
WATERBORNE COMMERCE OF THE UNITED STATES

Calendar Year 1998

**Part 3—
Waterways and Harbors
Great Lakes**



Compiled under the supervision of
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Introduction

General

Waterborne Commerce of the United States, WCUS, Part 3 is one of a series of publications which provides statistics on the foreign and domestic waterborne commerce moved on the United States waters. WCUS, Parts 1-4 present detailed data on the movements of vessels and commodities at the ports and harbors and on the waterways and canals of the United States, the Commonwealth of Puerto Rico, and the Virgin Islands.

The publication numbers and the geographical areas covered in **WCUS, Parts 1-5** are detailed below:

WCUS, Part 1 Atlantic Coast

WCUS, Part 2 Gulf Coast, Mississippi River System and Antilles

WCUS, Part 3 Great Lakes

WCUS, Part 4 Pacific Coast, Alaska and Hawaii

WCUS, Part 5 National Summaries

Legal Authority

The legal authority for the collection, compilation and publication of waterborne commerce statistics by the Army Corps of Engineers is Section 11 of the Rivers and Harbors Appropriations Act of 1922 (42 Stat. 1043), as amended, and codified in 33 U.S.C. 555 and provides the following:

Owners, agents, masters, and clerks of vessels and other craft plying upon the navigable waters of the United States, and all individuals and corporations engaged in transporting their own goods upon the navigable waters of the United States, shall furnish such statements relative to vessels, passengers, freight and tonnage as may be required by the Secretary of the Army: Provided. That this provision shall not apply to those rafting logs, except upon a direct request upon the owner

to furnish specific information.

Every person or persons offending against the provisions of this section shall, for each and every offense, be liable to a fine of not more than \$5,000 or imprisonment not exceeding two months, to be enforced in any district court of the United States within whose territorial jurisdiction such offense may have been committed. In addition, the Secretary may assess a civil penalty of up to \$2,500 per violation against any person or entity, that fails to provide timely, accurate statements required to be submitted pursuant to this section by the Secretary.

The vessel and commodity movement information collected and compiled is designed to meet the data requirements of the Department of the Army in connection with the duties assigned by Congress. These data also provide valuable information for other governmental departments, commercial and shipping concerns and others interested in the U.S. transportation industry.

Domestic Commerce

Contiguous and non-contiguous states and territories constitute the geographical space upon which domestic commerce may be transported. This includes Hawaii, Alaska, the 48 contiguous states, Puerto Rico and the Virgin Islands, Guam, American Samoa, Wake Island and the U.S. Trust Territories.

The waterborne traffic movements are reported to the Corps of Engineers by all vessel operators of record on ENG Forms 3925 and 3925b (or equivalent) approved by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3510(a)). The reports are generally submitted on the basis of individual vessel movements completed. For

movements with cargo, the point of loading and the point of unloading of each individual commodity must be delineated. Cargo moved for the military agencies in commercial vessels is reported as ordinary commercial cargo; military cargo movements in Department of Defense vessels are not collected.

In summarizing the domestic commerce certain movements are excluded: Cargo carried on general ferries; coal and petroleum products loaded from shore facilities directly into bunkers of vessels for fuel; and insignificant amounts of government materials (less than 100 tons) moved on government owned equipment in support of Corps projects.

The fish landing data is furnished by the National Marine Fisheries Service. No domestic fishing vessel trips are included in the trip and draft data of the Trips and Drafts Section.

Foreign Commerce

Foreign commerce is waterborne import, export, and in-transit traffic between the United States, Puerto Rico and the Virgin Islands and any foreign country. These statistics do not include traffic between Guam, Wake Island and American Samoa and any other foreign country.

Foreign waterborne intraport and export statistics are derived primarily from data furnished to the Corps of Engineers by the Bureau of the Census and the U.S. Customs Service. In-transit statistics are derived primarily from data purchased from the Port Import Export Reporting Service, Inc. and supplemented by data provided by Customs and Census.

The Republic of Panama is considered a foreign country. However, individual vessel movements with origin and destination at United States ports traveling via the Panama Canal are considered domestic traffic. Alaskan crude oil (origin at Valdez, AK) shipped via the Panama pipeline (west to east) and destined for gulf and east coast ports is also considered domestic commerce.

Import and export shipments for use of the United States Armed Forces abroad are not reported to the Waterborne Commerce Statistics Center (WCSC). Beginning with calendar year 1989 shipments under the military assistance program of the Department of Defense are

included in the statistics under the appropriate commodity code. In prior years these cargoes were given as commodity code 9999.

Commodity Descriptions

The first two digits of the WCSC publication codes correspond with the Lock Performance Monitoring System (LPMS) commodity codes. Both LPMS and WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, Rev. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports, as well as, with commodity movements of other countries.

Tonnage

The tonnage figures provided throughout the **WCUS, Parts 1-5** represent short tons (2000 pounds). Tonnage figures are rounded to the nearest 1000 tons.

A zero represents less than 500 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

Some freight tables have "Total" and "Grand Total". The "Total" means that in some cases it is the total for domestic or foreign and Canadian traffic. The "Grand Total" specifically represents the sum total of all the different traffics, including all domestic and foreign traffic. If a particular column or traffic type has only dashes and zeroes in the tonnage fields for that entire freight table then that column (traffic type) will not print.

Ton-Miles

For lakewise domestic movements, ton-miles equal the cargo tonnage times the distance between the U.S. Great Lakes ports. For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels. Ton-miles are rounded to the nearest 1000 ton-miles. The ton-mile data appears in the publication by traffic type at the end of a particular freight table for a given project. Since there are columns that will not print (see

tonnage above) the ton-miles associated with these columns will likewise not be included in the total ton-miles for that particular freight table. They will be included in "Ton-miles All Traffic" at the end of the project.

Trips

A trip is a vessel movement. For self-propelled vessels, a trip is logged between every point of departure and every point of arrival. For loaded barges, a trip is logged from the point of the loading of the barge to the point of unloading of the barge (i.e., excluding fleeting areas). For empty barges, trips are logged from point of unloading to the point of loading counting the fleeting areas in between (e.g. if an empty barge moved from Dock A to Dock B and the barge stopped at three fleeting areas in between, then four trips are logged.)

Some towboat trips and empty barge moves are estimated from a sample to expedite processing and reduce costs. Even with

sampling, however, the number of towboat trips are calculated from more than 70% of the total number of towboat moves reported, and the number of barge trips are derived from more than 85% of the total number of barge trips reported.

The number of trips also includes vessels engaged in foreign trade. These moves are furnished by the Bureau of the Census who process the data collected on U.S. Customs Service entrance and clearance forms.

To more accurately reflect actual traffic patterns (e.g. inbound versus outbound trip counts), some adjustments are made to the trip counts in the trip and draft tables in this publication.

Special Interest

... Passenger totals are not included in this publication but are available on request.

Terminology

Types of Traffic

Foreign

Imports

Overseas: Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses originating in foreign countries other than Canada.

Canadian: Inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses originating in Canada.

Exports

Overseas: Outbound domestic merchandise and re-export of foreign merchandise from a U.S. foreign trade zone destined for foreign countries other than Canada.

Canadian: Outbound domestic merchandise and re-export of foreign merchandise from a U.S. foreign trade zone destined for Canada.

In-transit Merchandise: Merchandise coming into the United States from a foreign country and shipped to a foreign country without having been entered as an import. In-transit merchandise is treated as an **Import (inbound)** when unloaded from a vessel and as an **Export (outbound)** when loaded onto a vessel.

Domestic

Coastwise: Domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico,(e.g. New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, Alaska to Hawaii). Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed **Coastwise**.

Lakewise: Waterborne traffic between the United States ports on the Great Lakes System. The Great Lakes System is treated as a separate waterway system rather than as a part of the inland waterway system. In comparing historical data for the Great Lakes System, one should note that prior to calendar year 1990, marine products, and sand and gravel being moved from the Great Lakes to Great Lake destinations were classified as local traffic. From 1990 on, these activities are classified as lakewise traffic.

Internal: Vessel movements (origin and destination) which take place solely on inland waterways. An inland waterway is one geographically located within the boundaries of the contiguous 48 states or within the boundaries of the State of Alaska.

The term "internal traffic" is also applied to these vessel movements: those which involve carriage on both inland waterways and the Great Lakes; those occurring between offshore areas and inland waterways (e.g., oil rig supplies and fish); and those taking place within Delaware Bay, Chesapeake Bay, Puget Sound, and San Francisco Bay, which are considered internal bodies of water rather than arms of the ocean.

Intraport: Movement of freight within the confines of a port whether the port has one or several arms or channels included in the port definition. This traffic type will not include car-ferries and general ferries moving within a port.

Through: Movements transiting a waterway, or stretch thereof, as defined in the project description of individual tables, and having origins and destinations outside of the defined area.

Intra-waterway: Shipments and receipts within the limits of a river, waterway or canal. This traffic will not include car-ferries and general ferries moving within a waterway or Corps project.

Intra-territory: Traffic between ports in Puerto Rico and the Virgin Islands, which are considered a single unit.

Traffic Direction

Waterways

Upbound: Traffic that moves in an upstream direction. For waterways without a characteristic monodirectional flow (e.g. the Gulf Intracoastal Waterway), "upbound" means in a northerly or easterly direction.

Downbound: Traffic that moves in a downstream direction. For waterways without a characteristic monodirectional flow, "downbound" means in a southerly or westerly direction.

Inbound: Traffic moving from one waterway into another where the destination is on the subject waterway.

Outbound: Traffic moving from one waterway into another where the origin is on the subject waterway.

Ports

Receipts: Traffic moving from one location to another where the destination is within the limits of the subject port.

Shipments: Traffic moving from one location to another where the origin is within the limits of the subject port.

Commodity Descriptions: The first two digits of the Waterborne Commerce Statistics Center (WCSC) publication codes correspond with the Lock Performance Monitoring System (LPMS) commodity codes. Both LPMS and WCSC codes were standardized to reflect the hierarchical structure of the Standard Industrial Trade Classification (SITC) Revision 3 commodity codes. SITC, Rev. 3 commodity codes conform to the Harmonized Commodity Description and Coding System (HS). Using SITC, Rev. 3 allows direct comparisons with U.S. imports and exports, as well as with commodity movements of other countries.

Tons: The tonnage figures provided throughout the *Waterborne Commerce of the United States, WCUS, Parts 1-5* represent short tons (2000 pounds).

Where noted, tonnage figures are rounded to the nearest thousand tons. A zero represents less than 500 tons but more than zero. Dashes mean zero tons. Columns and rows may not add up exactly to totals and subtotals due to rounding.

Ton-miles: Water carriage ton-miles were first compiled and published in calendar year 1962. The distances used are statute miles. Domestic ton-miles are calculated by multiplying the tons of commerce being moved by the number of miles actually moved on the water (e.g. 50 short tons moving 200 miles on a particular waterway would yield 10,000 ton-miles for that waterway). The ton-mile parameter measures the total performance of a waterway. Ton-miles are not computed for ports.

For coastwise traffic this represents the mileage on the shortest route that safe navigation permits between the point of origin and destination. The source of this distance information for coastwise traffic is the publication, *Distance Between United States Ports*, published by the National Oceanic and Atmospheric Administration (1987).

For rivers and inland waterways the distances were computed from waterway survey maps and records of the Corps of Engineers.

For the Great Lakes System the ton-miles are computed for movements of cargo west of the international boundary of St. Regis, Quebec, Canada to head of Lake Superior at Duluth, MN and Superior, WI.

For Canadian imports and exports, foreign ton-miles are computed as the tonnage times the distance between the U.S. and Canadian ports.

For lakewise domestic movements, ton-miles equal the cargo tonnage times the distance between the U.S. Great Lakes ports.

For overseas imports and exports, foreign ton-miles are computed by multiplying the cargo tonnage by the miles carried on U.S. waterways and channels.

Ton-miles are rounded to the nearest thousand.

Trans-shipments: Ports and offshore anchorages where cargo is moved from one vessel to another. These are: St. Lucia, Virgin Islands; Heald Bank off the Louisiana and Texas coasts; Chirqui Grande, Panama; Puerto Armuelles, Panama; and Hondo Platform-Pacific Ocean.

Commodity Classification List

<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group</u>	<u>Pub Name</u>	<u>Major Grouping</u>	<u>Minor Grouping</u>	<u>Pub Group</u>	<u>Pub Name</u>
00 Units				3282	Pigments & Paints		
	0200	Vehicles		3283	Coloring Mat. NEC		
	0300	Passengers		3284	Medicines		
10 Coal				3285	Perfumes & Cleansers		
	1100	Coal		3286	Plastics		
	1200	Coal Coke		3291	Pesticides		
20 Petroleum & Petroleum Products				3292	Starches,Gluten,Glue		
21 Crude Petroleum				3293	Explosives		
	2100	Crude Petroleum		3297	Chemical Additives		
22-29 Petroleum Products				3298	Wood & Resin Chem.		
	2211	Gasoline		3299	Chem. Products NEC		
	2221	Kerosene		40	Crude Materials, Inedible Except Fuels		
	2330	Distillate Fuel Oil		41	Forest Products, Wood and Chips		
	2340	Residual Fuel Oil		4110	Rubber & Gums		
	2350	Lube Oil & Greases		4150	Fuel Wood		
	2410	Petro. Jelly & Waxes		4161	Wood Chips		
	2429	Naphtha & Solvents		4170	Wood in the Rough		
	2430	Asphalt, Tar & Pitch		4189	Lumber		
	2540	Petroleum Coke		4190	Forest Products NEC		
	2640	Liquid Natural Gas		42	Pulp and Waste Paper		
	2990	Petro. Products NEC		4225	Pulp & Waste Paper		
30 Chemicals and Related Products				43	Soil, Sand, Gravel, Rock and Stone		
31 Fertilizers				4310	Building Stone		
	3110	Nitrogenous Fert.		4322	Limestone		
	3120	Phosphatic Fert.		4323	Gypsum		
	3130	Potassic Fert.		4327	Phosphate Rock		
	3190	Fert. & Mixes NEC		4331	Sand & Gravel		
32 Other Chemicals and Related Products				4333	Dredged Material		
	3211	Acyclic Hydrocarbons		4335	Waterway Improv. Mat		
	3212	Benzene & Toluene		4338	Soil & Fill Dirt		
	3219	Other Hydrocarbons		44	Iron Ore and Scrap		
	3220	Alcohols		4410	Iron Ore		
	3230	Carboxylic Acids		4420	Iron & Steel Scrap		
	3240	Nitrogen Func. Comp.		45	Marine Shells		
	3250	Organic-Inorganic Comp.		4515	Marine Shells		
	3260	Organic Comp. NEC		46	Non-Ferrous Ores and Scrap		
	3271	Sulphur (Liquid)		4630	Copper Ore		
	3272	Sulphuric Acid		4650	Aluminum Ore		
	3273	Ammonia		4670	Manganese Ore		
	3274	Sodium Hydroxide		4680	Non-Ferrous Scrap		
	3275	Inorg. Elemt.,Oxides, & Halogen Salts		4690	Non-Ferrous Ores NEC		
	3276	Metallic Salts		47	Sulphur, Clay and Salt		
	3279	Inorganic Chem. NEC		4741	Sulphur, (Dry)		
	3281	Radioactive Material		4782	Clay & Refrac. Mat.		
				4783	Salt		
				48	Slag		
				4860	Slag		
				49	Other Non-Metal. Min.		
				4900	Non-Metal. Min. NEC		

Commodity Classification List (continued)

<u>Major Grouping</u>		<u>Major Grouping</u>		
<u>Minor Grouping</u>		<u>Minor Grouping</u>		
	<u>Pub Group</u>	<u>Pub Name</u>	<u>Pub Group</u>	<u>Pub Name</u>
50	Primary Manufactured Goods		6811	Meat, Fresh, Frozen
	51 Paper Products		6817	Meat, Prepared
	5110 Newsprint		6822	Dairy Products
	5120 Paper & Paperboard		6835	Fish, Prepared
	5190 Paper Products NEC		6838	Tallow, Animal Oils
52	Lime, Cement and Glass		6839	Animals & Prod. NEC
	5210 Lime		6856	Bananas & Plantains
	5220 Cement & Concrete		6857	Fruit & Nuts NEC
	5240 Glass & Glass Prod.		6858	Fruit Juices
	5290 Misc. Mineral Prod.		6861	Sugar
53	Primary Iron and Steel Products		6865	Molasses
	5312 Pig Iron		6871	Coffee
	5315 Ferro Alloys		6872	Cocoa Beans
	5320 I&S Primary Forms		6885	Alcoholic Beverages
	5330 I&S Plates & Sheets		6887	Groceries
	5360 I&S Bars & Shapes		6888	Water & Ice
	5370 I&S Pipe & Tube		6889	Food Products NEC
	5390 Primary I&S NEC		6891	Tobacco & Products
54	Primary Non-Ferrous Metal Products		6893	Cotton
	5421 Copper		6894	Natural Fibers NEC
	5422 Aluminum		6899	Farm Products NEC
55	Primary Wood Products; Veneer		70	All Manufactured Equipment, Machinery and Products
	5540 Primary Wood Prod.		7110	Machinery (Not Elec)
60	Food and Farm Products		7120	Electrical Machinery
	61 Fish		7210	Vehicles & Parts
	6134 Fish (Not Shellfish)		7220	Aircraft & Parts
	6136 Shellfish		7230	Ships & Boats
62-64	Grain		7300	Ordnance & Access.
	6241 Wheat		7400	Manufac. Wood Prod.
	6344 Corn		7500	Textile Products
	6442 Rice		7600	Rubber & Plastic Pr.
	6443 Barley & Rye		7800	Empty Containers
	6445 Oats		7900	Manufac. Prod. NEC
	6447 Sorghum Grains		80	Waste and Scrap NEC
65	Oilseeds		8900	Waste and Scrap NEC
	6521 Peanuts		90	Unknown or Not Elsewhere Classified
	6522 Soybeans		99	Unknown or Not Elsewhere Clsf'd
	6534 Flaxseed		9900	Unknown or NEC
	6590 Oilseeds NEC			
66	Vegetable Products			
	6653 Vegetable Oils			
	6654 Vegetables & Prod.			
67	Processed Grain and Animal Feed			
	6746 Wheat Flour			
	6747 Grain Mill Products			
	6781 Hay & Fodder			
	6782 Animal Feed, Prep.			
68	Other Agricultural Products			

TABLE 1-TON-MILEAGE OF UNITED STATES FREIGHT CARRIED ON THE GREAT LAKES BY AREA, CALENDAR YEAR 1998
(thousand ton-miles)

Area	Area Totals	Foreign				Domestic						
		Overseas		Canadian		Coastwise		Lakewise		Internal		In/Out
		In/Out	Through	In/Out	Through	In/Out	Through	In/Out	Through	In/Out	Through	
DETROIT RIVER, MI	2,333,098	43,542	185,275	74,148	666,966	--	--	248,803	1,112,804	1,560	--	--
*LAKE ERIE	13,956,153	578,183	2,076,647	3,902,890	3,174,830	--	--	4,223,260	--	--	--	342
LAKE HURON	27,020,800	1,363	1,605,711	994,697	4,283,020	--	--	6,047,744	14,085,686	--	2,578	--
**LAKE MICHIGAN	20,716,463	1,245,376	--	2,873,527	--	--	--	16,527,011	--	27,625	--	42,923
***LAKE ONTARIO	8,489,980	838	4,071,889	54,739	4,351,756	--	--	5,048	5,709	--	--	--
LAKE SUPERIOR	26,907,611	1,351,254	--	3,549,913	466,874	--	--	21,539,469	--	68	--	32
ST. CLAIR RIVER, MI	3,024,996	1,232	231,758	11,844	812,671	--	--	191,766	1,775,377	--	348	--
****ST. LAWR-ENCE RIVER	2,310,035	1,105	1,163,318	16,142	1,126,212	--	--	3,258	--	--	--	--
ST. MARYS RIVER, MI	5,127,056	625	224,296	13,298	879,235	--	--	46,358	3,963,232	--	11	--
WELLAND CANAL, CANADA	771,229	--	282,625	--	487,498	--	--	--	1,106	--	--	--
NET UNITED STATES TRAFFIC ON THE GREAT LAKES	110,582,342	13,065,037		27,665,185		--		69,776,632		5,402		70,086

* Including Upper Niagara River

** Including the Port of Chicago (Chicago Harbor, North Branch, South Branch, Sanitary Ship Canal, Calumet-Sag Channel, Lake Calumet and Calumet Harbor and River)

*** Including Lower Niagara River

**** Between International boundary line and Lake Ontario

TABLE 2-FREIGHT TONS OF UNITED STATES TRAFFIC CARRIED ON THE GREAT LAKES BY AREA, CALENDAR YEAR 1998
(thousand short tons)

Area	Area Totals	Foreign				Domestic						
		Overseas		Canadian		Coastwise		Lakewise		Internal		In/Out
		In/Out	Through	In/Out	Through	In/Out	Through	In/Out	Through	In/Out	Through	In/Out
DETROIT RIVER, MI	82,842	1,919	5,977	4,992	21,515	--	--	12,376	35,897	166	--	--
*LAKE ERIE	97,799	2,572	7,896	24,165	13,002	--	--	49,823	--	--	--	342
LAKE HURON	119,891	4	5,938	3,933	17,605	--	--	25,718	66,682	--	9	--
**LAKE MICHIGAN	64,080	2,420	--	6,422	--	--	--	49,199	--	3,285	--	2,755
***LAKE ONTARIO	29,042	13	10,468	569	17,952	--	--	26	15	--	--	--
LAKE SUPERIOR	81,444	3,505	--	10,447	2,638	--	--	64,821	--	1	--	32
ST. CLAIR RIVER, MI	84,238	34	5,943	859	20,838	--	--	11,033	45,522	--	9	--
****ST. LAWR-ENCE RIVER	20,702	19	10,480	134	10,054	--	--	15	--	--	--	--
ST. MARYS RIVER, MI	82,235	14	3,505	413	14,961	--	--	1,417	61,926	--	0	--
WELLAND CANAL, CANADA	28,497	--	10,468	--	17,988	--	--	--	41	--	--	--
NET UNITED STATES TRAFFIC ON THE GREAT LAKES	192,232	10,499		52,981		--		122,172		2,279		4,302

* Including Upper Niagara River

** Including the Port of Chicago (Chicago Harbor, North Branch, South Branch, Sanitary Ship Canal, Calumet-Sag Channel, Lake Calumet and Calumet Harbor and River)

*** Including Lower Niagara River

**** Between International boundary line and Lake Ontario

TABLE 3 - NET SUMMARY OF FOREIGN AND DOMESTIC FREIGHT CARRIED ON THE GREAT LAKES
BY TYPE OF TRAFFIC AND COMMODITY

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	168,902	1992	159,947	1995	177,750	1998	192,232
1990	167,140	1993	159,628	1996	181,773		
1991	151,051	1994	175,275	1997	188,579		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign				Domestic		
		Imports		Exports		Lakewise	Internal	Intraport
		Canadian	Overseas	Canadian	Overseas			
Total, all commodities	192,232	19,645	5,913	33,336	4,586	122,172	2,279	4,302
Total coal	40,393	573	--	17,360	28	21,881	539	12
1100 coal lignite	39,171	440	--	17,137	0	21,536	47	10
1200 coal coke	1,222	133	--	223	28	345	492	2
Total petroleum and petroleum products	6,463	1,072	14	1,488	6	2,141	256	1,486
Subtotal crude petroleum	549	--	--	547	--	--	--	2
2100 crude petroleum	549	--	--	547	--	--	--	2
Subtotal petroleum products	5,914	1,072	14	941	6	2,141	256	1,484
2211 gasoline	966	357	0	101	--	507	0	0
2221 kerosene	47	--	0	40	--	7	--	--
2330 distillate fuel oil	590	58	--	63	0	140	7	322
2340 residual fuel oil	776	211	6	37	--	252	3	267
2350 lube oil & greases	364	166	--	120	0	1	67	9
2410 petro. jelly & waxes	1	--	--	--	1	--	--	--
2429 naphtha & solvents	100	--	--	86	0	--	1	12
2430 asphalt, tar & pitch	1,887	17	7	76	5	1,158	148	476
2540 petroleum coke	1,184	263	0	419	0	74	29	399
2640 liquid natural gas	1	--	0	--	0	1	0	0
Total chemicals and related products	1,344	375	99	247	94	177	102	250
Subtotal fertilizers	510	322	43	58	4	0	65	17
3110 nitrogenous fert.	170	36	43	20	0	0	54	17
3120 phosphatic fert.	11	--	--	--	--	--	11	--
3130 potassic fert.	286	286	--	0	--	--	--	--
3190 fert. & mixes nec	43	--	0	38	4	--	--	--
Subtotal other chemicals and related products	834	53	56	188	90	177	38	233
3211 acyclic hydrocarbons	1	1	--	--	0	--	--	--
3212 benzene & toluene	43	--	--	19	--	--	--	24
3219 other hydrocarbons	57	--	9	--	1	--	16	31
3220 alcohols	86	7	0	7	2	--	--	70
3230 carboxylic acids	2	--	1	--	1	--	--	--
3240 nitrogen func. comp.	10	2	0	0	7	--	--	--
3250 organo - inorg. comp.	3	--	0	0	3	--	--	--
3260 organic comp. nec	4	--	0	0	3	--	--	--
3273 ammonia	2	2	--	--	--	--	--	--
3274 sodium hydroxide	112	--	--	100	1	--	11	--
3275 inorg. elem.,oxides, & halogen salts	40	11	0	23	6	0	--	--
3276 metallic salts	403	27	41	38	2	177	10	108
3279 inorganic chem. nec	6	0	0	--	5	--	--	--
3281 radioactive material	0	0	0	--	--	--	--	--
3282 pigments & paints	8	3	0	0	5	--	--	--
3283 coloring mat. nec	0	0	0	--	0	--	--	--
3284 medicines	5	--	0	0	5	--	--	--
3285 perfumes & cleansers	16	0	0	0	16	--	--	--
3286 plastics	20	0	1	1	18	--	--	--
3291 pesticides	1	--	--	0	1	--	--	--
3292 starches, gluten, glue	9	0	1	0	8	--	--	--
3293 explosives	0	--	0	--	--	--	--	--
3297 chemical additives	3	0	0	--	3	--	--	--
3298 wood & resin chem.	0	--	--	--	0	--	--	--
3299 chem. products nec	4	0	0	0	4	0	--	--
Total crude materials, inedible except fuels	122,264	13,528	471	10,953	270	94,178	369	2,496
Subtotal forest products, wood and chips	161	156	0	1	3	1	0	0
4110 rubber & gums	0	--	--	--	0	--	--	--
4150 fuel wood	0	--	0	--	0	--	--	--
4161 wood chips	0	--	--	--	--	0	--	--
4170 wood in the rough	8	7	--	0	0	1	--	0
4189 lumber	152	149	0	1	2	0	0	0
4190 forest products nec	1	--	0	--	1	--	--	--
Subtotal pulp and waste paper	47	--	10	--	37	--	--	--
4225 pulp & waste paper	47	--	10	--	37	--	--	--
Subtotal soil, sand, gravel, rock and stone	41,346	2,588	0	3,950	15	32,671	19	2,105
4310 building stone	3	3	--	--	--	30,747	8	26
4322 limestone	34,356	--	--	3,574	--	--	--	--

