.26	0.77	1.16	1.31	1.60	1.45	1.71	1.53
★ Other	0.03	0.05	0.10	0.12	0.13	0.07	0.06	0.10	0.17	0.22



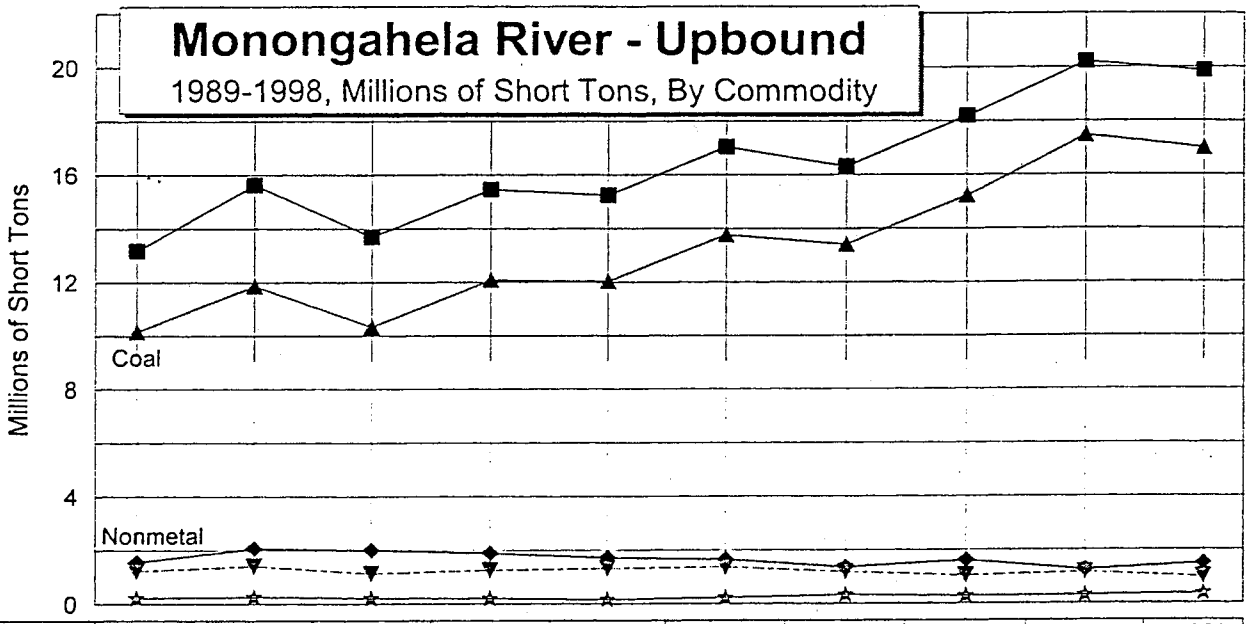
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	1.76	1.78	1.64	2.52	1.79	1.81	1.70	1.79	2.01	2.13
▲ Coal	0.83	0.92	0.69	1.08	1.05	1.13	1.11	1.14	1.26	0.95
▼ Petro & Chem	0.45	0.48	0.34	0.37	0.38	0.28	0.29	0.31	0.42	0.50
★ Other	0.27	0.26	0.29	0.34	0.22	0.20	0.20	0.17	0.19	0.25
◆ Nonmetal	0.22	0.11	0.31	0.73	0.14	0.20	0.09	0.16	0.15	0.43



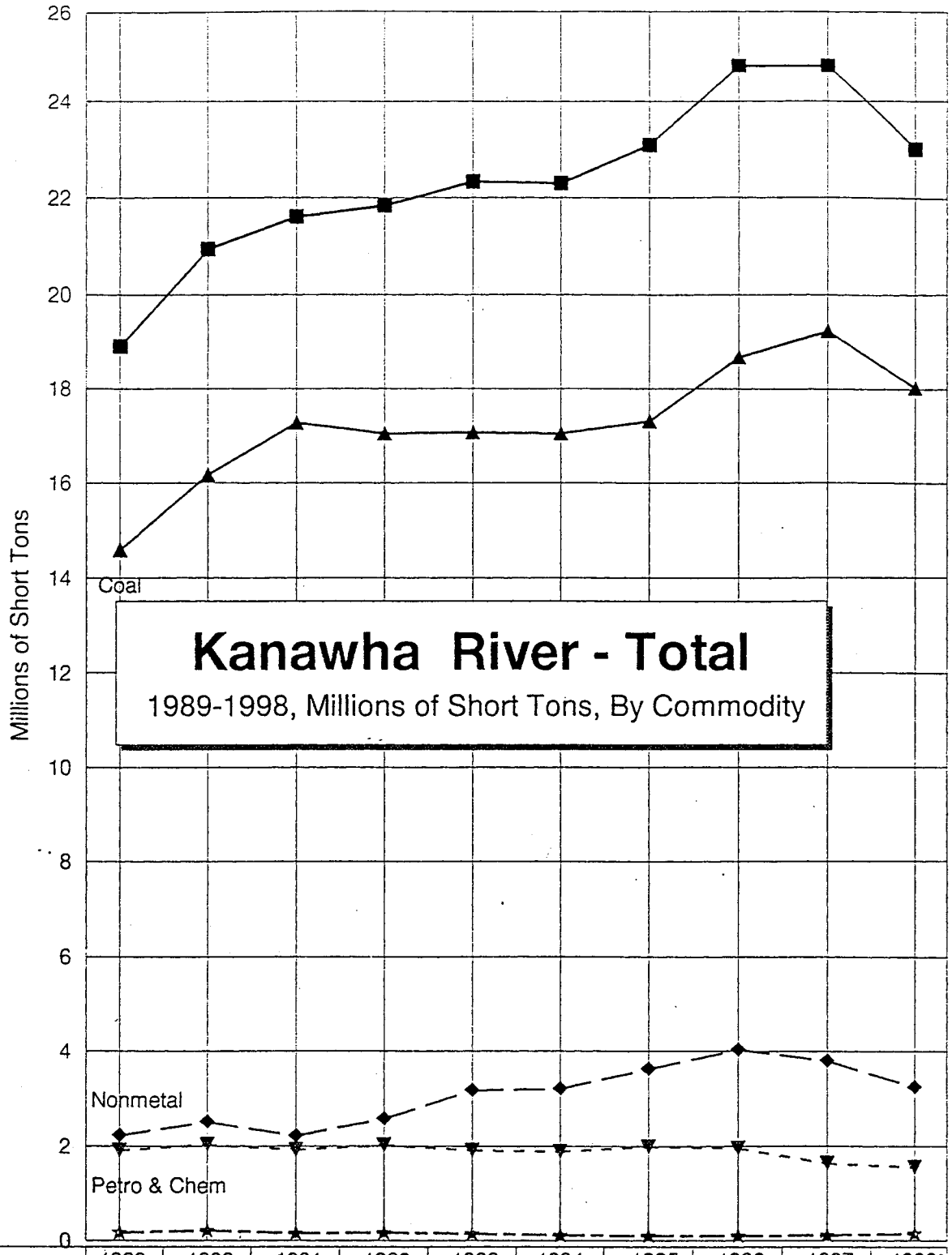
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	38.42	37.76	33.99	37.37	33.07	36.87	34.44	36.59	37.16	36.75
▲Coal	33.73	32.54	29.42	32.86	28.56	32.34	30.58	32.89	33.65	33.20
◆Nonmetal	2.22	2.83	2.72	2.49	2.30	2.37	1.56	1.70	1.31	1.61
▼Petro & Chem	2.00	1.72	1.38	1.47	1.59	1.54	1.41	1.23	1.47	1.16
★Other	0.47	0.66	0.47	0.56	0.62	0.61	0.90	0.77	0.72	0.78



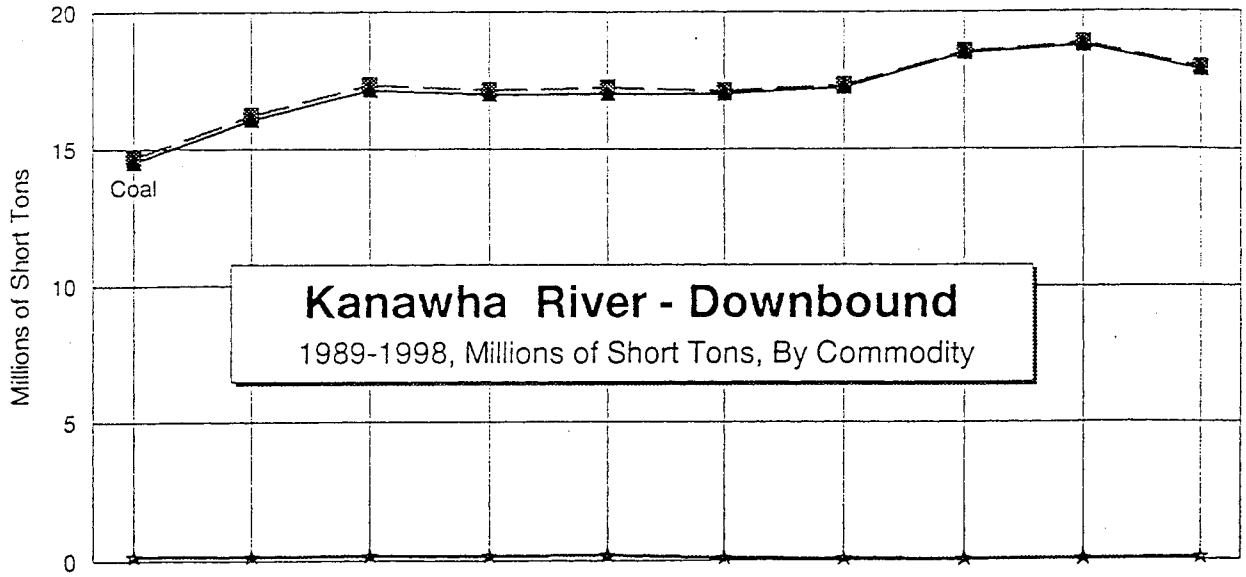
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	25.25	22.07	20.31	21.92	17.82	19.84	18.13	18.40	16.94	16.90
▲ Coal	23.58	20.51	19.10	20.77	16.53	18.57	17.17	17.67	16.19	16.22
★ Other	1.02	0.81	0.50	0.55	0.73	0.55	0.78	0.65	0.70	0.56
◆ Nonmetals	0.65	0.75	0.71	0.60	0.57	0.73	0.19	0.08	0.04	0.11



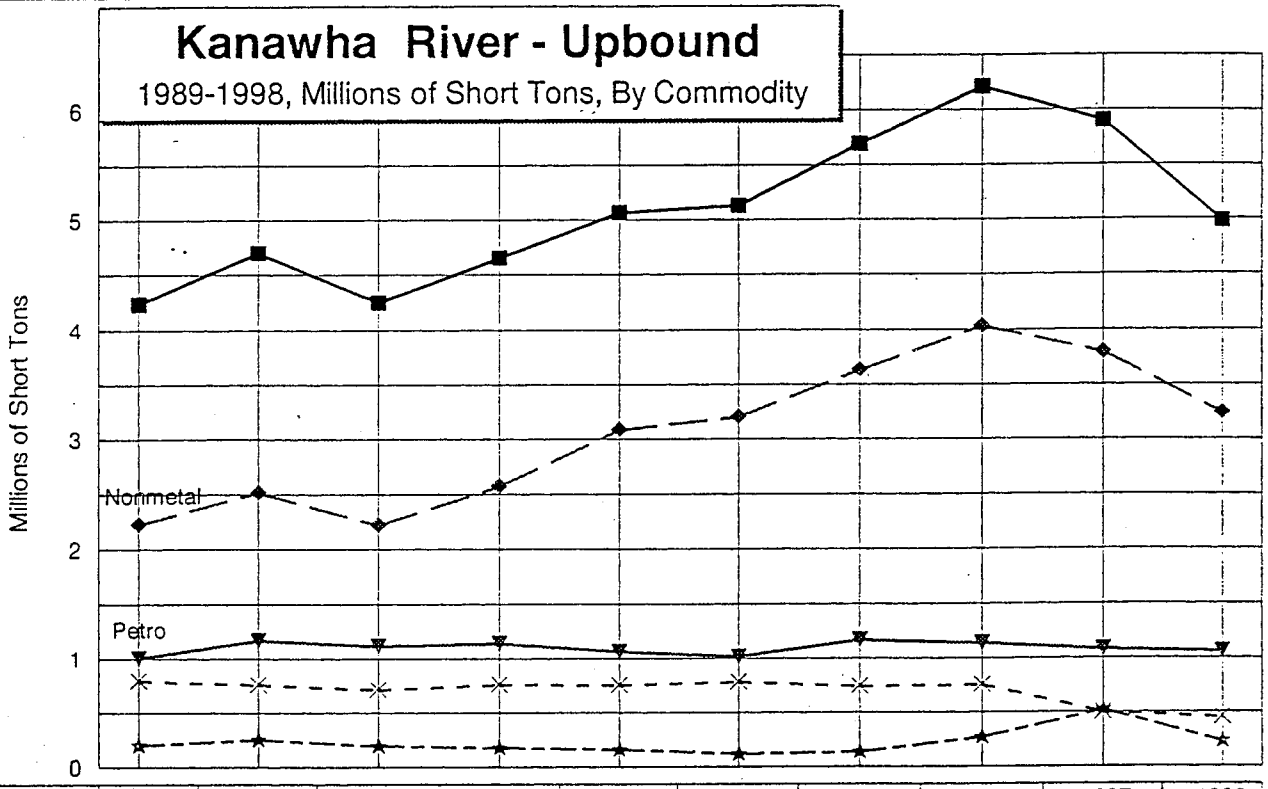
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997*	1998*
■ Total	13.17	15.62	13.69	15.46	15.25	17.03	16.32	18.18	20.22	19.86
▲ Coal	10.15	11.85	10.32	12.08	12.04	13.77	13.41	15.22	17.46	16.98
◆ Nonmetal	1.57	2.07	2.01	1.90	1.72	1.65	1.37	1.62	1.27	1.50
▼ Petro & Chem	1.23	1.42	1.14	1.27	1.32	1.37	1.20	1.05	1.18	0.99
☆ Other	0.22	0.27	0.22	0.21	0.16	0.24	0.34	0.29	0.32	0.38



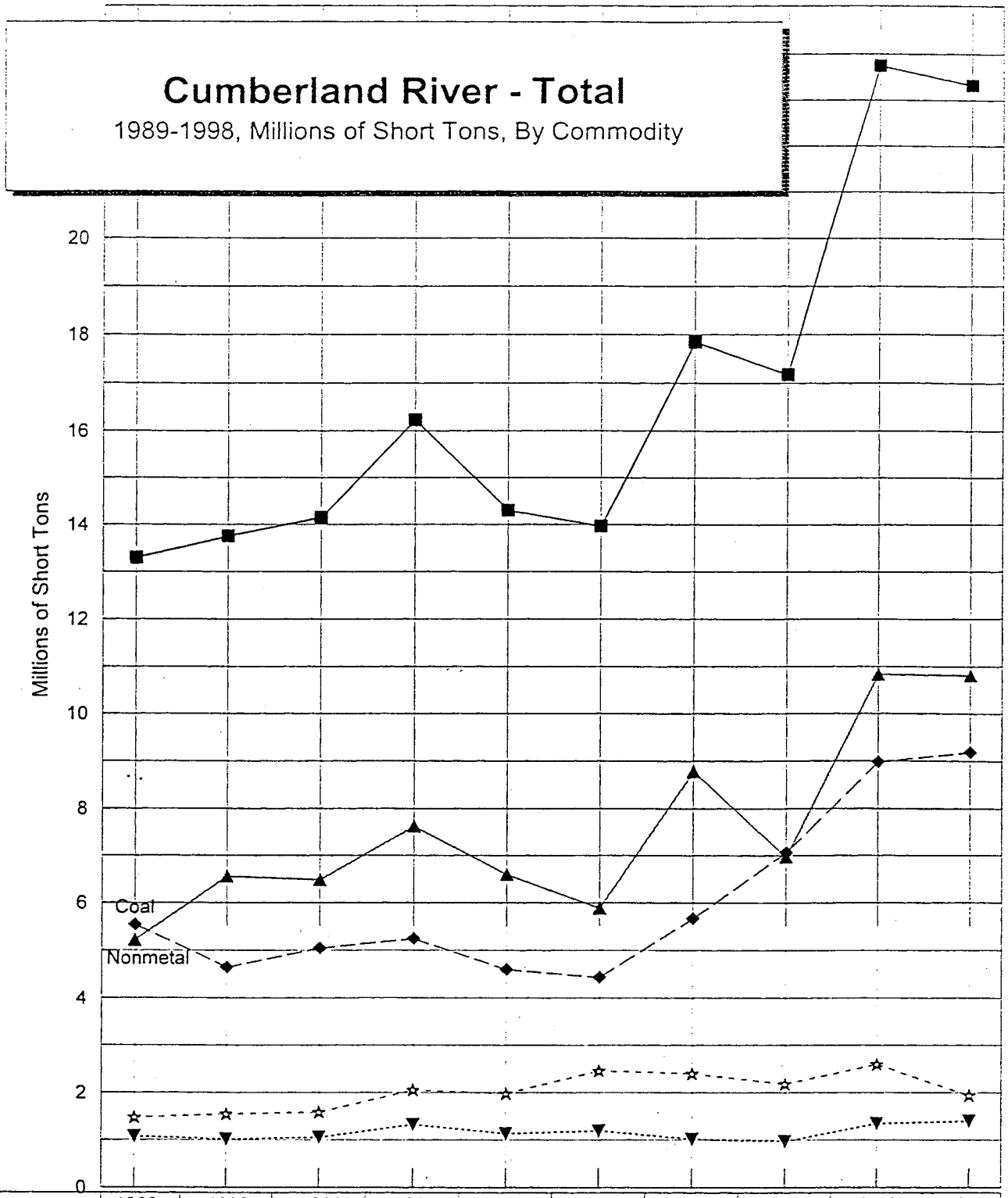
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	18.91	20.95	21.60	21.83	22.32	22.28	23.06	24.79	24.79	22.99
▲Coal	14.58	16.18	17.28	17.05	17.07	17.05	17.32	18.68	19.22	18.02
◆Nonmetal	2.23	2.52	2.22	2.58	3.18	3.21	3.63	4.04	3.81	3.24
▼Petro & Chem	1.91	2.03	1.93	2.02	1.91	1.90	2.00	1.96	1.64	1.57
★Other	0.18	0.22	0.17	0.18	0.15	0.13	0.11	0.11	0.12	0.16



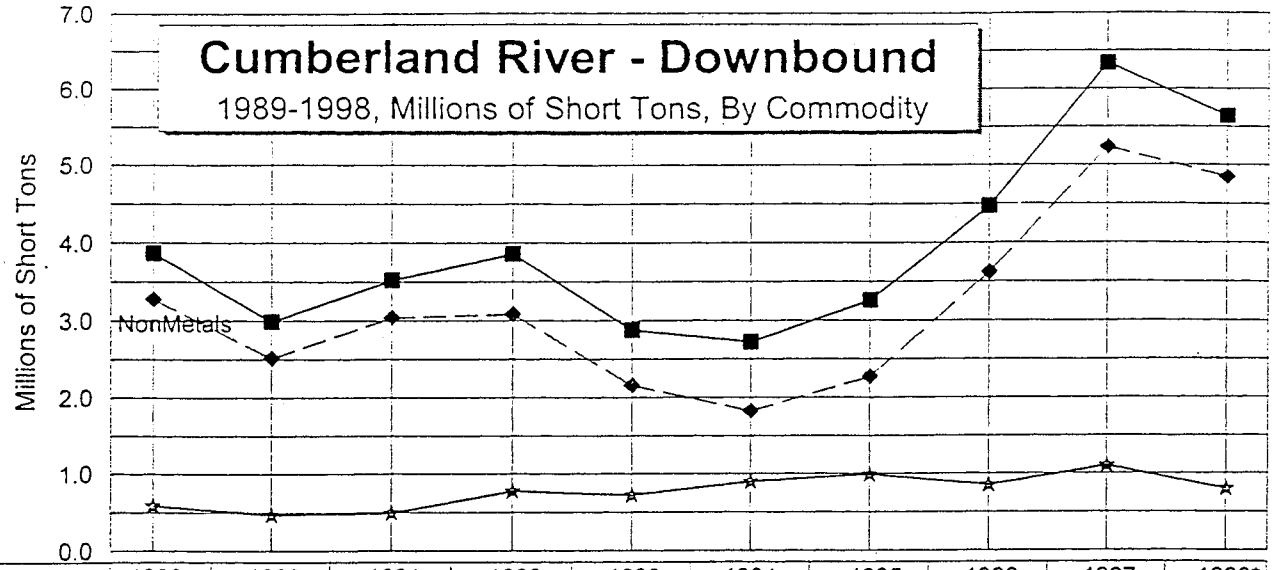
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	14.67	16.25	17.36	17.17	17.25	17.16	17.37	18.59	18.89	17.99
▲ Coal	14.51	16.07	17.17	16.99	17.03	17.03	17.28	18.52	18.81	17.89
★ Other	0.16	0.17	0.18	0.18	0.22	0.12	0.09	0.07	0.08	0.09