TABLE 3 - NET SUMMARY OF FOREIGN AND DOMESTIC FREIGHT CARRIED ON THE GREAT LAKES
BY TYPE OF TRAFFIC AND COMMODITY
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign				Domestic		
		Imports		Exports		Lakewise	Internal	Inraport
		Canadian	Overseas	Canadian	Overseas			
4323 gypsum	1,226	—	—	5	1	1,209	10	—
4327 phosphate rock	96	—	—	96	—	—	—	—
4331 sand & gravel	5,490	2,585	0	274	13	699	0	1,919
4335 waterway improv. mat	175	—	—	—	—	15	—	160
4338 soil & fill dirt	0	—	—	—	—	0	0	0
Subtotal iron ore and scrap	71,574	5,382	—	6,249	2	59,507	82	352
4410 iron ore	71,172	5,305	—	6,249	0	59,224	46	347
4420 iron & steel scrap	403	77	—	—	2	283	36	5
Subtotal non-ferrous ores and scrap	433	22	382	—	14	—	14	—
4630 copper ore	0	—	—	—	0	—	—	—
4650 aluminum ore	117	0	98	—	6	—	13	—
4670 manganese ore	1	—	—	—	—	—	1	—
4680 non-ferrous scrap	221	22	195	—	4	—	—	—
4690 non-ferrous ores nec	93	—	89	—	4	—	—	—
Subtotal sulphur, clay and salt	1,592	1,136	66	176	194	—	19	2
4741 sulphur, (dry)	0	—	0	—	—	—	—	—
4782 clay & refrac. mat.	1,592	1,136	66	176	194	—	19	2
Subtotal slag	1,074	58	6	31	0	713	228	38
4860 slag	1,074	58	6	31	0	713	228	38
Subtotal other non-metal. min.	6,037	4,187	6	547	5	1,286	6	—
4900 non-metal. min. nec	6,037	4,187	6	547	5	1,286	6	—
Total primary manufactured goods	13,437	3,640	5,216	358	47	3,445	694	37
Subtotal paper products	18	0	2	9	6	—	—	—
5110 newsprint	7	—	—	7	—	—	—	—
5120 paper & paperboard	8	0	2	2	4	—	—	—
5190 paper products nec	2	0	0	0	2	—	—	—
Subtotal lime, cement and glass	6,700	3,242	44	238	10	3,147	19	0
5210 lime	25	—	13	—	—	—	12	—
5220 cement & concrete	6,658	3,242	24	238	—	3,147	6	—
5240 glass & glass prod.	5	0	1	0	4	—	—	—
5290 misc. mineral prod.	12	0	6	0	6	0	—	0
Subtotal primary iron and steel products	6,582	369	5,094	109	16	298	660	35
5312 pig iron	548	368	51	0	0	25	101	1
5315 ferro alloys	30	—	28	—	0	—	1	—
5320 i&s primary forms	636	0	469	27	0	—	140	—
5330 i&s plates & sheets	4,857	0	4,164	71	10	270	308	33
5360 i&s bars & shapes	367	0	349	3	0	—	15	—
5370 i&s pipe & tube	33	0	20	7	5	—	—	—
5390 primary i&s nec	112	0	13	—	1	3	96	—
Subtotal primary non-ferrous metal products	132	28	75	1	10	0	16	2
5421 copper	1	0	0	0	0	—	—	—
5422 aluminum	51	28	22	0	1	—	—	—
5429 smelted prod. nec	35	0	33	0	1	—	—	—
5480 fab. metal products	46	0	20	0	8	0	16	2
Subtotal primary wood products	5	0	0	0	4	—	—	—
5540 primary wood prod.	5	0	0	0	4	—	—	—
Total food and farm products	8,093	438	68	2,921	4,024	308	313	21
Subtotal fish	1	—	—	1	0	0	—	—
6134 fish (not shellfish)	1	—	—	1	0	0	—	—
6136 shelffish	0	—	—	0	0	—	—	—
Subtotal grain	5,603	436	59	1,768	2,786	307	226	21
6241 wheat	2,735	102	—	515	1,789	307	3	19
6344 corn	2,435	—	—	1,249	961	—	223	2
6442 rice	0	—	0	0	—	—	—	—
6443 barley & rye	266	231	—	—	36	—	—	—
6445 oats	166	103	59	4	0	—	—	—
6447 sorghum grains	0	—	—	—	0	—	—	—
Subtotal oilseeds	2,307	—	—	1,120	1,101	—	86	—
6522 soybeans	1,928	—	—	1,120	722	—	86	—
6534 flaxseed	8	—	—	—	8	—	—	—
6590 oilseeds nec	371	—	—	—	371	—	—	—
Subtotal vegetable products	30	1	2	1	27	—	—	—
6653 vegetable oils	1	0	0	0	1	—	—	—
6654 vegetables & prod.	30	1	1	1	27	—	—	—
Subtotal processed grain and animal feed	63	0	0	0	61	0	1	—
6746 wheat flour	0	—	—	—	0	—	—	—
6747 grain mill products	4	—	0	0	4	0	—	—
6781 hay & fodder	2	—	—	—	2	—	—	—
6782 animal feed, prep.	57	0	0	0	55	—	1	—
Subtotal other agricultural products	89	1	7	32	48	1	—	—
6811 meat, fresh, frozen	10	0	0	0	10	—	—	—
6817 meat, prepared	0	—	0	0	0	—	—	—

TABLE 3 - NET SUMMARY OF FOREIGN AND DOMESTIC FREIGHT CARRIED ON THE GREAT LAKES
BY TYPE OF TRAFFIC AND COMMODITY
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign				Domestic		
		Imports		Exports		Lakewise	Internal	Intraport
		Canadian	Overseas	Canadian	Overseas			
6822 dairy products	2	—	0	1	1	—	—	—
6835 fish, prepared	0	—	—	0	0	—	—	—
6838 tallow, animal oils	19	—	0	—	19	—	—	—
6839 animals & prod. nec	8	—	0	—	8	—	—	—
6856 bananas & plantains	0	—	—	0	—	—	—	—
6857 fruit & nuts nec	2	0	—	0	1	0	—	—
6858 fruit juices	3	0	0	3	0	—	—	—
6861 sugar	8	—	4	4	—	—	—	—
6865 molasses	23	—	—	23	—	—	—	—
6871 coffee	0	—	—	0	0	—	—	—
6872 cocoa beans	0	—	0	—	—	—	—	—
6885 alcoholic beverages	2	0	1	0	0	—	—	—
6887 groceries	0	—	—	—	—	0	—	—
6888 water & ice	0	—	0	0	0	—	—	—
6889 food products nec	9	0	1	0	7	0	—	—
6891 tobacco & products	0	0	0	0	—	—	—	—
6893 cotton	0	—	—	0	0	—	—	—
6899 farm products nec	1	—	0	—	1	—	—	—
Total all manufactured equipment, machinery and products	213	8	46	8	117	29	5	0
7110 machinery (not elec)	68	4	21	3	35	0	5	0
7120 electrical machinery	17	1	7	1	8	0	0	—
7210 vehicles & parts	56	1	10	0	44	0	—	—
7220 aircraft & parts	0	—	0	—	0	—	—	—
7230 ships & boats	1	0	0	1	0	0	—	—
7300 ordnance & access.	0	0	0	—	0	—	—	—
7400 manufac. wood prod.	4	2	0	0	2	0	—	0
7500 textile products	5	0	1	2	2	—	—	—
7600 rubber & plastic pr.	13	0	1	1	10	—	—	—
7900 manufac. prod. nec	49	1	4	0	16	28	—	—
Total waste and scrap nec	0	—	—	—	—	0	0	—
8900 waste and scrap nec	0	—	—	—	—	0	0	—
Total unknown or not elsewhere classified	26	11	1	0	1	13	—	—
9900 unknown or nec	26	11	1	0	1	13	—	—

Section 1

Freight Traffic

WAUKEGAN HARBOR, IL

Section Included: Artificial harbor basin of about 13.5 acres and entrance channel from Lake Michigan approximately 2,200 feet in length. Project Depth: 22 feet in entrance channel; 18 feet between piers and inner basin; 8 feet in anchorage area of approximately 6 acres.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	470	1992	520	1995	496	1998	555
1990	490	1993	577	1996	469		
1991	598	1994	604	1997	473		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise	
		Receipts	Shipments
Total, all commodities	555	551	3
Total crude materials, inedible except fuels	289	286	3
Subtotal soil, sand, gravel, rock and stone	289	286	3
4323 gypsum	282	282	—
4331 sand & gravel	1	1	1
4335 waterway improv. mat	6	4	3
Total primary manufactured goods	266	266	—
Subtotal lime, cement and glass	266	266	—
5220 cement & concrete	266	266	—

CHICAGO RIVER (MAIN AND NORTH BRANCH), IL (INCLUDED IN PORT OF CHICAGO)

Section Included: Main River from Rush Street to junction of North and South Branch; North Branch to North Avenue. Project Depth: 21 feet from Rush Street in the Main River to North Avenue in the North Branch, including the North Branch Canal and the North Turning Branch Basin.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,709	1992	1,337	1995	867	1998	935
1990	2,207	1993	1,764	1996	700		
1991	1,802	1994	1,944	1997	733		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Internal			
		Inbound Upbound	Outbound Downbnd	Through Upbound	Through Downbnd
Total, all commodities	935	641	4	102	187
Total coal	2	--	--	--	2
1200 coal coke	2	--	--	--	2
Total petroleum and petroleum products	45	--	--	15	30
Subtotal petroleum products	45	--	--	15	30
2330 distillate fuel oil	10	--	--	5	5
2340 residual fuel oil	9	--	--	2	7
2430 asphalt, tar & pitch	11	--	--	3	9
2540 petroleum coke	15	--	--	5	10
Total chemicals and related products	80	--	--	80	--
Subtotal other chemicals and related products	80	--	--	80	--
3276 metallic salts	80	--	--	80	--
Total crude materials, inedible except fuels	799	639	3	1	156
Subtotal forest products, wood and chips	3	3	--	--	--
4161 wood chips	3	3	--	--	--
Subtotal soil, sand, gravel, rock and stone	684	528	--	--	156
4331 sand & gravel	528	528	--	--	--
4335 waterway improv. mat	156	--	--	--	156
Subtotal iron ore and scrap	4	--	3	1	--
4410 iron ore	1	--	--	1	--
4420 iron & steel scrap	3	--	3	--	--
Subtotal other non-metal. min.	108	108	--	--	--
4900 non-metal. min. nec	108	108	--	--	--
Total primary manufactured goods	1	1	--	--	--
Subtotal primary iron and steel products	1	1	--	--	--
5330 i&s plates & sheets	1	1	--	--	--
Total food and farm products	8	--	1	6	--
Subtotal grain	5	--	--	5	--
6344 corn	5	--	--	5	--

CHICAGO RIVER (MAIN AND NORTH BRANCH), IL (INCLUDED IN PORT OF CHICAGO)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Internal			
		Inbound	Outbound	Through	
		Upbound	Downbnd	Upbound	Downbnd
Subtotal oilseeds	3	--	1	2	--
6522 soybeans	3	--	1	2	--
Ton-miles (x1000)	102	97	4	0	0
Tons All Traffic (x1000)	935				
Ton-miles All Traffic (x1000)	102				

CHICAGO RIVER, SOUTH BRANCH, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)

Section Included: Damen Avenue to Lake Street. Project Depth: 9 feet at low water stages.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	2,220	1992	1,853	1995	1,226	1998	1,500
1990	2,857	1993	2,368	1996	1,088		
1991	2,461	1994	2,844	1997	1,247		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Internal			
		Inbound	Outbound	Through	
		Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	1,500	505	60	828	107
Total coal	12	2	9	2	--
1100 coal lignite	9	--	9	--	--
1200 coal coke	3	2	--	2	--
Total petroleum and petroleum products	45	--	--	30	15
Subtotal petroleum products	45	--	--	30	15
2330 distillate fuel oil	10	--	--	5	5
2340 residual fuel oil	9	--	--	7	2
2430 asphalt, tar & pitch	11	--	--	9	3
2540 petroleum coke	15	--	--	10	5
Total chemicals and related products	80	--	--	--	80
Subtotal other chemicals and related products	80	--	--	--	80
3276 metallic salts	80	--	--	--	80
Total crude materials, inedible except fuels	1,353	502	51	795	4
Subtotal forest products, wood and chips	3	--	--	3	--
4161 wood chips	3	--	--	3	--
Subtotal soil, sand, gravel, rock and stone	1,186	502	--	684	--
4331 sand & gravel	1,030	502	--	528	--
4335 waterway improv. mat	156	--	--	156	--
Subtotal iron ore and scrap	56	--	51	--	4
4410 iron ore	1	--	--	--	1
4420 iron & steel scrap	54	--	51	--	3
Subtotal other non-metal. min.	108	--	--	108	--
4900 non-metal. min. nec	108	--	--	108	--
Total primary manufactured goods	3	2	--	1	--
Subtotal paper products	1	1	--	--	--
5120 paper & paperboard	1	1	--	--	--
Subtotal primary iron and steel products	2	0	--	1	--
5330 i&s plates & sheets	1	--	--	1	--
5360 i&s bars & shapes	0	0	--	--	--
Total food and farm products	8	--	--	--	8
Subtotal grain	5	--	--	--	5
6344 corn	5	--	--	--	5
Subtotal oilseeds	3	--	--	--	3
6522 soybeans	3	--	--	--	3
Ton-miles (x1000)	4,496	615	0	3,362	519
Tons All Traffic (x1000)	1,500				
Ton-miles All Traffic (x1000)	4,496				

LAKE CALUMET, IL (INCLUDED IN PORT OF CHICAGO)

Section Included: Entrance channel from the Calumet River to a harbor area at south end of lake with a channel extending northward for a distance of 3,000 feet and a width of 1,000 feet. Project Depth: 27 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,548	1992	1,329	1995	1,913	1998	2,354
1990	1,304	1993	1,489	1996	2,327		
1991	1,165	1994	2,068	1997	1,845		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Imports	Domestic			Internal		
		Imports	Exports		Lakewise		Inbound		Upbound	
					Receipts	Shipments	Inbound	Outbound		
Total, all commodities	2,354	289	4	202	1,859	563	49	990	257	
Total coal	29	--	--	--	29	--	--	29	--	
1100 coal lignite	5	--	--	--	5	--	--	5	--	
1200 coal coke	24	--	--	--	24	--	--	24	--	
Total petroleum and petroleum products	28	--	--	--	28	3	24	--	--	
Subtotal petroleum products	28	--	--	--	28	3	24	--	--	
2330 distillate fuel oil	1	--	--	--	1	1	--	--	--	
2340 residual fuel oil	3	--	--	--	3	3	--	--	--	
2430 asphalt, tar & pitch	25	--	--	--	25	0	24	--	--	
Total chemicals and related products	307	7	--	12	288	--	--	145	143	
Subtotal fertilizers	5	--	--	5	--	--	--	--	--	
3130 potassic fert.	5	--	--	5	--	--	--	--	--	
Subtotal other chemicals and related products	301	7	--	7	288	--	--	145	143	
3212 benzene & toluene	59	--	--	--	59	--	--	--	59	
3219 other hydrocarbons	14	7	--	--	7	--	--	7	--	
3220 alcohols	105	--	--	7	99	--	--	15	84	
3274 sodium hydroxide	120	--	--	--	120	--	--	120	--	
3275 inorg. elem., oxides, & halogen salts	1	--	--	--	1	--	--	1	--	
3276 metallic salts	2	--	--	--	2	--	--	2	--	
3299 chem. products nec	0	--	--	--	0	--	--	—	0	
Total crude materials, inedible except fuels	352	--	--	190	162	65	--	15	82	
Subtotal forest products, wood and chips	2	--	--	--	2	--	--	2	--	
4161 wood chips	2	--	--	--	2	--	--	2	--	
Subtotal soil, sand, gravel, rock and stone	74	--	--	--	74	65	--	9	--	
4322 limestone	65	--	--	--	65	65	--	—	--	
4331 sand & gravel	9	--	--	--	9	--	--	9	--	
Subtotal iron ore and scrap	178	--	--	93	85	--	--	3	82	
4410 iron ore	79	--	--	78	1	--	--	1	--	
4420 iron & steel scrap	99	--	--	16	83	--	--	2	82	
Subtotal non-ferrous ores and scrap	1	--	--	--	1	--	--	1	--	
4690 non-ferrous ores nec	1	--	--	--	1	--	--	1	--	
Subtotal sulphur, clay and salt	0	--	--	0	--	--	--	--	--	
4782 clay & refrac. mat.	0	--	--	0	--	--	--	--	--	

LAKE CALUMET, IL (INCLUDED IN PORT OF CHICAGO)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian Imports	Domestic						
		Imports	Exports		Total		Lakewise		Internal		
					Receipts	Shipments	Inbound Upbound	Outbound Downbnd			
Subtotal other non-metal. min.	97	--	--	97	--	--	--	--	--	--	
4900 non-metal. min. nec	97	--	--	97	--	--	--	--	--	--	
Total primary manufactured goods	1,592	282	--	--	1,310	495	25	768	23		
Subtotal lime, cement and glass	302	--	--	--	302	254	5	43	--		
5220 cement & concrete	302	--	--	--	302	254	5	43	--		
Subtotal primary iron and steel products	1,249	274	--	--	975	241	20	692	23		
5312 pig iron	259	--	--	--	259	1	17	239	2		
5315 ferro alloys	10	--	--	--	10	--	--	10	--		
5320 i&s primary forms	33	8	--	--	25	--	--	25	--		
5330 i&s plates & sheets	842	267	--	--	576	239	3	314	20		
5360 i&s bars & shapes	51	--	--	--	51	--	--	51	--		
5370 i&s pipe & tube	2	0	--	--	2	--	--	2	--		
5390 primary i&s nec	51	--	--	--	51	--	--	50	2		
Subtotal primary non-ferrous metal products	41	7	--	--	33	--	--	33	--		
5422 aluminum	1	1	--	--	--	--	--	--	--		
5429 smelted prod. nec	16	6	--	--	10	--	--	10	--		
5480 fab. metal products	23	--	--	--	23	--	--	23	--		
Total food and farm products	47	--	4	--	43	--	--	34	9		
Subtotal grain	11	--	4	--	8	--	--	--	8		
6241 wheat	5	--	4	--	1	--	--	--	1		
6344 corn	6	--	--	--	6	--	--	--	6		
Subtotal oilseeds	2	--	--	--	2	--	--	--	2		
6522 soybeans	2	--	--	--	2	--	--	--	2		
Subtotal other agricultural products	34	--	--	--	34	--	--	34	--		
6861 sugar	34	--	--	--	34	--	--	34	--		
Total all manufactured equipment, machinery and products	0	0	--	--	--	--	--	--	--		
7210 vehicles & parts	0	0	--	--	--	--	--	--	--		
Ton-miles (x1000)	1,919	289	4	202	1,425	495	8	681	241		
Tons All Traffic (x1000)					2,354						
Ton-miles All Traffic (x1000)					1,919						

CALUMET HARBOR AND RIVER, IL AND IN (INCLUDED IN PORT OF CHICAGO)

Section Included: Calumet Harbor and River to turning basin no. 5 (130th Street Bridge). Project Depth: 29 feet in approach channel, 28 feet in outer harbor anchorage area, 27 feet in river entrance channel to E. J. & E. R. R. Bridge, and 27 feet in river to and including Basin No. 5, (130th Street Bridge).

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	12,973	1992	11,765	1995	18,225	1998	16,701
1990	11,689	1993	13,706	1996	20,167		
1991	10,589	1994	18,554	1997	16,552		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign				Canadian		
		Imports*	Exports	Through Upbound	Downbnd	Imports	Exports	Through Downbnd
Total, all commodities	5,218	1,498	181	4	289	2,689	356	202
Total coal	64	--	--	--	--	64	--	--
1100 coal lignite	59	--	--	--	--	59	--	--
1200 coal coke	5	--	--	--	--	5	--	--
Total petroleum and petroleum products	526	0	0	--	--	242	283	--
Subtotal petroleum products	526	0	0	--	--	242	283	--
2211 gasoline	0	0	—	--	--	—	—	—
2330 distillate fuel oil	5	--	0	--	--	—	5	—
2340 residual fuel oil	45	--	—	--	--	45	—	—
2350 lube oil & greases	0	--	0	--	--	—	—	—
2410 petro. jelly & waxes	0	--	0	--	--	—	—	—
2429 naphtha & solvents	0	--	0	--	--	—	—	—
2430 asphalt, tar & pitch	6	--	—	--	--	6	—	—
2540 petroleum coke	469	--	—	--	--	191	278	—
2640 liquid natural gas	0	0	—	--	--	—	—	—
Total chemicals and related products	113	3	17	--	7	64	10	12
Subtotal fertilizers	70	--	1	--	--	64	--	5
3110 nitrogenous fert.	7	--	—	--	--	7	—	—
3130 potassic fert.	62	--	—	--	--	56	—	5
3190 fert. & mixes nec	1	--	1	--	--	—	—	—
Subtotal other chemicals and related products	44	3	17	--	7	--	10	7
3219 other hydrocarbons	9	2	0	--	7	—	—	—
3220 alcohols	8	0	1	--	--	—	—	7
3230 carboxylic acids	0	0	0	--	--	—	—	—
3240 nitrogen func. comp.	0	0	0	--	--	—	—	—
3250 organo - inorg. comp.	0	0	0	--	--	—	—	—
3260 organic comp. nec	0	0	0	--	--	—	—	—
3274 sodium hydroxide	10	—	3	--	--	—	10	—
3275 inorg. elem.,oxides, & halogen salts	4	0	3	--	--	—	—	—
3276 metallic salts	0	0	0	--	--	—	—	—
3279 inorganic chem. nec	0	0	—	--	--	—	—	—
3281 radioactive material	0	0	—	--	--	—	—	—
3282 pigments & paints	0	0	0	--	--	—	—	—
3283 coloring mat. nec	0	0	0	--	--	—	—	—
3284 medicines	0	0	0	--	--	—	—	—
3285 perfumes & cleansers	2	0	2	--	--	—	—	—
3286 plastics	2	0	1	--	--	—	—	—
3291 pesticides	0	—	0	--	--	—	—	—
3292 starches, gluten, glue	6	0	6	--	--	—	—	—
3297 chemical additives	0	—	0	--	--	—	—	—
3298 wood & resin chem.	0	—	0	--	--	—	—	—
3299 chem. products nec	1	0	1	--	--	—	—	—
Total crude materials, inedible except fuels	2,637	70	118	--	--	2,248	10	190
Subtotal forest products, wood and chips	0	0	0	--	--	—	—	—
4110 rubber & gums	0	—	0	--	--	—	—	—
4150 fuel wood	0	—	0	--	--	—	—	—
4189 lumber	0	0	0	--	--	—	—	—
4190 forest products nec	0	0	0	--	--	—	—	—
Subtotal pulp and waste paper	2	--	2	--	--	—	—	—
4225 pulp & waste paper	2	--	2	--	--	—	—	—
Subtotal soil, sand, gravel, rock and stone	32	--	0	--	--	21	10	—
4323 gypsum	0	—	0	--	--	—	—	—
4327 phosphate rock	10	—	—	--	--	—	10	—
4331 sand & gravel	21	—	0	--	--	21	—	—
Subtotal iron ore and scrap	1,395	--	2	--	--	1,300	—	93
4410 iron ore	1,344	--	—	--	--	1,267	—	78
4420 iron & steel scrap	51	--	2	--	--	33	—	16

CALUMET HARBOR AND RIVER, IL AND IN (INCLUDED IN PORT OF CHICAGO)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian		
		Imports*	Exports	Through Upbound	Through Downbnd	Imports	Exports	Through Downbnd
Subtotal non-ferrous ores and scrap	74	70	4	—	—	—	—	—
4650 aluminum ore	70	70	—	—	—	—	—	—
4680 non-ferrous scrap	0	0	—	—	—	—	—	—
4690 non-ferrous ores nec	4	—	4	—	—	—	—	—
Subtotal sulphur, clay and salt	111	0	110	—	—	0	—	0
4741 sulphur, (dry)	0	0	—	—	—	—	—	—
4782 clay & refrac. mat.	110	—	110	—	—	0	—	0
Subtotal other non-metal. min.	1,025	—	1	—	—	927	—	97
4900 non-metal. min. nec	1,025	—	1	—	—	927	—	97
Total primary manufactured goods	1,766	1,410	4	—	282	70	0	—
Subtotal paper products	1	0	1	—	—	—	—	—
5120 paper & paperboard	0	0	0	—	—	—	—	—
5190 paper products nec	1	0	1	—	—	—	—	—
Subtotal lime, cement and glass	2	2	0	—	—	—	—	—
5240 glass & glass prod.	1	1	0	—	—	—	—	—
5290 misc. mineral prod.	2	2	0	—	—	—	—	—
Subtotal primary iron and steel products	1,736	1,392	0	—	274	70	—	—
5312 pig iron	70	—	0	—	—	70	—	—
5315 ferro alloys	14	14	—	—	—	—	—	—
5320 i&s primary forms	201	193	—	—	8	—	—	—
5330 i&s plates & sheets	1,365	1,098	0	—	267	—	—	—
5360 i&s bars & shapes	66	66	0	—	—	—	—	—
5370 i&s pipe & tube	14	14	0	—	0	—	—	—
5390 primary i&s nec	6	6	0	—	—	—	—	—
Subtotal primary non-ferrous metal products	26	17	2	—	7	—	0	—
5421 copper	0	0	0	—	—	—	0	—
5422 aluminum	1	0	0	—	1	—	—	—
5429 smelted prod. nec	15	8	0	—	6	—	—	—
5480 fab. metal products	10	8	2	—	—	—	—	—
Subtotal primary wood products	0	0	0	—	—	—	—	—
5540 primary wood prod.	0	0	0	—	—	—	—	—
Total food and farm products	87	1	31	4	—	—	52	—
Subtotal fish	1	—	—	—	—	—	1	—
6134 fish (not shellfish)	1	—	—	—	—	—	1	—
Subtotal grain	82	—	27	4	—	—	51	—
6241 wheat	4	—	—	4	—	—	—	—
6344 corn	78	—	26	—	—	—	51	—
6445 oats	0	—	0	—	—	—	—	—
Subtotal vegetable products	0	0	0	—	—	—	—	—
6653 vegetable oils	0	0	0	—	—	—	—	—
6654 vegetables & prod.	0	0	0	—	—	—	—	—
Subtotal processed grain and animal feed	2	0	2	—	—	—	—	—
6747 grain mill products	0	0	0	—	—	—	—	—
6782 animal feed, prep.	2	—	2	—	—	—	—	—
Subtotal other agricultural products	3	1	2	—	—	—	—	—
6822 dairy products	0	0	0	—	—	—	—	—
6838 tallow, animal oils	1	0	1	—	—	—	—	—
6839 animals & prod. nec	0	0	—	—	—	—	—	—
6857 fruit & nuts nec	0	—	0	—	—	—	—	—
6858 fruit juices	0	0	0	—	—	—	—	—
6872 cocoa beans	0	0	—	—	—	—	—	—
6885 alcoholic beverages	0	0	0	—	—	—	—	—
6889 food products nec	1	0	1	—	—	—	—	—
6893 cotton	0	—	0	—	—	—	—	—
6899 farm products nec	0	0	—	—	—	—	—	—
Total all manufactured equipment, machinery and products	24	12	11	—	0	1	0	—
7110 machinery (not elec)	10	5	3	—	—	1	—	—
7120 electrical machinery	4	2	2	—	—	—	—	—
7210 vehicles & parts	3	2	1	—	0	—	—	—
7220 aircraft & parts	0	0	0	—	—	—	—	—
7230 ships & boats	0	0	0	—	—	—	0	—
7300 ordnance & access.	0	0	—	—	—	—	—	—
7400 manufac. wood prod.	0	0	0	—	—	—	—	—
7500 textile products	1	0	0	—	—	—	—	—
7600 rubber & plastic pr.	1	0	1	—	—	—	—	—
7900 manufac. prod. nec	5	2	4	—	—	0	—	—

CALUMET HARBOR AND RIVER, IL AND IN (INCLUDED IN PORT OF CHICAGO)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Total	Foreign				Canadian		
		Imports*	Exports	Through Upbound	Through Downbnd	Imports	Exports	Through Downbnd
Total unknown or not elsewhere classified	0	0	—	—	—	—	—	—
9900 unknown or nec	0	0	—	—	—	—	—	—
Ton-miles (x1000)	7,689	1,498	181	22	1,733	2,689	356	1,211
Foreign & Canadian								

Commodity	Total	Lakewise			
		Receipts	Shipments	Through Upbound	Through Downbnd
Total, all commodities	4,899	2,303	1,983	49	563
Total coal	1,892	—	1,892	—	—
1100 coal lignite	1,622	—	1,622	—	—
1200 coal coke	270	—	270	—	—
Total petroleum and petroleum products	130	17	85	24	3
Subtotal petroleum products	130	17	85	24	3
2330 distillate fuel oil	5	3	2	—	1
2340 residual fuel oil	19	6	11	—	3
2350 lube oil & greases	1	1	—	—	—
2430 asphalt, tar & pitch	86	2	59	24	0
2540 petroleum coke	18	4	14	—	—
Total chemicals and related products	10	10	—	—	—
Subtotal other chemicals and related products	10	10	—	—	—
3276 metallic salts	10	10	—	—	—
Total crude materials, inedible except fuels	2,132	2,065	2	—	65
Subtotal soil, sand, gravel, rock and stone	1,310	1,246	—	—	65
4322 limestone	1,302	1,237	—	—	65
4335 waterway improv. mat	8	8	—	—	—
Subtotal iron ore and scrap	820	820	—	—	—
4410 iron ore	820	820	—	—	—
Subtotal slag	2	—	2	—	—
4860 slag	2	—	2	—	—
Total primary manufactured goods	718	194	5	25	495
Subtotal lime, cement and glass	450	191	—	5	254
5220 cement & concrete	450	191	—	5	254
Subtotal primary iron and steel products	268	3	5	20	241
5312 pig iron	23	—	5	17	1
5330 i&s plates & sheets	242	—	—	3	239
5390 primary i&s nec	3	3	—	—	—
Total food and farm products	18	18	—	—	—
Subtotal grain	18	18	—	—	—
6241 wheat	18	18	—	—	—
Ton-miles (x1000)	21,156	7,641	9,944	193	3,378
Lakewise					

Commodity	Total	Internal					
		Inbound	Outbound	Through	Intra		
		Upbound	Downbnd	Downbnd	Upbound	Downbnd	Upbound
Total, all commodities	6,584	2,527	5	886	1,541	1,624	1
Total coal	1,601	988	—	67	531	16	—
1100 coal lignite	983	910	—	17	50	7	—
1200 coal coke	618	77	—	50	481	9	—
Total petroleum and petroleum products	1,433	262	5	302	273	590	—
Subtotal crude petroleum	2	—	—	—	2	—	—
2100 crude petroleum	2	—	—	—	2	—	—
Subtotal petroleum products	1,430	262	5	302	270	590	—
2330 distillate fuel oil	157	2	—	3	62	91	—
2340 residual fuel oil	183	14	—	18	98	52	—
2350 lube oil & greases	70	1	—	1	18	50	—
2429 naphtha & solvents	5	—	—	—	—	5	—
2430 asphalt, tar & pitch	367	26	5	27	33	275	—
2540 petroleum coke	649	220	—	252	59	117	—
Total chemicals and related products	213	60	—	11	108	34	—
Subtotal fertilizers	121	39	—	—	80	2	—
3110 nitrogenous fert.	107	36	—	—	69	2	—
3120 phosphatic fert.	11	—	—	—	11	—	—

CALUMET HARBOR AND RIVER, IL AND IN (INCLUDED IN PORT OF CHICAGO)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Total	Internal					
		Upbound	Downbnd	Outbound	Upbound	Through	Intra
3190 fert. & mixes nec	3	3	--	--	--	--	--
Subtotal other chemicals and related products	92	21	--	11	27	33	--
3212 benzene & toluene	1	1	--	--	--	--	--
3219 other hydrocarbons	16	--	--	--	16	--	--
3274 sodium hydroxide	11	--	--	--	11	--	--
3276 metallic salts	39	--	--	7	--	33	--
3279 inorganic chem. nec	24	20	--	4	--	--	--
Total crude materials, inedible except fuels	1,164	307	--	298	193	365	1
Subtotal forest products, wood and chips	18	18	--	--	--	--	--
4161 wood chips	7	7	--	--	--	--	--
4190 forest products nec	11	11	--	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	274	4	--	102	2	166	1
4322 limestone	3	2	--	--	2	--	--
4323 gypsum	10	--	--	--	--	10	--
4331 sand & gravel	105	3	--	102	--	--	--
4335 waterway improv. mat	156	--	--	--	--	156	1
Subtotal iron ore and scrap	205	--	--	120	56	29	--
4410 iron ore	95	--	--	51	38	6	--
4420 iron & steel scrap	109	--	--	68	18	23	--
Subtotal non-ferrous ores and scrap	128	109	--	4	14	--	--
4650 aluminum ore	21	9	--	--	13	--	--
4670 manganese ore	86	80	--	4	1	--	--
4690 non-ferrous ores nec	20	20	--	--	--	--	--
Subtotal sulphur, clay and salt	21	2	--	--	19	--	--
4782 clay & refrac. mat.	21	2	--	--	19	--	--
Subtotal slag	273	--	--	7	99	167	--
4860 slag	273	--	--	7	99	167	--
Subtotal other non-metal. min.	246	174	--	66	3	3	--
4900 non-metal. min. nec	246	174	--	66	3	3	--
Total primary manufactured goods	1,613	860	--	25	415	313	--
Subtotal lime, cement and glass	36	17	--	--	12	6	--
5210 lime	12	--	--	--	12	--	--
5220 cement & concrete	24	17	--	--	--	6	--
Subtotal primary iron and steel products	1,431	714	--	23	400	293	--
5312 pig iron	318	209	--	8	101	--	--
5315 ferro alloys	147	139	--	7	--	1	--
5320 i&s primary forms	146	6	--	--	140	--	--
5330 i&s plates & sheets	513	168	--	4	84	257	--
5360 i&s bars & shapes	38	19	--	3	13	2	--
5390 primary i&s nec	269	172	--	1	62	33	--
Subtotal primary non-ferrous metal products	146	129	--	2	3	13	--
5422 aluminum	8	8	--	--	--	--	--
5429 smelted prod. nec	21	21	--	--	--	--	--
5480 fab. metal products	117	99	--	2	3	13	--
Total food and farm products	552	48	--	181	17	306	--
Subtotal grain	392	43	--	113	17	220	--
6241 wheat	74	41	--	14	16	3	--
6344 corn	319	2	--	99	2	217	--
Subtotal oilseeds	144	--	--	60	--	84	--
6522 soybeans	144	--	--	60	--	84	--
Subtotal vegetable products	1	--	--	1	--	--	--
6654 vegetables & prod.	1	--	--	1	--	--	--
Subtotal processed grain and animal feed	9	--	--	7	--	1	--
6782 animal feed, prep.	9	--	--	7	--	1	--
Subtotal other agricultural products	5	5	--	--	--	--	--
6865 molasses	5	5	--	--	--	--	--
Total all manufactured equipment, machinery and products	7	1	--	1	4	0	--
7110 machinery (not elec)	7	1	--	1	4	--	--
7120 electrical machinery	0	--	--	--	--	0	--
Ton-miles (x1000)	26,703	7,063	31	1,571	9,249	8,791	0
Internal							
Tons All Traffic (x1000)	16,701						
Ton-miles All Traffic (x1000)	55,549						

*Includes 2 (x1000) tons of foreign inbound in-transits.

PORT OF CHICAGO, IL

Section Included: Chicago Harbor, Chicago River, Main and North Branch, Chicago River, South Branch, Chicago Sanitary and Ship Canal, Calumet-Sag Channel and Lake Calumet, IL, Calumet Harbor and River, IL and IN. Project Depth: See Chicago Harbor, Chicago River, Main and North Branch, Chicago River, South Branch, Chicago Sanitary and Ship Canal, Calumet-Sag Channel and Lake Calumet, IL, Calumet Harbor and River, IL and IN.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	23,446	1992	22,154	1995	25,329	1998	25,958
1990	22,541	1993	25,048	1996	27,886		
1991	21,767	1994	29,422	1997	24,868		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports
Total, all commodities	5,218	1,786	185	2,891	356
Total coal	64	--	--	64	--
1100 coal lignite	59	--	--	59	--
1200 coal coke	5	--	--	5	--
Total petroleum and petroleum products	526	0	0	242	283
Subtotal petroleum products	526	0	0	242	283
2211 gasoline	0	0	--	--	--
2330 distillate fuel oil	5	--	0	--	5
2340 residual fuel oil	45	--	--	45	--
2350 lube oil & greases	0	--	0	--	--
2410 petro. jelly & waxes	0	--	0	--	--
2429 naphtha & solvents	0	--	0	--	--
2430 asphalt, tar & pitch	6	--	--	6	--
2540 petroleum coke	469	--	--	191	278
2640 liquid natural gas	0	0	--	--	--
Total chemicals and related products	113	10	17	76	10
Subtotal fertilizers	70	--	1	69	--
3110 nitrogenous fert.	7	--	--	7	--
3130 potassic fert.	62	--	--	62	--
3190 fert. & mixes nec	1	--	1	--	--
Subtotal other chemicals and related products	44	10	17	7	10
3219 other hydrocarbons	9	9	0	--	--
3220 alcohols	8	0	1	7	--
3230 carboxylic acids	0	0	0	--	--
3240 nitrogen func. comp.	0	0	0	--	--
3250 organo - inorg. comp.	0	0	0	--	--
3260 organic comp. nec	0	0	0	--	--
3274 sodium hydroxide	10	--	--	--	10
3275 inorg. elem., oxides, & halogen salts	4	0	3	--	--
3276 metallic salts	0	0	0	--	--
3279 inorganic chem. nec	0	0	0	--	--
3281 radioactive material	0	0	0	--	--
3282 pigments & paints	0	0	0	--	--
3283 coloring mat. nec	0	0	0	--	--
3284 medicines	0	0	0	--	--
3285 perfumes & cleansers	2	0	2	--	--
3286 plastics	2	0	1	--	--
3291 pesticides	0	--	0	--	--
3292 starches, gluten, glue	6	0	6	--	--
3297 chemical additives	0	--	0	--	--
3298 wood & resin chem.	0	--	0	--	--
3299 chem. products nec	1	0	1	--	--
Total crude materials, inedible except fuels	2,637	70	118	2,438	10
Subtotal forest products, wood and chips	0	0	0	--	--
4110 rubber & gums	0	--	0	--	--
4150 fuel wood	0	--	0	--	--
4189 lumber	0	0	0	--	--
4190 forest products nec	0	0	0	--	--
Subtotal pulp and waste paper	2	--	2	--	--
4225 pulp & waste paper	2	--	2	--	--
Subtotal soil, sand, gravel, rock and stone	32	--	0	21	10
4323 gypsum	0	--	0	--	--
4327 phosphate rock	10	--	--	--	10
4331 sand & gravel	21	--	0	21	--
Subtotal iron ore and scrap	1,395	--	2	1,393	--
4410 iron ore	1,344	--	2	1,344	--
4420 iron & steel scrap	51	--	49	49	--
Subtotal non-ferrous ores and scrap	74	70	4	--	--
4650 aluminum ore	70	70	--	--	--
4680 non-ferrous scrap	0	0	--	--	--
4690 non-ferrous ores nec	4	--	4	--	--
Subtotal sulphur, clay and salt	111	0	110	0	--
4741 sulphur, (dry)	0	0	--	--	--
4782 clay & refrac. mat.	110	--	110	0	--
Subtotal other non-metal. min.	1,025	--	1	1,024	--
4900 non-metal. min. nec	1,025	--	1	1,024	--

PORT OF CHICAGO, IL
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports
Total primary manufactured goods	1,766	1,692	4	70	0
Subtotal paper products	1	0	1	--	--
5120 paper & paperboard	0	0	0	--	--
5190 paper products nec	1	0	1	--	--
Subtotal lime, cement and glass	2	2	0	--	--
5240 glass & glass prod.	1	1	0	--	--
5290 misc. mineral prod.	2	2	0	--	--
Subtotal primary iron and steel products	1,736	1,666	0	70	--
5312 pig iron	70	--	0	70	--
5315 ferro alloys	14	14	--	--	--
5320 i&s primary forms	201	201	--	--	--
5330 i&s plates & sheets	1,365	1,365	0	--	--
5360 i&s bars & shapes	66	66	0	--	--
5370 i&s pipe & tube	14	14	0	--	--
5390 primary i&s nec	6	6	0	--	--
Subtotal primary non-ferrous metal products	26	24	2	--	0
5421 copper	0	0	0	--	--
5422 aluminum	1	1	0	--	--
5429 smelted prod. nec	15	15	0	--	--
5480 fab. metal products	10	8	2	--	--
Subtotal primary wood products	0	0	0	--	--
5540 primary wood prod.	0	0	0	--	--
Total food and farm products	87	1	34	--	52
Subtotal fish	1	--	--	--	1
6134 fish (not shellfish)	1	--	--	--	1
Subtotal grain	82	--	30	--	51
6241 wheat	4	--	4	--	--
6344 corn	78	--	26	--	51
6445 oats	0	--	0	--	--
Subtotal vegetable products	0	0	0	--	--
6653 vegetable oils	0	0	0	--	--
6654 vegetables & prod.	0	0	0	--	--
Subtotal processed grain and animal feed	2	0	2	--	--
6747 grain mill products	0	0	0	--	--
6782 animal feed, prep.	2	--	2	--	--
Subtotal other agricultural products	3	1	2	--	--
6822 dairy products	0	0	0	--	--
6838 tallow, animal oils	1	0	1	--	--
6839 animals & prod. nec	0	0	0	--	--
6857 fruit & nuts nec	0	0	0	--	--
6858 fruit juices	0	0	0	--	--
6872 cocoa beans	0	0	0	--	--
6885 alcoholic beverages	0	0	0	--	--
6889 food products nec	1	0	1	--	--
6893 cotton	0	--	0	--	--
6899 farm products nec	0	0	0	--	--
Total all manufactured equipment, machinery and products	24	12	11	1	0
7110 machinery (not elec)	10	5	3	1	--
7120 electrical machinery	4	2	2	--	--
7210 vehicles & parts	3	2	1	--	--
7220 aircraft & parts	0	0	0	--	--
7230 ships & boats	0	0	0	--	0
7300 ordnance & access.	0	0	0	--	--
7400 manufac. wood prod.	0	0	0	--	--
7500 textile products	1	0	0	--	--
7600 rubber & plastic pr.	1	0	1	--	--
7900 manufac. prod. nec	5	2	4	0	--
Total unknown or not elsewhere classified	0	0	--	--	--
9900 unknown or nec	0	0	--	--	--

Commodity	Total	Domestic				
		Lakewise		Internal		
Receipts	Shipments	Receipts	Shipments	Intraport		
Total, all commodities	20,740	2,866	2,032	9,622	3,979	2,240
Total coal	3,166	--	1,892	1,120	151	3
1100 coal lignite	2,635	--	1,622	988	24	2
1200 coal coke	531	--	270	133	127	2
Total petroleum and petroleum products	4,129	20	110	1,581	1,785	634
Subtotal crude petroleum	2	--	--	--	2	--
2100 crude petroleum	2	--	--	--	2	--
Subtotal petroleum products	4,127	20	110	1,581	1,783	634
2211 gasoline	9	--	--	7	2	--
2221 kerosene	2	--	--	--	2	--
2330 distillate fuel oil	931	4	2	302	477	146
2340 residual fuel oil	697	8	11	213	392	73

PORT OF CHICAGO, IL
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Domestic					
		Lakewise		Internal			
		Receipts	Shipments	Receipts	Shipments	Inraport	
2350 lube oil & greases	199	1	--	182	7	9	
2429 naphtha & solvents	89	--	--	60	21	8	
2430 asphalt, tar & pitch	913	2	83	482	183	162	
2540 petroleum coke	1,286	4	14	335	698	235	
Total chemicals and related products	1,879	10	--	1,517	222	130	
Subtotal fertilizers	42	--	--	39	3	--	
3110 nitrogenous fert.	38	--	--	36	1	--	
3120 phosphatic fert.	2	--	--	--	2	--	
3190 fert. & mixes nec	3	--	--	3	--	--	
Subtotal other chemicals and related products	1,837	10	--	1,477	219	130	
3212 benzene & toluene	128	--	--	2	102	24	
3219 other hydrocarbons	121	--	--	61	29	31	
3220 alcohols	680	--	--	558	52	70	
3230 carboxylic acids	2	--	--	2	--	--	
3260 organic comp. nec	21	--	--	21	--	--	
3274 sodium hydroxide	645	--	--	642	3	--	
3275 inorg. elem., oxides, & halogen salts	58	--	--	58	--	--	
3276 metallic salts	158	10	--	113	29	6	
3279 inorganic chem. nec	24	--	--	20	4	--	
3299 chem. products nec	0	--	--	--	0	--	
Total crude materials, inedible except fuels	6,605	2,130	2	2,030	979	1,465	
Subtotal forest products, wood and chips	142	--	--	142	--	--	
4161 wood chips	129	--	--	129	--	--	
4190 forest products nec	12	--	--	12	--	--	
Subtotal soil, sand, gravel, rock and stone	4,250	1,310	--	1,003	472	1,465	
4322 limestone	1,314	1,302	--	12	--	--	
4331 sand & gravel	2,768	--	--	835	472	1,462	
4335 waterway improv. mat	167	8	--	156	--	3	
Subtotal iron ore and scrap	1,252	820	--	5	428	--	
4410 iron ore	872	820	--	1	51	--	
4420 iron & steel scrap	380	--	--	3	376	--	
Subtotal non-ferrous ores and scrap	124	--	--	120	4	--	
4650 aluminum ore	15	--	--	15	--	--	
4670 manganese ore	86	--	--	82	4	--	
4690 non-ferrous ores nec	23	--	--	23	--	--	
Subtotal sulphur, clay and salt	3	--	--	2	1	--	
4782 clay & refrac. mat.	3	--	--	2	1	--	
Subtotal slag	10	--	2	--	8	--	
4860 slag	10	--	2	--	8	--	
Subtotal other non-metal. min.	825	--	--	759	66	--	
4900 non-metal. min. nec	825	--	--	759	66	--	
Total primary manufactured goods	4,008	688	29	3,231	57	3	
Subtotal paper products	1	--	--	1	--	--	
5120 paper & paperboard	1	--	--	1	--	--	
Subtotal lime, cement and glass	1,374	445	5	924	--	--	
5210 lime	7	--	--	7	--	--	
5220 cement & concrete	1,367	445	5	917	--	--	
Subtotal primary iron and steel products	2,400	243	24	2,079	52	1	
5312 pig iron	607	1	22	575	8	1	
5315 ferro alloys	170	--	--	164	7	--	
5320 i&s primary forms	63	--	--	63	--	--	
5330 i&s plates & sheets	947	239	3	680	25	--	
5360 i&s bars & shapes	208	--	--	205	3	--	
5370 i&s pipe & tube	6	--	--	6	--	--	
5390 primary i&s nec	399	3	--	387	9	--	
Subtotal primary non-ferrous metal products	232	--	--	226	5	2	
5422 aluminum	8	--	--	8	--	--	
5429 smelted prod. nec	35	--	--	35	--	--	
5480 fab. metal products	188	--	--	182	5	2	
Total food and farm products	933	18	--	127	783	5	
Subtotal grain	577	18	--	44	511	5	
6241 wheat	84	18	--	41	22	3	
6344 corn	494	--	--	3	489	2	
Subtotal oilseeds	219	--	--	2	217	--	
6522 soybeans	219	--	--	2	217	--	
Subtotal vegetable products	31	--	--	--	31	--	
6653 vegetable oils	30	--	--	--	30	--	
6654 vegetables & prod.	1	--	--	--	1	--	
Subtotal processed grain and animal feed	23	--	--	--	23	--	
6782 animal feed, prep.	23	--	--	--	23	--	
Subtotal other agricultural products	82	--	--	82	--	--	
6861 sugar	61	--	--	61	--	--	
6865 molasses	21	--	--	21	--	--	
Total all manufactured equipment, machinery and products	19	--	--	17	3	--	
7110 machinery (not elec)	2	--	--	1	1	--	
7400 manufac. wood prod.	14	--	--	14	--	--	

PORT OF CHICAGO, IL
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Domestic					
		Lakewise		Internal			
		Receipts	Shipments	Receipts	Shipments	Intraport	
7600 rubber & plastic pr.	2	--	--	--	2	--	
7900 manufac. prod. nec	1	--	--	1	--	--	

*Includes 2 (x1000) tons of foreign inbound in-transits.