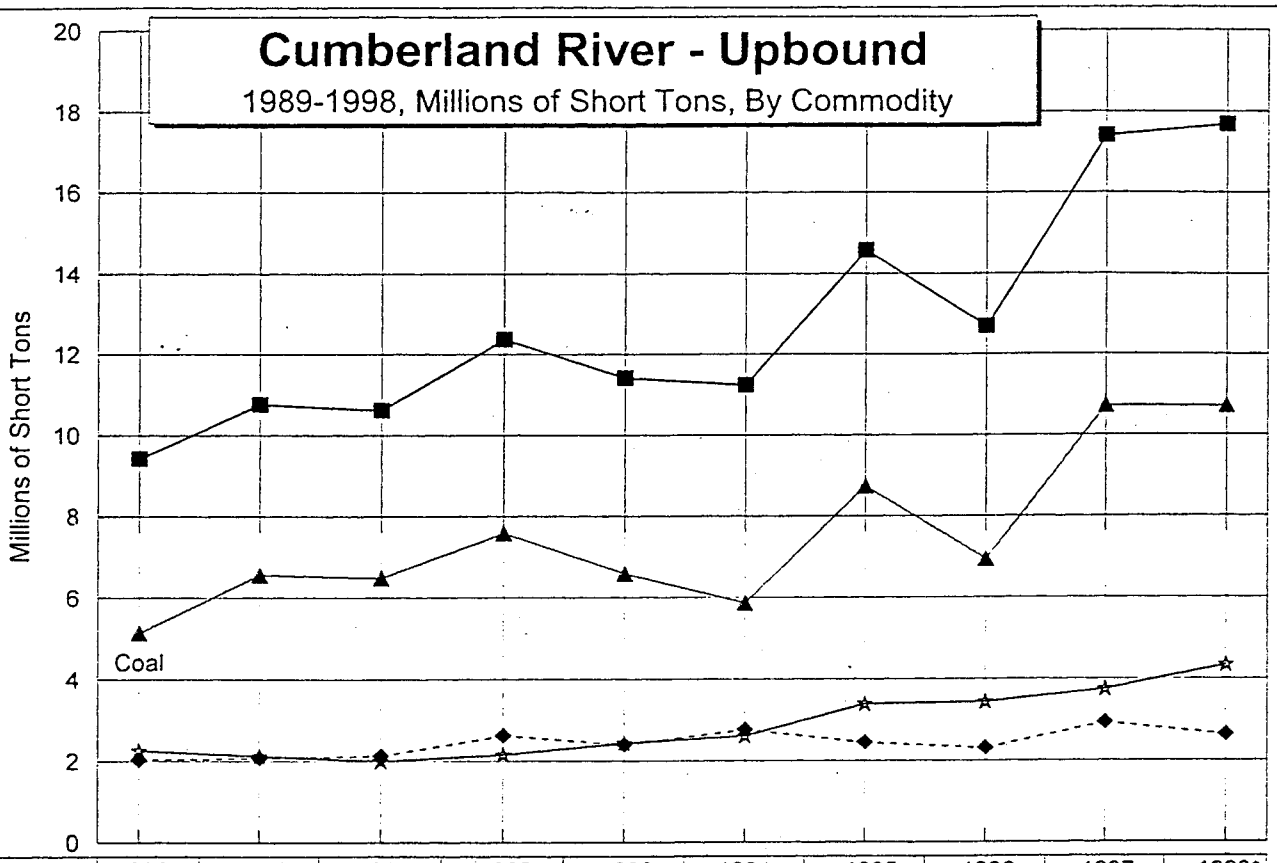
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	4.24	4.70	4.25	4.65	5.06	5.13	5.69	6.20	5.90	4.98
◆ Nonmetal	2.23	2.52	2.22	2.58	3.09	3.20	3.63	4.03	3.79	3.24
▼ Petro	1.00	1.17	1.11	1.14	1.06	1.02	1.17	1.14	1.08	1.05
✕ Chemical	0.80	0.76	0.71	0.76	0.75	0.79	0.75	0.76	0.50	0.46
★ Other	0.20	0.26	0.20	0.18	0.16	0.12	0.14	0.28	0.52	0.23



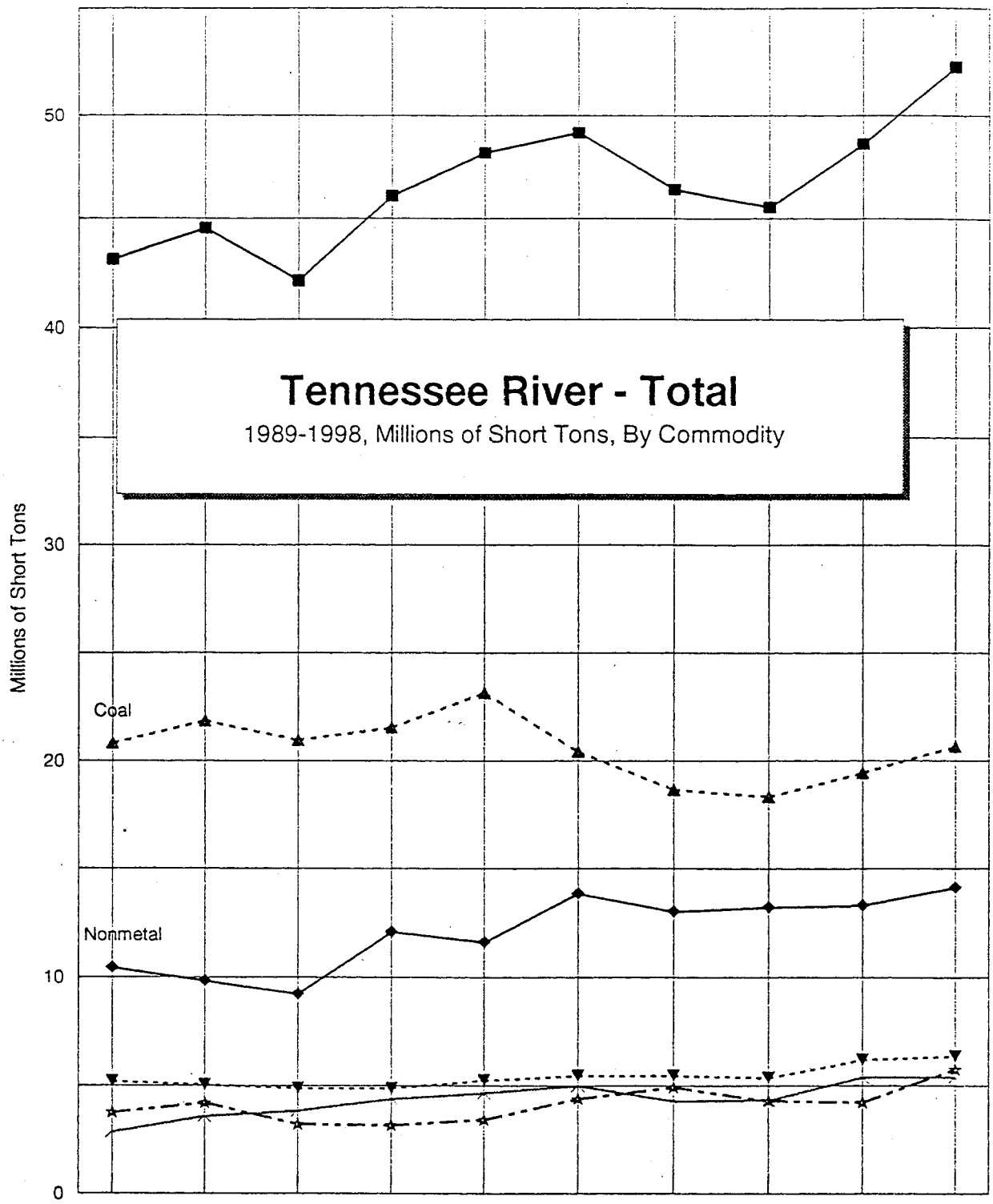
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	13.29	13.74	14.14	16.22	14.29	13.95	17.84	17.17	23.74	23.31
▲Coal	5.21	6.55	6.48	7.61	6.59	5.88	8.77	6.96	10.82	10.81
◆Nonmetal	5.54	4.64	5.04	5.24	4.59	4.43	5.66	7.06	8.98	9.18
★Other	1.47	1.54	1.58	2.05	1.98	2.45	2.39	2.18	2.60	1.93
▼Petro & Chem	1.07	1.01	1.05	1.32	1.13	1.19	1.01	0.97	1.34	1.40



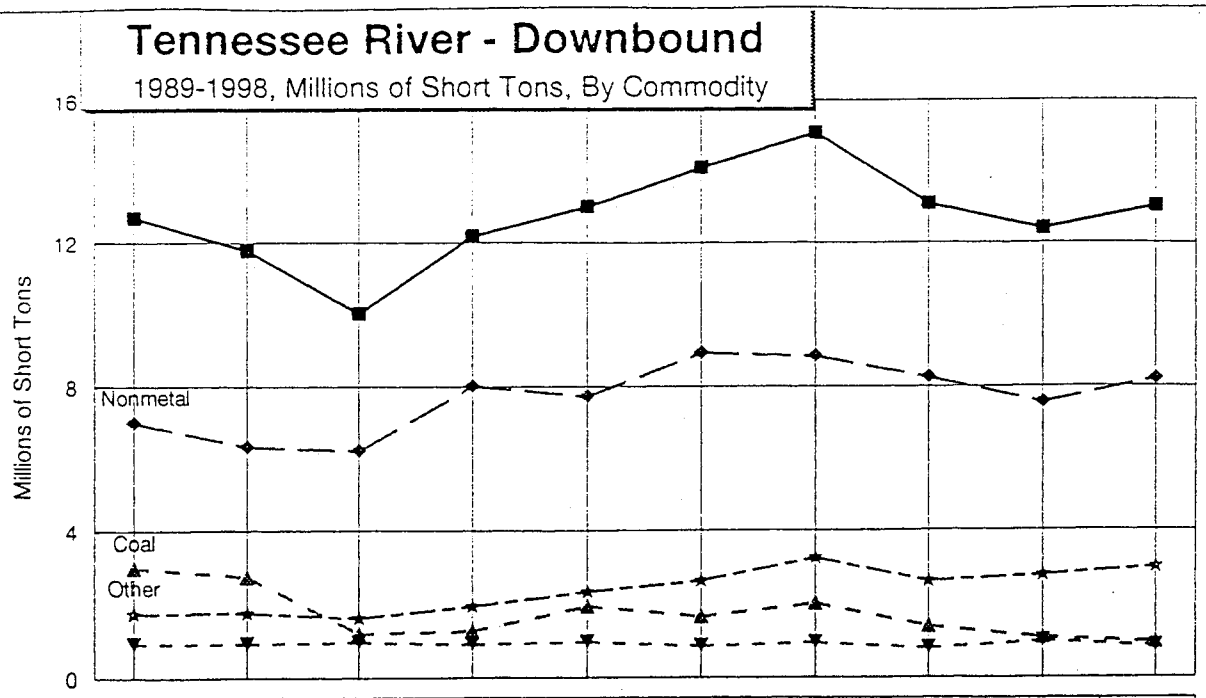
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	3.86	2.98	3.52	3.86	2.88	2.72	3.26	4.47	6.33	5.64
◆ Nonmetal	3.28	2.51	3.04	3.08	2.16	1.82	2.27	3.62	5.23	4.84
☆ Other	0.59	0.47	0.49	0.78	0.72	0.89	0.99	0.85	1.10	0.79



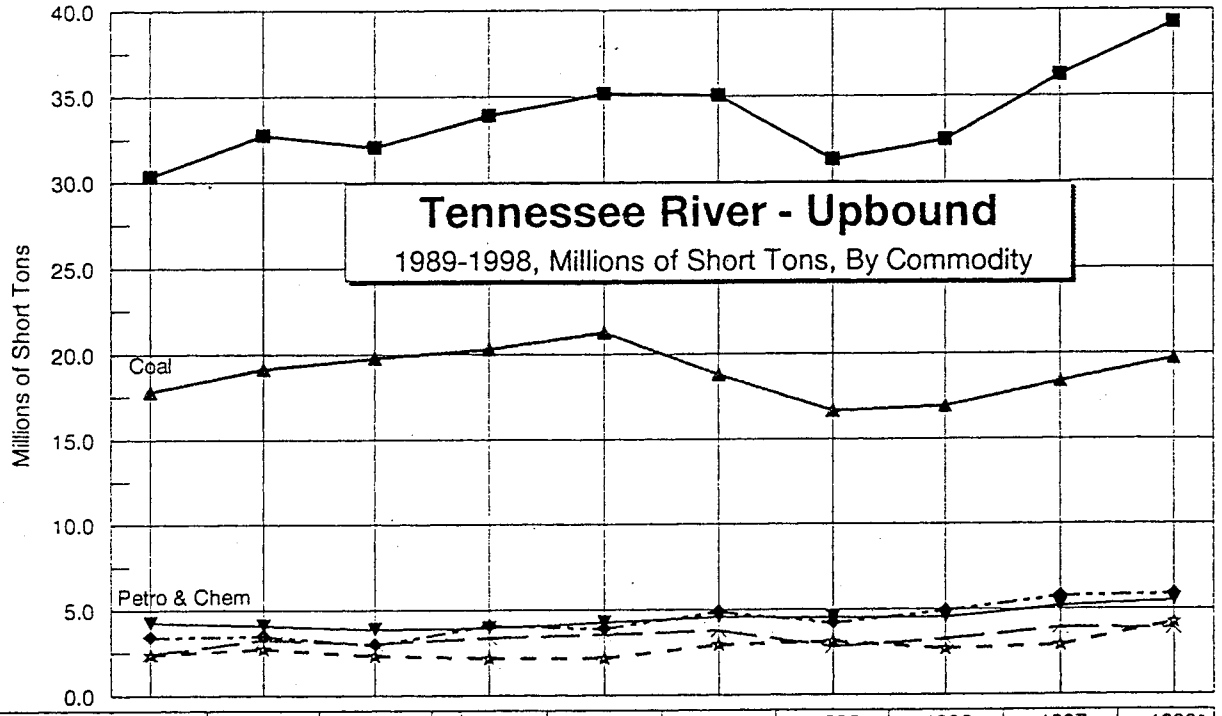
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	9.42	10.76	10.61	12.36	11.42	11.24	14.58	12.70	17.40	17.68
▲ Coal	5.13	6.55	6.48	7.58	6.58	5.86	8.73	6.94	10.71	10.71
◆ Nonmetal	2.04	2.08	2.14	2.63	2.40	2.77	2.45	2.31	2.94	2.64
☆ Other	2.26	2.13	2.00	2.16	2.43	2.61	3.39	3.44	3.75	4.33



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	43.06	44.51	42.09	46.08	48.16	49.14	46.39	45.53	48.61	52.30
▲ Coal	20.82	21.88	20.97	21.56	23.18	20.43	18.66	18.32	19.44	20.68
◆ Nonmetal	10.44	9.84	9.22	12.12	11.64	13.86	13.04	13.24	13.35	14.13
▼ Petro & Chem	5.21	5.03	4.86	4.87	5.25	5.47	5.48	5.36	6.20	6.36
★ Other	3.75	4.20	3.20	3.16	3.43	4.38	4.92	4.28	4.22	5.73
Farm	2.84	3.57	3.83	4.37	4.66	5.00	4.29	4.32	5.40	5.40



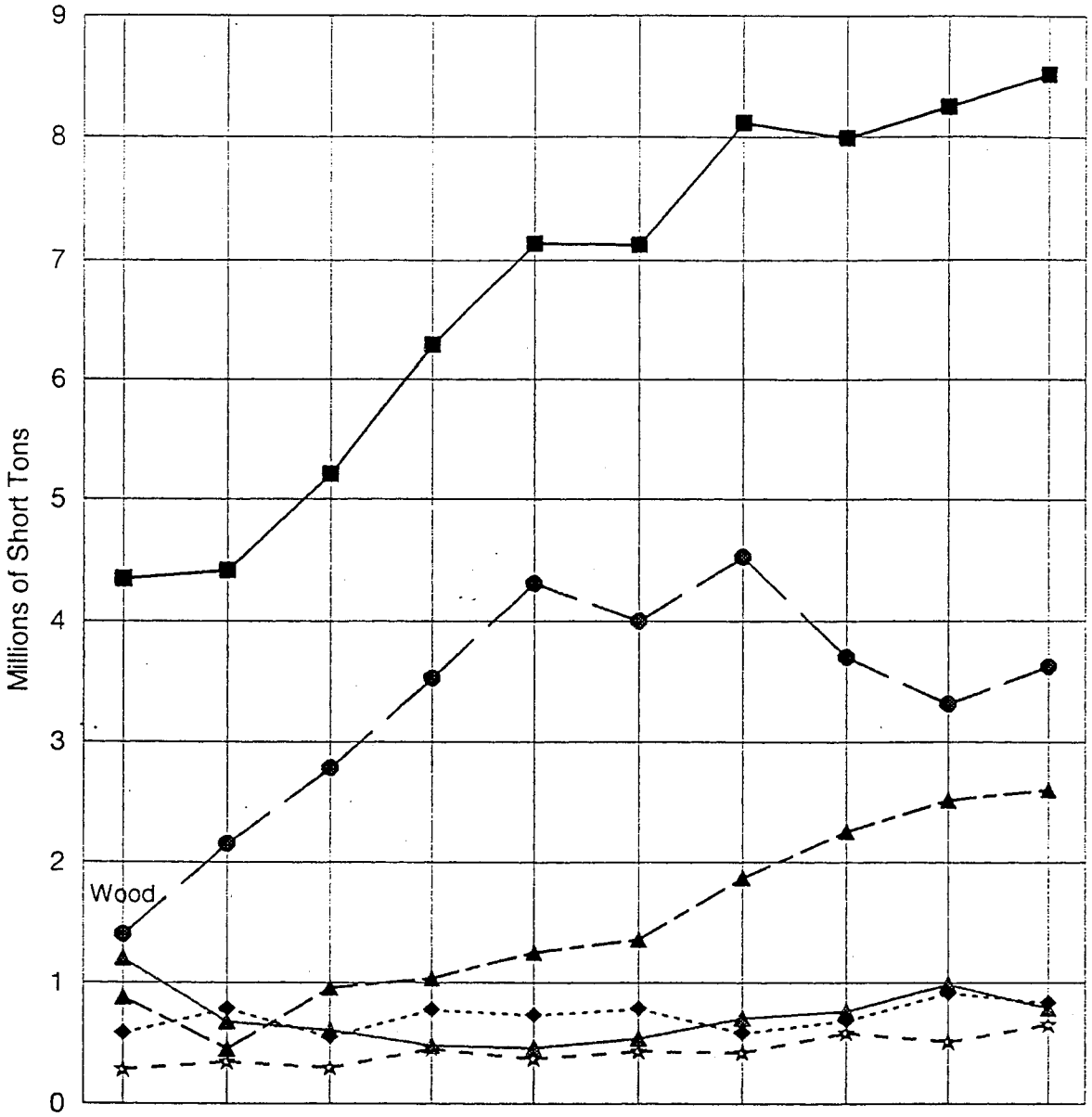
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	12.70	11.78	10.05	12.18	13.00	14.10	15.07	13.08	12.39	13.02
◆ Nonmetal	7.00	6.32	6.22	8.02	7.74	8.95	8.85	8.28	7.56	8.22
★ Other	1.76	1.78	1.64	1.96	2.35	2.62	3.25	2.62	2.76	2.98
▲ Coal	2.98	2.73	1.21	1.29	1.94	1.65	2.01	1.38	1.08	0.97
▼ Petro & Chem	0.95	0.95	0.99	0.92	0.97	0.88	0.96	0.81	0.99	0.86