INDIANA HARBOR, IN

Section Included: Approach channel, outer harbor and canal entrance channel to the first E. J. & E. R. R. Bridge: Indiana Harbor Canal, including the Calumet River Branch to Columbus Drive Bridge and the Lake George Branch to 0.2 miles past Indianapolis Blvd. Project Depth: 29 feet in approach channel, 28 feet in harbor basin, 27 feet in canal entrance channel, and 22 feet in remainder of canal to 0.2 miles past Indianapolis Blvd. on Lake George Branch and Columbus Drive on Calumet River Branch.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	15,055	1992	15,326	1995	15,700	1998	14,910
1990	14,673	1993	15,546	1996	16,893		
1991	13,767	1994	16,145	1997	16,524		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports	Exports	Imports	Exports
Total, all commodities	119	28	5	55	31
Total petroleum and petroleum products	0	--	0	--	--
Subtotal petroleum products	0	--	0	--	--
2540 petroleum coke	0	--	0	--	--
Total chemicals and related products	0	--	0	--	--
Subtotal other chemicals and related products	0	--	0	--	--
3230 carboxylic acids	0	--	0	--	--
3282 pigments & paints	0	--	0	--	--
3284 medicines	0	--	0	--	--
3285 perfumes & cleansers	0	--	0	--	--
Total crude materials, inedible except fuels	84	28	1	55	--
Subtotal forest products, wood and chips	1	--	1	--	--
4170 wood in the rough	0	--	0	--	--
4189 lumber	1	--	1	--	--
Subtotal pulp and waste paper	0	--	0	--	--
4225 pulp & waste paper	0	--	0	--	--
Subtotal soil, sand, gravel, rock and stone	0	--	0	--	--
4331 sand & gravel	0	--	0	--	--
Subtotal iron ore and scrap	55	--	--	55	--
4410 iron ore	55	--	--	55	--
Subtotal non-ferrous ores and scrap	28	28	--	--	--
4650 aluminum ore	28	28	--	--	--
Total primary manufactured goods	0	--	0	--	--
Subtotal paper products	0	--	0	--	--
5120 paper & paperboard	0	--	0	--	--
Total food and farm products	34	--	3	--	31
Subtotal grain	31	--	0	--	31
6241 wheat	3	--	0	--	3
6344 corn	28	--	0	--	28
Subtotal vegetable products	1	--	1	--	--
6653 vegetable oils	0	--	0	--	--
6654 vegetables & prod.	1	--	1	--	--
Subtotal processed grain and animal feed	2	--	2	--	--
6747 grain mill products	0	--	0	--	--
6781 hay & fodder	1	--	1	--	--
6782 animal feed, prep.	0	--	0	--	--
Subtotal other agricultural products	1	--	1	--	--
6811 meat, fresh, frozen	0	--	0	--	--
6817 meat, prepared	0	--	0	--	--
6822 dairy products	0	--	0	--	--
6839 animals & prod. nec	0	--	0	--	--
6857 fruit & nuts nec	0	--	0	--	--
6858 fruit juices	0	--	0	--	--
6889 food products nec	0	--	0	--	--
6899 farm products nec	0	--	0	--	--
Total all manufactured equipment, machinery and products	0	--	0	--	--
7110 machinery (not elec)	0	--	0	--	--
7120 electrical machinery	0	--	0	--	--
7400 manufac. wood prod.	0	--	0	--	--
7500 textile products	0	--	0	--	--

INDIANA HARBOR, IN
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports	Exports	Imports	Exports
7600 rubber & plastic pr.	0	--	0	--	--
7900 manufac. prod. nec	0	--	0	--	--

Commodity	Total	Domestic				
		Lakewise		Internal		
		Receipts	Shipments	Receipts	Shipments	Intraport
Total, all commodities	14,791	12,041	1,569	397	729	55
Total coal	183	46	--	130	7	--
1100 coal lignite	22	16	--	—	7	--
1200 coal coke	161	31	--	130	—	--
Total petroleum and petroleum products	2,184	3	1,328	210	588	55
Subtotal crude petroleum	2	--	--	2	--	--
2100 crude petroleum	2	--	--	2	--	--
Subtotal petroleum products	2,181	3	1,328	207	588	55
2211 gasoline	463	--	463	—	—	--
2330 distillate fuel oil	283	--	100	67	96	20
2340 residual fuel oil	206	3	9	105	55	34
2350 lube oil & greases	69	--	1	18	50	--
2429 naphtha & solvents	5	--	--	—	5	--
2430 asphalt, tar & pitch	986	--	709	—	278	--
2540 petroleum coke	169	--	46	18	105	1
Total crude materials, inedible except fuels	12,385	11,988	238	37	122	--
Subtotal soil, sand, gravel, rock and stone	1,122	1,120	--	--	2	--
4322 limestone	1,120	1,120	--	—	—	--
4323 gypsum	2	--	--	—	2	--
Subtotal iron ore and scrap	10,821	10,756	--	35	30	--
4410 iron ore	10,798	10,756	--	35	8	--
4420 iron & steel scrap	23	--	--	—	23	--
Subtotal slag	437	112	238	--	87	--
4860 slag	437	112	238	—	87	--
Subtotal other non-metal. min.	5	--	--	2	3	--
4900 non-metal. min. nec	5	--	--	2	3	--
Total primary manufactured goods	40	5	2	20	13	--
Subtotal primary iron and steel products	27	5	2	20	--	--
5312 pig iron	27	5	2	20	—	--
Subtotal primary non-ferrous metal products	13	--	--	--	13	--
5480 fab. metal products	13	--	--	—	13	--

BURNS WATERWAY HARBOR, IN

Section Included: Approach channel, outer harbor, and two harbor arms. Project Depth: 30 feet in approach channel, 28 feet in outer harbor, and 27 feet in the east and west harbor arms.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	8,695	1992	8,756	1995	10,275	1998	9,006
1990	9,524	1993	9,315	1996	9,848		
1991	8,304	1994	9,344	1997	10,414		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports	Exports	Imports	Exports
Total, all commodities	483	66	6	209	202
Total coal	176	--	--	--	176
1200 coal coke	176	--	--	--	176
Total petroleum and petroleum products	13	--	--	--	13
Subtotal petroleum products	13	--	--	--	13
2540 petroleum coke	13	--	--	—	13
Total chemicals and related products	12	--	0	11	--
Subtotal fertilizers	11	--	—	11	--
3130 potassic fert.	11	--	—	11	--
Subtotal other chemicals and related products	0	--	0	--	--
3250 organo - inorg. comp.	0	--	0	—	--
3286 plastics	0	--	0	—	--

BURNS WATERWAY HARBOR, IN
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports	Exports	Imports	Exports
Total crude materials, inedible except fuels	193	--	6	175	13
Subtotal iron ore and scrap	175	--	--	175	--
4410 iron ore	175	--	--	175	--
Subtotal non-ferrous ores and scrap	3	--	3	--	--
4680 non-ferrous scrap	3	--	3	--	--
Subtotal sulphur, clay and salt	16	--	3	--	13
4782 clay & refrac. mat.	16	--	3	--	13
Total primary manufactured goods	89	66	--	23	--
Subtotal primary iron and steel products	89	66	--	23	--
5312 pig iron	23	--	--	23	--
5315 ferro alloys	7	7	--	--	--
5330 i&s plates & sheets	59	59	--	--	--
5370 i&s pipe & tube	0	0	--	--	--
5390 primary i&s nec	0	0	--	--	--
Total all manufactured equipment, machinery and products	0	0	--	--	--
7110 machinery (not elec)	0	0	--	--	--

Commodity	Total	Domestic				
		Lakewise		Internal		
		Receipts	Shipments	Receipts	Shipments	Intraport
Total, all commodities	8,524	6,809	160	981	572	2
Total coal	449	67	111	263	7	--
1100 coal lignite	152	66	37	50	--	--
1200 coal coke	297	1	75	213	7	--
Total petroleum and petroleum products	133	39	5	77	12	--
Subtotal petroleum products	133	39	5	77	12	--
2330 distillate fuel oil	24	24	--	--	--	--
2340 residual fuel oil	5	3	3	--	--	--
2430 asphalt, tar & pitch	47	12	2	33	--	--
2540 petroleum coke	56	--	--	43	12	--
Total chemicals and related products	155	36	--	108	12	--
Subtotal fertilizers	82	--	--	80	2	--
3110 nitrogenous fert.	71	--	--	69	2	--
3120 phosphatic fert.	11	--	--	11	--	--
Subtotal other chemicals and related products	73	36	--	27	10	--
3219 other hydrocarbons	16	--	--	16	--	--
3274 sodium hydroxide	11	--	--	11	--	--
3276 metallic salts	46	36	--	--	10	--
Total crude materials, inedible except fuels	6,813	6,636	15	144	16	2
Subtotal soil, sand, gravel, rock and stone	896	886	--	2	9	--
4322 limestone	888	886	--	2	--	--
4323 gypsum	9	--	--	--	9	--
Subtotal iron ore and scrap	5,771	5,750	--	21	--	--
4410 iron ore	5,753	5,750	--	3	--	--
4420 iron & steel scrap	18	--	--	18	--	--
Subtotal non-ferrous ores and scrap	1	--	--	1	--	--
4670 manganese ore	1	--	--	1	--	--
Subtotal sulphur, clay and salt	21	--	--	19	--	2
4782 clay & refrac. mat.	21	--	--	19	--	2
Subtotal slag	122	--	15	99	8	--
4860 slag	122	--	15	99	8	--
Subtotal other non-metal. min.	2	--	--	2	--	--
4900 non-metal. min. nec	2	--	--	2	--	--
Total primary manufactured goods	640	31	29	368	212	--
Subtotal lime, cement and glass	12	--	--	12	--	--
5210 lime	12	--	--	12	--	--
Subtotal primary iron and steel products	625	31	29	353	212	--
5312 pig iron	78	--	1	76	--	--
5315 ferro alloys	1	--	--	--	1	--
5320 i&s primary forms	140	--	--	140	--	--
5330 i&s plates & sheets	328	31	24	84	188	--
5360 i&s bars & shapes	15	--	--	13	2	--
5390 primary i&s nec	64	--	3	40	21	--
Subtotal primary non-ferrous metal products	3	--	--	3	--	--
5480 fab. metal products	3	--	--	3	--	--
Total food and farm products	329	--	--	17	312	--
Subtotal grain	242	--	--	17	225	--
6241 wheat	19	--	--	16	3	--
6344 corn	223	--	--	2	222	--
Subtotal oilseeds	86	--	--	--	86	--
6522 soybeans	86	--	--	--	86	--

BURNS WATERWAY HARBOR, IN
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Total	Domestic					
		Lakewise		Internal			Intraport
		Receipts	Shipments	Receipts	Shipments		
Subtotal processed grain and animal feed	1	--	--	--	--	1	--
6782 animal feed, prep.	1	--	--	--	--	1	--
Total all manufactured equipment, machinery and products	5	--	--	4	0	--	
7110 machinery (not elec)	4	--	--	4	--	0	--
7120 electrical machinery	0	--	--	--	--	0	--

Other Harbors and Waterways 1998

Harbor or Waterway Project	Commodity	Thousand Short Tons
CHICAGO HARBOR, IL (INCLUDED IN PORT OF CHICAGO)	4335 waterway improv. mat	157
	Total Tons(x1000)	157
	Total Ton-miles(x1000)	2
MICHIGAN CITY HARBOR, IN	No Commerce Reported	
Non-project		
BUFFINGTON HARBOR, IN	1100 coal lignite 1200 coal coke 2330 distillate fuel oil 2340 residual fuel oil 4322 limestone 4650 aluminum ore 4860 slag	155 28 0 1 1,360 11 267
	Total Tons(x1000)	1,823
GARY HARBOR, IN	1200 coal coke 2330 distillate fuel oil 2340 residual fuel oil 2540 petroleum coke 4322 limestone 4410 iron ore 4420 iron & steel scrap 4650 aluminum ore 4860 slag 5220 cement & concrete 5312 pig iron 5330 i&s plates & sheets 5390 primary i&s nec	141 0 0 8 194 8,023 207 2 151 6 5 312 34
	Total Tons(x1000)	9,083

TWO HARBORS (AGATE BAY), MN

Section Included: Entire harbor. Controlling Depth: 28 feet except for a 26 foot area along the east project line. Project Depth: 28 feet in inner basin and 30 feet near entrance.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	10,536	1992	11,160	1995	8,265	1998	13,223
1990	12,313	1993	10,711	1996	10,662		
1991	12,501	1994	9,288	1997	13,508		

Freight Traffic, 1998 (thousand short tons)

	Commodity	Grand Total	Lakewise Shipments
Total, all commodities		13,223	13,223
Total crude materials, inedible except fuels		13,223	13,223
Subtotal iron ore and scrap		13,223	13,223
4410 iron ore		12,956	12,956
4420 iron & steel scrap		266	266

DULUTH-SUPERIOR HARBOR, MN AND WI

Section Included: Superior Bay and its tributaries, St. Louis Bay and St. Louis River, and Allouez Bay. Controlling Depth: 32 feet in lake approaches, diminishing to a minimum of 20 feet in certain inner channels; there are numerous 1-2 foot shoals scattered in portions of the Duluth and Superior Harbor Basins. Project Depth: 32 feet in lake approaches; 27 feet in Duluth and Superior Harbor Basins, superior front channel, and in ore-channel routes through north and south channels to D. M. & I. R. Y. ore docks; 27 feet in Howards Bay and Allouez Bay; 23 feet in remaining portion of south, upper, and Minnesota channels to Hallet Dock No. 6; and 20 feet from thence to northerly end of Clough Island. Navigation Season: April 3 to January 11.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	40,803	1992	39,304	1995	45,049	1998	42,443
1990	40,766	1993	37,679	1996	41,398		
1991	37,716	1994	41,819	1997	41,929		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Inraport
		Imports	Exports*	Imports	Exports	Total	Lakewise Shipments	Receipts	
Total, all commodities	42,443	34	3,470	733	7,708	30,497	3,041	27,425	31
Total coal	15,622	--	--	--	2,155	13,467	54	13,414	--
1100 coal lignite	15,622	--	--	--	2,155	13,467	54	13,414	--
Total chemicals and related products	42	11	0	18	--	12	12	--	--
Subtotal fertilizers	11	11	--	--	--	--	--	--	--
3110 nitrogenous fert.	11	11	--	--	--	--	--	--	--
Subtotal other chemicals and related products	31	--	0	18	--	12	12	--	--
3240 nitrogen func. comp.	0	--	0	--	--	--	--	--	--
3276 metallic salts	30	--	0	18	--	12	12	--	--
3286 plastics	0	--	0	--	--	--	--	--	--
3298 wood & resin chem.	0	--	0	--	--	--	--	--	--
Total crude materials, inedible except fuels	21,053	--	17	176	4,344	16,516	2,763	13,722	31
Subtotal forest products, wood and chips	7	--	0	7	--	--	--	--	--
4170 wood in the rough	7	--	--	7	--	--	--	--	--
4189 lumber	0	--	0	--	--	--	--	--	--
Subtotal pulp and waste paper	1	--	1	--	--	--	--	--	--
4225 pulp & waste paper	1	--	1	--	--	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	2,736	--	--	--	--	2,736	2,717	--	19
4322 limestone	2,702	--	--	--	--	2,702	2,682	--	19
4331 sand & gravel	34	--	--	--	--	34	34	--	--

DULUTH-SUPERIOR HARBOR, MN AND WI
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Inraport
		Imports	Exports*	Imports	Exports	Total	Lakewise Receipts	Shipments	
Subtotal iron ore and scrap	17,976	—	—	—	4,242	13,734	—	13,722	12
4410 iron ore	17,976	—	—	—	4,242	13,734	—	13,722	12
Subtotal non-ferrous ores and scrap	0	—	0	—	—	—	—	—	—
4680 non-ferrous scrap	0	—	0	—	—	—	—	—	—
Subtotal sulphur, clay and salt	116	—	14	—	101	—	—	—	—
4782 clay & refrac. mat.	116	—	14	—	101	—	—	—	—
Subtotal slag	17	—	—	—	—	17	17	—	—
4860 slag	17	—	—	—	—	17	17	—	—
Subtotal other non-metal. min.	201	—	1	170	—	30	30	—	—
4900 non-metal. min. nec	201	—	1	170	—	30	30	—	—
Total primary manufactured goods	541	16	3	307	3	212	212	—	—
Subtotal paper products	0	—	0	—	—	—	—	—	—
5120 paper & paperboard	0	—	0	—	—	—	—	—	—
5190 paper products nec	0	—	0	—	—	—	—	—	—
Subtotal lime, cement and glass	521	—	0	307	2	212	212	—	—
5220 cement & concrete	521	—	—	307	2	212	212	—	—
5290 misc. mineral prod.	0	—	0	—	—	—	—	—	—
Subtotal primary iron and steel products	20	16	3	—	1	—	—	—	—
5315 ferro alloys	0	—	0	—	—	—	—	—	—
5330 i&s plates & sheets	17	16	—	—	1	—	—	—	—
5370 i&s pipe & tube	3	—	3	—	—	—	—	—	—
Subtotal primary non-ferrous metal products	0	—	0	—	—	—	—	—	—
5429 smelted prod. nec	0	—	0	—	—	—	—	—	—
5480 fab. metal products	0	—	0	—	—	—	—	—	—
Total food and farm products	5,177	0	3,450	231	1,207	290	—	290	—
Subtotal fish	0	—	0	—	—	—	—	—	—
6134 fish (not shellfish)	0	—	0	—	—	—	—	—	—
Subtotal grain	3,647	—	2,506	231	621	290	—	290	—
6241 wheat	2,394	—	1,785	—	319	290	—	290	—
6344 corn	987	—	685	—	302	—	—	—	—
6443 barley & rye	266	—	36	231	—	—	—	—	—
Subtotal oilseeds	1,468	—	882	—	586	—	—	—	—
6522 soybeans	1,089	—	503	—	586	—	—	—	—
6534 flaxseed	8	—	8	—	—	—	—	—	—
6590 oilseeds nec	371	—	371	—	—	—	—	—	—
Subtotal vegetable products	16	0	16	—	—	—	—	—	—
6654 vegetables & prod.	16	0	16	—	—	—	—	—	—
Subtotal processed grain and animal feed	43	—	43	—	—	—	—	—	—
6747 grain mill products	3	—	3	—	—	—	—	—	—
6781 hay & fodder	1	—	1	—	—	—	—	—	—
6782 animal feed, prep.	39	—	39	—	—	—	—	—	—
Subtotal other agricultural products	3	—	3	—	—	—	—	—	—
6811 meat, fresh, frozen	2	—	2	—	—	—	—	—	—
6822 dairy products	0	—	0	—	—	—	—	—	—

DULUTH-SUPERIOR HARBOR, MN AND WI
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Intraport
		Imports	Exports*	Imports	Exports	Total	Lakewise Receipts	Shipments	
6839 animals & prod. nec	0	—	0	—	—	—	—	—	—
6857 fruit & nuts nec	0	—	0	—	—	—	—	—	—
6858 fruit juices	0	—	0	—	—	—	—	—	—
6885 alcoholic beverages	0	—	0	—	—	—	—	—	—
6899 farm products nec	0	—	0	—	—	—	—	—	—
Total all manufactured equipment, machinery and products	7	7	0	—	0	—	—	—	—
7110 machinery (not elec)	1	0	0	—	—	—	—	—	—
7120 electrical machinery	0	—	0	—	—	—	—	—	—
7210 vehicles & parts	6	6	0	—	—	—	—	—	—
7400 manufac. wood prod.	0	—	0	—	—	—	—	—	—
7600 rubber & plastic pr.	0	—	—	—	0	—	—	—	—
7900 manufac. prod. nec	0	—	0	—	—	—	—	—	—
Total unknown or not elsewhere classified	1	—	1	—	—	—	—	—	—
9900 unknown or nec	1	—	1	—	—	—	—	—	—

*Includes 1 (x1000) tons of foreign outbound in-transits.

TACONITE HARBOR, MN

NON-CORPS PROJECT

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	8,991	1992	9,069	1995	9,247	1998	8,761
1990	9,651	1993	9,716	1996	8,408		
1991	8,684	1994	9,510	1997	8,607		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise	
		Receipts	Shipments
Total, all commodities	8,761	646	8,115
Total coal	646	646	--
1100 coal lignite	646	646	--
Total crude materials, inedible except fuels	8,115	--	8,115
Subtotal iron ore and scrap	8,115	--	8,115
4410 iron ore	8,115	--	8,115

PRESQUE ISLE HARBOR, MI

Section Included: Entire harbor. Controlling and Project Depths: 30 feet in approach and 28 feet in basin. Navigation Season: March 31 to January 21.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	12,156	1992	10,737	1995	10,099	1998	10,483
1990	7,737	1993	9,672	1996	8,959		
1991	7,801	1994	10,191	1997	11,201		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic		
		Imports	Exports	Total	Lakewise	
					Receipts	Shipments
Total, all commodities	10,483	52	1,884	8,547	2,059	6,488
Total coal	1,816	—	—	1,816	1,816	—
1100 coal lignite	1,816	—	—	1,816	1,816	—
Total crude materials, inedible except fuels	8,667	52	1,884	6,732	244	6,488
Subtotal soil, sand, gravel, rock and stone	228	52	—	176	176	—
4322 limestone	176	—	—	176	176	—
4331 sand & gravel	52	52	—	—	—	—
Subtotal iron ore and scrap	8,439	—	1,884	6,556	68	6,488
4410 iron ore	8,439	—	1,884	6,556	68	6,488

MARQUETTE HARBOR, MI

Section Included: Entire harbor. Controlling Depth: 26 feet. Project Depth: 27 feet. Navigation Season: May 14 to November 22.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	770	1992	454	1995	836	1998	869
1990	626	1993	789	1996	1,598		
1991	634	1994	822	1997	689		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise	
		Receipts	Shipments
Total, all commodities	869	869	
Total coal	179	179	
1100 coal lignite	179	179	
Total crude materials, inedible except fuels	690	690	
Subtotal soil, sand, gravel, rock and stone	690	690	
4322 limestone	690	690	

DRUMMOND ISLAND, MI (INCLUDED IN ST. MARYS RIVER)

Section Included: Private loading dock on St. Marys River at Drummond Island, MI. Controlling Depths: 30 feet to and from Lake Huron; 27.0 feet to and from Lake Superior; 27.0 feet to Lake Superior; 23 feet at dock. Project Depth: See St. Marys River.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	820	1992	1,496	1995	1,606	1998	1,582
1990	758	1993	2,205	1996	1,682		
1991	786	1994	1,474	1997	1,560		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic	
		Imports	Exports	Lakewise	
				Receipts	Shipments
Total, all commodities	1,582	14	166	1,402	
Total crude materials, inedible except fuels	1,582	14	166	1,402	
Subtotal soil, sand, gravel, rock and stone	1,568	—	166	1,402	
4322 limestone	1,568	—	166	166	1,402
Subtotal other non-metal. min.	14	14	—	—	—
4900 non-metal. min. nec	14	14	—	—	—

ST. MARYS RIVER, MI

Section Included: Entire length of St. Marys River from Lake Superior to Lake Huron, including American ports of Sault Ste. Marie, Raber, Lime Island, Drummond Island, and Detour, Michigan.

Name of Canal	Project Depth	Controlling Depth
Gros Cap Reefs	30.0	30.0
Point Iroquois Shoal Channel	30.0	29.4
Point Iroquois Anchorage areas	29.0	21.0
Birch Point Course	28.0-30.0	30.0
Brush Point Course	28.0-30.0	28.0
Point Louise Channel	28.0	28.0
Point Aux Pins Course	28.0	28.0
Vidal Shoals Channel	28.0	28.0
Locks and Canal (see report for St. Marys Fall Canal)		
Bayfield Channel Course 1	28.0	28.0
Anchorage and maneuver area angle courses 1 and 2	28.5	28.5
Little Rapids Courses 2 and 3	27.0	27.0
Lake Nicolet Channel	29.0	29.0
Lake Nicolet Anchorage	28.0	28.0
Middle Neebish Channel	27.0-28.0	27.0
West Neebish Channel	27.5-28.5	27.5
Lake Munuscong Channel	28.0	28.0
Lime Island Channel	29.0	29.0
Detour Passage	30.0	29.0
Pipe Island Course	29.0	29.0
Watson Reef Course	30.0	30.0
Crab Island	30.0	30.0

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	73,469	1992	71,223	1995	78,639	1998	82,235
1990	71,865	1993	69,623	1996	78,939		
1991	68,055	1994	75,939	1997	83,822		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports	Through		Imports	Exports	Through	
				Upbound	Downbnd			Upbound	Downbnd
Total, all commodities	18,893	3	11	34	3,470	247	166	2,782	12,178
Total coal	3,599	--	--	--	--	--	--	1,312	2,288
1100 coal lignite	3,599	--	--	--	--	--	--	1,312	2,288
Total petroleum and petroleum products	21	--	--	--	--	--	--	--	21
Subtotal petroleum products	21	--	--	--	--	--	--	--	21
2330 distillate fuel oil	5	--	--	--	--	--	--	--	5
2430 asphalt, tar & pitch	15	--	--	--	--	--	--	--	15
Total chemicals and related products	334	--	4	11	0	--	0	51	268
Subtotal fertilizers	279	--	--	11	--	--	--	--	268
3110 nitrogenous fert.	29	--	--	11	--	--	--	--	18
3130 potassium fert.	249	--	--	--	--	--	--	--	249
Subtotal other chemicals and related products	55	--	4	--	0	--	0	51	0
3240 nitrogen func. comp.	0	--	--	--	0	--	--	--	--
3250 organo - inorg. comp.	1	--	1	--	--	--	--	--	--
3274 sodium hydroxide	10	--	--	--	--	--	--	10	--
3276 metallic salts	41	--	--	--	0	--	--	41	--
3283 coloring mat. nec	0	--	--	--	--	--	--	--	0
3284 medicines	3	--	3	--	--	--	--	--	--
3286 plastics	0	--	0	--	0	--	--	--	--
3298 wood & resin chem.	0	--	--	--	0	--	--	--	--
3299 chem. products nec	0	--	--	--	--	--	0	--	--

ST. MARYS RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports	Through Upbound	Downbnd	Imports	Exports	Through Upbound	Downbnd
Total crude materials, inedible except fuels	9,197	3	--	--	17	247	166	979	7,784
Subtotal forest products, wood and chips	0	--	--	--	0	--	--	--	--
4189 lumber	0	--	--	--	0	--	--	--	--
Subtotal pulp and waste paper	4	3	--	--	1	--	--	--	--
4225 pulp & waste paper	4	3	--	--	1	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	1,579	--	--	--	--	56	166	741	616
4322 limestone	882	--	--	--	--	--	166	716	--
4331 sand & gravel	697	--	--	--	--	56	--	25	616
Subtotal iron ore and scrap	6,485	--	--	--	--	--	--	23	6,463
4410 iron ore	6,441	--	--	--	--	--	--	23	6,419
4420 iron & steel scrap	44	--	--	--	--	--	--	--	44
Subtotal non-ferrous ores and scrap	0	--	--	--	0	--	--	--	--
4680 non-ferrous scrap	0	--	--	--	0	--	--	--	--
Subtotal sulphur, clay and salt	702	--	--	--	14	96	--	--	591
4782 clay & refrac. mat.	702	--	--	--	14	96	--	--	591
Subtotal slag	23	--	--	--	--	0	--	--	23
4860 slag	23	--	--	--	--	0	--	--	23
Subtotal other non-metal. min.	403	--	--	--	1	95	--	215	91
4900 non-metal. min. nec	403	--	--	--	1	95	--	215	91
Total primary manufactured goods	942	0	0	16	3	--	--	441	482
Subtotal paper products	0	--	--	--	0	--	--	--	--
5120 paper & paperboard	0	--	--	--	0	--	--	--	--
5190 paper products nec	0	--	--	--	0	--	--	--	--
Subtotal lime, cement and glass	923	--	--	--	0	--	--	441	482
5220 cement & concrete	923	--	--	--	--	--	--	441	482
5290 misc. mineral prod.	0	--	--	--	0	--	--	--	--
Subtotal primary iron and steel products	19	0	0	16	3	--	--	--	0
5312 pig iron	0	--	0	--	--	--	--	--	--
5315 ferro alloys	0	--	--	--	0	--	--	--	--
5330 i&s plates & sheets	16	--	--	16	--	--	--	--	0
5370 i&s pipe & tube	3	0	--	--	3	--	--	--	0
Subtotal primary non-ferrous metal products	0	0	--	--	0	--	--	--	0
5421 copper	0	--	--	--	--	--	--	--	0
5429 smelted prod. nec	0	--	--	--	0	--	--	--	--
5480 fab. metal products	0	0	--	--	0	--	--	--	--
Total food and farm products	4,790	--	5	0	3,450	--	--	--	1,336
Subtotal fish	0	--	--	--	0	--	--	--	--
6134 fish (not shellfish)	0	--	--	--	0	--	--	--	--
Subtotal grain	3,256	--	--	--	2,506	--	--	--	750
6241 wheat	2,215	--	--	--	1,785	--	--	--	430
6344 corn	943	--	--	--	685	--	--	--	259
6443 barley & rye	36	--	--	--	36	--	--	--	--
6445 oats	62	--	--	--	--	--	--	--	62

ST. MARYS RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports	Through Upbound	Through Downbnd	Imports	Exports	Through Upbound	Through Downbnd
Subtotal oilseeds	1,468	--	--	--	882	--	--	--	586
6522 soybeans	1,089	--	--	--	503	--	--	--	586
6534 flaxseed	8	--	--	--	8	--	--	--	--
6590 oilseeds nec	371	--	--	--	371	--	--	--	--
Subtotal vegetable products	16	--	0	0	16	--	--	--	--
6653 vegetable oils	0	--	0	--	--	--	--	--	--
6654 vegetables & prod.	16	--	0	0	16	--	--	--	--
Subtotal processed grain and animal feed	43	--	0	--	43	--	--	--	--
6747 grain mill products	3	--	--	--	3	--	--	--	--
6781 hay & fodder	1	--	--	--	1	--	--	--	--
6782 animal feed, prep.	39	--	0	--	39	--	--	--	--
Subtotal other agricultural products	7	--	4	--	3	--	--	--	--
6811 meat, fresh, frozen	2	--	--	--	2	--	--	--	--
6822 dairy products	0	--	--	--	0	--	--	--	--
6839 animals & prod. nec	5	--	4	--	0	--	--	--	--
6857 fruit & nuts nec	0	--	--	--	0	--	--	--	--
6858 fruit juices	0	--	0	--	0	--	--	--	--
6885 alcoholic beverages	0	--	--	--	0	--	--	--	--
6889 food products nec	0	--	0	--	--	--	--	--	--
6899 farm products nec	0	--	--	--	0	--	--	--	--
Total all manufactured equipment, machinery and products	9	--	2	7	0	0	--	--	0
7110 machinery (not elec)	1	--	0	0	0	0	--	--	--
7120 electrical machinery	0	--	--	--	0	--	--	--	--
7210 vehicles & parts	6	--	0	6	0	--	--	--	--
7230 ships & boats	0	--	--	--	--	--	--	--	0
7400 manufac. wood prod.	0	--	--	--	0	--	--	--	--
7600 rubber & plastic pr.	0	--	--	--	--	--	--	--	0
7900 manufac. prod. nec	2	--	2	--	0	--	--	--	--
Total unknown or not elsewhere classified	1	--	--	--	1	--	--	--	--
9900 unknown or nec	1	--	--	--	1	--	--	--	--
Ton-miles Foreign & Canadian (x1000)	1,117,455	147	478	2,187	222,109	8,817	4,481	128,832	750,403

Commodity	Total	Lakewise			
		Receipts	Shipments	Through Upbound	Through Downbnd
Total, all commodities	63,342	15	1,402	4,602	57,323
Total coal	12,000	--	--	961	11,039
1100 coal lignite	12,000	--	--	961	11,039
Total chemicals and related products	12	--	--	12	--
Subtotal other chemicals and related products	12	--	--	12	--
3276 metallic salts	12	--	--	12	--

ST. MARYS RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Lakewise			
		Receipts	Shipments	Through	
		Upbound	Downbnd		
Total crude materials, inedible except fuels	50,828	15	1,402	3,418	45,994
Subtotal soil, sand, gravel, rock and stone	4,787	15	1,402	3,371	--
4322 limestone	4,753	15	1,402	3,337	--
4331 sand & gravel	34	--	--	34	--
Subtotal iron ore and scrap	45,994	--	--	--	45,994
4410 iron ore	45,728	--	--	--	45,728
4420 iron & steel scrap	266	--	--	--	266
Subtotal slag	17	--	--	17	--
4860 slag	17	--	--	17	--
Subtotal other non-metal. min.	30	--	--	30	--
4900 non-metal. min. nec	30	--	--	30	--
Total primary manufactured goods	212	--	--	212	--
Subtotal lime, cement and glass	212	--	--	212	--
5220 cement & concrete	212	--	--	212	--
Total food and farm products	290	--	--	--	290
Subtotal grain	290	--	--	--	290
6241 wheat	290	--	--	--	290
Ton-miles (x1000)	4,009,590	683	45,675	294,553	3,668,679
Lakewise					
Tons All Traffic (x1000)	82,235				
Ton-miles All Traffic (x1000)	5,127,056				

ST. MARYS FALLS CANAL, MI AND SAULT STE. MARIE, ONTARIO SHIP CANAL, CN (INCLUDED IN ST. MARYS RIVER)

Section Included: American and Canadian Navigation Canals and Locks at St. Marys Falls, Sault Ste. Marie, MI. and Ontario. Controlling Depths: Sabin Lock 23.1, Davis Lock 23.1, Macarthur Lock 31.0, Poe Lock 32.0 and 16.8 feet Canadian Canal. Project Depth: See St. Marys River.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	75,143	1992	67,752	1995	75,113	1998	78,296
1990	68,514	1993	65,351	1996	75,353		
1991	64,808	1994	72,657	1997	79,850		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Through		Through		Total	Lakewise	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	
Total, all commodities	78,296	34	3,470	850	11,593	62,348	5,025	57,323
Total coal	14,113	--	--	205	1,907	12,000	961	11,039
1100 coal lignite	14,113	--	--	205	1,907	12,000	961	11,039
Total petroleum and petroleum products	5	--	--	--	5	--	--	--
Subtotal petroleum products	5	--	--	--	5	--	--	--
2330 distillate fuel oil	5	--	--	--	5	--	--	--
Total chemicals and related products	342	11	0	51	268	12	12	--
Subtotal fertilizers	279	11	--	--	268	--	--	--
3110 nitrogenous fert.	29	11	--	--	18	--	--	--
3130 potassic fert.	249	--	--	--	249	--	--	--
Subtotal other chemicals and related products	64	--	0	51	0	12	12	--
3240 nitrogen func. comp.	0	--	0	--	--	--	--	--
3274 sodium hydroxide	10	--	--	10	--	--	--	--
3276 metallic salts	53	--	0	41	--	12	12	--
3283 coloring mat. nec	0	--	--	--	0	--	--	--
3286 plastics	0	--	0	--	--	--	--	--
3298 wood & resin chem.	0	--	0	--	--	--	--	--
Total crude materials, inedible except fuels	57,667	--	17	220	7,595	49,834	3,840	45,994
Subtotal forest products, wood and chips	0	--	0	--	--	--	--	--
4189 lumber	0	--	0	--	--	--	--	--
Subtotal pulp and waste paper	1	--	1	--	--	--	--	--
4225 pulp & waste paper	1	--	1	--	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	4,435	--	--	5	636	3,793	3,793	--
4322 limestone	3,764	--	--	5	--	3,759	3,759	--
4331 sand & gravel	670	--	--	--	636	34	34	--

ST. MARYS FALLS CANAL, MI AND SAULT STE. MARIE, ONTARIO SHIP CANAL, CN (INCLUDED IN ST. MARYS RIVER)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Through		Through		Total	Lakewise	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Through	Downbnd
Subtotal iron ore and scrap	52,255	--	--	--	6,261	45,994	--	45,994
4410 iron ore	51,989	--	--	--	6,261	45,728	--	45,728
4420 iron & steel scrap	266	--	--	--	--	266	--	266
Subtotal non-ferrous ores and scrap	0	--	0	--	--	--	--	--
4680 non-ferrous scrap	0	--	0	--	--	--	--	--
Subtotal sulphur, clay and salt	643	--	14	--	628	--	--	--
4782 clay & refrac. mat.	643	--	14	--	628	--	--	--
Subtotal slag	17	--	--	--	--	17	17	--
4860 slag	17	--	--	--	--	17	17	--
Subtotal other non-metal. min.	316	--	1	215	70	30	30	--
4900 non-metal. min. nec	316	--	1	215	70	30	30	--
Total primary manufactured goods	1,085	16	3	373	482	212	212	--
Subtotal paper products	0	--	0	--	--	--	--	--
5120 paper & paperboard	0	--	0	--	--	--	--	--
5190 paper products nec	0	--	0	--	--	--	--	--
Subtotal lime, cement and glass	1,066	--	0	373	482	212	212	--
5220 cement & concrete	1,066	--	--	373	482	212	212	--
5290 misc. mineral prod.	0	--	0	--	--	--	--	--
Subtotal primary iron and steel products	19	16	3	--	0	--	--	--
5315 ferro alloys	0	--	0	--	--	--	--	--
5330 i&s plates & sheets	16	16	--	--	0	--	--	--
5370 i&s pipe & tube	3	--	3	--	--	--	--	--
Subtotal primary non-ferrous metal products	0	--	0	--	--	--	--	--
5429 smelted prod. nec	0	--	0	--	--	--	--	--
5480 fab. metal products	0	--	0	--	--	--	--	--
Total food and farm products	5,075	0	3,450	--	1,336	290	--	290
Subtotal fish	0	--	0	--	--	--	--	--
6134 fish (not shellfish)	0	--	0	--	--	--	--	--
Subtotal grain	3,545	--	2,506	--	750	290	--	290
6241 wheat	2,505	--	1,785	--	430	290	--	290
6344 corn	943	--	685	--	259	--	--	--
6443 barley & rye	36	--	36	--	--	--	--	--
6445 oats	62	--	--	--	62	--	--	--
Subtotal oilseeds	1,468	--	882	--	586	--	--	--
6522 soybeans	1,089	--	503	--	586	--	--	--
6534 flaxseed	8	--	8	--	--	--	--	--
6590 oilseeds nec	371	--	371	--	--	--	--	--
Subtotal vegetable products	16	0	16	--	--	--	--	--
6654 vegetables & prod.	16	0	16	--	--	--	--	--
Subtotal processed grain and animal feed	43	--	43	--	--	--	--	--
6747 grain mill products	3	--	3	--	--	--	--	--
6781 hay & fodder	1	--	1	--	--	--	--	--
6782 animal feed, prep.	39	--	39	--	--	--	--	--
Subtotal other agricultural products	3	--	3	--	--	--	--	--
6811 meat, fresh, frozen	2	--	2	--	--	--	--	--
6822 dairy products	0	--	0	--	--	--	--	--
6839 animals & prod. nec	0	--	0	--	--	--	--	--
6857 fruit & nuts nec	0	--	0	--	--	--	--	--
6858 fruit juices	0	--	0	--	--	--	--	--
6885 alcoholic beverages	0	--	0	--	--	--	--	--
6899 farm products nec	0	--	0	--	--	--	--	--
Total all manufactured equipment, machinery and products	7	7	0	--	0	--	--	--
7110 machinery (not elec)	1	0	0	--	0	--	--	--
7120 electrical machinery	0	--	0	--	--	--	--	--
7210 vehicles & parts	6	6	0	--	--	--	--	--
7230 ships & boats	0	--	--	--	0	--	--	--
7400 manufac. wood prod.	0	--	0	--	--	--	--	--
7600 rubber & plastic pr.	0	--	--	--	0	--	--	--
7900 manufac. prod. nec	0	--	0	--	--	--	--	--
Total unknown or not elsewhere classified	1	--	1	--	--	--	--	--
9900 unknown or nec	1	--	1	--	--	--	--	--
Ton-miles (x1000)	4,731,843	2,153	218,639	53,537	555,786	3,901,740	290,374	3,611,356
Tons All Traffic (x1000)			78,296					
Ton-miles All Traffic (x1000)			4,731,854					

GRAYS REEF PASSAGE, MI

Section Included: East channel, 3,000 feet wide and about 2 miles long. Controlling and project depths: 25 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	4,569	1992	8,826	1995	8,792	1998	10,489
1990	8,214	1993	8,892	1996	8,152		
1991	8,265	1994	9,763	1997	8,677		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic					
		Through		Lakewise		Internal			
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	10,489	68	799	9,622	3,433	6,180		4	5
Total coal	3,493	--	--	3,493	969	2,525		--	--
1100 coal lignite	3,235	--	--	3,235	710	2,525		--	--
1200 coal coke	259	--	--	259	259	--		--	--
Total petroleum and petroleum products	772	--	8	764	742	13		4	5
Subtotal petroleum products	772	--	8	764	742	13		4	5
2211 gasoline	275	--	8	267	260	7		--	--
2330 distillate fuel oil	66	--	--	66	66	--		--	--
2340 residual fuel oil	8	--	--	8	8	--		--	--
2430 asphalt, tar & pitch	373	--	--	373	363	6		4	--
2540 petroleum coke	50	--	--	50	45	--		--	5
Total chemicals and related products	108	--	--	108	108	--		--	--
Subtotal other chemicals and related products	108	--	--	108	108	--		--	--
3276 metallic salts	108	--	--	108	108	--		--	--
Total crude materials, inedible except fuels	4,395	--	775	3,620	1,410	2,210		--	--
Subtotal soil, sand, gravel, rock and stone	3,138	--	21	3,117	1,254	1,863		--	--
4322 limestone	2,791	--	--	2,791	1,254	1,537		--	--
4323 gypsum	326	--	--	326	--	326		--	--
4331 sand & gravel	21	--	21	--	--	--		--	--
Subtotal iron ore and scrap	232	--	--	232	139	92		--	--
4410 iron ore	215	--	--	215	123	92		--	--
4420 iron & steel scrap	16	--	--	16	16	--		--	--
Subtotal sulphur, clay and salt	0	--	0	--	--	--		--	--
4782 clay & refrac. mat.	0	--	0	--	--	--		--	--
Subtotal slag	107	--	--	107	17	90		--	--
4860 slag	107	--	--	107	17	90		--	--
Subtotal other non-metal. min.	918	--	754	164	--	164		--	--
4900 non-metal. min. nec	918	--	754	164	--	164		--	--
Total primary manufactured goods	1,719	68	15	1,636	204	1,432		--	0
Subtotal lime, cement and glass	1,704	68	--	1,636	204	1,432		--	--
5220 cement & concrete	1,704	68	--	1,636	204	1,432		--	--
Subtotal primary iron and steel products	15	--	15	0	--	--		--	0
5312 pig iron	15	--	15	--	--	--		--	--
5360 I&S bars & shapes	0	--	--	0	--	--		--	0
Total all manufactured equipment, machinery and products	1	--	1	--	--	--		--	--
7110 machinery (not elec)	1	--	1	--	--	--		--	--
Ton-miles (x1000)	1,155,103	1,355	93,535	1,060,213	484,067	574,572		925	649
Tons All Traffic (x1000)			10,489						
Ton-miles All Traffic (x1000)			1,155,103						

CHARLEVOIX HARBOR, MI

Section Included: Entrance channel and entire area of Round Lake and Lake Charlevoix, including Advance, Boyne City and East Jordan. Controlling Depth: 18 feet. Project Depth: 23 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,456	1992	1,353	1995	1,584	1998	1,281
1990	1,508	1993	1,467	1996	1,666		
1991	1,312	1994	1,549	1997	1,529		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian	Domestic		
		Exports	Total	Lakewise	Shipments
			Receipts	Shipments	Shipments
Total, all commodities	1,281	68	1,213	210	1,003
Total coal	164	--	164	164	--
1100 coal lignite	164	--	164	164	--
Total petroleum and petroleum products	15	--	15	--	15
Subtotal petroleum products	15	--	15	--	15
2540 petroleum coke	15	--	15	--	15
Total crude materials, inedible except fuels	44	--	44	44	--
Subtotal soil, sand, gravel, rock and stone	42	--	42	42	--
4323 gypsum	42	--	42	42	--
Subtotal slag	2	--	2	2	--
4860 slag	2	--	2	2	--
Total primary manufactured goods	1,054	68	986	2	984
Subtotal lime, cement and glass	1,054	68	986	2	984
5220 cement & concrete	1,054	68	986	2	984
Total unknown or not elsewhere classified	5	--	5	1	4
9900 unknown or nec	5	--	5	1	4

MANISTEE HARBOR, MI

Section Included: Entrance channel and entire area of Manistee Lake, including Filer City. Controlling Depths: 24 feet over the entrance bar, through the outer basin and in the channel between the piers; thence 23 feet in the river channel, narrowing to a minimum width of about 100 to 140 feet to Manistee Lake. Project Depths: 25 feet in the outer basin and 23 feet in the river to Manistee Lake. Navigation season: March 30 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	325	1992	456	1995	432	1998	435
1990	535	1993	425	1996	460		
1991	372	1994	483	1997	477		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian	Domestic			
		Exports	Total	Lakewise	Internal	
			Receipts	Shipments	Shipments	
Total, all commodities	435	9	426	384	37	6
Total coal	296	--	296	296	--	--
1100 coal lignite	283	--	283	283	--	--
1200 coal coke	13	--	13	13	--	--
Total chemicals and related products	51	9	42	--	37	6
Subtotal other chemicals and related products	51	9	42	--	37	6
3276 metallic salts	51	9	42	--	37	6
Total crude materials, inedible except fuels	87	--	87	87	--	--
Subtotal soil, sand, gravel, rock and stone	87	--	87	87	--	--
4322 limestone	84	--	84	84	--	--
4331 sand & gravel	3	--	3	3	--	--

LUDINGTON HARBOR, MI

Section Included: Entrance channel and entire area of Pere Marquette Lake. Controlling Depths: 26 feet in the outer entrance bar and 27 feet in the channel to Pere Marquette Lake. Project Depths: Outer entrance channel, 30 feet; inner entrance channel, 29.5 feet; channel to Pere Marquette Lake, 29 feet; north and south mooring basins, 18 feet. Navigation season: April 2 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,179	1992	846	1995	1,150	1998	1,075
1990	1,291	1993	966	1996	1,237		
1991	929	1994	1,093	1997	864		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Shipments
		Imports	Exports	Imports	Exports*	Total	Lakewise Receipts	Shipments	
Total, all commodities	1,075	3	33	197	16	827	590	140	96
Total petroleum and petroleum products	5	--	--	5	--	--	--	--	--
Subtotal petroleum products	5	--	--	5	--	--	--	--	--
2350 lube oil & greases	5	--	--	5	--	--	--	--	--
Total chemicals and related products	254	--	1	--	16	236	--	140	96
Subtotal other chemicals and related products	254	--	1	--	16	236	--	140	96
3276 metallic salts	253	--	--	--	16	236	--	140	96
3279 inorganic chem. nec	1	--	1	--	--	--	--	--	--
Total crude materials, inedible except fuels	816	3	31	192	--	590	590	--	--
Subtotal soil, sand, gravel, rock and stone	631	--	--	72	--	559	559	--	--
4322 limestone	559	--	--	--	--	559	559	--	--
4331 sand & gravel	72	--	--	72	--	--	--	--	--
Subtotal sulphur, clay and salt	59	3	31	25	--	--	--	--	--
4782 clay & refrac. mat.	59	3	31	25	--	--	--	--	--
Subtotal slag	31	--	--	0	--	31	31	--	--
4860 slag	31	--	--	0	--	31	31	--	--
Subtotal other non-metal. min.	95	--	--	95	--	--	--	--	--
4900 non-metal. min. nec	95	--	--	95	--	--	--	--	--
Total all manufactured equipment, machinery and products	0	--	--	0	--	--	--	--	--
7110 machinery (not elec)	0	--	--	0	--	--	--	--	--
7210 vehicles & parts	0	--	--	0	--	--	--	--	--
7900 manufac. prod. nec	0	--	--	0	--	--	--	--	--

*Includes 9 (x1000) tons of Canadian outbound in-transits.

MUSKEGON HARBOR, MI

Section Included: Entrance channel and entire area of Muskegon Lake. Controlling Depths: 29.0 feet through the outer portion of project and 27 feet in channel to Muskegon Lake. Project Depth: Varying from 29.0 feet at harbor entrance to 28 feet between breakwaters and 27 feet in inner channel. Navigation season: April 7 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,877	1992	1,562	1995	1,825	1998	1,936
1990	1,802	1993	1,635	1996	2,172		
1991	1,358	1994	2,004	1997	2,061		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian	Domestic		
		Imports	Total	Lakewise	Receipts
			1,789	1,755	34
Total, all commodities	1,936	147	1,789	1,755	34
Total coal	1,288	—	1,288	1,288	—
1100 coal lignite	1,288	—	1,288	1,288	—
Total crude materials, inedible except fuels	506	147	358	324	34
Subtotal soil, sand, gravel, rock and stone	291	44	248	214	34
4322 limestone	214	—	214	214	—
4331 sand & gravel	78	44	34	—	34
Subtotal sulphur, clay and salt	51	51	—	—	—
4782 clay & refrac. mat.	51	51	—	—	—
Subtotal slag	111	—	111	111	—
4860 slag	111	—	111	111	—
Subtotal other non-metal. min.	53	53	—	—	—
4900 non-metal. min. nec	53	53	—	—	—
Total primary manufactured goods	142	—	142	142	—
Subtotal lime, cement and glass	142	—	142	142	—
5220 cement & concrete	142	—	142	142	—

GRAND HAVEN HARBOR AND GRAND RIVER, MI

Section Included: Entire harbor, including Ferrysburg and Spring Lake; and Grand River from Grand Trunk RY. Bridge at Ferrysburg to Bass River about 15 miles. Controlling Depths: 22 feet in entrance channel; 21 feet to the mouth of the south channel; 21 feet to the sag; 20 feet to Grand Trunk RY. Bridge at Ferrysburg; 18 feet in the Turning Basin; 17 feet in channel to Spring Lake; thence 8 feet to mile 17.0 and 5 feet to the end of the project. Project Depths: 23 feet in entrance channel; 21 feet to Ferrysburg; 18 feet in channel to Spring Lake; 8 feet to mouth of Bass River. Navigation season: March 1 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,333	1992	871	1995	961	1998	1,014
1990	1,052	1993	1,004	1996	971		
1991	792	1994	878	1997	988		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign	Canadian		Domestic		
		Imports	Imports	Exports	Total	Lakewise	Receipts
			58	50		901	844
Total, all commodities	1,014	6	58	50	901	844	57
Total coal	177	—	—	—	177	177	—
1100 coal lignite	177	—	—	—	177	177	—
Total crude materials, inedible except fuels	676	6	58	50	562	505	57
Subtotal soil, sand, gravel, rock and stone	415	—	27	50	338	281	57
4322 limestone	281	—	—	—	281	281	—
4331 sand & gravel	134	—	27	50	57	—	57
Subtotal sulphur, clay and salt	25	6	19	—	—	—	—
4782 clay & refrac. mat.	25	6	19	—	—	—	—
Subtotal slag	224	—	—	—	224	224	—
4860 slag	224	—	—	—	224	224	—
Subtotal other non-metal. min.	12	—	12	—	—	—	—
4900 non-metal. min. nec	12	—	12	—	—	—	—
Total primary manufactured goods	161	—	—	—	161	161	—
Subtotal lime, cement and glass	161	—	—	—	161	161	—
5220 cement & concrete	161	—	—	—	161	161	—

HOLLAND HARBOR, MI

Section Included: Controlling Depths: Entrance channel - 23 feet decreasing to 20 feet at the outer end of the inner pier; thence a controlling depth of 19 feet for a channel through Lake Macatawa to the wharves in Holland, Michigan, a Turning Basin 18 feet deep, a channel in Black River 21 feet deep and a settling basin with a project depth of 17 feet above the Black River channel to the State Street Bridge. Navigation season: March 13 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	361	1992	316	1995	432	1998	476
1990	391	1993	317	1996	407		
1991	262	1994	391	1997	398		

Freight Traffic, 1998 (thousand short tons)

	Commodity	Grand Total	Lakewise Receipts
Total, all commodities		476	476
Total coal		175	175
1100 coal lignite		175	175
Total crude materials, inedible except fuels		300	300
Subtotal soil, sand, gravel, rock and stone		228	228
4322 limestone		228	228
Subtotal slag		72	72
4860 slag		72	72