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	30.37	32.73	32.03	33.91	35.16	35.04	31.32	32.45	36.22	39.28
▲ Coal	17.83	19.15	19.76	20.27	21.24	18.79	16.65	16.95	18.36	19.71
▼ Petro & Chem	4.26	4.08	3.88	3.96	4.27	4.59	4.52	4.56	5.21	5.50
◆ Nonmetal	3.44	3.51	3.00	4.10	3.91	4.91	4.18	4.96	5.79	5.91
★ Other	2.39	2.72	2.33	2.18	2.15	2.95	3.13	2.70	2.90	4.24
⌃ Farm	2.45	3.26	3.06	3.40	3.59	3.81	2.84	3.29	3.95	3.91

Tennessee - Tombigbee Waterway

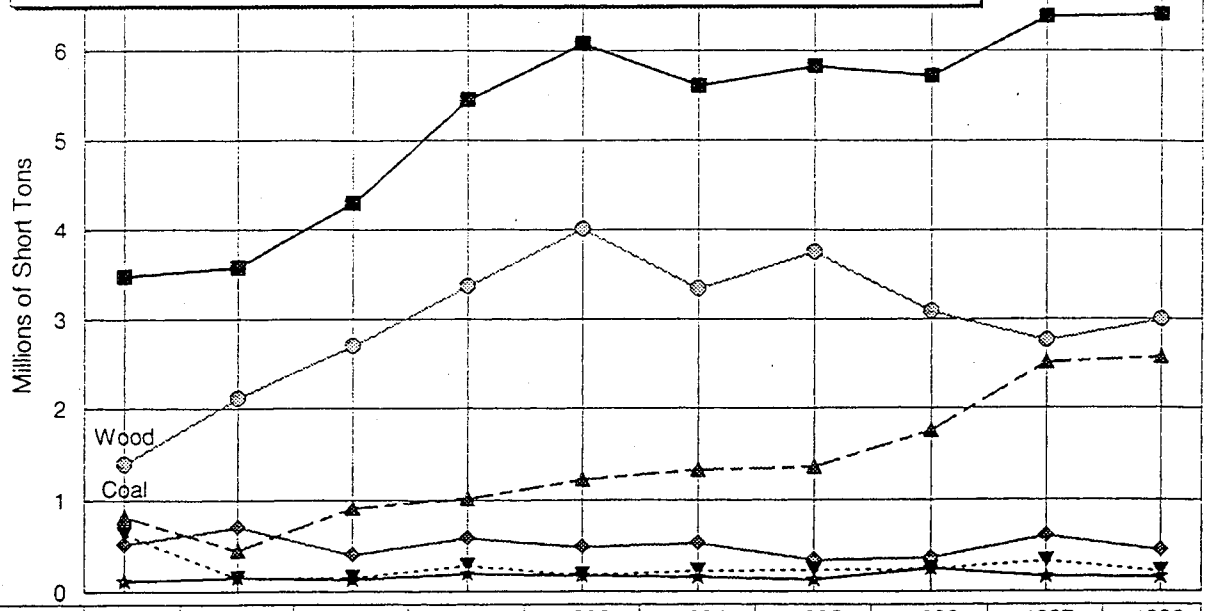
Total, 1989-1998, Millions of Short Tons, By Commodity



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	4.35	4.41	5.20	6.29	7.13	7.12	8.12	7.99	8.24	8.51
●Wood	1.40	2.15	2.78	3.53	4.31	4.00	4.53	3.70	3.31	3.62
▲Coal	0.88	0.45	0.96	1.04	1.25	1.36	1.87	2.25	2.52	2.60
▲Petro & Chem	1.20	0.68	0.61	0.49	0.47	0.54	0.71	0.77	0.99	0.79
◆Nonmetal	0.59	0.79	0.55	0.78	0.73	0.78	0.59	0.69	0.91	0.84
★Other	0.28	0.35	0.30	0.45	0.37	0.43	0.42	0.58	0.51	0.65

Tennessee - Tombigbee Waterway

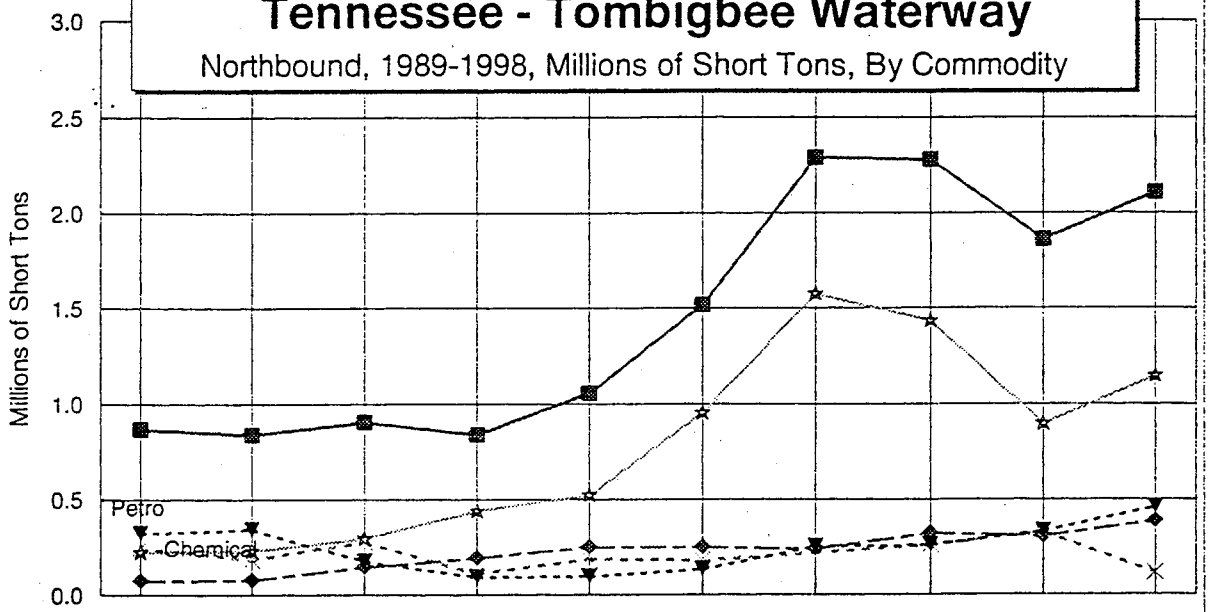
Southbound, 1989-1998, By Commodity



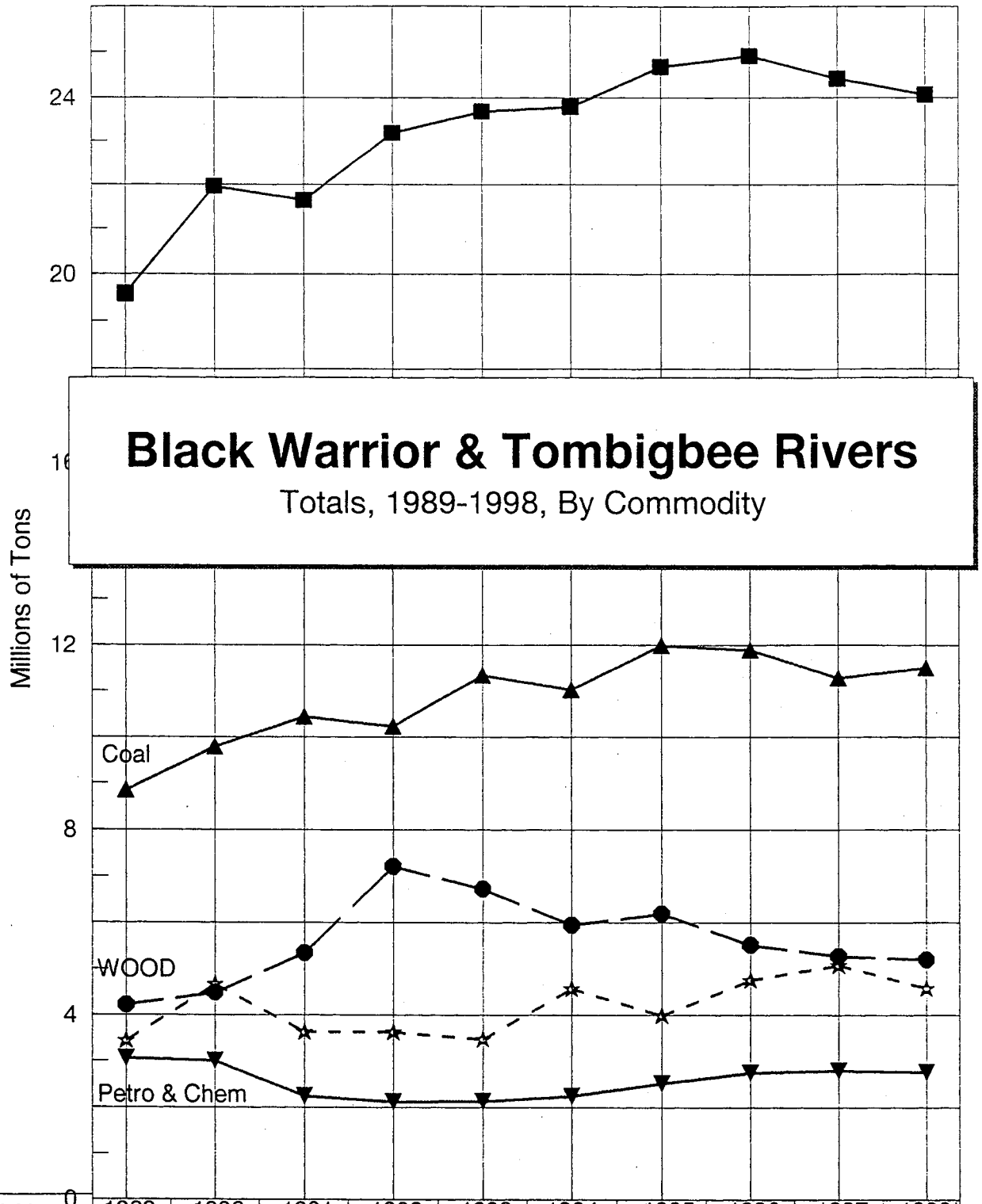
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	3.48	3.58	4.30	5.45	6.08	5.60	5.83	5.71	6.38	6.40
◎ Wood	1.40	2.12	2.70	3.37	4.01	3.35	3.75	3.10	2.76	3.00
▲ Coal	0.82	0.45	0.91	1.02	1.22	1.33	1.36	1.75	2.52	2.57
◆ Nonmetal	0.51	0.71	0.40	0.59	0.48	0.53	0.35	0.37	0.61	0.45
▼ Petro & Chem	0.63	0.15	0.16	0.28	0.18	0.23	0.24	0.24	0.33	0.22
★ Other	0.12	0.15	0.13	0.20	0.18	0.16	0.13	0.25	0.17	0.16

Tennessee - Tombigbee Waterway

Northbound, 1989-1998, Millions of Short Tons, By Commodity



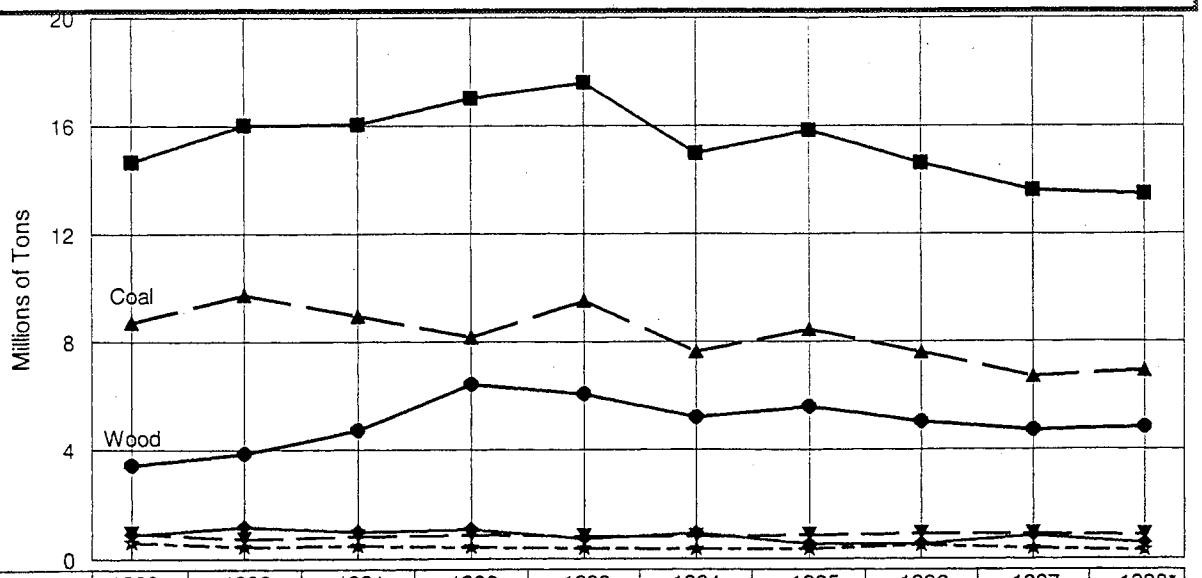
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	0.87	0.84	0.90	0.84	1.06	1.52	2.29	2.28	1.86	2.11
☆ Other	0.22	0.23	0.30	0.44	0.52	0.95	1.58	1.44	0.90	1.15
◆ Nonmetal	0.07	0.08	0.15	0.19	0.25	0.25	0.24	0.32	0.31	0.39
✕ Chemical	0.24	0.18	0.28	0.11	0.19	0.18	0.22	0.26	0.33	0.12
▼ Petro	0.32	0.34	0.18	0.09	0.10	0.14	0.25	0.26	0.33	0.46



Millions of Tons	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	19.57	21.95	21.63	23.19	23.67	23.78	24.67	24.91	24.41	24.05
▲Coal	8.84	9.79	10.43	10.23	11.34	11.02	11.98	11.88	11.27	11.51
●Wood	4.22	4.48	5.34	7.20	6.73	5.94	6.19	5.51	5.27	5.20
★Other	3.44	4.66	3.63	3.63	3.47	4.57	3.99	4.76	5.08	4.58
▼Petro & Chem	3.06	3.01	2.24	2.13	2.14	2.25	2.52	2.75	2.79	2.76

Black Warrior & Tombigbee Rivers

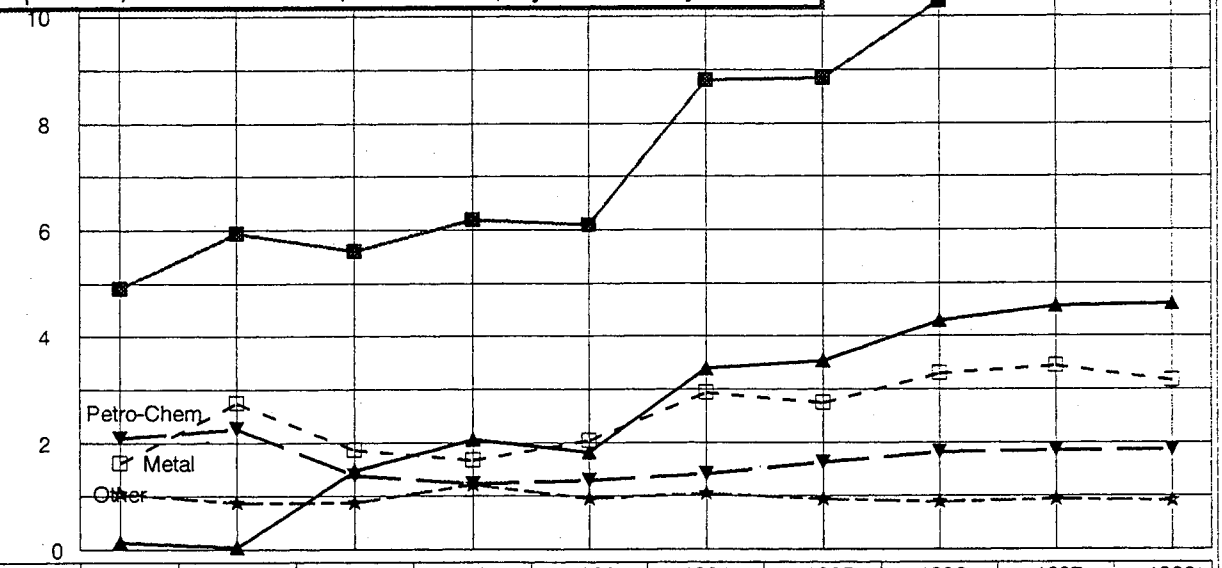
Downbound, Millions of Tons, 1989-1998, By Commodity



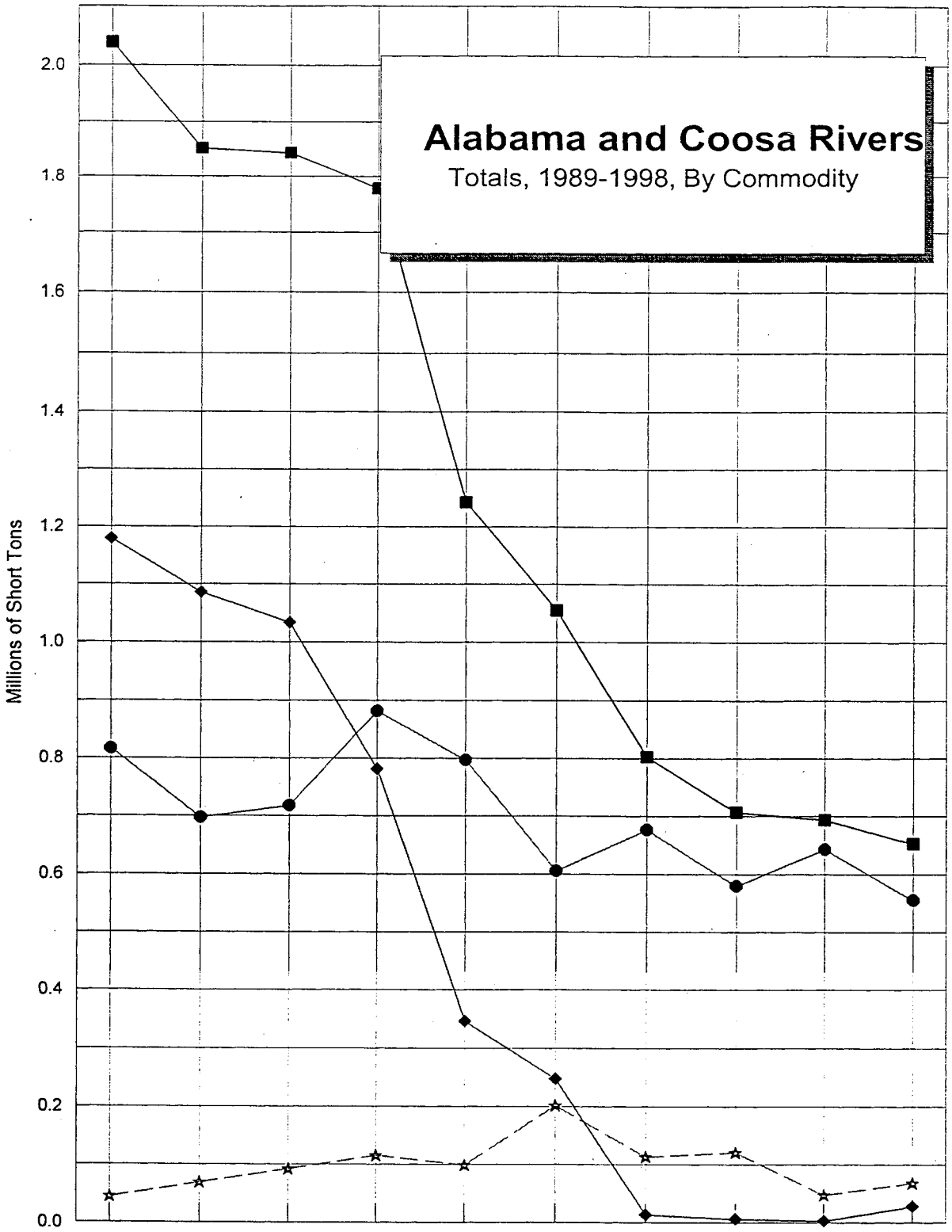
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ TOTAL	14.66	16.01	16.03	17.00	17.58	14.98	15.83	14.61	13.61	13.48
▲ Coal	8.70	9.74	8.96	8.17	9.52	7.62	8.44	7.59	6.71	6.90
● Wood	3.44	3.87	4.72	6.40	6.06	5.17	5.58	5.02	4.71	4.80
▼ Petro-Chem	0.97	0.75	0.85	0.89	0.85	0.84	0.89	0.94	0.94	0.89
◆ Nonmetal	0.91	1.19	1.01	1.11	0.75	0.97	0.55	0.56	0.87	0.58
★ Other	0.63	0.47	0.49	0.43	0.39	0.38	0.37	0.50	0.39	0.31