ST. JOSEPH HARBOR, MI

Section Included: Entrance channel and lower portion of St. Joseph River to and including Benton Harbor Canal. Controlling Depth: 24 feet at entrance; 21 feet between entrance piers and in the river to the mouth of the Paw Paw River; with miscellaneous of shoaling along the channel limits; 17 feet in the Turning Basin; and 16 feet at Benton Harbor Canal. Project Depths: 24 feet at entrance, and 21 feet in channel and river to the mouth of the Paw Paw River; 18 feet in turning basins and the Benton Harbor Canal. Navigation season: March 7 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	386	1992	543	1995	598	1998	747
1990	445	1993	485	1996	447		
1991	418	1994	631	1997	609		

Freight Traffic, 1998 (thousand short tons)

	Commodity	Grand Total	Lakewise Receipts
Total, all commodities		747	747
Total crude materials, inedible except fuels		470	470
Subtotal soil, sand, gravel, rock and stone		470	470
4322 limestone		470	470
Total primary manufactured goods		277	277
Subtotal lime, cement and glass		277	277
5220 cement & concrete		277	277

CHEBOYGAN HARBOR, MI

Section Included: Entrance channel and 3,500 feet of river. Controlling Depth: 21 feet to East First Street, including turning basin, and 18.5 feet to the State Road Bridge. Project Depth: 21 feet to East First Street; 18.5 feet to the State Road Bridge; 8.5 feet above the State Road Bridge to Lock in Cheboygan River; 21 feet in turning basin. Navigation season: 14 April to 9 December.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	143	1992	110	1995	314	1998	308
1990	134	1993	221	1996	276		
1991	115	1994	299	1997	282		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise Receipts
Total, all commodities	308	308
Total petroleum and petroleum products	308	308
Subtotal petroleum products	308	308
2211 gasoline	255	255
2330 distillate fuel oil	53	53

MILWAUKEE HARBOR, WI

Section Included: Lake Approach Channel, outer harbor, Milwaukee River to Buffalo Street, lower 2 miles of Menomonee River, lower 2 miles of Kinnickinnic River and South Menomonee and Burnham Canals. Controlling and project depths: 30 feet in Lake Approach Channel, 28 feet in the entrance channel and the south outer harbor, 21 feet in the north outer harbor, 27 feet in the Kinnickinnic River to the Chicago and North Western Railway Bridge at mile 1.0, thence 21 feet to South Kinnickinnic Avenue Bridge; 27 feet in Milwaukee River to the Chicago and North Western Railway Bridge at mile 0.21, thence 21 feet to East Buffalo Street Bridge; 21 feet in Menomonee River and South Menomonee and Burham Canals.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	2,379	1992	2,153	1995	3,262	1998	3,108
1990	2,128	1993	2,496	1996	2,858		
1991	2,076	1994	2,641	1997	3,265		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports
Total, all commodities	1,402	188	17	895	302
Total chemicals and related products	0	0	0	--	--
Subtotal other chemicals and related products	0	0	0	--	--
3276 metallic salts	0	--	0	--	--
3282 pigments & paints	0	--	0	--	--
3286 plastics	0	0	0	--	--
3291 pesticides	0	--	0	--	--
3299 chem. products nec	0	--	0	--	--
Total crude materials, inedible except fuels	950	--	0	854	96
Subtotal soil, sand, gravel, rock and stone	96	--	--	--	96
4331 sand & gravel	96	--	--	--	96
Subtotal other non-metal. min.	854	--	0	854	--
4900 non-metal. min. nec	854	--	0	854	--
Total primary manufactured goods	225	185	0	40	--
Subtotal paper products	0	--	0	--	--
5120 paper & paperboard	0	--	0	--	--
5190 paper products nec	0	--	0	--	--
Subtotal lime, cement and glass	19	--	0	19	--
5220 cement & concrete	19	--	--	19	--
5290 misc. mineral prod.	0	--	0	--	--
Subtotal primary iron and steel products	205	183	--	21	--
5312 pig iron	21	--	--	21	--
5320 i&s primary forms	11	11	--	--	--
5330 i&s plates & sheets	126	125	--	0	--
5360 i&s bars & shapes	45	45	--	--	--
5390 primary i&s nec	2	1	--	0	--
Subtotal primary non-ferrous metal products	2	2	0	--	--
5422 aluminum	0	--	0	--	--
5480 fab. metal products	2	2	--	--	--
Total food and farm products	224	--	17	--	207
Subtotal fish	0	--	0	--	--
6136 shellfish	0	--	0	--	--
Subtotal grain	142	--	17	--	125
6344 corn	142	--	17	--	125
Subtotal oilseeds	82	--	--	--	82
6522 soybeans	82	--	--	--	82
Subtotal other agricultural products	0	--	0	--	--
6889 food products nec	0	--	0	--	--
6899 farm products nec	0	--	0	--	--

MILWAUKEE HARBOR, WI
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports
Total all manufactured equipment, machinery and products	3	3	0	0	--
7110 machinery (not elec)	2	2	0	0	--
7120 electrical machinery	0	0	0	--	--
7230 ships & boats	0	0	--	--	--
7500 textile products	0	--	0	--	--
7600 rubber & plastic pr.	0	--	0	--	--
7900 manufac. prod. nec	0	0	0	--	--
Total unknown or not elsewhere classified	0	0	--	--	--
9900 unknown or nec	0	0	--	--	--

Commodity	Total	Domestic			
		Lakewise	Internal	Shipments	Intraport
Receipts	Shipments	Shipments	Intraport		
Total, all commodities	1,706	1,635	70	1	1
Total coal	772	761	11	--	--
1100 coal lignite	772	761	11	--	--
Total petroleum and petroleum products	230	230	--	--	--
Subtotal petroleum products	230	230	--	--	--
2430 asphalt, tar & pitch	220	220	--	--	--
2540 petroleum coke	10	10	--	--	--
Total crude materials, inedible except fuels	155	140	13	1	1
Subtotal forest products, wood and chips	0	--	--	--	0
4170 wood in the rough	0	--	--	--	0
Subtotal soil, sand, gravel, rock and stone	93	79	13	1	1
4322 limestone	22	22	--	--	--
4331 sand & gravel	57	57	1	--	--
4335 waterway improv. mat	14	--	13	1	1
Subtotal other non-metal. min.	61	61	--	--	--
4900 non-metal. min. nec	61	61	--	--	--
Total primary manufactured goods	532	504	28	--	0
Subtotal lime, cement and glass	532	504	28	--	--
5220 cement & concrete	532	504	28	--	--
Subtotal primary non-ferrous metal products	0	--	--	--	0
5480 fab. metal products	0	--	--	--	0
Total food and farm products	18	--	18	--	--
Subtotal grain	18	--	18	--	--
6241 wheat	18	--	18	--	--

*Includes 15 (x1000) tons of foreign inbound in-transits.

POR WASHINGTON HARBOR, WI

Section Included: Outer harbor and interior basins. Controlling and project depths: 21 feet in the entrance channel and outer turning basin; 18 feet in inner basins.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	173	1992	120	1995	390	1998	596
1990	139	1993	84	1996	546		
1991	125	1994	335	1997	595		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise Receipts
Total, all commodities	596	596
Total coal	596	596
1100 coal lignite	596	596

MANITOWOC HARBOR, WI

Section Included: Outer harbor and lower 2 miles of river. Controlling and project depths: 21 feet in the Lake Approach Channel, the outer harbor, and in the river channel to the Third Railway Bridge.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	218	1992	274	1995	373	1998	414
1990	201	1993	300	1996	312		
1991	272	1994	330	1997	407		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Domestic		
		Lakewise		Internal
		Receipts	Shipments	Shipments
Total, all commodities	414	247	12	155
Total coal	65	65	--	--
1100 coal lignite	65	65	--	--
Total crude materials, inedible except fuels	167	--	12	155
Subtotal soil, sand, gravel, rock and stone	167	--	12	155
4331 sand & gravel	12	--	12	--
4335 waterway improv. mat	155	--	--	155
Total primary manufactured goods	182	182	--	--
Subtotal lime, cement and glass	182	182	--	--
5220 cement & concrete	182	182	--	--

GREEN BAY HARBOR, WI

Section Included: Outer channel, channel through the city of Green Bay and upper river channel to city of De Pere. Controlling and project depths: 26 feet in outer channel to Grassy Island; 24 feet in the entrance channel and river channel to a point 1,700 feet upstream from the C. & N. W. R. R. Bridge; 24 feet in the turning basin at the mouth of the East River; 20 feet in the turning basin above the C. & N. W. R. R. Bridge; 18 feet in the upper river channel and turning basin at the city of De Pere.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,547	1992	2,431	1995	2,122	1998	2,353
1990	1,677	1993	2,587	1996	2,176		
1991	2,068	1994	2,288	1997	2,130		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Imports	Domestic		
		Imports	Exports		Total	Lakewise	Internal
		Receipts	Shipments		Intra	Upbound	
Total, all commodities	2,353	39	18	338	1,958	1,621	337
Total coal	695	--	0	--	695	695	--
1100 coal lignite	695	--	0	--	695	695	--
Total petroleum and petroleum products	57	--	--	--	57	57	--
Subtotal petroleum products	57	--	--	--	57	57	--
2430 asphalt, tar & pitch	52	--	--	--	52	52	--
2540 petroleum coke	5	--	--	--	5	5	--
Total chemicals and related products	23	0	--	--	23	23	--
Subtotal other chemicals and related products	23	0	--	--	23	23	--
3276 metallic salts	23	--	--	--	23	23	--
3282 pigments & paints	0	0	--	--	--	--	--
Total crude materials, inedible except fuels	1,110	4	--	242	864	527	337
Subtotal pulp and waste paper	4	4	--	--	--	--	--
4225 pulp & waste paper	4	4	--	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	790	--	--	--	790	453	337
4322 limestone	451	--	--	--	451	451	--
4323 gypsum	2	--	--	--	2	2	--
4331 sand & gravel	337	--	--	--	337	--	337
Subtotal other non-metal. min.	316	--	--	242	73	73	--
4900 non-metal. min. nec	316	--	--	242	73	73	--
Total primary manufactured goods	450	35	0	95	320	320	--
Subtotal paper products	0	--	0	--	--	--	--
5120 paper & paperboard	0	--	0	--	--	--	--
Subtotal lime, cement and glass	386	--	--	66	320	320	--
5220 cement & concrete	386	--	--	66	320	320	--

GREEN BAY HARBOR, WI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian Imports	Domestic			
		Imports	Exports		Total	Lakewise	Internal	
						Receipts	Intra Upbound	
Subtotal primary iron and steel products	64	35	--	29	--	--	--	
5312 pig iron	64	35	--	29	--	--	--	
Total food and farm products	18	--	18	--	--	--	--	
Subtotal other agricultural products	18	--	18	--	--	--	--	
6838 tallow, animal oils	18	--	18	--	--	--	--	
Total all manufactured equipment, machinery and products	0	0	0	--	--	--	--	
7110 machinery (not elec)	0	0	--	--	--	--	--	
7400 manufac. wood prod.	0	--	0	--	--	--	--	

ALPENA HARBOR, MI

Section Included: Lower 4,000 feet of river and private harbors north of mouth of Thunder Bay River. Controlling Depth: 21 feet in the bay section; 17 feet in river; 15 feet in turning basin. Project Depths: channel 21 feet deep from that depth in Thunder Bay to a point 2,500 feet lakeward of the lighthouse; thence 18.5 feet in river narrowing to 100-foot width at a point 700 feet upstream from the lighthouse; thence 100 feet wide and 18.5 feet deep to the Second Ave. Bridge; thence 18.5 feet deep and 75 feet wide to the upper limits of the project; a turning basin 15 feet deep by 3.7 acres at the upper end of project; and a turning basin 18.5 feet deep at the river mouth. Navigation season: March 15 to December 17.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	2,397	1992	2,486	1995	2,767	1998	3,078
1990	2,255	1993	2,547	1996	2,345		
1991	2,284	1994	2,672	1997	2,901		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic		
		Imports	Exports	Total	Lakewise	Internal
					Receipts	Shipments
Total, all commodities	3,078	12	185	2,880	748	2,132
Total coal	478	--	--	478	478	--
1100 coal lignite	240	--	--	240	240	--
1200 coal coke	238	--	--	238	238	--
Total crude materials, inedible except fuels	321	12	31	278	270	9
Subtotal soil, sand, gravel, rock and stone	173	--	--	173	164	9
4322 limestone	173	--	--	173	164	9
Subtotal iron ore and scrap	106	--	--	106	106	--
4410 iron ore	106	--	--	106	106	--
Subtotal slag	31	--	31	--	--	--
4860 slag	31	--	31	--	--	--
Subtotal other non-metal. min.	12	12	--	--	--	--
4900 non-metal. min. nec	12	12	--	--	--	--
Total primary manufactured goods	2,279	--	155	2,124	--	2,124
Subtotal lime, cement and glass	2,279	--	155	2,124	--	2,124
5220 cement & concrete	2,279	--	155	2,124	--	2,124

MENOMINEE HARBOR AND RIVER, MI AND WI

Section Included: Entrance channel and lower 2.0 miles of Menominee River. Controlling and project depths: 20 feet controlling depth, 23 feet project depth in the Approach Channel; 18 feet controlling depth, 21 feet project depth in the entrance and river channels, 19 feet in the river adjacent to the Marinette Marine Corp., 12 feet to the end of the project, and 18.5 feet controlling depth, 21 feet project depth in the Turning Basin.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	129	1992	130	1995	194	1998	388
1990	102	1993	162	1996	191		
1991	112	1994	217	1997	260		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian Imports	Domestic			
		Imports	Exports		Total	Lakewise	Internal	
						Receipts	Intraport	
Total, all commodities	388	19	22	183	164	45	119	
Total coal	10	--	--	--	10	10	--	
1100 coal lignite	10	--	--	--	10	10	--	

MENOMINEE HARBOR AND RIVER, MI AND WI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian Imports	Domestic		
		Imports	Exports		Total	Lakewise Receipts	Internal Intraport
Total chemicals and related products	0	--	0	--	--	--	--
Subtotal other chemicals and related products	0	--	0	--	--	--	--
3240 nitrogen func. comp.	0	--	0	--	--	--	--
3260 organic comp. nec	0	--	0	--	--	--	--
3286 plastics	0	--	0	--	--	--	--
3292 starches, gluten, glue	0	--	0	--	--	--	--
Total crude materials, inedible except fuels	195	2	21	38	134	15	119
Subtotal forest products, wood and chips	0	--	0	--	--	--	--
4170 wood in the rough	0	--	0	--	--	--	--
Subtotal pulp and waste paper	23	2	21	--	--	--	--
4225 pulp & waste paper	23	2	21	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	134	--	--	--	134	15	119
4322 limestone	15	--	--	--	15	15	--
4331 sand & gravel	119	--	--	--	119	--	119
Subtotal non-ferrous ores and scrap	0	--	0	--	--	--	--
4680 non-ferrous scrap	0	--	0	--	--	--	--
Subtotal other non-metal. min.	38	--	--	38	--	--	--
4900 non-metal. min. nec	38	--	--	38	--	--	--
Total primary manufactured goods	181	17	0	146	19	19	--
Subtotal lime, cement and glass	0	--	0	--	--	--	--
5240 glass & glass prod.	0	--	0	--	--	--	--
Subtotal primary iron and steel products	181	17	--	146	19	19	--
5312 pig iron	181	17	--	146	19	19	--
Subtotal primary non-ferrous metal products	0	--	0	--	--	--	--
5422 aluminum	0	--	0	--	--	--	--
5480 fab. metal products	0	--	0	--	--	--	--
Total food and farm products	0	--	0	--	--	--	--
Subtotal other agricultural products	0	--	0	--	--	--	--
6889 food products nec	0	--	0	--	--	--	--
Total all manufactured equipment, machinery and products	0	0	0	--	--	--	--
7110 machinery (not elec)	0	--	0	--	--	--	--
7210 vehicles & parts	0	--	0	--	--	--	--
7220 aircraft & parts	0	--	0	--	--	--	--
7230 ships & boats	0	--	0	--	--	--	--
7300 ordnance & access.	0	--	0	--	--	--	--
7500 textile products	0	0	--	--	--	--	--
7900 manufac. prod. nec	0	--	0	--	--	--	--
Total unknown or not elsewhere classified	0	--	0	--	--	--	--
9900 unknown or nec	0	--	0	--	--	--	--

SAGINAW RIVER, MI

Section Included: From the mouth of the river up to and including Saginaw, Michigan. Controlling Depths: 27 feet from the 25 foot contour in Saginaw Bay to 26 feet at the river mouth, 4 feet miscellaneous shoaling along channel limits; thence 24 feet to the Grand Trunk R.R. Bridge; thence 22 feet to the C&O R.R. Bridge in Saginaw, Michigan; thence 14 feet to the Holland Street Bridge; thence about 7 feet over a width of 100 feet upstream to Green Point (this section not maintained). Controlling depths in turning basins are: Essexville - 23 feet north side, 22 feet south side; Airport - 21 feet; Carrollton - 19 feet; Sixth Street - 20 feet; basin at 19 mile point - 15 feet. Project Depths: 27 feet from the deep water in Saginaw Bay to the river mouth; thence 26 feet for 0.4 mile; thence 25 feet to the Grand Trunk R.R. Bridge; thence 22 feet to the C&O R.R. Bridge in Saginaw; thence 16.5 feet to the upstream limits at Green Point. 20 and 25 feet in Essexville Turning Basin; 22 feet in the Airport turning basin; 20 feet in the Carrollton Turning Basin; 20 feet in the Sixth Street Turning Basin and 15 feet in the Turning Basin at the 19 mile point. Navigation season: March 24 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	4,674	1992	3,789	1995	4,720	1998	5,609
1990	4,039	1993	5,234	1996	5,264		
1991	3,895	1994	5,119	1997	5,730		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Exports	Imports	Exports	Total		Lakewise	
					Receipts	Shipments		
Total, all commodities	5,609	4	1,035	88	4,482	4,479	2	
Total coal	275	--	--	--	275	275	--	
1100 coal lignite	275	--	--	--	275	275	--	
Total petroleum and petroleum products	158	--	13	88	57	57	--	
Subtotal petroleum products	158	--	13	88	57	57	--	
2211 gasoline	35	--	--	9	26	26	--	
2221 kerosene	31	--	--	31	--	--	--	
2330 distillate fuel oil	18	--	--	7	11	11	--	
2340 residual fuel oil	33	--	13	--	20	20	--	
2350 lube oil & greases	24	--	--	24	--	--	--	
2430 asphalt, tar & pitch	16	--	--	16	--	--	--	
Total chemicals and related products	173	0	78	--	95	95	--	
Subtotal fertilizers	78	--	78	--	--	--	--	
3110 nitrogenous fert.	11	--	11	--	--	--	--	
3130 potassic fert.	67	--	67	--	--	--	--	
Subtotal other chemicals and related products	95	0	--	--	95	95	--	
3276 metallic salts	95	--	--	--	95	95	--	
3282 pigments & paints	0	0	--	--	--	--	--	
Total crude materials, inedible except fuels	4,525	4	622	--	3,899	3,897	2	
Subtotal soil, sand, gravel, rock and stone	4,042	--	282	--	3,760	3,758	2	
4310 building stone	3	--	3	--	--	--	--	
4322 limestone	3,738	--	--	--	3,738	3,738	--	
4323 gypsum	2	--	--	--	2	--	2	
4331 sand & gravel	298	--	279	--	19	19	--	
Subtotal sulphur, clay and salt	172	4	168	--	--	--	--	
4782 clay & refrac. mat.	172	4	168	--	--	--	--	
Subtotal slag	23	--	23	--	--	--	--	
4860 slag	23	--	23	--	--	--	--	
Subtotal other non-metal. min.	288	--	149	--	139	139	--	
4900 non-metal. min. nec	288	--	149	--	139	139	--	
Total primary manufactured goods	478	--	323	--	155	155	--	
Subtotal lime, cement and glass	478	--	323	--	155	155	--	
5220 cement & concrete	478	--	323	--	155	155	--	

ST. CLAIR RIVER, MI

Section Included: Entire length of St. Clair River and Black River up to Washington Avenue in Port Huron. Controlling Depths: 27 to 30 feet in St. Clair River at Port Huron and 20 feet in Black River.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	78,458	1992	68,613	1995	78,813	1998	84,238
1990	75,438	1993	69,062	1996	78,546		
1991	66,003	1994	75,531	1997	79,777		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports*	Through Upbound	Downbnd	Imports	Exports	Through Upbound	Downbnd
Total, all commodities	27,673	10	24	2,172	3,771	604	255	8,488	12,350
Total coal	7,276	--	--	--	0	--	7	4,976	2,292
1100 coal lignite	7,169	--	--	--	0	--	--	4,971	2,198
1200 coal coke	107	--	--	--	--	--	7	5	95
Total petroleum and petroleum products	1,566	0	--	0	0	29	13	374	1,149
Subtotal crude petroleum	550	--	--	--	--	--	3	3	544
2100 crude petroleum	550	--	--	--	--	--	3	3	544
Subtotal petroleum products	1,016	0	--	0	0	29	10	371	605
2211 gasoline	38	--	--	0	--	--	--	28	9
2221 kerosene	31	--	--	--	--	--	--	--	31
2330 distillate fuel oil	47	--	--	--	0	5	--	5	36
2340 residual fuel oil	152	--	--	--	--	24	--	83	45
2350 lube oil & greases	110	--	--	--	0	--	--	17	93
2410 petro. jelly & waxes	0	--	--	--	0	--	--	--	--
2429 naphtha & solvents	50	--	--	--	0	--	--	50	--
2430 asphalt, tar & pitch	79	--	--	--	--	--	--	--	79
2540 petroleum coke	509	0	--	--	0	--	10	189	310
2640 liquid natural gas	0	--	--	0	--	--	--	--	--
Total chemicals and related products	388	1	2	21	24	24	19	132	165
Subtotal fertilizers	201	--	--	11	1	15	9	35	129
3110 nitrogenous fert.	62	--	--	11	--	15	9	15	12
3130 potassic fert.	118	--	--	--	--	--	--	--	118
3190 fert. & mixes nec	21	--	--	--	1	--	--	21	--
Subtotal other chemicals and related products	188	1	2	10	23	9	10	97	36
3211 acyclic hydrocarbons	1	--	--	--	--	1	--	--	--
3212 benzene & toluene	19	--	--	--	--	--	--	--	19
3219 other hydrocarbons	9	--	--	9	0	--	--	--	--
3220 alcohols	22	--	--	0	1	--	7	7	7
3230 carboxylic acids	0	0	--	0	0	--	--	--	--
3240 nitrogen func. comp.	4	0	0	0	0	2	0	2	1
3250 organo - inorg. comp.	1	--	--	0	1	--	--	--	--
3260 organic comp. nec	0	--	0	0	0	--	--	--	--
3273 ammonia	3	--	--	--	--	1	--	1	1
3274 sodium hydroxide	64	--	--	--	--	--	--	64	--
3275 inorg. elem., oxides, & halogen salts	15	0	--	0	3	5	--	4	2
3276 metallic salts	28	0	--	0	0	--	3	18	6
3279 inorganic chem. nec	1	--	--	0	1	--	--	--	--

ST. CLAIR RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports*	Through		Imports	Exports	Through	
				Upbound	Downbnd			Upbound	Downbnd
3281 radioactive material	0	—	—	0	—	—	—	—	—
3282 pigments & paints	1	0	0	0	0	0	—	0	0
3283 coloring mat. nec	0	0	0	0	0	—	—	—	0
3284 medicines	4	—	0	0	3	—	—	0	—
3285 perfumes & cleansers	3	0	1	0	2	—	0	0	0
3286 plastics	4	0	1	0	2	0	0	0	0
3291 pesticides	0	—	—	—	0	—	—	0	—
3292 starches, gluten, glue	7	0	—	0	6	—	—	—	—
3297 chemical additives	0	—	0	—	0	—	—	—	—
3298 wood & resin chem.	0	—	—	—	0	—	—	—	—
3299 chem. products nec	2	0	—	0	1	—	—	0	0
Total crude materials, inedible except fuels	9,464	0	9	117	199	547	102	2,133	6,357
Subtotal forest products, wood and chips	4	—	—	0	1	1	—	1	1
4110 rubber & gums	0	—	—	—	0	—	—	—	—
4150 fuel wood	0	—	—	—	0	—	—	—	—
4170 wood in the rough	0	—	—	—	0	—	—	—	—
4189 lumber	4	—	—	0	1	1	—	1	1
4190 forest products nec	0	—	—	0	0	—	—	—	—
Subtotal pulp and waste paper	33	—	—	10	23	—	—	—	—
4225 pulp & waste paper	33	—	—	10	23	—	—	—	—
Subtotal soil, sand, gravel, rock and stone	2,814	—	—	—	0	363	—	191	2,259
4322 limestone	2,014	—	—	—	—	—	—	31	1,983
4323 gypsum	5	—	—	—	0	—	—	—	5
4327 phosphate rock	5	—	—	—	—	—	—	—	5
4331 sand & gravel	790	—	—	—	0	363	—	160	266
Subtotal iron ore and scrap	4,634	—	—	—	2	—	—	1,075	3,556
4410 iron ore	4,571	—	—	—	—	—	—	1,043	3,528
4420 iron & steel scrap	62	—	—	—	2	—	—	33	28
Subtotal non-ferrous ores and scrap	108	0	3	98	7	—	—	—	—
4650 aluminum ore	101	—	3	98	—	—	—	—	—
4680 non-ferrous scrap	3	—	—	0	3	—	—	—	—
4690 non-ferrous ores nec	4	0	—	—	4	—	—	—	—
Subtotal sulphur, clay and salt	583	—	6	9	163	183	52	0	169
4741 sulphur, (dry)	0	—	—	0	—	—	—	—	—
4782 clay & refrac. mat.	582	—	6	9	163	183	52	0	169
Subtotal other non-metal. min.	1,288	—	—	—	2	—	50	865	371
4900 non-metal. min. nec	1,288	—	—	—	2	—	50	865	371
Total primary manufactured goods	3,579	5	0	2,011	7	1	7	868	681
Subtotal paper products	10	1	0	0	2	—	—	0	7
5110 newsprint	7	—	—	—	—	—	—	—	7
5120 paper & paperboard	1	1	—	0	1	—	—	0	—
5190 paper products nec	1	0	0	0	1	—	—	0	0
Subtotal lime, cement and glass	1,243	1	—	2	0	0	—	576	663
5220 cement & concrete	1,239	—	—	—	—	—	—	576	663

ST. CLAIR RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports*	Through		Imports	Exports	Through	
				Upbound	Downbnd			Upbound	Downbnd
5240 glass & glass prod.	1	0	—	1	0	—	—	0	—
5290 misc. mineral prod.	3	1	—	2	0	0	—	—	0
Subtotal primary iron and steel products	2,296	3	0	1,982	3	0	7	291	10
5312 pig iron	340	0	—	51	0	—	—	289	—
5315 ferro alloys	21	—	—	21	0	—	—	—	—
5320 i&s primary forms	212	—	—	212	—	0	—	0	—
5330 i&s plates & sheets	1,569	2	—	1,566	0	0	—	1	0
5360 i&s bars & shapes	115	0	—	111	0	0	—	0	3
5370 i&s pipe & tube	31	0	0	14	3	—	7	1	7
5390 primary i&s nec	8	0	—	8	0	—	—	0	—
Subtotal primary non-ferrous metal products	30	1	0	26	2	0	—	0	1
5421 copper	0	0	—	0	0	—	—	0	0
5422 aluminum	2	0	—	1	0	—	—	0	0
5429 smelted prod. nec	15	0	—	15	0	—	—	—	—
5480 fab. metal products	13	0	0	10	2	0	—	0	0
Subtotal primary wood products	0	0	—	0	0	—	—	0	0
5540 primary wood prod.	0	0	—	0	0	—	—	0	0
Total food and farm products	5,341	1	10	1	3,527	1	103	4	1,695
Subtotal fish	1	—	—	—	0	—	—	0	1
6134 fish (not shellfish)	1	—	—	—	0	—	—	0	1
6136 shellfish	0	—	—	—	0	—	—	0	—
Subtotal grain	3,664	0	—	—	2,553	—	94	3	1,014
6241 wheat	2,257	—	—	—	1,789	—	—	3	466
6344 corn	1,309	—	—	—	728	—	94	—	487
6442 rice	0	0	—	—	—	—	—	—	—
6443 barley & rye	36	—	—	—	36	—	—	—	—
6445 oats	62	—	—	—	0	—	—	—	62
Subtotal oilseeds	1,550	—	—	—	882	—	—	—	668
6522 soybeans	1,171	—	—	—	503	—	—	—	668
6534 flaxseed	8	—	—	—	8	—	—	—	—
6590 oilseeds nec	371	—	—	—	371	—	—	—	—
Subtotal vegetable products	20	1	0	0	17	1	0	1	0
6653 vegetable oils	1	0	—	0	0	—	—	—	—
6654 vegetables & prod.	19	0	0	0	17	1	0	1	0
Subtotal processed grain and animal feed	56	0	9	0	47	—	—	0	0
6747 grain mill products	3	0	—	0	3	—	—	—	0
6781 hay & fodder	2	—	—	—	2	—	—	—	—
6782 animal feed, prep.	50	0	9	—	41	—	—	0	0
Subtotal other agricultural products	51	1	1	1	28	0	9	0	12
6811 meat, fresh, frozen	3	—	0	—	2	—	—	—	—
6817 meat, prepared	0	0	—	—	0	—	—	—	—
6822 dairy products	0	0	0	0	0	—	—	—	—
6838 tallow, animal oils	19	—	—	0	19	—	—	—	—
6839 animals & prod. nec	5	0	—	0	5	—	—	—	—
6857 fruit & nuts nec	1	—	—	—	0	0	—	0	—
6858 fruit juices	3	0	—	0	0	—	—	—	3
6865 molasses	18	—	—	—	—	—	9	—	9
6872 cocoa beans	0	0	—	0	—	—	—	—	—
6885 alcoholic beverages	1	0	—	0	0	0	—	0	0

ST. CLAIR RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports	Exports*	Through		Imports	Exports	Through	
				Upbound	Downbnd			Upbound	Downbnd
6889 food products nec	1	0	—	0	1	—	—	0	0
6891 tobacco & products	0	0	—	—	—	—	—	—	—
6893 cotton	0	—	—	—	0	—	—	—	—
6899 farm products nec	0	—	—	0	0	—	—	—	—
Total all manufactured equipment, machinery and products	50	2	3	21	13	2	3	1	4
7110 machinery (not elec)	21	1	2	8	4	0	3	1	3
7120 electrical machinery	5	0	0	2	2	0	0	0	0
7210 vehicles & parts	11	0	0	9	1	1	0	0	0
7220 aircraft & parts	0	—	—	0	0	—	—	—	—
7230 ships & boats	0	—	—	0	0	—	—	0	0
7300 ordnance & access.	0	—	—	0	0	—	—	—	—
7400 manufac. wood prod.	1	0	0	0	0	—	—	0	0
7500 textile products	2	0	0	0	0	0	—	0	1
7600 rubber & plastic pr.	1	0	0	0	1	0	0	0	0
7900 manufac. prod. nec	9	1	0	2	6	1	0	0	0
Total unknown or not elsewhere classified	9	0	—	0	1	0	0	0	7
9900 unknown or nec	9	0	—	0	1	0	0	0	7
Ton-miles Foreign & Canadian (x1000)	1,057,505	369	862	84,706	147,052	2,548	9,296	331,023	481,648

Commodity	Total	Domestic					
		Lakewise		Internal		Upbound	Downbnd
		Receipts	Through	Upbound	Downbnd		
Total, all commodities	56,564	11,033	4,729	40,793		5	4
Total coal	14,593	8,954	3,948	1,690		—	—
1100 coal lignite	14,531	8,954	3,948	1,628		—	—
1200 coal coke	62	—	—	62		—	—
Total petroleum and petroleum products	551	75	55	413		5	4
Subtotal petroleum products	551	75	55	413		5	4
2211 gasoline	28	—	28	—		—	—
2330 distillate fuel oil	28	28	—	—		—	—
2340 residual fuel oil	71	47	20	4		—	—
2430 asphalt, tar & pitch	373	—	6	363		—	4
2540 petroleum coke	50	—	—	45		5	—
Total crude materials, inedible except fuels	40,656	2,004	726	37,926		—	—
Subtotal soil, sand, gravel, rock and stone	11,756	1,990	24	9,743		—	—
4322 limestone	10,724	1,990	24	8,710		—	—
4323 gypsum	870	—	—	870		—	—
4331 sand & gravel	162	—	—	162		—	—
Subtotal iron ore and scrap	28,212	—	94	28,118		—	—
4410 iron ore	28,137	—	94	28,042		—	—
4420 iron & steel scrap	76	—	—	76		—	—
Subtotal slag	255	—	190	65		—	—
4860 slag	255	—	190	65		—	—
Subtotal other non-metal. min.	432	14	418	—		—	—
4900 non-metal. min. nec	432	14	418	—		—	—
Total primary manufactured goods	475	—	—	475		—	—
Subtotal lime, cement and glass	475	—	—	475		—	—
5220 cement & concrete	475	—	—	475		—	—

ST. CLAIR RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Domestic			
		Lakewise		Internal	
		Receipts	Through Upbound	Through Downbnd	Through Upbound
Total food and farm products	290	--	--	290	--
Subtotal grain	290	--	--	290	--
6241 wheat	290	--	--	290	--
Ton-miles (x1000)	1,967,491	191,766	184,440	1,590,937	208
Domestic					140
Tons All Traffic (x1000)		84,238			
Ton-miles All Traffic (x1000)		3,024,996			

*Includes 9 (x1000) tons of foreign outbound in-transits.

PORT HURON, MI (INCLUDED IN ST. CLAIR RIVER)

Section Included: West bank of the St. Clair River from mouth of river to Grand Trunk Western Railroad Bridge and both banks of the Black River up to Washington Avenue in Port Huron, Michigan. Controlling Depths: from Lake St. Clair to Stag Island, 27.1 feet. In the Stag Island to Port Huron channel and the foot of Lake Huron channel, 27.3 feet and 30 feet respectively. In the Black River, 17 feet, for a width of 70 feet, from the mouth to 1,700 feet upstream of the Grand Trunk Western Railroad Bridge, and 15 feet for a width of 50 feet through the settling basin to Washington Avenue. Project Depths: In the St. Clair River, slopes from 30 feet at head to 27.5 feet at Grand Trunk Western Railroad Bridge. In the Black River, 20 feet from the mouth to the upper end of the settling basin, about 2,300 feet upstream from the Grand Trunk Western Railroad Bridge.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,034	1992	1,652	1995	488	1998	843
1990	1,429	1993	1,687	1996	581		
1991	1,609	1994	839	1997	588		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic
		Imports	Exports*	Imports	Exports	Lakewise Receipts
Total, all commodities	843	10	18	344	251	221
Total coal	7	--	--	--	7	--
1200 coal coke	7	--	--	--	7	--
Total petroleum and petroleum products	31	0	--	22	10	--
Subtotal crude petroleum	3	--	--	--	3	--
2100 crude petroleum	3	--	--	--	3	--
Subtotal petroleum products	28	0	--	22	6	--
2330 distillate fuel oil	5	--	--	5	--	--
2340 residual fuel oil	16	--	--	16	--	--
2540 petroleum coke	6	0	--	--	6	--
Total chemicals and related products	45	1	2	23	19	--
Subtotal fertilizers	24	--	--	15	9	--
3110 nitrogenous fert.	24	--	--	15	9	--
Subtotal other chemicals and related products	22	1	2	8	10	--
3211 acyclic hydrocarbons	1	--	--	1	--	--
3220 alcohols	7	--	--	--	7	--
3230 carboxylic acids	0	0	--	0	--	--
3240 nitrogen func. comp.	2	0	0	2	0	--
3260 organic comp. nec	0	--	0	--	--	--
3273 ammonia	1	--	--	1	--	--
3275 inorg. elem., oxides, & halogen salts	5	0	--	4	--	--
3276 metallic salts	3	0	--	--	3	--
3282 pigments & paints	0	0	0	0	--	--
3283 coloring mat. nec	0	0	0	--	--	--
3284 medicines	0	--	0	--	--	--
3285 perfumes & cleansers	1	0	1	--	0	--
3286 plastics	2	0	1	0	0	--
3292 starches, gluten, glue	0	0	--	--	--	--
3297 chemical additives	0	--	0	--	--	--
3299 chem. products nec	0	0	--	--	--	--
Total crude materials, inedible except fuels	622	0	3	295	102	221
Subtotal forest products, wood and chips	1	--	--	1	--	--
4189 lumber	1	--	--	1	--	--
Subtotal soil, sand, gravel, rock and stone	411	--	--	190	--	221
4322 limestone	221	--	--	--	--	221
4331 sand & gravel	190	--	--	190	--	--
Subtotal non-ferrous ores and scrap	3	0	3	--	--	--
4650 aluminum ore	3	--	3	--	--	--
4690 non-ferrous ores nec	0	0	--	--	--	--
Subtotal sulphur, clay and salt	156	--	--	104	52	--
4782 clay & refrac. mat.	156	--	--	104	52	--
Subtotal other non-metal. min.	50	--	--	--	50	--
4900 non-metal. min. nec	50	--	--	--	50	--

PORT HURON, MI (INCLUDED IN ST. CLAIR RIVER)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic
		Imports	Exports*	Imports	Exports	Lakewise Receipts
Total primary manufactured goods	12	5	0	1	7	--
Subtotal paper products	1	1	0	—	—	—
5120 paper & paperboard	1	1	—	—	—	—
5190 paper products nec	0	0	0	—	—	—
Subtotal lime, cement and glass	1	1	—	0	—	—
5240 glass & glass prod.	0	0	—	—	—	—
5290 misc. mineral prod.	1	1	—	0	—	—
Subtotal primary iron and steel products	10	3	0	0	7	—
5312 pig iron	0	0	—	—	—	—
5320 i&s primary forms	0	—	—	0	—	—
5330 i&s plates & sheets	3	2	—	0	—	—
5360 i&s bars & shapes	0	—	—	0	—	—
5370 i&s pipe & tube	7	0	0	—	7	—
5390 primary i&s nec	0	0	—	—	—	—
Subtotal primary non-ferrous metal products	1	1	0	0	—	—
5421 copper	0	0	—	—	—	—
5422 aluminum	0	0	—	—	—	—
5429 smelted prod. nec	0	0	—	—	—	—
5480 fab. metal products	1	0	0	0	—	—
Subtotal primary wood products	0	0	—	—	—	—
5540 primary wood prod.	0	0	—	—	—	—
Total food and farm products	115	1	10	1	103	—
Subtotal grain	94	0	—	—	94	—
6344 corn	94	—	—	—	94	—
6442 rice	0	0	—	—	—	—
Subtotal vegetable products	2	1	0	1	0	—
6653 vegetable oils	0	0	—	—	—	—
6654 vegetables & prod.	1	0	0	1	0	—
Subtotal processed grain and animal feed	9	0	9	—	—	—
6747 grain mill products	0	0	—	—	—	—
6782 animal feed, prep.	9	0	9	—	—	—
Subtotal other agricultural products	10	1	1	0	9	—
6811 meat, fresh, frozen	0	—	0	—	—	—
6817 meat, prepared	0	0	—	—	—	—
6822 dairy products	0	0	0	—	—	—
6839 animals & prod. nec	0	0	—	—	—	—
6857 fruit & nuts nec	0	—	—	0	—	—
6858 fruit juices	0	0	—	—	—	—
6865 molasses	9	—	—	—	9	—
6872 cocoa beans	0	0	—	—	—	—
6885 alcoholic beverages	0	0	—	0	—	—
6889 food products nec	0	0	—	—	—	—
6891 tobacco & products	0	0	—	—	—	—
Total all manufactured equipment, machinery and products	9	2	3	2	3	—
7110 machinery (not elec)	6	1	2	0	3	—
7120 electrical machinery	0	0	0	0	0	—
7210 vehicles & parts	1	0	0	1	0	—
7400 manufac. wood prod.	0	0	0	—	—	—
7500 textile products	0	0	0	0	—	—
7600 rubber & plastic pr.	0	0	0	0	0	—
7900 manufac. prod. nec	1	1	0	1	0	—
Total unknown or not elsewhere classified	0	0	—	0	0	—
9900 unknown or nec	0	0	—	0	0	—

*Includes 9 (x1000) tons of foreign outbound in-transits.

MARYSVILLE, MI (INCLUDED IN ST. CLAIR RIVER)

Section Included: West bank of St. Clair River at Marysville, MI. Controlling Depth: 27.4 feet. Project Depth: at low-water datum; 27.4 feet to and from Lake Huron; 27.1 feet downbound to Lake St. Clair.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	559	1992	640	1995	889	1998	1,282
1990	615	1993	736	1996	1,068		
1991	518	1994	1,175	1997	1,142		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign	Canadian		Domestic
		Exports	Imports	Exports	Lakewise Receipts
Total, all commodities	1,282	6	252	4	1,021
Total coal	200	--	--	--	200
1100 coal lignite	200	--	--	--	200
Total petroleum and petroleum products	48	--	--	4	44
Subtotal petroleum products	48	--	--	4	44
2330 distillate fuel oil	2	--	--	--	2
2340 residual fuel oil	43	--	--	--	43
2540 petroleum coke	4	--	--	4	--
Total crude materials, inedible except fuels	1,034	6	252	--	776
Subtotal soil, sand, gravel, rock and stone	935	--	173	--	762
4322 limestone	762	--	--	--	762
4331 sand & gravel	173	--	173	--	--
Subtotal sulphur, clay and salt	85	6	79	--	--
4782 clay & refrac. mat.	85	6	79	--	--
Subtotal other non-metal. min.	14	--	--	--	14
4900 non-metal. min. nec	14	--	--	--	14

ST. CLAIR, MI (INCLUDED IN ST. CLAIR RIVER)

Section Included: West bank of St. Clair River at St. Clair, MI Controlling Depth: 27.3 feet. Project Depth: 27.3 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	5,756	1992	4,666	1995	5,028	1998	5,533
1990	4,889	1993	5,039	1996	5,427		
1991	4,778	1994	5,887	1997	5,699		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian	Domestic
		Imports	Lakewise Receipts
Total, all commodities	5,533	9	5,524
Total coal	5,493	--	5,493
1100 coal lignite	5,493	--	5,493
Total petroleum and petroleum products	38	7	31
Subtotal petroleum products	38	7	31
2330 distillate fuel oil	27	--	27
2340 residual fuel oil	11	7	4
Total chemicals and related products	1	1	--
Subtotal fertilizers	1	1	--
3110 nitrogenous fert.	1	1	--
Subtotal other chemicals and related products	1	1	--
3240 nitrogen func. comp.	0	0	--
3273 ammonia	0	0	--
3275 inorg. elem., oxides, & halogen salts	1	1	--
Total crude materials, inedible except fuels	0	0	--
Subtotal forest products, wood and chips	0	0	--
4189 lumber	0	0	--
Total primary manufactured goods	0	0	--
Subtotal primary non-ferrous metal products	0	0	--
5480 fab. metal products	0	0	--
Total all manufactured equipment, machinery and products	0	0	--
7110 machinery (not elec.)	0	0	--
7210 vehicles & parts	0	0	--
7600 rubber & plastic pr.	0	0	--
7900 manufac. prod. nec	0	0	--

ST. CLAIR, MI (INCLUDED IN ST. CLAIR RIVER)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Canadian	Domestic
		Imports	Lakewise Receipts
Total unknown or not elsewhere classified	0	0	--
9900 unknown or nec	0	0	--

MARINE CITY, MI (INCLUDED IN ST. CLAIR RIVER)

Section Included: West bank of St. Clair River at Marine City, MI, 25.3 miles upbound to Lake Huron; 19.2 miles downbound to Lake St. Clair, MI
Controlling Depth: 27 feet. Project Depth(at low water datum): 27.3 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	328	1992	3,174	1995	3,850	1998	4,252
1990	4,497	1993	3,454	1996	4,116		
1991	3,896	1994	3,572	1997	4,001		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise
		Receipts
Total, all commodities	4,252	4,252
Total coal	3,261	3,261
1100 coal lignite	3,261	3,261
Total crude materials, inedible except fuels	991	991
Subtotal soil, sand, gravel, rock and stone	991	991
4322 limestone	991	991

CHANNELS IN LAKE ST. CLAIR

Section Included: Improved ship channels connecting St. Clair River and Detroit River across Lake St. Clair, entrance channels to mouth of Clinton River and the Canadian channel to the mouth of the Thames River. Controlling Depths: 27.0 feet in the main channel with 8 feet in channel to Clinton River. Project Depths: 27.5 feet in main channel and 8 feet in Clinton River channel.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	69,851	1992	58,131	1995	68,555	1998	71,970
1990	64,034	1993	56,982	1996	67,111		
1991	54,232	1994	63,963	1997	68,211		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign	Canadian	
		Through	Through	
	Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	25,802	2,182	3,795	8,174
Total coal	7,261	--	0	4,976
1100 coal lignite	7,169	--	0	4,971
1200 coal coke	92	--	--	5
Total petroleum and petroleum products	1,300	1	0	276
Subtotal crude petroleum	543	--	--	3
2100 crude petroleum	543	--	--	3
Subtotal petroleum products	757	1	0	273
2211 gasoline	38	0	--	28
2330 distillate fuel oil	34	--	0	5
2340 residual fuel oil	72	--	--	34
2350 lube oil & greases	85	--	0	17
2410 petro. jelly & waxes	0	--	0	--
2429 naphtha & solvents	50	--	0	50
2430 asphalt, tar & pitch	79	--	--	79
2540 petroleum coke	398	0	0	139
2640 liquid natural gas	0	0	--	--
Total chemicals and related products	297	22	26	104
Subtotal fertilizers	152	11	1	21
3110 nitrogenous fert.	13	11	--	2
3130 potassic fert.	118	--	--	118
3190 fert. & mixes nec	21	--	1	21
Subtotal other chemicals and related products	145	11	25	83
3211 acyclic hydrocarbons	1	--	--	1
3212 benzene & toluene	19	--	--	19

CHANNELS IN LAKE ST. CLAIR
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Through		Through	
		Upbound	Downbnd	Upbound	Downbnd
3219 other hydrocarbons	9	9	0	—	—
3220 alcohols	1	0	1	—	—
3230 carboxylic acids	0	0	0	—	—
3240 nitrogen func. comp.	1	0	0	—	1
3250 organo - inorg. comp.	1	0	1	—	—
3260 organic comp. nec	0	0	0	—	—
3273 ammonia	1	—	—	—	1
3274 sodium hydroxide	64	—	—	64	—
3275 inorg. elem., oxides, & halogen salts	5	0	3	0	1
3276 metallic salts	21	0	0	18	3
3279 inorganic chem. nec	1	0	1	—	—
3281 radioactive material	0	0	—	—	—
3282 pigments & paints	0	0	0	0	0
3283 coloring mat. nec	0	0	0	—	0
3284 medicines	4	0	3	0	—
3285 perfumes & cleansers	3	0	3	0	0
3286 plastics	4	1	3	0	0
3291 pesticides	0	—	0	0	—
3292 starches, gluten, glue	7	0	6	—	—
3297 chemical additives	0	—	0	—	—
3298 wood & resin chem.	0	—	0	—	—
3299 chem. products nec	2	0	1	0	0
Total crude materials, inedible except fuels	8,194	117	208	1,946	5,923
Subtotal forest products, wood and chips	3	0	1	0	1
4110 rubber & gums	0	—	0	—	—
4150 fuel wood	0	—	0	—	—
4170 wood in the rough	0	—	0	—	—
4189 lumber	2	0	1	0	1
4190 forest products nec	0	0	0	—	—
Subtotal pulp and waste paper	33	10	23	—	—
4225 pulp & waste paper	33	10	23	—	—
Subtotal soil, sand, gravel, rock and stone	1,945	—	0	33	1,911
4322 limestone	1,666	—	—	31	1,635
4323 gypsum	5	—	0	—	5
4327 phosphate rock	5	—	—	—	5
4331 sand & gravel	269	—	0	2	266
Subtotal iron ore and scrap	4,634	—	2	1,075	3,556
4410 iron ore	4,571	—	—	1,043	3,528
4420 iron & steel scrap	62	—	2	33	28
Subtotal non-ferrous ores and scrap	108	99	10	—	—
4650 aluminum ore	101	98	3	—	—
4680 non-ferrous scrap	3	0	3	—	—
4690 non-ferrous ores nec	4	0	4	—	—
Subtotal sulphur, clay and salt	312	9	169	0	134
4741 sulphur, (dry)	0	0	—	—	—
4782 clay & refrac. mat.	311	9	169	0	134
Subtotal other non-metal. min.	1,160	—	2	837	321
4900 non-metal. min. nec	1,160	—	2	837	321
Total primary manufactured goods	3,565	2,016	8	867	674
Subtotal paper products	10	1	2	0	7
5110 newsprint	7	—	—	—	7
5120 paper & paperboard	1	1	1	0	—
5190 paper products nec	1	0	1	0	0
Subtotal lime, cement and glass	1,243	3	0	577	663
5220 cement & concrete	1,239	—	—	576	663
5240 glass & glass prod.	1	1	0	0	—
5290 misc. mineral prod.	3	2	0	0	0
Subtotal primary iron and steel products	2,282	1,986	3	291	3
5312 pig iron	340	51	0	289	—
5315 ferro alloys	21	21	0	—	—
5320 i&s primary forms	212	212	—	—	—
5330 i&s plates & sheets	1,569	1,568	0	1	0
5360 i&s bars & shapes	115	111	0	0	3
5370 i&s pipe & tube	18	14	3	1	0
5390 primary i&s nec	8	8	0	0	—
Subtotal primary non-ferrous metal products	30	27	2	0	1
5421 copper	0	0	0	0	0
5422 aluminum	2	1	0	0	0
5429 smelted prod. nec	15	15	0	—	—
5480 fab. metal products	12	10	2	0	0
Subtotal primary wood products	0	0	0	0	0
5540 primary wood prod.	0	0	0	0	0
Total food and farm products	5,133	2	3,536	3	1,591
Subtotal fish	1	—	0	0	1
6134 fish (not shellfish)	1	—	0	0	1
6136 shellfish	0	—	0	0	—
Subtotal grain	3,475	0	2,553	3	920
6241 wheat	2,257	—	1,789	3	466
6344 corn	1,120	—	728	—	392
6442 rice	0	0	—	—	—
6443 barley & rye	36	—	36	—	—
6445 oats	62	—	0	—	62

CHANNELS IN LAKE ST. CLAIR
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Through		Through	
		Upbound	Downbnd	Upbound	Downbnd
Subtotal oilseeds	1,550	—	882	—	668
6522 soybeans	1,171	—	503	—	668
6534 flaxseed	8	—	8	—	—
6590 oilseeds nec	371	—	371	—	—
Subtotal vegetable products	18	1	17	0	0
6653 vegetable oils	1	0	0	—	—
6654 vegetables & prod.	18	0	17	0	0
Subtotal processed grain and animal feed	56	0	56	0	0
6747 grain mill products	3	0	3	—	0
6781 hay & fodder	2	—	2	—	—
6782 animal feed, prep.	50	0	50	0	0
Subtotal other agricultural products	33	1	28	0	3
6811 meat, fresh, frozen	3	—	3	—	—
6817 meat, prepared	0	0	0	—	—
6822 dairy products	0	0	0	—	—
6838 tallow, animal oils	19	0	19	—	—
6839 animals & prod. nec	5	0	5	—	—
6857 fruit & nuts nec	0	—	0	0	—
6858 fruit juices	3	0	0	—	3
6872 cocoa beans	0	0	—	—	—
6885 alcoholic beverages	1	0	0	—	0
6889 food products nec	1	0	1	0	0
6891 tobacco & products	0	0	—	—	—
6893 cotton	0	—	0	—	—
6899 farm products nec	0	0	0	—	—
Total all manufactured equipment, machinery and products	43	23	16	2	2
7110 machinery (not elec)	15	8	6	0	0
7120 electrical machinery	5	3	2	0	0
7210 vehicles & parts	11	9	1	1	0
7220 aircraft & parts	0	0	0	—	—
7230 ships & boats	0	0	0	0	0
7300 ordnance & access.	0	0	0	—	—
7400 manufac. wood prod.	1	0	0	0	0
7500 textile products	2	1	0	0	1
7600 rubber & plastic pr.	1	1	1	0	0
7900 manufac. prod. nec	9	2	6	1	0
Total unknown or not elsewhere classified	9	0	1	0	7
9900 unknown or nec	9	0	1	0	7
Ton-miles (x1000) Foreign & Canadian	464,432	39,275	68,304	147,137	209,716