Black Warrior & Tombigbee Rivers

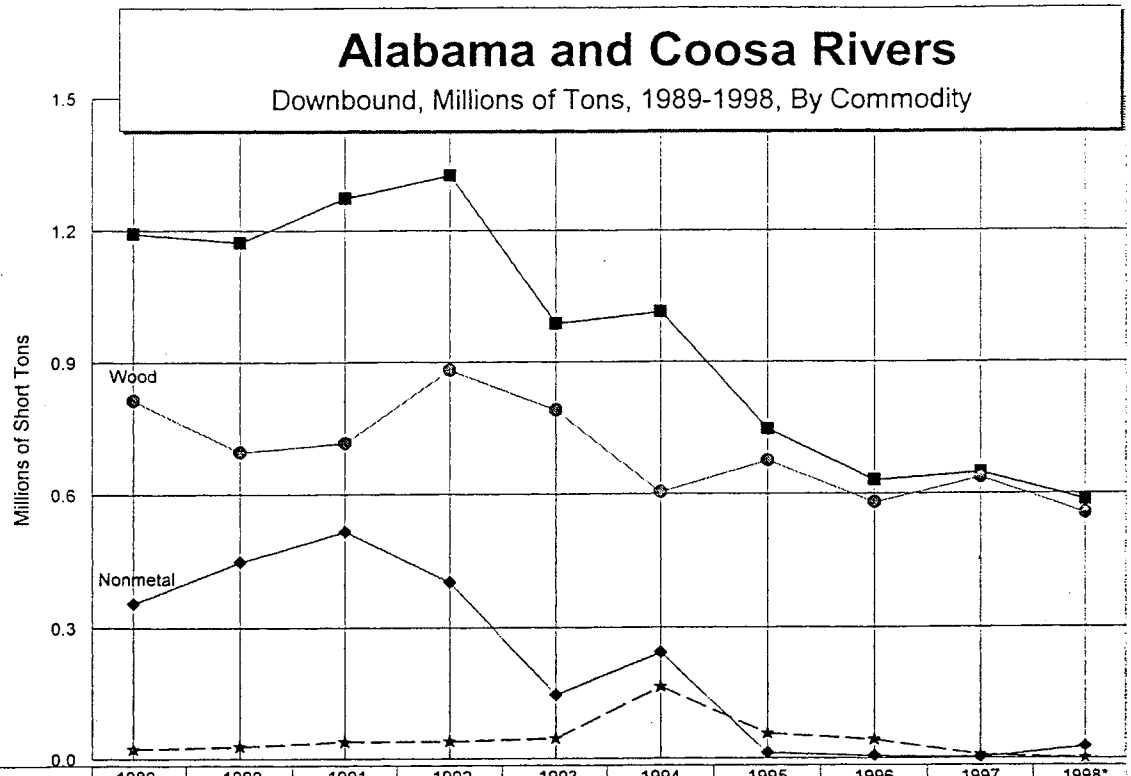
Upbound, Millions of Tons, 1989-1998, By Commodity



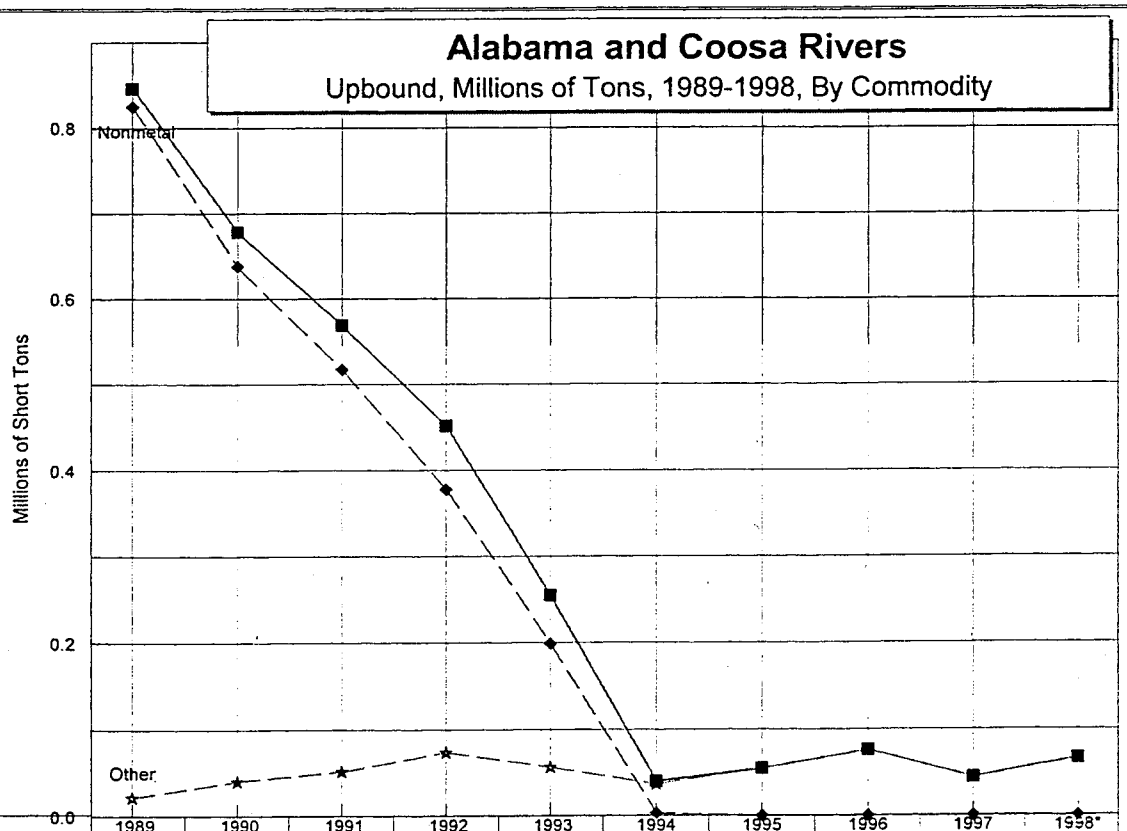
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	4.91	5.94	5.60	6.19	6.10	8.80	8.84	10.29	10.80	10.57
▲ Coal	0.14	0.05	1.47	2.06	1.82	3.40	3.54	4.29	4.56	4.61
⊟ Metal	1.63	2.74	1.87	1.68	2.05	2.94	2.74	3.30	3.44	3.17
▼ Petro & Chem	2.09	2.26	1.38	1.24	1.28	1.41	1.63	1.81	1.85	1.87
★ Other	1.05	0.88	0.88	1.22	0.95	1.06	0.94	0.90	0.94	0.92



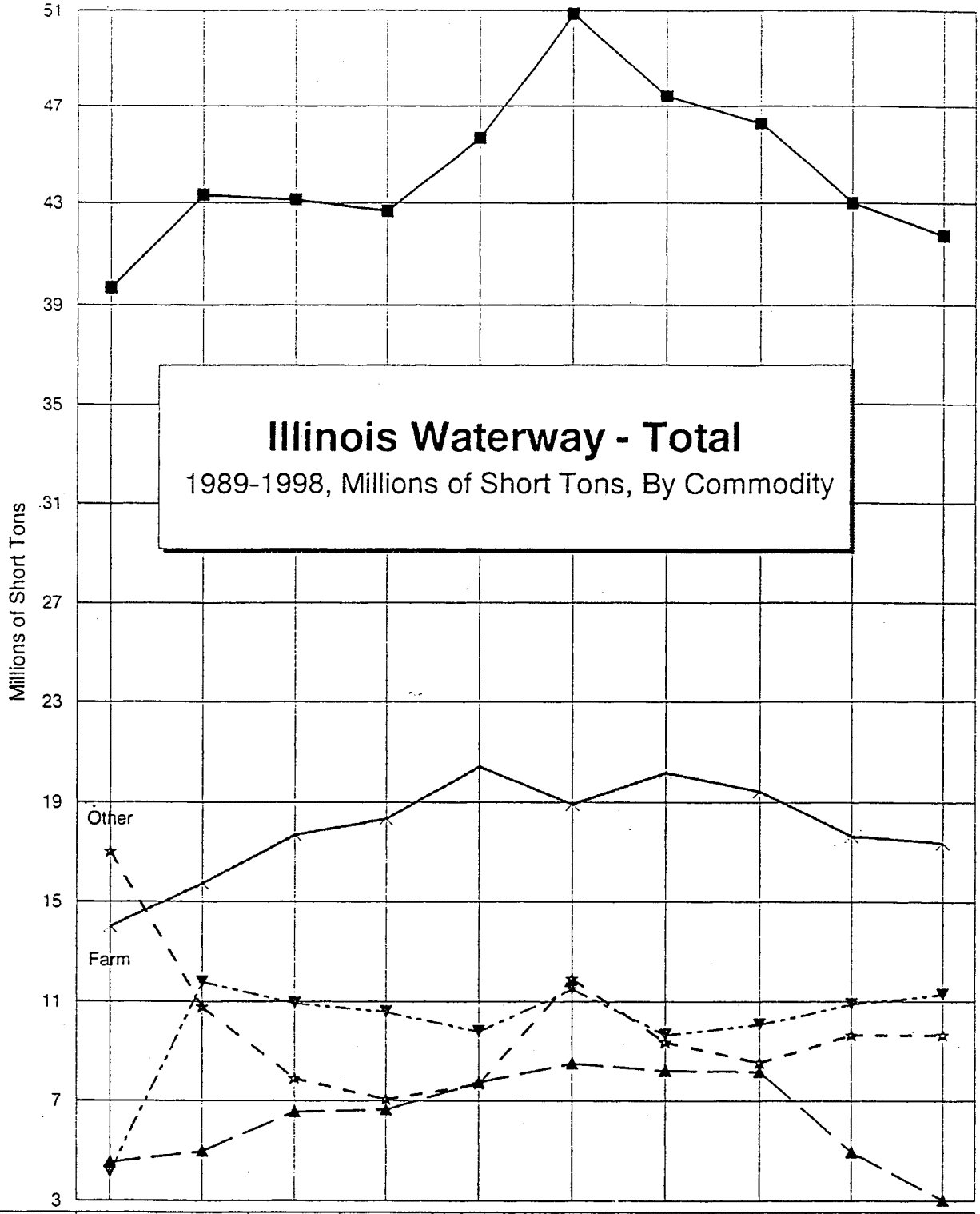
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	2.04	1.85	1.84	1.78	1.24	1.05	0.80	0.71	0.69	0.65
● Wood	0.82	0.70	0.72	0.88	0.80	0.60	0.68	0.58	0.64	0.56
☆ Other	0.04	0.07	0.09	0.12	0.10	0.20	0.11	0.12	0.05	0.07
◆ Nonmetal	1.18	1.08	1.03	0.78	0.35	0.25	0.01	0.01	0.00	0.03



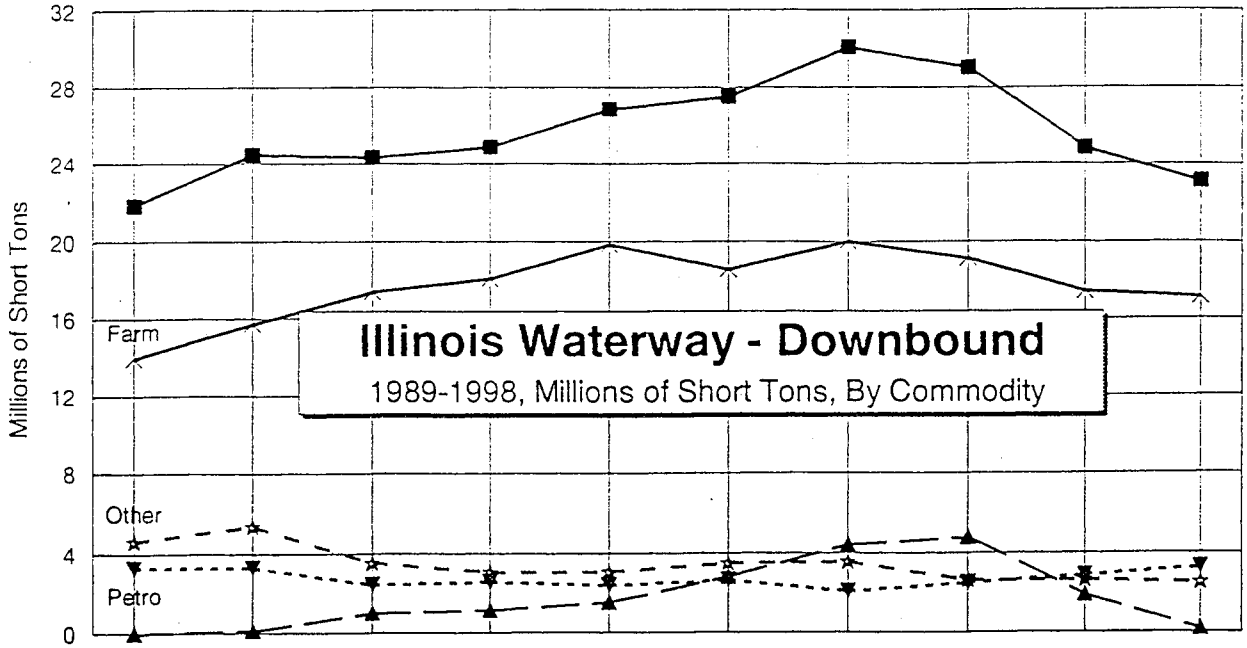
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	1.19	1.17	1.27	1.33	0.99	1.01	0.75	0.63	0.65	0.59
● Wood	0.81	0.70	0.72	0.88	0.79	0.60	0.68	0.58	0.64	0.56
★ Other	0.02	0.03	0.04	0.04	0.05	0.17	0.06	0.04	0.01	0.00
◆ Nonmetal	0.35	0.45	0.52	0.40	0.15	0.24	0.01	0.01	0.00	0.03



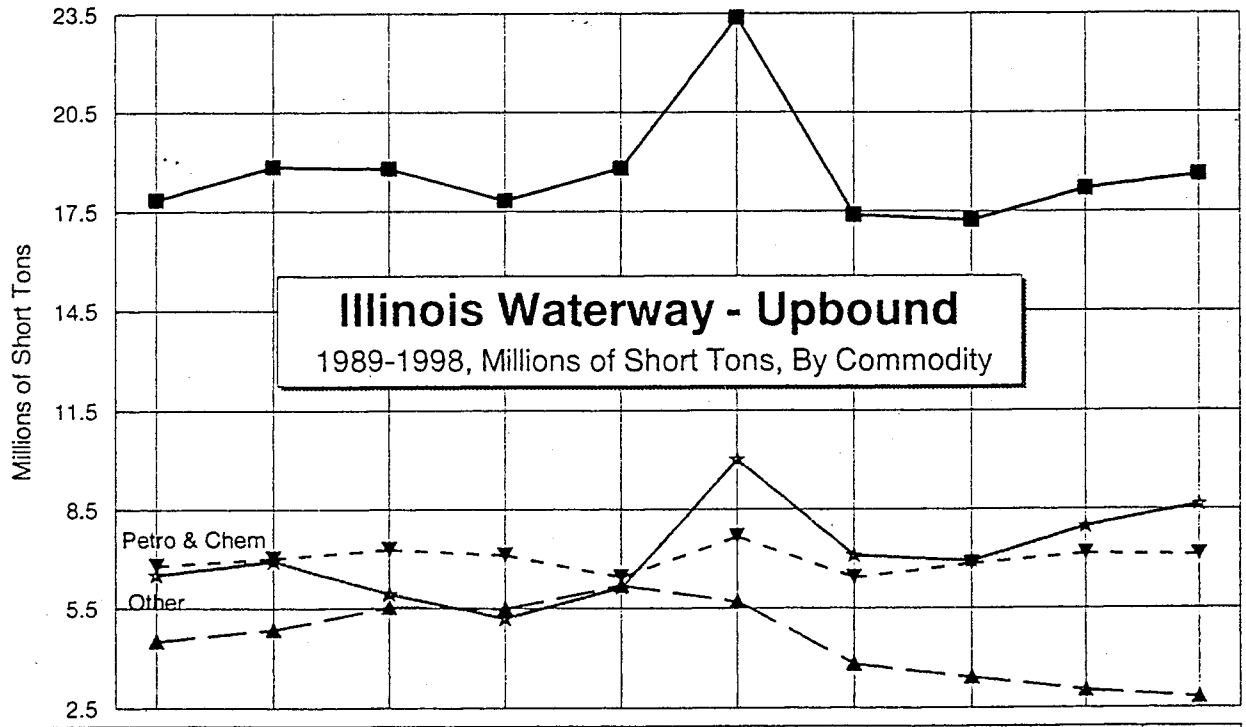
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	0.85	0.68	0.57	0.45	0.25	0.04	0.05	0.08	0.04	0.07
★ Other	0.02	0.04	0.05	0.07	0.06	0.04	0.05	0.08	0.04	0.07
◆ Nonmetal	0.82	0.64	0.52	0.38	0.20	0.00	0.00	0.00	0.00	0.00



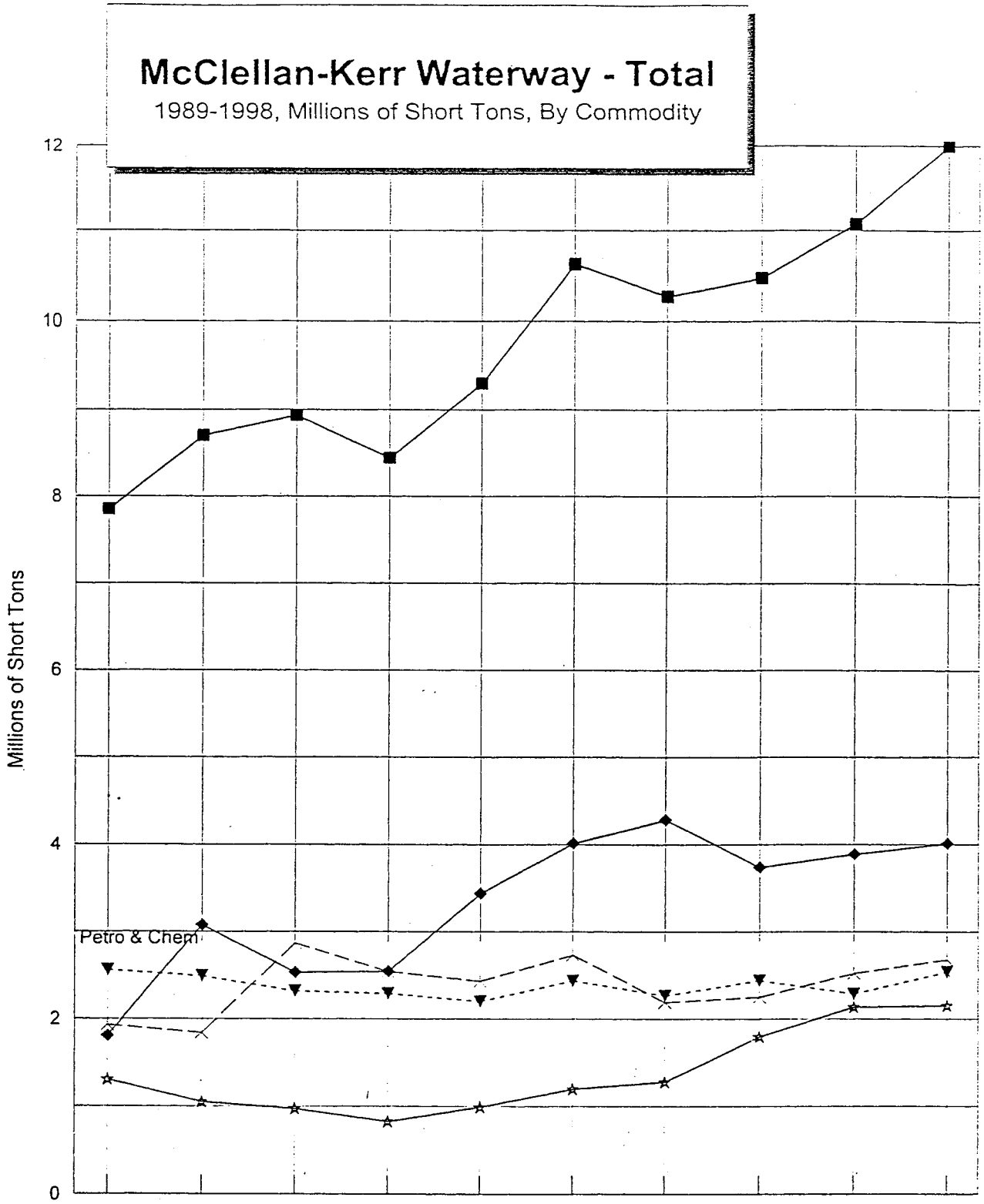
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	39.67	43.30	43.11	42.67	45.64	50.88	47.43	46.24	42.99	41.71
Farm	13.99	15.74	17.68	18.35	20.43	18.91	20.17	19.42	17.64	17.38
★ Other	17.01	10.77	7.92	7.08	7.68	11.93	9.35	8.53	9.65	9.65
▼ Petro & Chem	4.15	11.79	10.94	10.58	9.78	11.51	9.67	10.08	10.89	11.28
▲ Coal	4.53	4.99	6.56	6.66	7.75	8.53	8.24	8.20	4.94	3.03



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	21.83	24.46	24.34	24.86	26.84	27.50	30.05	29.02	24.81	23.11
⚹ Farm	13.94	15.72	17.37	18.08	19.81	18.56	20.00	19.10	17.42	17.13
▲ Coal	0.00	0.12	1.02	1.16	1.54	2.82	4.41	4.77	1.91	0.19
★ Other	4.61	5.32	3.51	3.07	3.07	3.50	3.56	2.64	2.63	2.51
▼ Petro	3.28	3.31	2.43	2.55	2.42	2.63	2.08	2.50	2.86	3.27



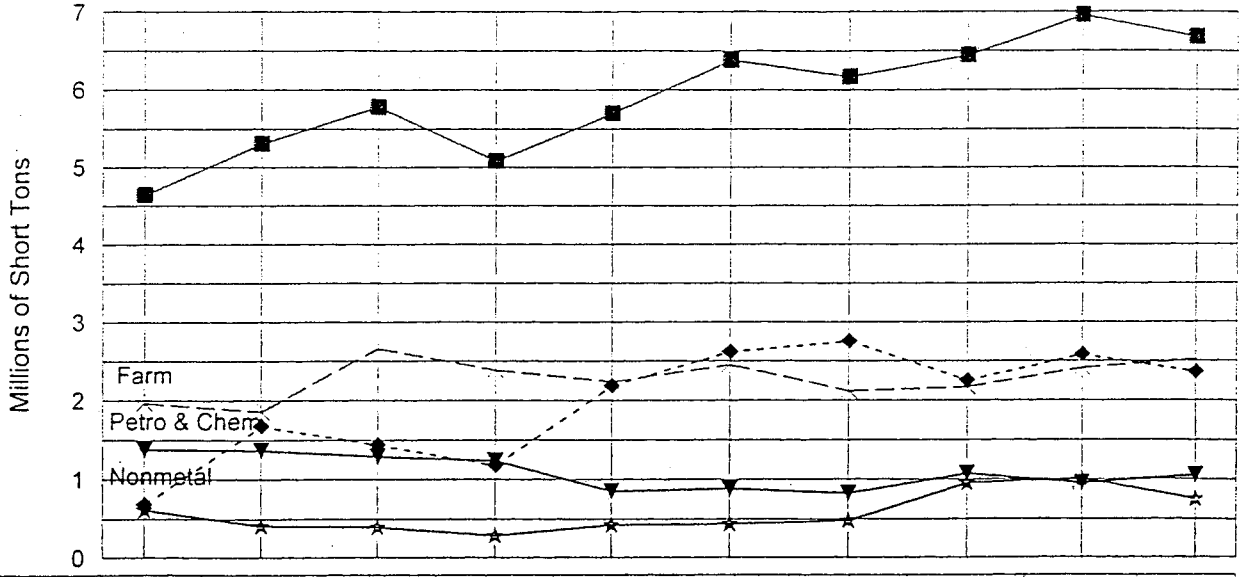
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	17.84	18.84	18.77	17.81	18.79	23.38	17.38	17.22	18.18	18.60
★ Other	6.51	6.93	5.94	5.18	6.14	9.99	7.11	6.93	7.99	8.63
▼ Petro & Chem	6.80	7.03	7.29	7.13	6.45	7.68	6.44	6.86	7.15	7.13
▲ Coal	4.53	4.87	5.54	5.50	6.21	5.71	3.83	3.43	3.03	2.84



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	7.93	8.78	9.01	8.53	9.38	10.71	10.35	10.55	11.15	12.08
◆Nonmetal	1.89	3.16	2.61	2.63	3.52	4.09	4.36	3.82	3.96	4.09
×Farm	2.01	1.92	2.95	2.62	2.51	2.81	2.27	2.33	2.61	2.76
▼Petro & Chem	2.64	2.57	2.40	2.37	2.28	2.52	2.35	2.52	2.37	2.62
☆Other	1.39	1.13	1.06	0.90	1.07	1.28	1.36	1.88	2.21	2.24

McClellan-Kerr Waterway - Downbound

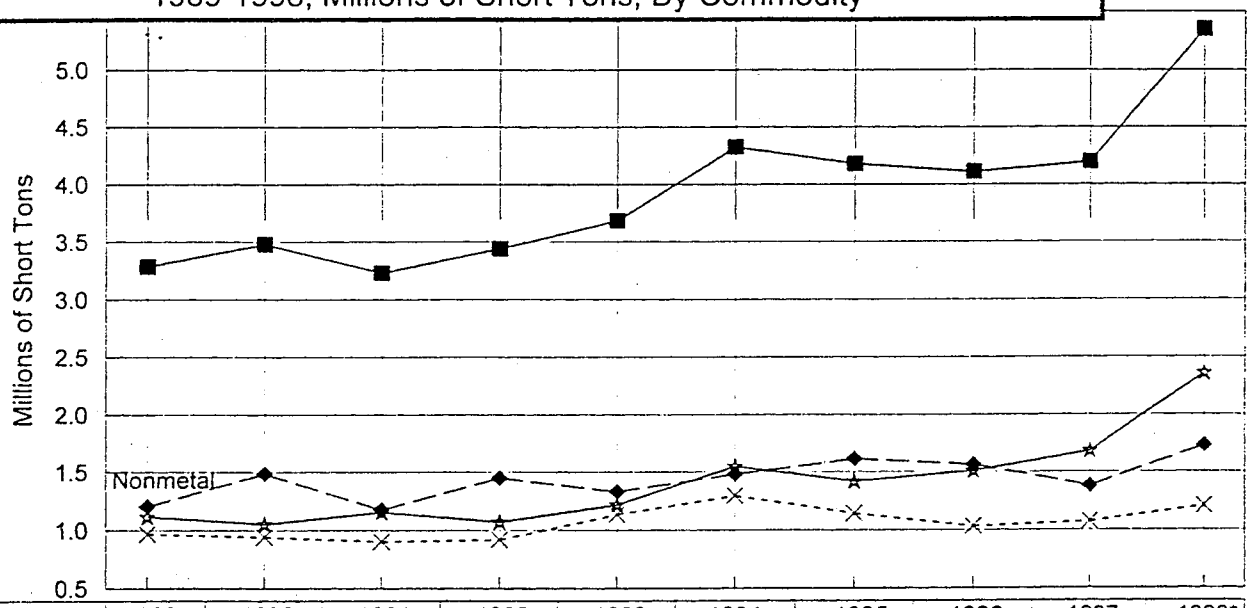
1989-1998, Millions of Short Tons, By Commodity



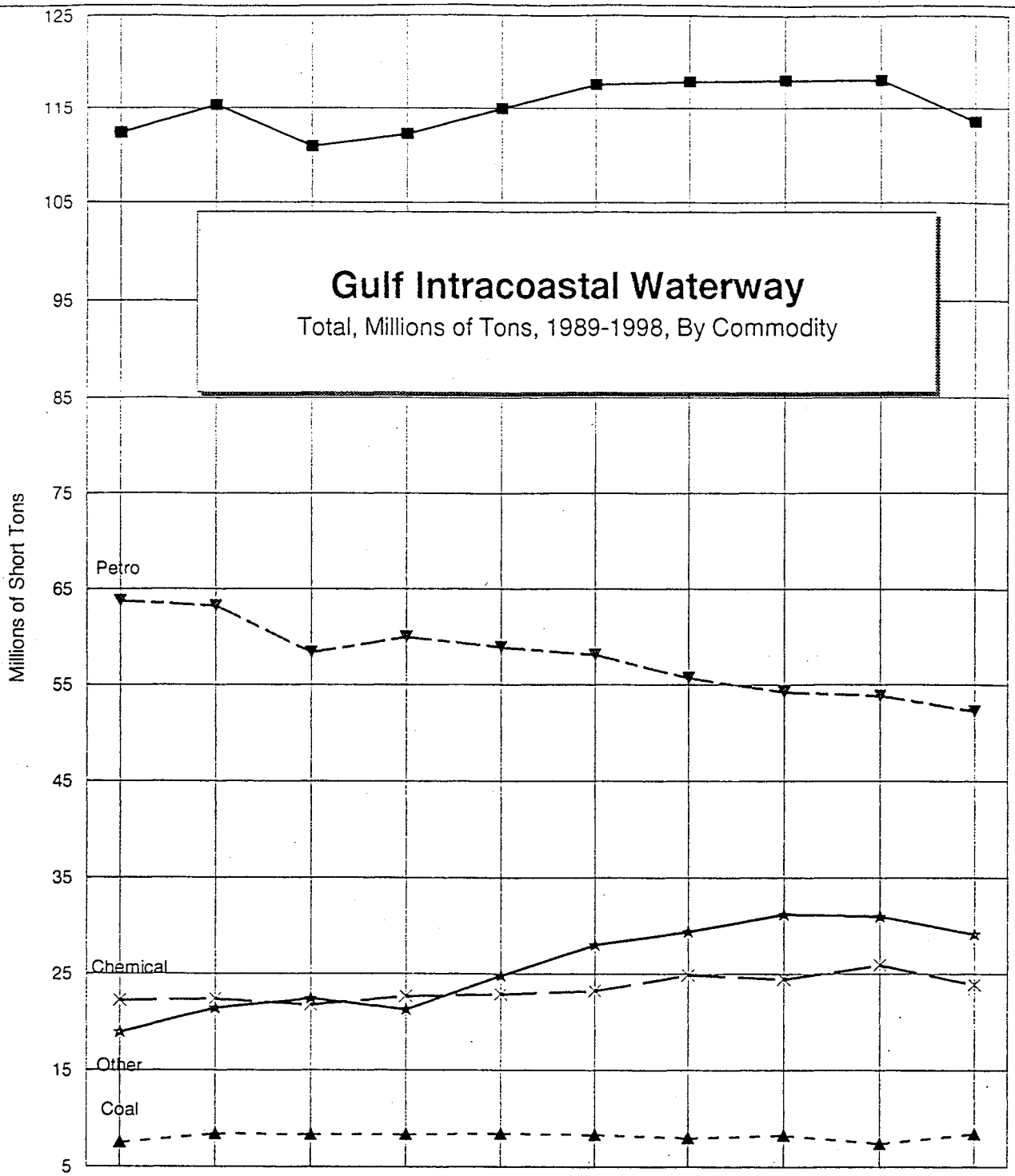
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	4.64	5.31	5.78	5.09	5.70	6.38	6.17	6.44	6.96	6.68
◆ Nonmetal	0.68	1.67	1.44	1.18	2.18	2.61	2.75	2.25	2.58	2.36
⌅ Farm	1.97	1.86	2.66	2.38	2.24	2.45	2.12	2.17	2.41	2.52
▼ Petro & Chem	1.38	1.36	1.29	1.24	0.85	0.88	0.82	1.07	0.95	1.05
☆ Other	0.61	0.41	0.40	0.29	0.42	0.43	0.48	0.96	1.01	0.75

McClellan-Kerr Waterway - Upbound

1989-1998, Millions of Short Tons, By Commodity

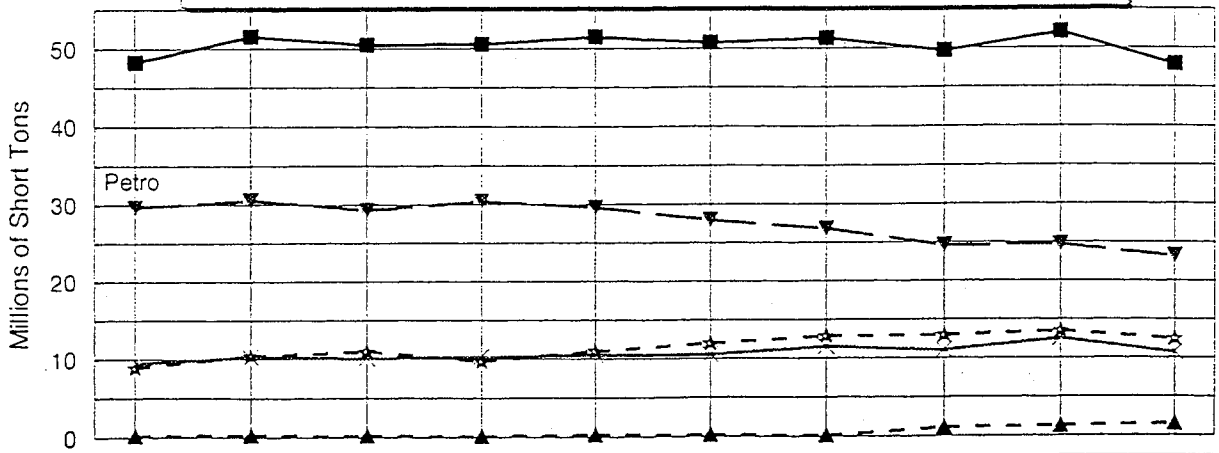


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	3.29	3.48	3.23	3.44	3.68	4.33	4.18	4.11	4.19	5.35
◆ Nonmetal	1.20	1.49	1.17	1.45	1.33	1.48	1.61	1.56	1.38	1.73
☆ Other	1.11	1.05	1.16	1.07	1.22	1.55	1.42	1.51	1.68	2.36
× Chemical	0.97	0.94	0.90	0.92	1.13	1.30	1.15	1.03	1.08	1.21



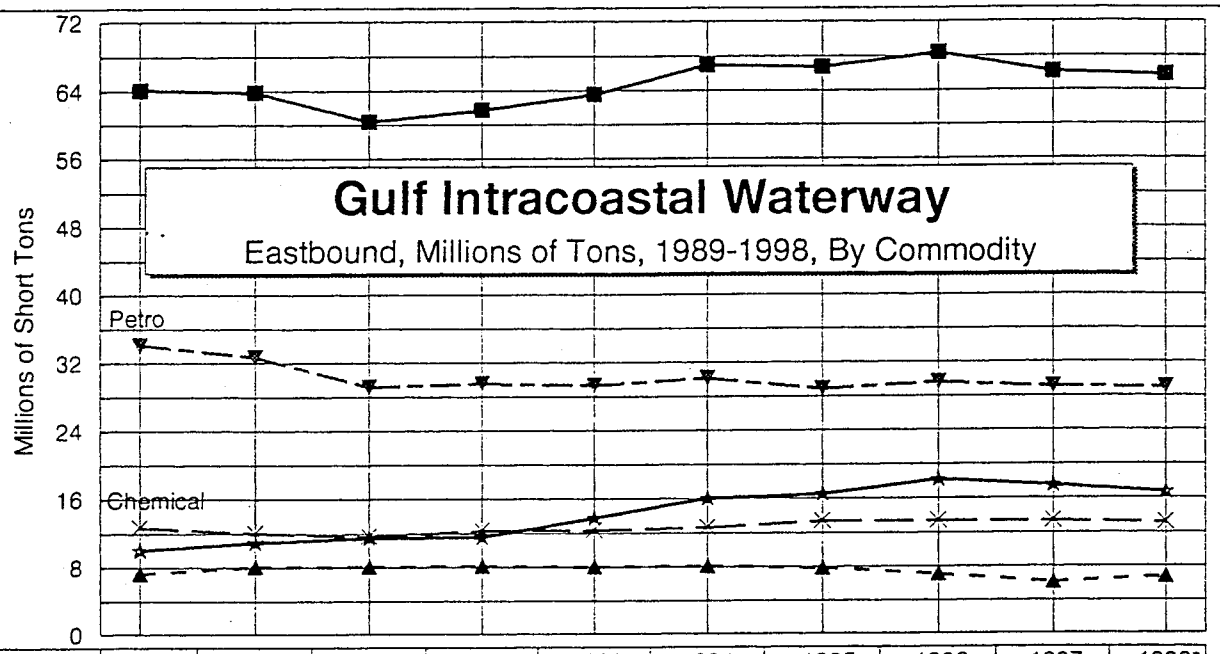
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	112.36	115.38	110.83	112.19	114.94	117.61	117.96	118.03	118.11	113.56
▼ Petro	63.76	63.19	58.38	59.93	58.89	58.06	55.69	54.18	53.80	52.21
☆ Other	18.87	21.41	22.39	21.26	24.80	28.02	29.42	31.17	30.96	29.12
× Chemical	22.20	22.33	21.70	22.61	22.85	23.19	24.85	24.41	25.90	23.82
▲ Coal	7.52	8.45	8.35	8.38	8.41	8.34	8.01	8.27	7.44	8.41

Domestic Tonnage



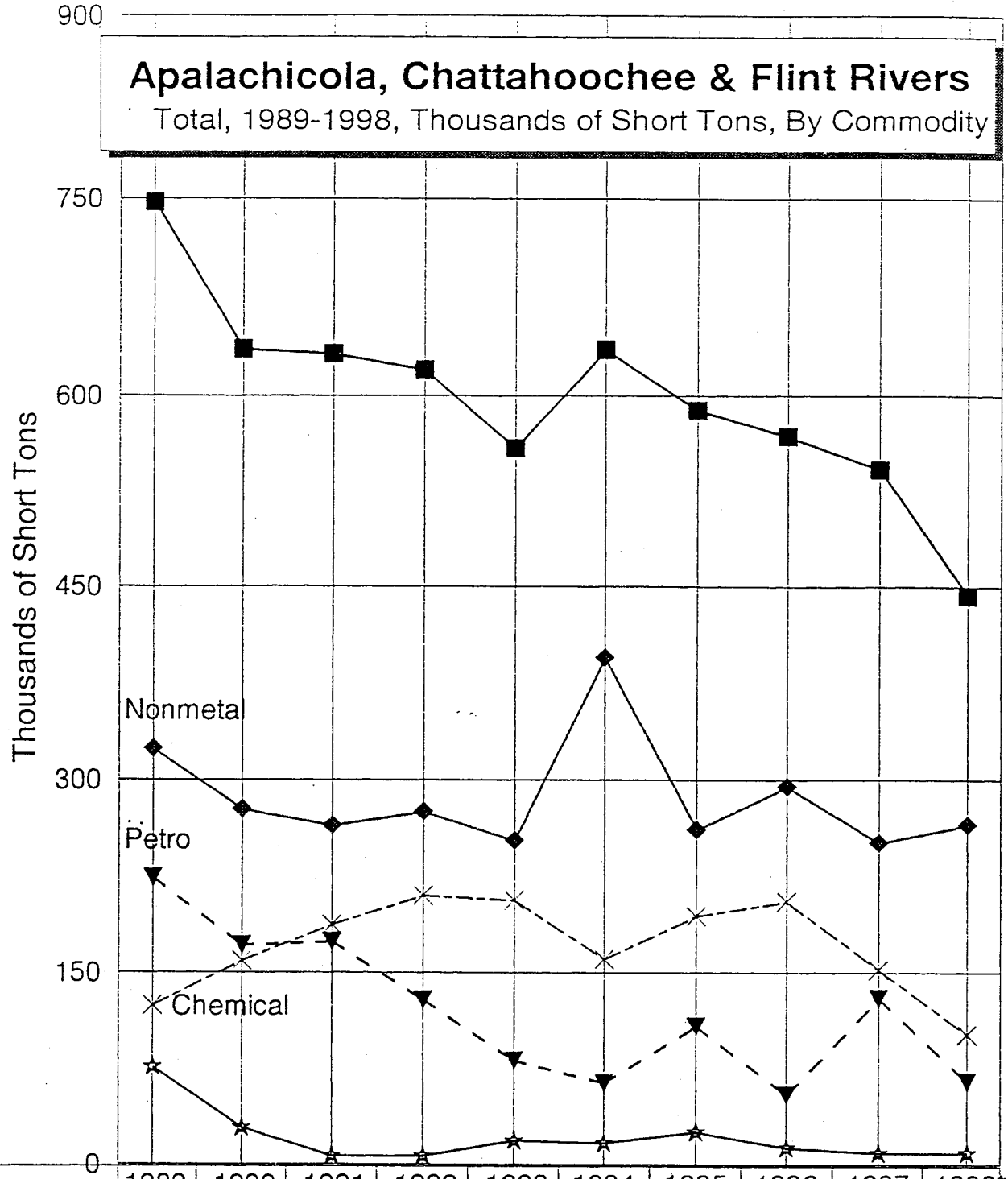
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	48.25	51.57	50.43	50.51	51.43	50.69	51.24	49.68	52.02	47.80
▼ Petro	29.69	30.52	29.23	30.38	29.54	27.91	26.77	24.56	24.69	23.17
★ Other	8.85	10.43	10.94	9.69	11.02	12.00	12.89	12.98	13.48	12.43
✕ Chemical	9.45	10.27	10.03	10.28	10.51	10.50	11.47	10.99	12.54	10.65
▲ Coal	0.26	0.35	0.23	0.16	0.36	0.27	0.11	1.16	1.31	1.55

Domestic Tonnage



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	64.11	63.82	60.39	61.68	63.51	66.92	66.72	68.35	66.09	65.76
▼ Petro	34.07	32.67	29.14	29.56	29.35	30.14	28.92	29.61	29.11	29.04
★ Other	10.02	10.98	11.45	11.56	13.78	16.02	16.52	18.19	17.49	16.68
✕ Chemical	12.75	12.06	11.67	12.34	12.33	12.69	13.38	13.43	13.36	13.17
▲ Coal	7.26	8.10	8.12	8.22	8.05	8.07	7.89	7.11	6.13	6.86

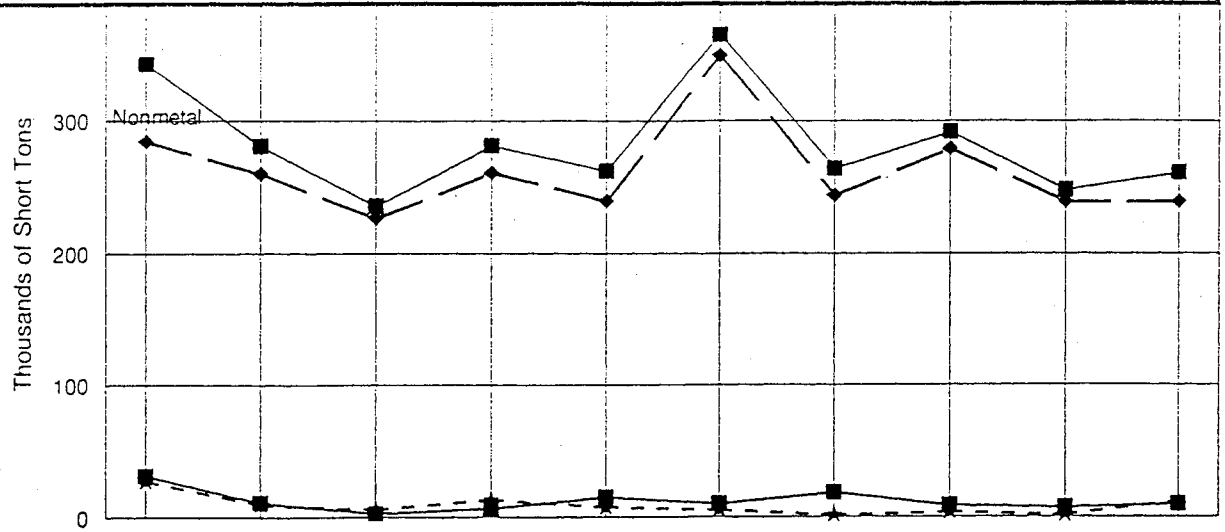
Domestic Tonnage



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	747	636	632	620	559	636	588	567	541	443
◆Nonmetal	324	277	264	275	253	395	261	294	251	265
×Chemical	124	159	187	210	206	160	194	206	152	101
▼Petro	223	171	174	128	81	64	108	54	130	65
☆Other	76	29	7	7	19	17	26	13	9	9

Apalachicola, Chattahoochee & Flint Rivers

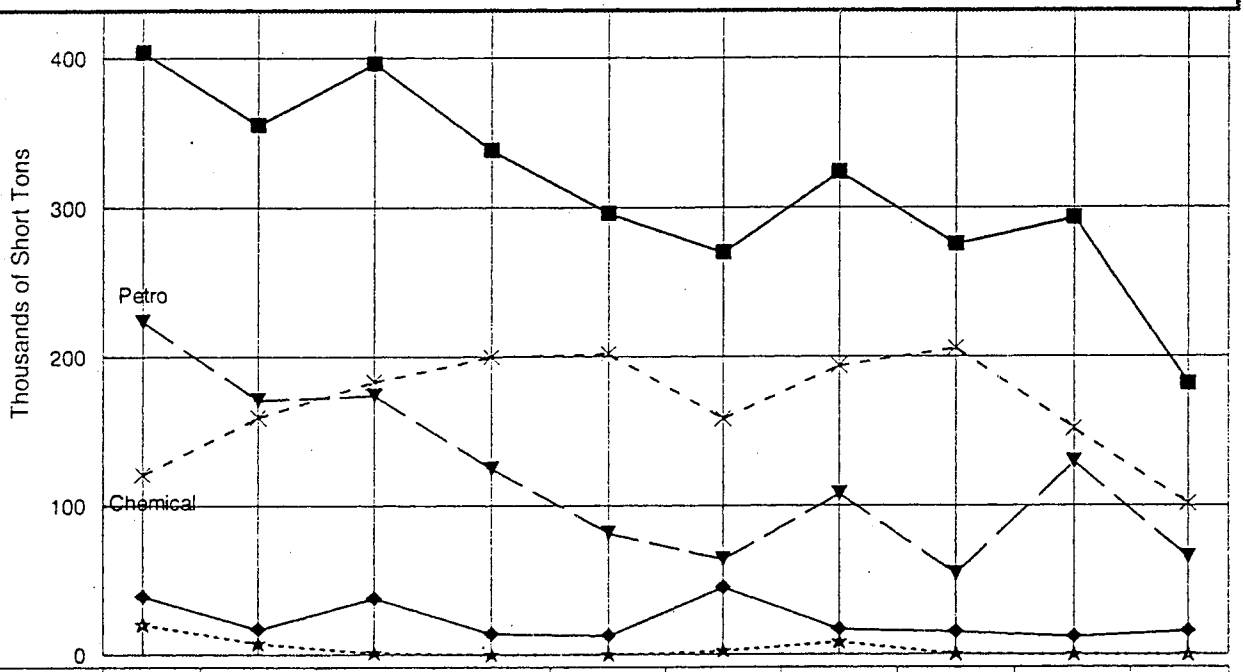
Downbound, 1989-1998, Thousands of Tons, By Commodity



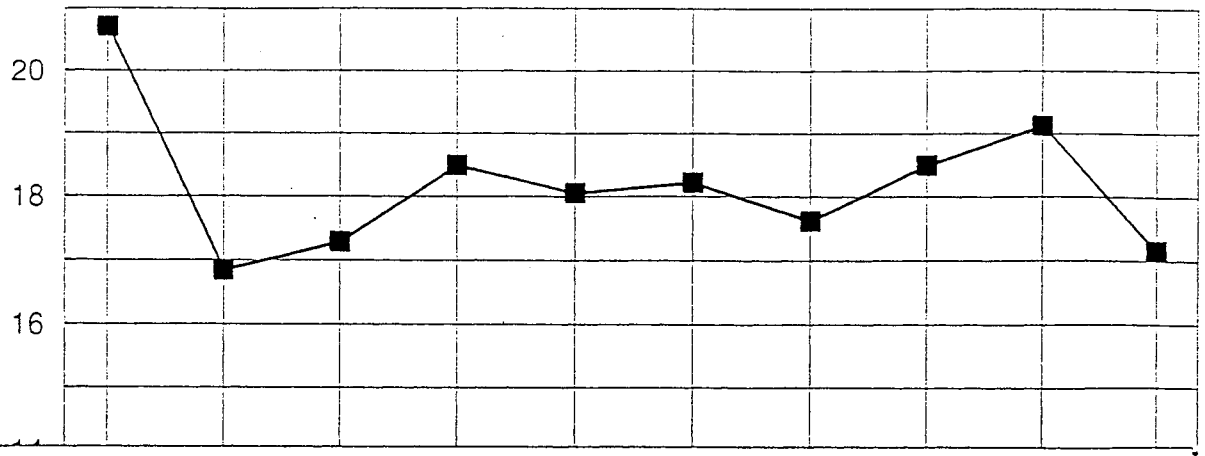
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	343	281	236	282	263	366	265	292	248	261
◆ Nonmetal	284	260	226	261	240	349	244	279	239	239
■ Farm	31	11	3	7	15	10	19	9	7	10
★ Other	27	10	6	14	8	6	2	4	2	12

Apalachicola, Chattahoochee & Flint Rivers

Upbound, 1989-1998, Thousands of Tons, By Commodity

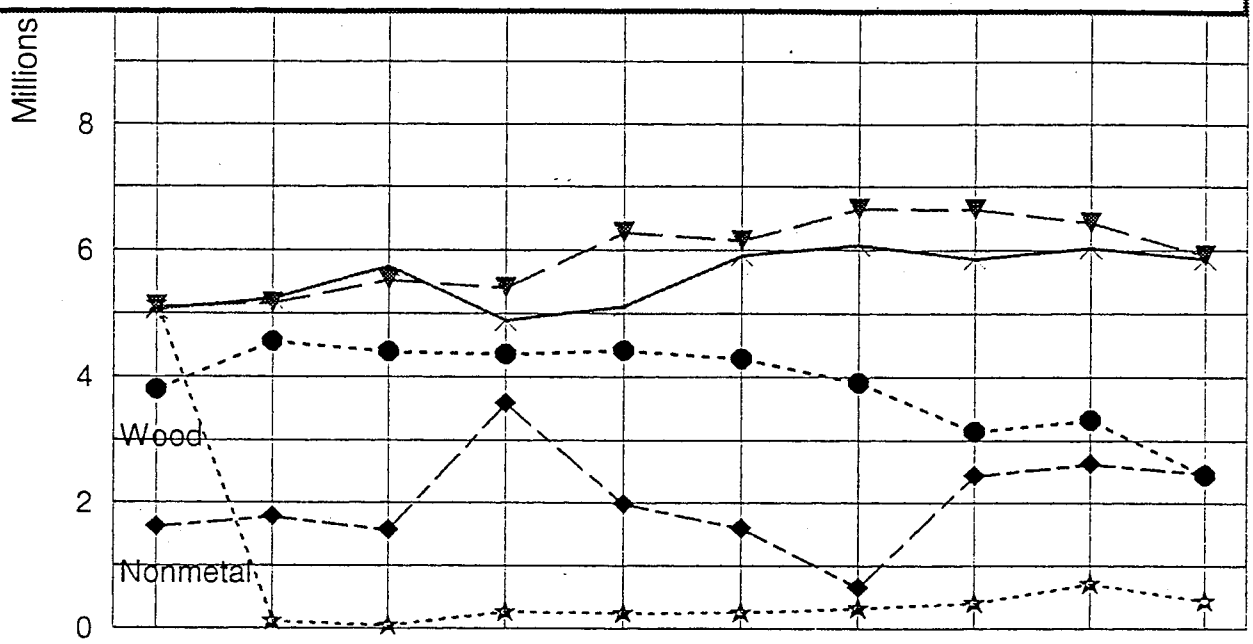


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	404	355	396	338	296	270	324	276	293	182
✕ Chemical	121	159	183	200	202	159	194	206	152	101
▼ Petro	223	171	174	125	81	64	108	54	130	65
◆ Nonmetal	39	17	38	14	13	45	17	15	12	16
★ Other	21	8	1	0	0	2	9	0	0	0



Columbia River - Total

1989-1998, Millions of Short Tons, By Commodity

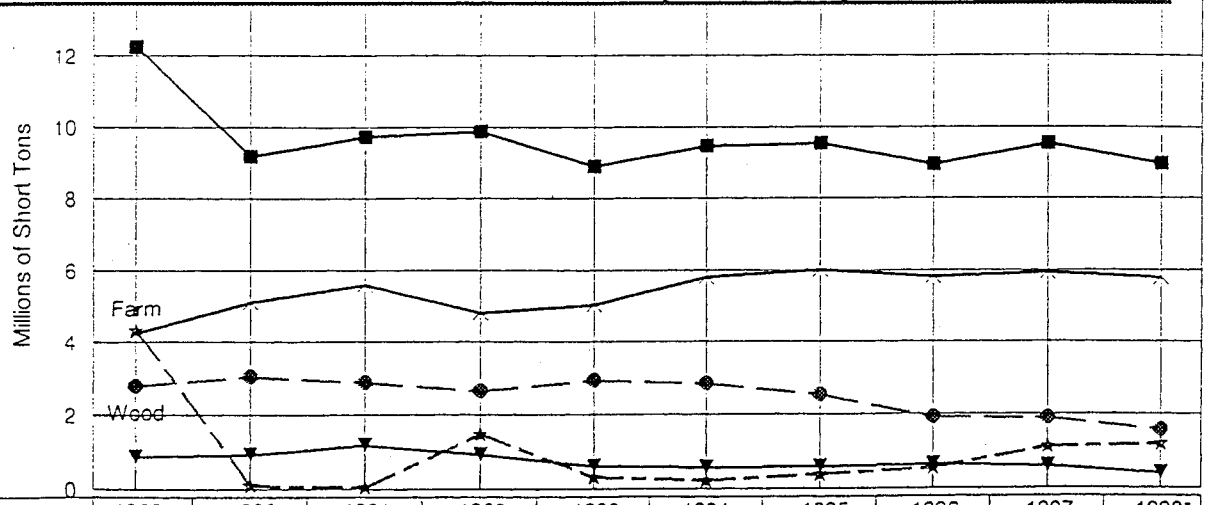


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	20.71	16.84	17.28	18.49	18.05	18.21	17.62	18.48	19.11	17.15
▼Petro & Chem	5.10	5.16	5.52	5.40	6.28	6.15	6.65	6.64	6.43	5.92
⅄Farm	5.05	5.23	5.75	4.88	5.11	5.91	6.07	5.86	6.02	5.85
●Wood	3.80	4.55	4.39	4.35	4.41	4.28	3.90	3.13	3.32	2.45
◆Nonmetal	1.62	1.78	1.56	3.58	1.99	1.60	0.66	2.44	2.63	2.48
★Other	5.13	0.13	0.06	0.27	0.26	0.27	0.33	0.42	0.72	0.45

Domestic Tonnage

Columbia River - Downbound

1989-1998, Millions of Short Tons, By Commodity

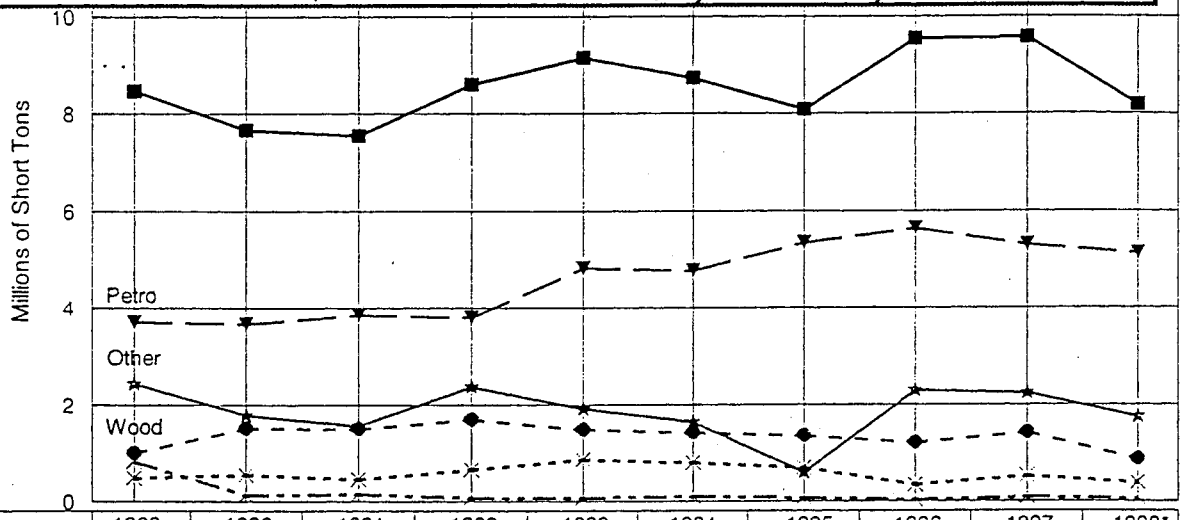


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	12.23	9.18	9.73	9.88	8.90	9.47	9.53	8.94	9.54	8.96
Farm	4.23	5.10	5.59	4.80	5.03	5.81	5.99	5.81	5.93	5.79
● Wood	2.79	3.03	2.89	2.66	2.94	2.85	2.54	1.92	1.89	1.57
▼ Petro & Chem	0.89	0.94	1.20	0.94	0.61	0.59	0.61	0.65	0.60	0.41
★ Other	4.31	0.11	0.05	1.48	0.32	0.23	0.39	0.56	1.11	1.18

Domestic Tonnage

Columbia River - Upbound

1989-1998, Millions of Short Tons, By Commodity

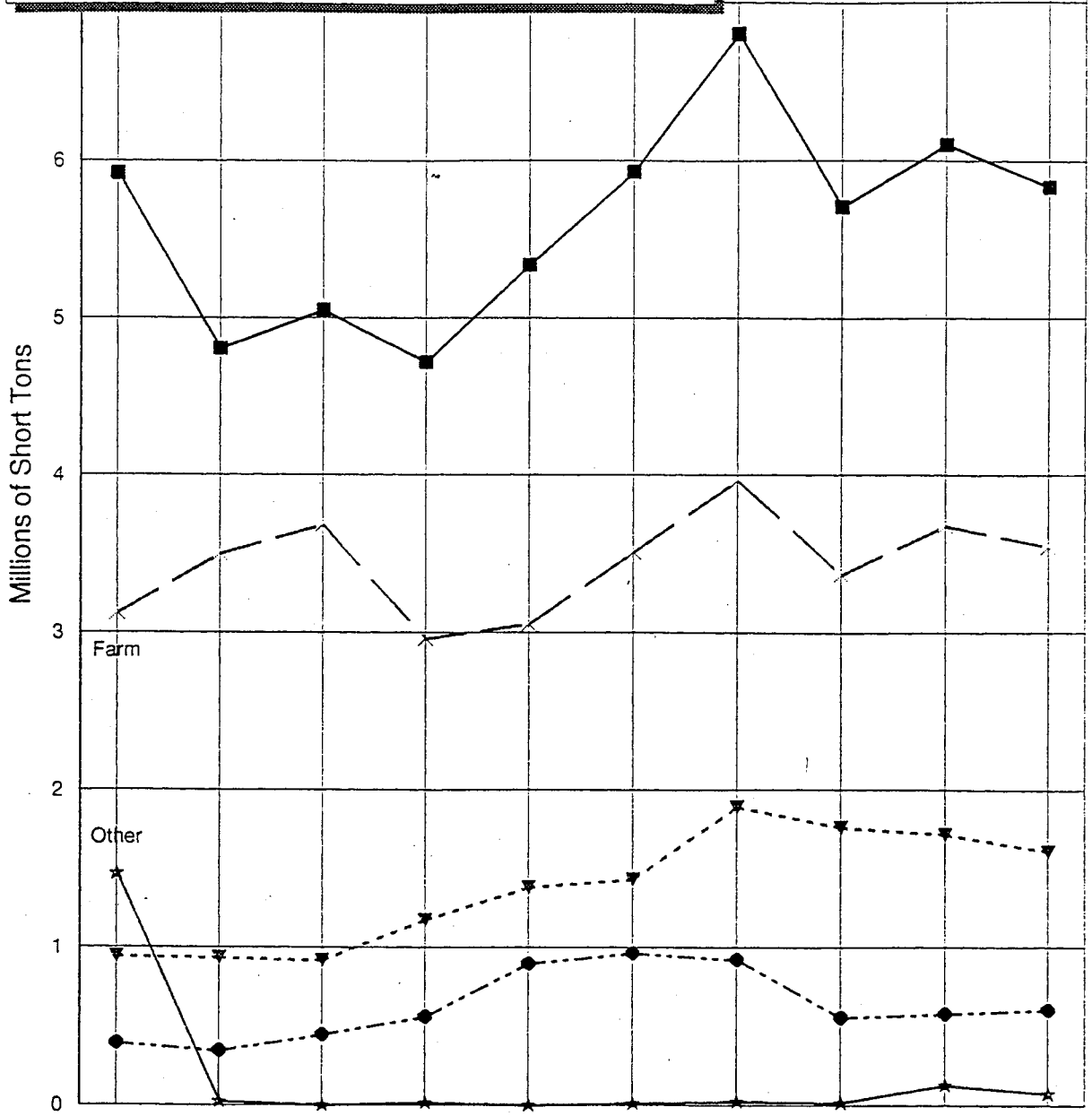


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	8.47	7.66	7.55	8.60	9.15	8.73	8.09	9.54	9.57	8.19
▼ Petro	3.72	3.67	3.86	3.81	4.82	4.77	5.35	5.65	5.30	5.13
★ Other	2.44	1.79	1.57	2.37	1.92	1.64	0.61	2.30	2.24	1.76
● Wood	1.00	1.52	1.50	1.69	1.48	1.43	1.36	1.21	1.42	0.87
Chemical	0.49	0.55	0.46	0.66	0.85	0.79	0.69	0.34	0.53	0.38
Farm	0.82	0.13	0.15	0.08	0.07	0.10	0.08	0.04	0.09	0.06

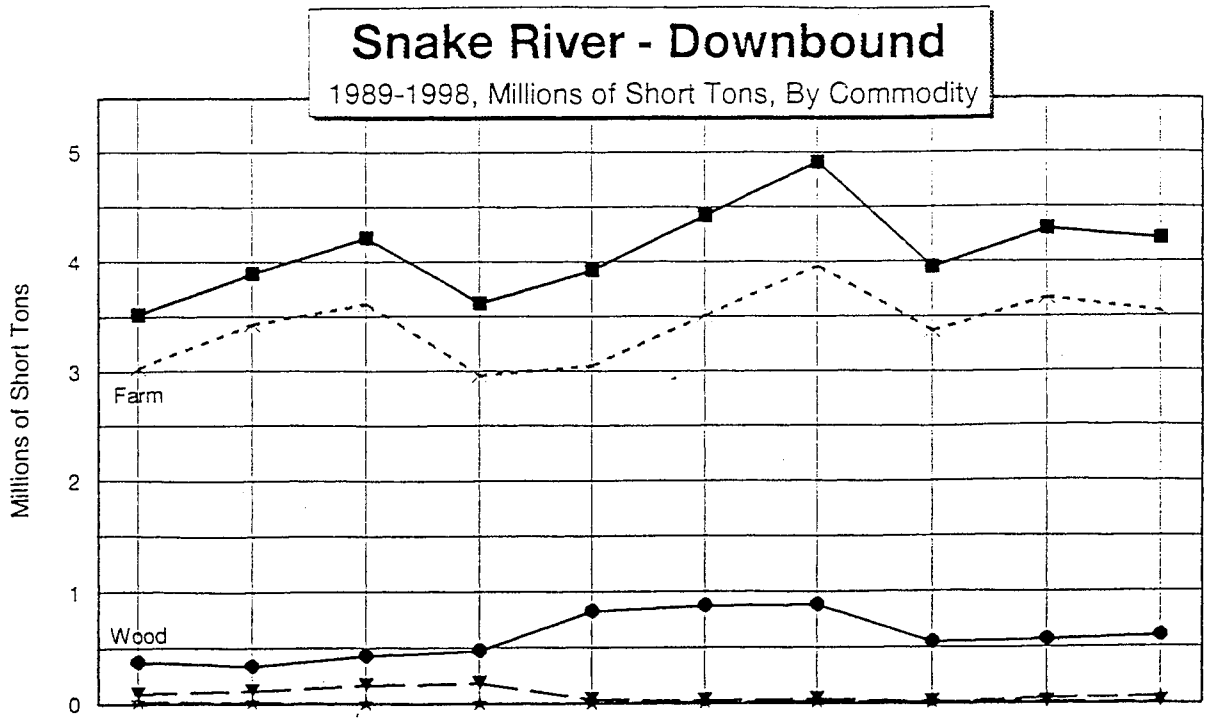
Domestic Tonnage

Snake River - Total

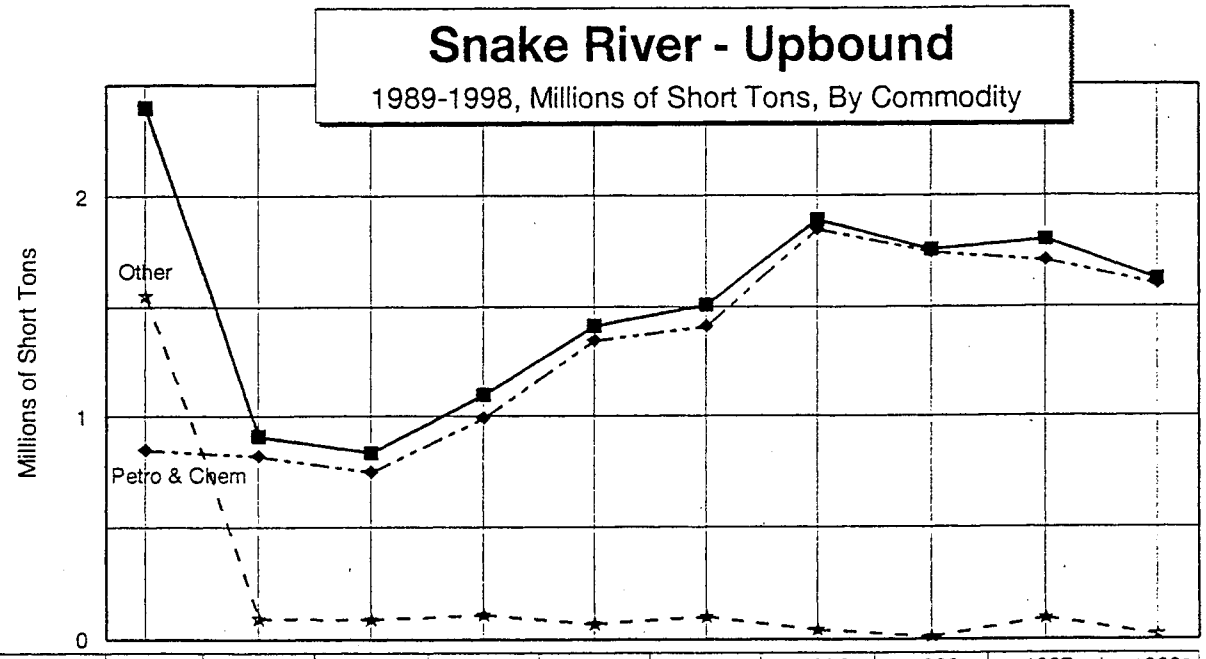
1989-1998, Millions of Short Tons, By Commodity



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	5.92	4.80	5.05	4.72	5.34	5.93	6.80	5.71	6.10	5.84
Farm	3.12	3.50	3.68	2.96	3.06	3.51	3.96	3.37	3.68	3.54
▼Petro & Chem	0.94	0.93	0.92	1.18	1.38	1.43	1.89	1.76	1.71	1.61
●Wood	0.39	0.35	0.45	0.56	0.90	0.96	0.92	0.56	0.58	0.60
☆Other	1.47	0.03	0.01	0.02	0.00	0.02	0.03	0.02	0.13	0.08



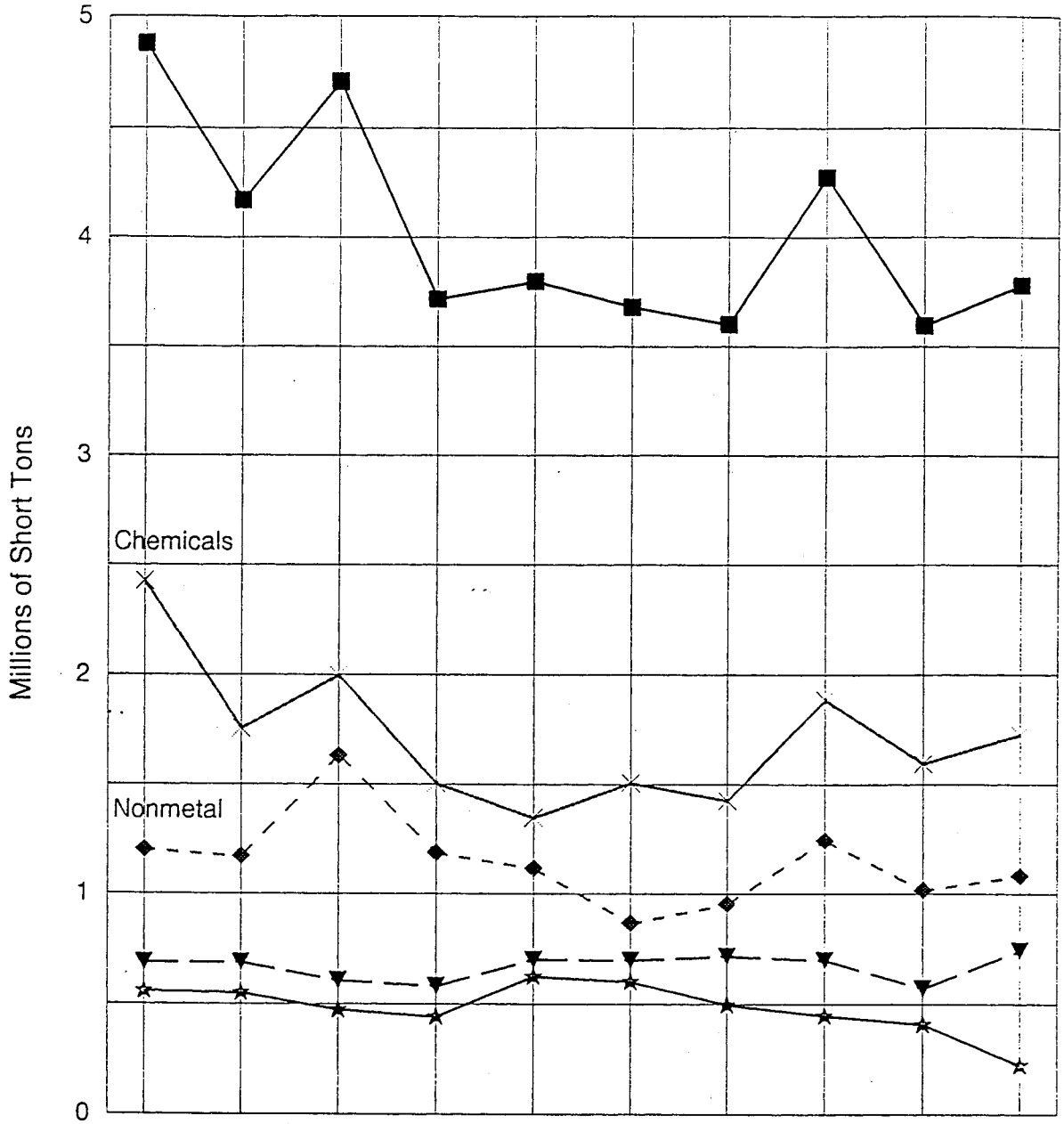
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	3.52	3.89	4.22	3.62	3.93	4.42	4.91	3.95	4.30	4.21
⁄ Farm	3.04	3.43	3.62	2.96	3.06	3.51	3.96	3.37	3.67	3.54
● Wood	0.38	0.34	0.43	0.48	0.84	0.88	0.89	0.55	0.58	0.60
▼ Petro & Chem	0.09	0.11	0.17	0.18	0.03	0.03	0.04	0.02	0.01	0.01
★ Other	0.02	0.01	0.00	0.00	0.00	0.01	0.02	0.01	0.04	0.06



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	2.40	0.91	0.84	1.10	1.41	1.51	1.89	1.76	1.80	1.62
◆ Petro & Chem	0.85	0.82	0.75	0.99	1.35	1.41	1.85	1.74	1.71	1.60
★ Other	1.55	0.09	0.09	0.11	0.07	0.10	0.04	0.01	0.09	0.02

Atlantic Intracoastal Waterway

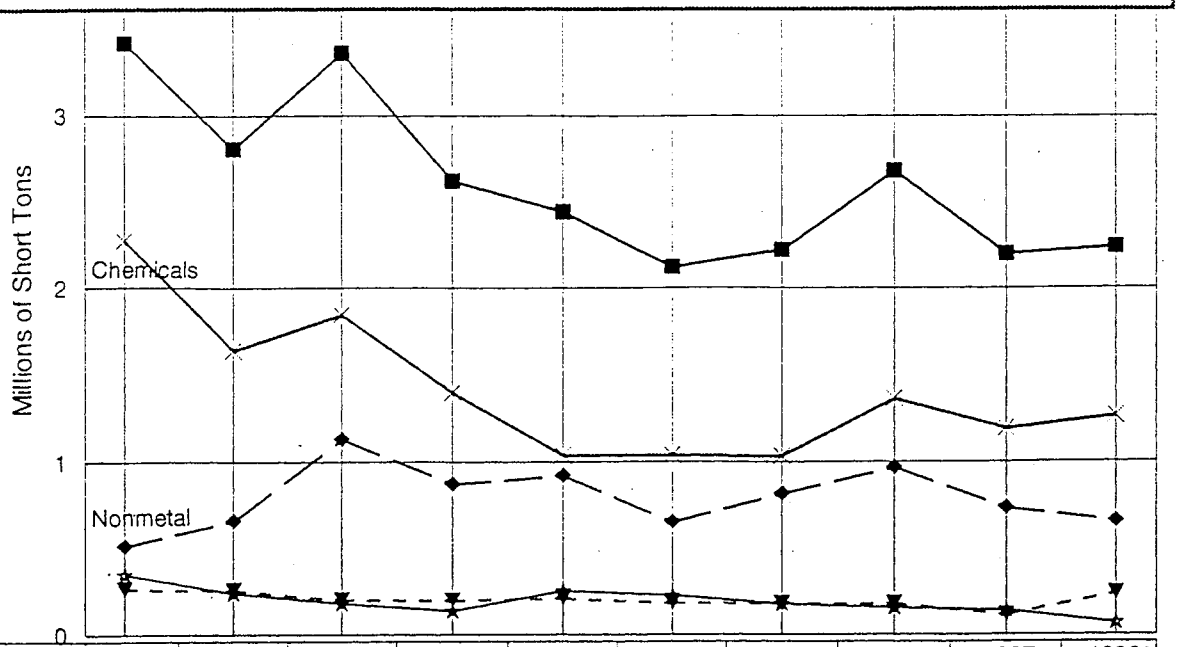
Total, 1989-1998, Millions of Short Tons, By Commodity



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	4.88	4.17	4.71	3.71	3.79	3.68	3.60	4.27	3.59	3.78
×Chemicals	2.42	1.76	2.00	1.50	1.35	1.51	1.42	1.88	1.59	1.73
◆Nonmetal	1.20	1.17	1.63	1.19	1.12	0.87	0.96	1.24	1.02	1.08
▼Petro	0.69	0.69	0.61	0.58	0.70	0.70	0.72	0.70	0.57	0.74
★Other	0.56	0.55	0.47	0.44	0.63	0.60	0.50	0.45	0.41	0.22

Atlantic Intracoastal Waterway

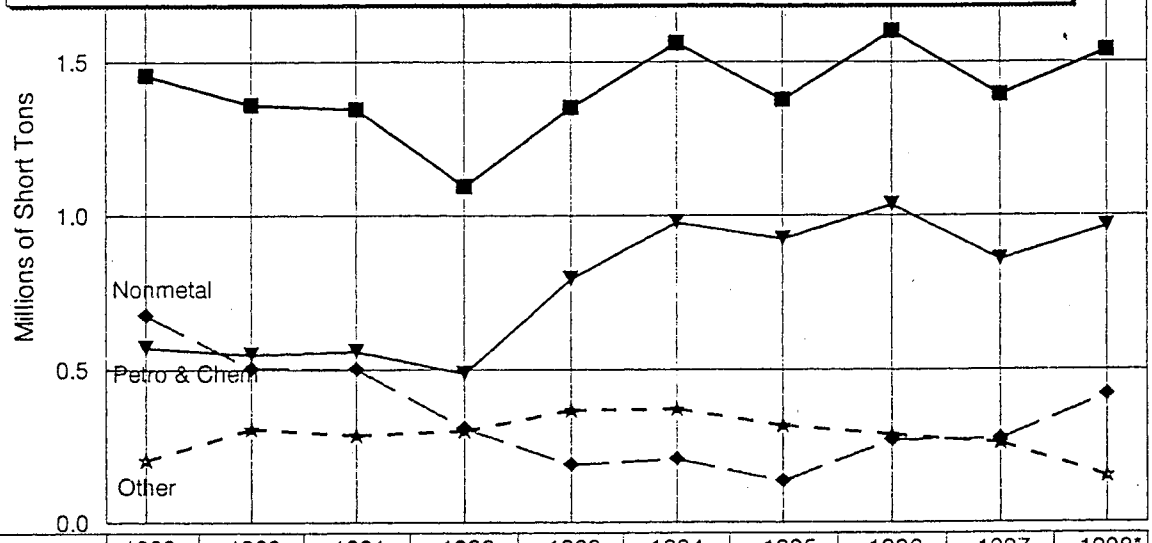
Southbound, 1989-1998 By Commodity, Millions of Tons



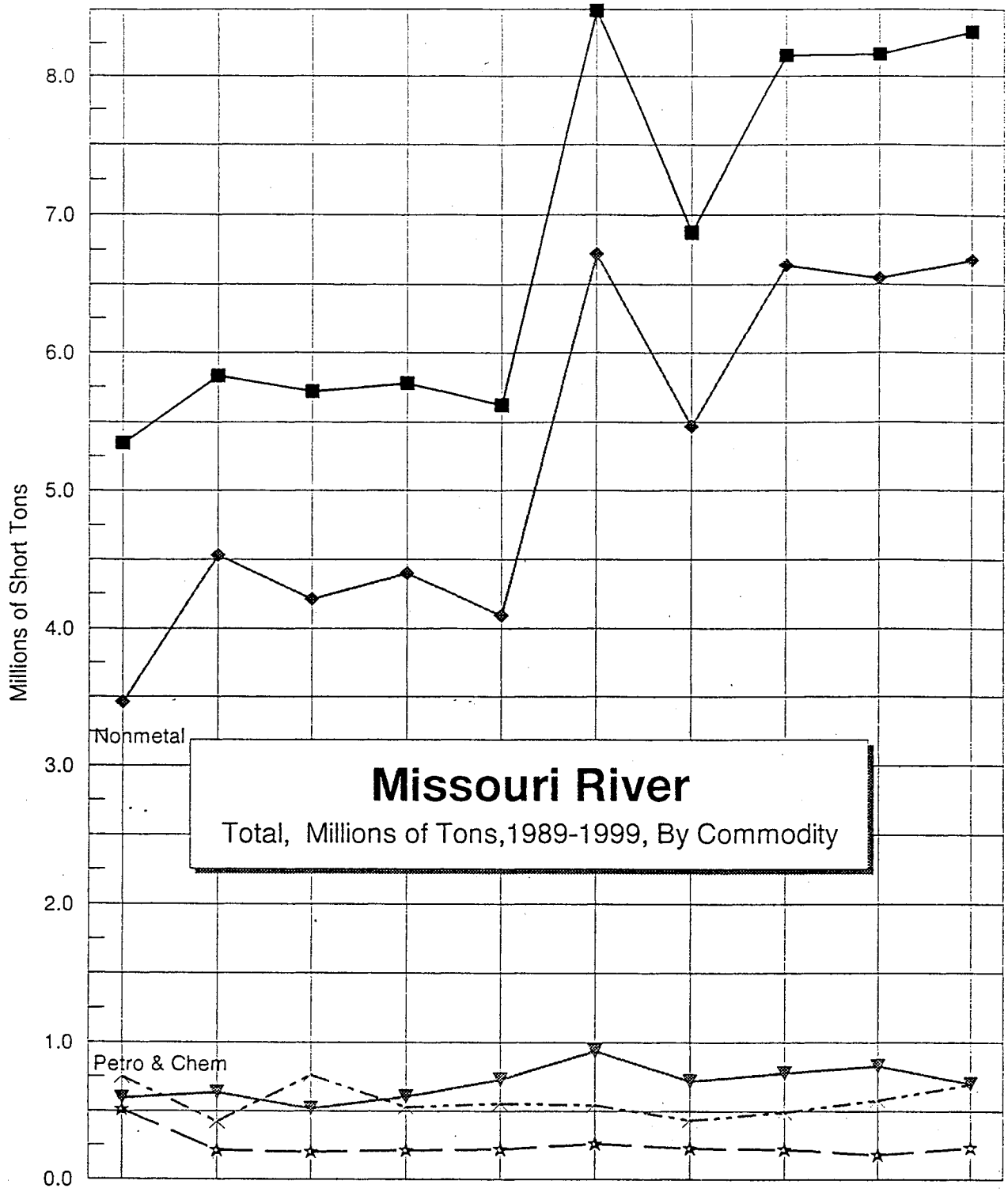
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	3.42	2.81	3.36	2.62	2.44	2.12	2.22	2.68	2.20	2.24
✕ Chemicals	2.27	1.63	1.84	1.39	1.04	1.04	1.04	1.36	1.19	1.26
◆ Nonmetal	0.52	0.67	1.13	0.88	0.93	0.66	0.82	0.97	0.74	0.66
▼ Petro	0.27	0.26	0.21	0.20	0.22	0.19	0.18	0.19	0.12	0.24
★ Other	0.35	0.24	0.19	0.14	0.26	0.23	0.18	0.16	0.15	0.07

Atlantic Intracoastal Waterway

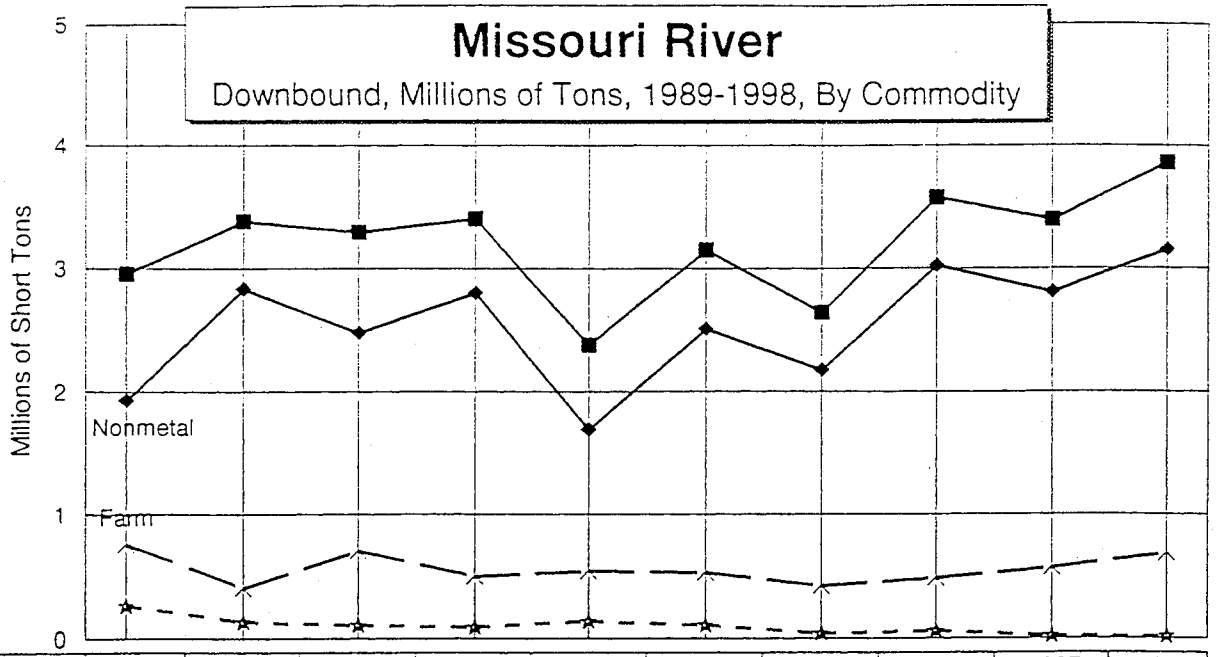
Northbound, 1989-1998, By Commodity



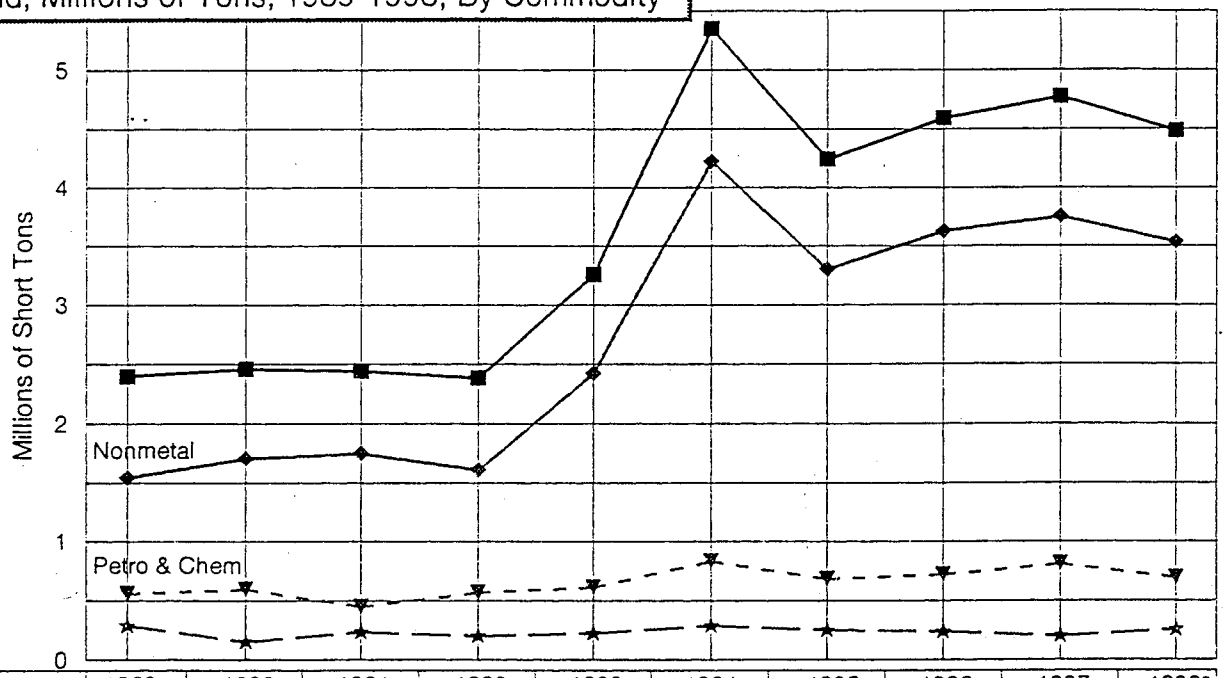
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	1.46	1.36	1.35	1.10	1.35	1.56	1.38	1.60	1.39	1.54
▼ Petro & Chem	0.57	0.55	0.56	0.49	0.79	0.98	0.92	1.04	0.86	0.96
★ Other	0.21	0.31	0.29	0.30	0.37	0.37	0.32	0.29	0.26	0.15
◆ Nonmetal	0.68	0.50	0.50	0.31	0.19	0.21	0.14	0.27	0.28	0.42



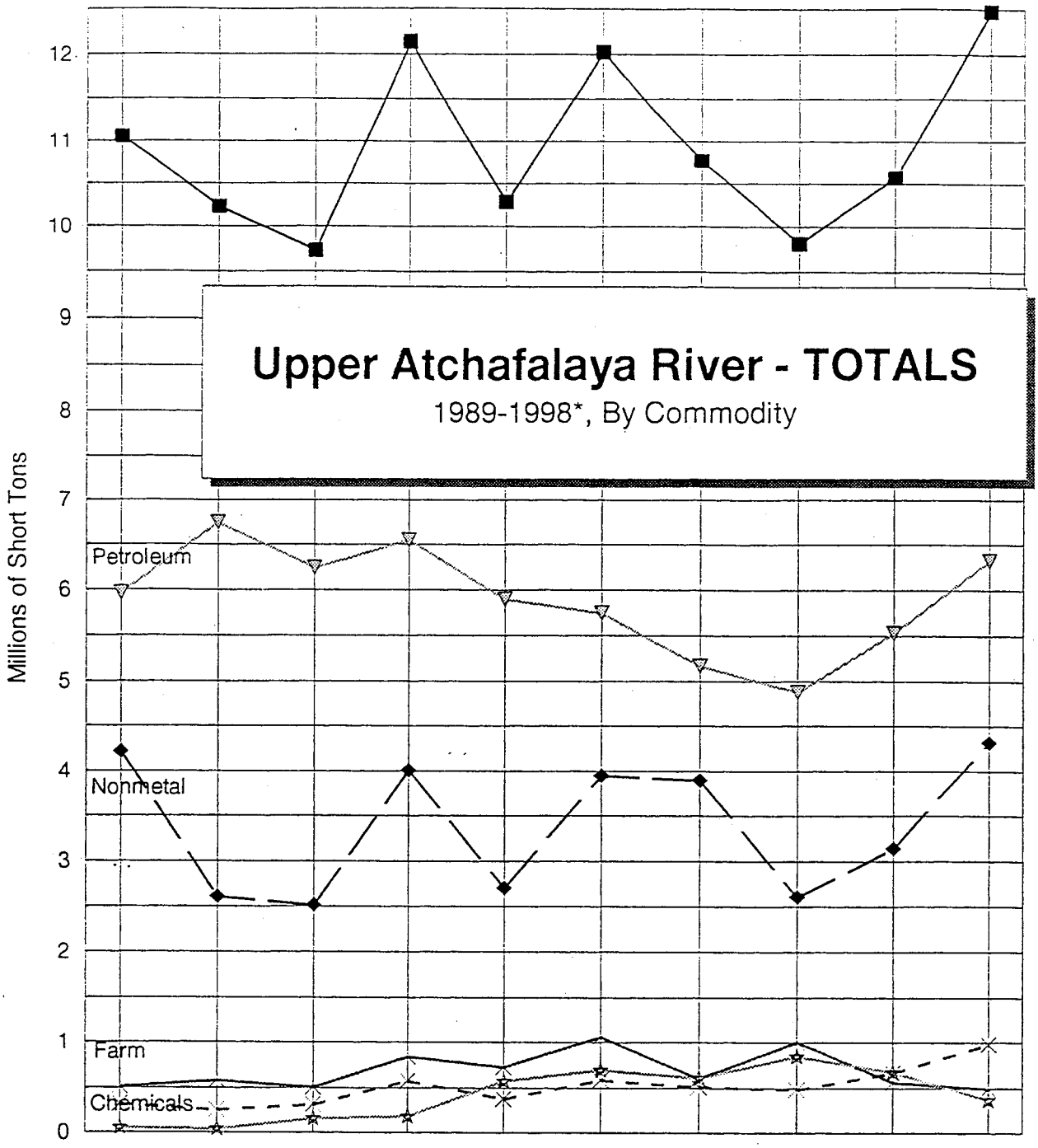
Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■Total	5.35	5.84	5.73	5.78	5.63	8.50	6.88	8.17	8.17	8.34
◆Nonmetal	3.47	4.54	4.22	4.41	4.10	6.73	5.47	6.65	6.56	6.69
▼Petro & Chem	0.60	0.65	0.53	0.61	0.74	0.95	0.73	0.79	0.84	0.71
⅄Farm	0.76	0.43	0.77	0.54	0.56	0.55	0.44	0.50	0.59	0.70
☆Other	0.52	0.22	0.21	0.22	0.23	0.27	0.24	0.23	0.19	0.24



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	2.96	3.38	3.29	3.40	2.37	3.15	2.64	3.57	3.40	3.86
◆ Nonmetal	1.93	2.84	2.47	2.80	1.68	2.51	2.17	3.02	2.81	3.15
⊼ Farm	0.76	0.41	0.70	0.50	0.55	0.53	0.42	0.49	0.57	0.69
★ Other	0.27	0.14	0.11	0.09	0.14	0.11	0.05	0.06	0.02	0.02



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	2.40	2.46	2.44	2.38	3.26	5.35	4.24	4.59	4.77	4.48
◆ Nonmetal	1.54	1.70	1.75	1.60	2.42	4.22	3.30	3.63	3.75	3.53
▼ Petro & Chem	0.56	0.60	0.46	0.57	0.61	0.84	0.68	0.72	0.82	0.69
★ Other	0.29	0.16	0.24	0.20	0.23	0.29	0.26	0.24	0.21	0.26

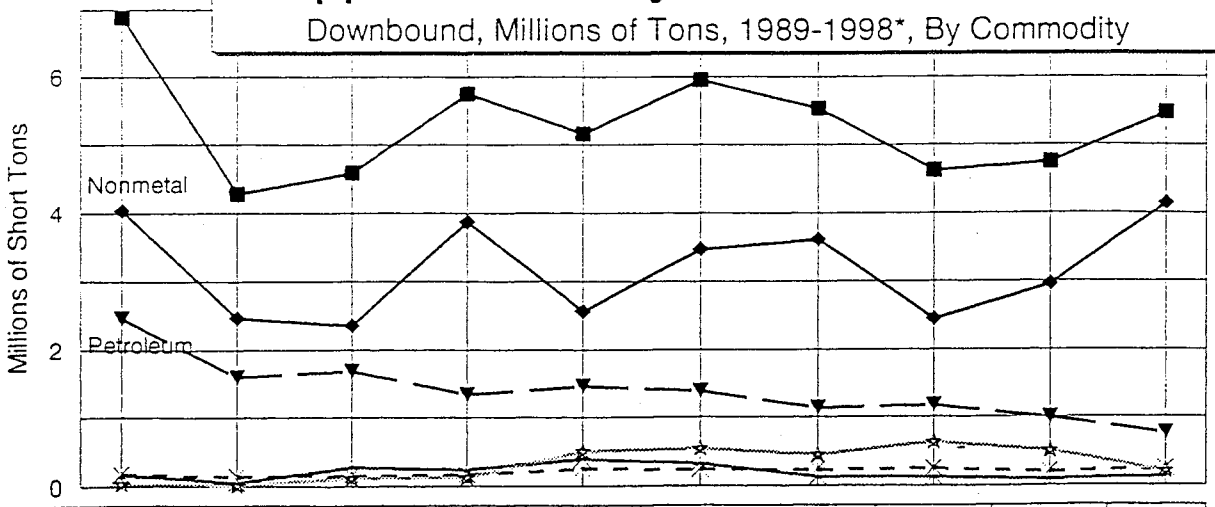


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	11.05	10.23	9.72	12.14	10.28	12.03	10.77	9.81	10.57	12.48
▽ Petroleum	5.96	6.75	6.24	6.55	5.90	5.75	5.17	4.87	5.53	6.32
◆ Nonmetal	4.21	2.61	2.51	4.00	2.71	3.94	3.89	2.61	3.14	4.32
✕ Chemicals	0.32	0.25	0.31	0.57	0.38	0.58	0.51	0.48	0.66	0.98
⊹ Farm	0.51	0.58	0.50	0.84	0.72	1.06	0.60	1.00	0.56	0.49
☆ Other	0.06	0.04	0.16	0.18	0.57	0.69	0.61	0.84	0.67	0.37

10-15-99 *Preliminary

Upper Atchafalaya River - Downbound

Downbound, Millions of Tons, 1989-1998*, By Commodity

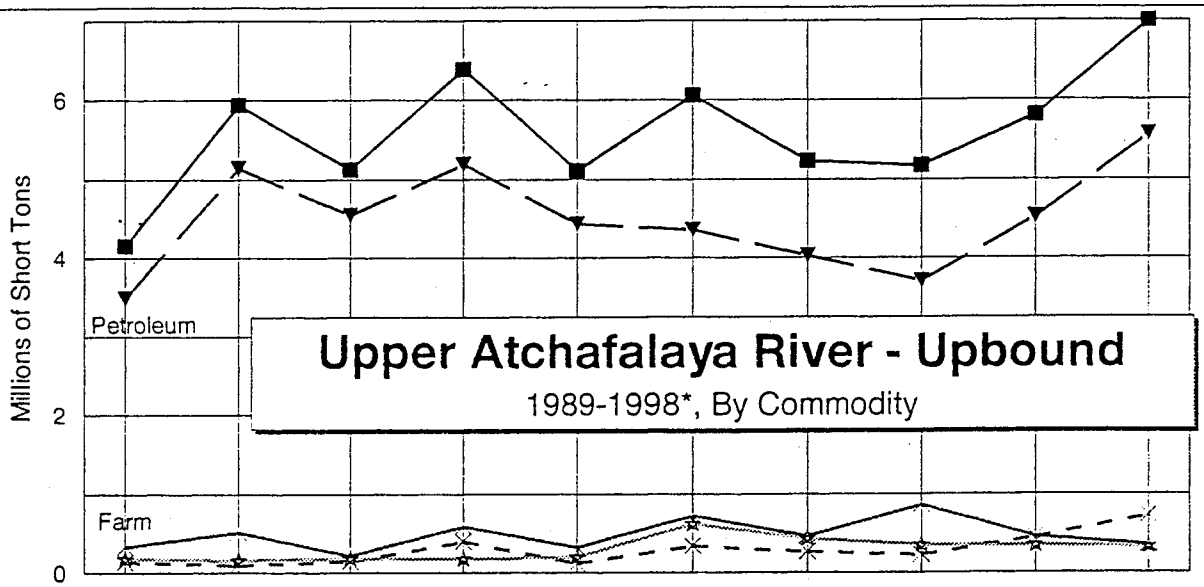


Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	6.88	4.28	4.59	5.74	5.16	5.95	5.53	4.62	4.75	5.47
◆ Nonmetal	4.03	2.47	2.36	3.87	2.56	3.47	3.61	2.45	2.96	4.13
▼ Petroleum	2.47	1.59	1.68	1.34	1.45	1.38	1.13	1.16	0.99	0.76
✳ Chemicals	0.17	0.15	0.16	0.17	0.25	0.24	0.23	0.25	0.21	0.24
– Farm	0.17	0.06	0.28	0.24	0.39	0.33	0.12	0.13	0.09	0.13
☆ Other	0.04	0.01	0.12	0.13	0.51	0.54	0.45	0.64	0.50	0.21

10-15-99 *Preliminary

Upper Atchafalaya River - Upbound

1989-1998*, By Commodity



Year	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998*
■ Total	4.17	5.95	5.13	6.40	5.12	6.07	5.24	5.19	5.82	7.01
▼ Petroleum	3.49	5.16	4.56	5.21	4.45	4.37	4.04	3.71	4.54	5.57
✳ Chemicals	0.14	0.10	0.15	0.41	0.13	0.35	0.28	0.23	0.46	0.73
– Farm	0.34	0.52	0.22	0.60	0.33	0.73	0.48	0.87	0.47	0.36
☆ Other	0.19	0.17	0.20	0.19	0.21	0.63	0.44	0.37	0.36	0.34

10-15-99 *Preliminary