Commodity	Total	Domestic			
		Lakewise		Internal	
		Through	Upbound	Through	Upbound
Total, all commodities	46,169	5,367	40,793	5	4
Total coal	5,951	4,261	1,690	—	—
1100 coal lignite	5,889	4,261	1,628	—	—
1200 coal coke	62	—	62	—	—
Total petroleum and petroleum products	546	124	413	5	4
Subtotal petroleum products	546	124	413	5	4
2211 gasoline	28	28	—	—	—
2330 distillate fuel oil	27	27	—	—	—
2340 residual fuel oil	68	63	4	—	—
2430 asphalt, tar & pitch	373	6	363	—	4
2540 petroleum coke	50	—	45	5	—
Total crude materials, inedible except fuels	38,907	981	37,926	—	—
Subtotal soil, sand, gravel, rock and stone	10,007	265	9,743	—	—
4322 limestone	8,975	265	8,710	—	—
4323 gypsum	870	—	870	—	—
4331 sand & gravel	162	—	162	—	—
Subtotal iron ore and scrap	28,212	94	28,118	—	—
4410 iron ore	28,137	94	28,042	—	—
4420 iron & steel scrap	76	—	76	—	—
Subtotal slag	255	190	65	—	—
4860 slag	255	190	65	—	—
Subtotal other non-metal. min.	432	432	—	—	—
4900 non-metal. min. nec	432	432	—	—	—
Total primary manufactured goods	475	—	475	—	—
Subtotal lime, cement and glass	475	—	475	—	—
5220 cement & concrete	475	—	475	—	—

CHANNELS IN LAKE ST. CLAIR
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Domestic			
		Lakewise		Internal	
		Through Upbound	Downbnd	Through Upbound	Downbnd
Total food and farm products	290	--	290	--	--
Subtotal grain	290	--	290	--	--
6241 wheat	290	--	290	--	--
Ton-miles (x1000)	831,037	96,598	734,278	96	65
Domestic					
Tons All Traffic (x1000)	71,970				
Ton-miles All Traffic (x1000)	1,295,469				

DETROIT RIVER, MI

Section Included: Entire length of Detroit River and Rouge River to head of project. Controlling Depths: 25 to 28.5 feet and 21 to 25 feet, respectively with 5 feet of shoaling along the channel limits of the lower Livingstone and east outer channel and with project depth in the regularly traveled shipping lanes.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	75,662	1992	63,134	1995	73,502	1998	82,842
1990	69,635	1993	62,662	1996	75,023		
1991	57,894	1994	72,027	1997	75,939		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports*	Exports	Through		Imports	Exports*	Through	
				Upbound	Downbnd			Upbound	Downbnd
Total, all commodities	34,403	1,694	225	2,182	3,795	4,693	299	9,805	11,710
Total coal	7,407	--	--	--	0	446	2	5,041	1,918
1100 coal lignite	7,171	--	--	--	0	381	2	4,971	1,817
1200 coal coke	236	--	--	--	—	65	—	70	101
Total petroleum and petroleum products	1,817	2	0	1	0	217	144	412	1,040
Subtotal crude petroleum	543	--	--	--	--	--	--	3	541
2100 crude petroleum	543	--	--	--	--	--	--	3	541
Subtotal petroleum products	1,273	2	0	1	0	217	144	410	499
2211 gasoline	38	--	--	0	--	--	--	28	9
2330 distillate fuel oil	39	--	0	—	0	3	3	5	29
2340 residual fuel oil	109	--	--	--	--	24	12	37	36
2350 lube oil & greases	361	--	0	—	0	143	29	128	60
2410 petro. jelly & waxes	0	--	0	—	0	--	--	--	--
2429 naphtha & solvents	65	--	0	—	0	--	4	57	4
2430 asphalt, tar & pitch	84	2	0	—	—	6	--	--	76
2540 petroleum coke	577	0	0	0	0	42	96	155	284
2640 liquid natural gas	0	--	--	0	--	--	--	--	--
Total chemicals and related products	383	3	56	22	26	9	--	108	158
Subtotal fertilizers	155	0	3	11	1	2	--	21	118
3110 nitrogenous fert.	13	0	--	11	--	2	--	--	--
3130 potassic fert.	118	--	--	--	--	--	--	--	118
3190 fert. & mixes nec	24	0	3	--	1	--	--	21	--
Subtotal other chemicals and related products	228	3	53	11	25	7	--	87	41
3211 acyclic hydrocarbons	1	--	0	—	—	--	--	1	--
3212 benzene & toluene	19	--	--	—	—	--	--	--	19

DETROIT RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign				Canadian			
		Imports*	Exports	Through		Imports	Exports*	Through	
				Upbound	Downbnd			Upbound	Downbnd
3219 other hydrocarbons	9	—	0	9	0	—	—	—	—
3220 alcohols	2	—	1	0	1	—	—	—	—
3230 carboxylic acids	2	1	1	0	0	—	—	—	—
3240 nitrogen func. comp.	9	0	7	0	0	1	—	0	0
3250 organo - inorg. comp.	3	0	1	0	1	—	—	—	—
3260 organic comp. nec	2	0	2	0	0	—	—	—	—
3273 ammonia	1	—	—	—	—	1	—	—	—
3274 sodium hydroxide	65	—	1	—	—	—	—	64	—
3275 inorg. elem.,oxides, & halogen salts	9	0	2	0	3	2	—	1	0
3276 metallic salts	41	0	2	0	0	—	—	18	21
3279 inorganic chem. nec	6	0	4	0	1	0	—	0	—
3281 radioactive material	0	—	—	0	—	0	—	0	—
3282 pigments & paints	9	0	3	0	0	3	—	3	0
3283 coloring mat. nec	0	0	0	0	0	0	—	0	0
3284 medicines	5	0	1	0	3	—	—	0	—
3285 perfumes & cleansers	15	0	12	0	3	0	—	0	0
3286 plastics	13	1	9	1	3	0	—	0	0
3291 pesticides	0	—	0	—	0	—	—	0	—
3292 starches, gluten, glue	9	0	2	0	6	0	—	0	—
3293 explosives	0	0	—	—	—	—	—	—	—
3297 chemical additives	3	0	2	—	0	0	—	—	0
3298 wood & resin chem.	0	—	0	—	0	—	—	—	—
3299 chem. products nec	4	0	2	0	1	0	—	0	0
Total crude materials, inedible except fuels	12,908	1	23	117	208	3,075	99	3,098	6,286
Subtotal forest products, wood and chips	281	0	1	0	1	129	0	90	59
4110 rubber & gums	0	—	0	—	0	—	—	—	—
4150 fuel wood	0	0	0	—	0	—	—	—	—
4170 wood in the rough	0	—	0	—	0	—	—	—	—
4189 lumber	280	—	1	0	1	129	0	90	59
4190 forest products nec	0	0	0	0	0	—	—	—	—
Subtotal pulp and waste paper	34	—	1	10	23	—	—	—	—
4225 pulp & waste paper	34	—	1	10	23	—	—	—	—
Subtotal soil, sand, gravel, rock and stone	3,044	0	11	—	0	368	69	758	1,837
4322 limestone	2,071	—	—	—	—	—	—	437	1,635
4323 gypsum	6	—	1	—	0	—	—	—	5
4327 phosphate rock	25	—	—	—	—	—	10	—	15
4331 sand & gravel	940	0	10	—	0	368	59	321	182
Subtotal iron ore and scrap	6,650	—	0	—	2	1,986	30	1,076	3,556
4410 iron ore	6,587	—	0	—	—	1,986	30	1,043	3,528
4420 iron & steel scrap	63	—	0	—	2	0	—	33	28
Subtotal non-ferrous ores and scrap	109	—	1	99	10	0	—	0	0
4650 aluminum ore	102	—	0	98	3	0	—	0	—
4680 non-ferrous scrap	3	—	0	0	3	0	—	—	0
4690 non-ferrous ores nec	4	—	0	0	4	—	—	—	—
Subtotal sulphur, clay and salt	384	0	9	9	169	38	—	32	127
4741 sulphur, (dry)	0	0	—	0	—	—	—	—	—

DETROIT RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign					Canadian				
		Imports*	Exports	Through		Imports	Exports*	Through			
				Upbound	Downbnd			Upbound	Downbnd		
4782 clay & refrac. mat.	384	0	9	9	169	38	—	32	127		
Subtotal slag	68	0	—	—	—	35	—	32	—		
4860 slag	68	0	—	—	—	35	—	32	—		
Subtotal other non-metal. min.	2,337	—	0	—	2	518	—	1,111	706		
4900 non-metal. min. nec	2,337	—	0	—	2	518	—	1,111	706		
Total primary manufactured goods	6,533	1,675	30	2,016	8	938	39	1,136	690		
Subtotal paper products	15	1	4	1	2	0	—	0	7		
5110 newsprint	7	—	—	—	—	—	—	—	7		
5120 paper & paperboard	6	1	4	1	1	0	—	0	0		
5190 paper products nec	2	0	1	0	1	0	—	0	0		
Subtotal lime, cement and glass	2,381	28	5	3	0	860	—	845	639		
5220 cement & concrete	2,369	24	—	—	—	860	—	845	639		
5240 glass & glass prod.	3	0	2	1	0	0	—	0	—		
5290 misc. mineral prod.	9	3	3	2	0	0	—	0	0		
Subtotal primary iron and steel products	4,065	1,641	13	1,986	3	50	39	291	43		
5312 pig iron	390	—	0	51	0	50	—	289	—		
5315 ferro alloys	28	7	—	21	0	—	—	—	—		
5320 i&s primary forms	356	144	0	212	—	—	—	—	—		
5330 i&s plates & sheets	3,075	1,417	10	1,568	0	0	39	1	39		
5360 i&s bars & shapes	184	69	0	111	0	—	—	0	3		
5370 i&s pipe & tube	22	2	2	14	3	0	—	1	0		
5390 primary i&s nec	11	2	1	8	0	0	—	0	—		
Subtotal primary non-ferrous metal products	67	5	4	27	2	28	0	0	1		
5421 copper	1	0	0	0	0	0	0	0	0		
5422 aluminum	30	0	0	1	0	28	—	0	—		
5429 smelted prod. nec	15	0	0	15	0	0	—	0	—		
5480 fab. metal products	21	5	3	10	2	0	—	0	0		
Subtotal primary wood products	5	0	4	0	0	0	—	0	0		
5540 primary wood prod.	5	0	4	0	0	0	—	0	0		
Total food and farm products	5,206	2	41	2	3,536	1	15	3	1,606		
Subtotal fish	1	—	—	—	0	—	—	0	1		
6134 fish (not shellfish)	1	—	—	—	0	—	—	0	1		
6136 shellfish	0	—	—	—	0	—	—	0	—		
Subtotal grain	3,478	0	3	0	2,553	—	—	3	920		
6241 wheat	2,257	—	—	—	1,789	—	—	3	466		
6344 corn	1,123	—	3	—	728	—	—	—	392		
6442 rice	0	0	—	0	—	—	—	—	—		
6443 barley & rye	36	—	—	—	36	—	—	—	—		
6445 oats	62	—	—	—	0	—	—	—	62		
6447 sorghum grains	0	—	0	—	—	—	—	—	—		
Subtotal oilseeds	1,554	—	4	—	882	—	—	—	668		
6522 soybeans	1,175	—	4	—	503	—	—	—	668		
6534 flaxseed	8	—	—	—	8	—	—	—	—		
6590 oilseeds nec	371	—	0	—	371	—	—	—	—		
Subtotal vegetable products	29	1	10	1	17	—	—	0	0		
6653 vegetable oils	1	0	0	0	0	—	—	—	—		
6654 vegetables & prod.	28	1	10	0	17	—	—	0	0		

DETROIT RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign					Canadian				
		Imports*	Exports	Through		Imports	Exports*	Through		Upbound	Downbnd
				Upbound	Downbnd			Upbound	Downbnd		
Subtotal processed grain and animal feed	61	0	4	0	56	0	--	0	0		
6746 wheat flour	0	—	0	—	—	—	—	—	—	—	—
6747 grain mill products	4	0	0	0	3	—	—	—	—	—	0
6781 hay & fodder	2	—	—	—	2	—	—	—	—	—	—
6782 animal feed, prep.	55	0	4	0	50	0	—	0	0	0	0
Subtotal other agricultural products	83	1	20	1	28	0	15	0	17		
6811 meat, fresh, frozen	10	0	7	—	3	—	—	—	—	—	—
6817 meat, prepared	0	—	—	0	0	—	—	—	—	—	—
6822 dairy products	1	—	0	0	0	—	—	—	—	—	—
6835 fish, prepared	0	—	0	—	—	—	—	—	—	—	—
6838 tallow, animal oils	19	0	0	0	19	—	—	—	—	—	—
6839 animals & prod. nec	8	0	3	0	5	—	—	—	—	—	—
6857 fruit & nuts nec	1	—	1	—	0	—	—	0	—	—	—
6858 fruit juices	3	0	0	0	0	—	—	—	3	—	—
6865 molasses	29	—	—	—	—	—	15	—	15	—	—
6871 coffee	0	—	0	—	—	—	—	—	—	—	—
6872 cocoa beans	0	0	—	0	—	—	—	—	—	—	—
6885 alcoholic beverages	2	0	0	0	0	0	—	0	0	—	—
6888 water & ice	0	0	0	—	—	—	—	—	—	—	—
6889 food products nec	8	0	6	0	1	—	—	—	0	—	0
6891 tobacco & products	0	—	—	0	—	—	—	—	—	—	—
6893 cotton	0	—	0	—	0	—	—	—	—	—	—
6899 farm products nec	1	0	1	0	0	—	—	—	—	—	—
Total all manufactured equipment, machinery and products	137	11	74	23	16	4	0	4	3		
7110 machinery (not elec)	42	6	17	8	6	2	0	2	1	—	—
7120 electrical machinery	10	0	5	3	2	0	0	0	0	—	—
7210 vehicles & parts	48	1	36	9	1	0	0	1	0	—	—
7220 aircraft & parts	0	0	0	0	0	—	—	—	—	—	—
7230 ships & boats	1	0	0	0	0	0	0	0	0	—	—
7300 ordnance & access.	0	0	0	0	0	0	—	0	0	—	—
7400 manufac. wood prod.	4	0	0	0	0	2	—	0	2	—	—
7500 textile products	3	1	1	1	0	0	—	0	1	—	—
7600 rubber & plastic pr.	11	1	9	1	1	0	0	0	0	—	—
7900 manufac. prod. nec	17	1	6	2	6	0	0	1	0	—	—
Total unknown or not elsewhere classified	14	0	0	0	1	2	--	2	8		
9900 unknown or nec	14	0	0	0	1	2	—	2	8	—	—
Ton-miles Foreign & Canadian (x1000)	969,931	37,991	5,551	67,640	117,635	67,718	6,429	303,968	362,999		

DETROIT RIVER, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Lakewise			
		Receipts	Shipments	Through Upbound	Through Downbnd
Total, all commodities	48,273	11,812	564	5,198	30,699
Total coal	7,389	1,438	--	4,261	1,690
1100 coal lignite	7,328	1,438	--	4,261	1,628
1200 coal coke	62	--	--	--	62
Total petroleum and petroleum products	961	215	443	60	245
Subtotal petroleum products	961	215	443	60	245
2211 gasoline	35	--	7	28	--
2221 kerosene	7	7	--	--	--
2330 distillate fuel oil	27	0	27	--	--
2340 residual fuel oil	127	44	51	32	--
2430 asphalt, tar & pitch	721	159	358	--	205
2540 petroleum coke	45	5	--	--	40
Total crude materials, inedible except fuels	39,153	9,833	118	877	28,326
Subtotal soil, sand, gravel, rock and stone	10,037	3,064	23	255	6,695
4322 limestone	8,992	2,753	10	255	5,974
4323 gypsum	884	312	13	--	559
4331 sand & gravel	162	--	--	--	162
Subtotal iron ore and scrap	28,212	6,487	94	--	21,631
4410 iron ore	28,137	6,487	94	--	21,556
4420 iron & steel scrap	76	--	--	--	76
Subtotal slag	255	65	--	190	--
4860 slag	255	65	--	190	--
Subtotal other non-metal. min.	649	217	--	432	--
4900 non-metal. min. nec	649	217	--	432	--
Total primary manufactured goods	479	326	4	--	149
Subtotal lime, cement and glass	479	326	4	--	149
5220 cement & concrete	479	326	4	--	149
Total food and farm products	290	--	--	--	290
Subtotal grain	290	--	--	--	290
6241 wheat	290	--	--	--	290
Ton-miles (x1000)	1,361,607	239,593	9,209	161,125	951,679
Lakewise					

Commodity	Total	Internal			
		Inbound Downbnd	Outbound Upbound	Upbound	Intra Downbnd
Total, all commodities	166	4	5	78	79
Total petroleum and petroleum products	159	4	5	78	72
Subtotal petroleum products	159	4	5	78	72
2340 residual fuel oil	3	--	--	3	--
2430 asphalt, tar & pitch	150	4	--	75	72
2540 petroleum coke	5	--	5	--	--
Total crude materials, inedible except fuels	7	--	--	1	7
Subtotal soil, sand, gravel, rock and stone	7	--	--	1	7
4322 limestone	7	--	--	--	7
4331 sand & gravel	1	--	--	1	--
Ton-miles (x1000)	1,560	7	59	555	939
Internal					
Tons All Traffic (x1000)	82,842				
Ton-miles All Traffic (x1000)	2,333,098				

*Includes 21 (x1000) tons of foreign inbound in-transits; Includes 0 (x1000) tons of Canadian outbound in-transits.

DETROIT HARBOR, MI (INCLUDED IN PORT OF DETROIT)

Section Included: U.S. bank of Detroit River from Lake St. Clair to western extreme of Zug Island. Controlling Depth: Channel north of Belle Isle 21 feet, remainder of river 25-28.5 feet. Project Depth: 28.5 feet except channel north of Belle Isle, 21 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	9,900	1992	7,194	1995	5,284	1998	5,882
1990	7,553	1993	8,083	1996	8,224		
1991	5,526	1994	7,501	1997	5,689		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports
Total, all commodities	4,976	1,137	215	3,366	258
Total coal	447	--	--	446	2
1100 coal lignite	383	--	--	381	2
1200 coal coke	65	--	--	65	--
Total petroleum and petroleum products	339	2	0	192	144
Subtotal petroleum products	339	2	0	192	144
2330 distillate fuel oil	3	--	0	--	3
2340 residual fuel oil	31	--	--	19	12
2350 lube oil & greases	167	--	0	138	29
2410 petro. jelly & waxes	0	--	0	--	--
2429 naphtha & solvents	4	--	0	--	4
2430 asphalt, tar & pitch	6	2	0	4	--
2540 petroleum coke	128	0	0	32	96
Total chemicals and related products	65	3	55	6	--
Subtotal fertilizers	4	0	3	1	--
3110 nitrogenous fert.	1	0	--	1	--
3190 fert. & mixes nec	3	0	3	--	--
Subtotal other chemicals and related products	61	3	52	5	--
3211 acyclic hydrocarbons	0	--	0	--	--
3219 other hydrocarbons	0	--	0	--	--
3220 alcohols	1	--	1	--	--
3230 carboxylic acids	2	1	1	--	--
3240 nitrogen func. comp.	8	0	7	1	--
3250 organo - inorg. comp.	2	0	1	--	--
3260 organic comp. nec	2	0	2	--	--
3273 ammonia	0	--	0	0	--
3274 sodium hydroxide	1	--	1	--	--
3275 inorg. elem., oxides, & halogen salts	3	0	1	1	--
3276 metallic salts	2	0	2	--	--
3279 inorganic chem. nec	4	0	4	0	--
3281 radioactive material	0	--	0	0	--
3282 pigments & paints	6	0	3	3	--
3283 coloring mat. nec	0	0	0	0	--
3284 medicines	1	0	1	--	--
3285 perfumes & cleansers	12	0	12	0	--
3286 plastics	9	1	9	0	--
3291 pesticides	0	--	0	--	--
3292 starches, gluten, glue	2	0	2	0	--
3293 explosives	0	0	--	--	--
3297 chemical additives	3	0	2	--	--
3298 wood & resin chem.	0	--	0	--	--
3299 chem. products nec	2	0	2	0	--
Total crude materials, inedible except fuels	2,216	1	23	2,128	65
Subtotal forest products, wood and chips	90	0	1	89	0
4110 rubber & gums	0	--	0	--	--
4150 fuel wood	0	0	0	--	--
4170 wood in the rough	0	--	0	--	--
4189 lumber	90	--	1	89	0
4190 forest products nec	0	0	0	--	--
Subtotal pulp and waste paper	1	--	1	--	--
4225 pulp & waste paper	1	--	1	--	--
Subtotal soil, sand, gravel, rock and stone	249	0	11	204	35
4323 gypsum	1	--	1	--	--
4327 phosphate rock	10	--	--	--	10
4331 sand & gravel	238	0	10	204	25
Subtotal iron ore and scrap	1,605	--	0	1,575	30
4410 iron ore	1,605	--	0	1,575	30
4420 iron & steel scrap	0	--	0	0	--
Subtotal non-ferrous ores and scrap	1	--	1	0	--
4650 aluminum ore	0	--	0	0	--
4680 non-ferrous scrap	0	--	0	0	--
4690 non-ferrous ores nec	0	--	0	--	--
Subtotal sulphur, clay and salt	9	0	9	--	--
4741 sulphur, (dry)	0	0	--	--	--
4782 clay & refrac. mat.	9	0	9	--	--
Subtotal slag	36	0	--	35	--
4860 slag	36	0	--	35	--
Subtotal other non-metal. min.	224	--	0	224	--
4900 non-metal. min. nec	224	--	0	224	--

DETROIT HARBOR, MI (INCLUDED IN PORT OF DETROIT)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports
Total primary manufactured goods	1,761	1,118	21	589	33
Subtotal paper products	5	1	4	0	--
5120 paper & paperboard	4	1	4	0	--
5190 paper products nec	1	0	1	0	--
Subtotal lime, cement and glass	581	3	5	572	--
5220 cement & concrete	572	—	—	572	--
5240 glass & glass prod.	2	0	2	0	--
5290 misc. mineral prod.	6	3	3	0	--
Subtotal primary iron and steel products	1,146	1,109	3	0	33
5312 pig iron	0	—	0	—	--
5315 ferro alloys	7	7	—	—	--
5320 i&s primary forms	33	33	0	—	--
5330 i&s plates & sheets	1,038	1,004	0	0	33
5360 i&s bars & shapes	60	60	0	—	--
5370 i&s pipe & tube	4	2	2	0	--
5390 primary i&s nec	3	2	1	0	--
Subtotal primary non-ferrous metal products	25	5	4	16	0
5421 copper	0	0	0	0	0
5422 aluminum	16	0	0	16	--
5429 smelted prod. nec	0	0	0	0	--
5480 fab. metal products	8	5	3	0	--
Subtotal primary wood products	4	0	4	0	--
5540 primary wood prod.	4	0	4	0	--
Total food and farm products	58	2	41	1	15
Subtotal grain	3	0	3	—	--
6344 corn	3	—	3	—	--
6442 rice	0	0	—	—	--
6447 sorghum grains	0	—	0	—	--
Subtotal oilseeds	4	—	4	—	--
6522 soybeans	4	—	4	—	--
6590 oilseeds nec	0	—	0	—	--
Subtotal vegetable products	11	1	10	—	--
6653 vegetable oils	0	0	0	—	--
6654 vegetables & prod.	11	1	10	—	--
Subtotal processed grain and animal feed	5	0	4	0	--
6746 wheat flour	0	—	0	—	--
6747 grain mill products	0	0	0	—	--
6782 animal feed, prep.	4	0	4	0	--
Subtotal other agricultural products	36	1	20	0	15
6811 meat, fresh, frozen	7	0	7	—	--
6822 dairy products	0	—	0	—	--
6835 fish, prepared	0	—	0	—	--
6838 tallow, animal oils	0	0	0	—	--
6839 animals & prod. nec	3	0	3	—	--
6857 fruit & nuts nec	1	—	1	—	--
6858 fruit juices	0	0	0	—	--
6865 molasses	15	—	—	—	15
6871 coffee	0	—	0	—	--
6872 cocoa beans	0	0	—	—	--
6885 alcoholic beverages	1	0	0	0	--
6888 water & ice	0	0	0	—	--
6889 food products nec	7	0	6	—	--
6893 cotton	0	—	0	—	--
6899 farm products nec	1	0	1	—	--
Total all manufactured equipment, machinery and products	87	11	74	2	0
7110 machinery (not elec)	24	6	17	2	0
7120 electrical machinery	6	0	5	0	0
7210 vehicles & parts	38	1	36	0	0
7220 aircraft & parts	0	0	0	—	--
7230 ships & boats	0	0	0	0	--
7300 ordnance & access.	0	0	0	0	--
7400 manufac. wood prod.	0	0	0	0	--
7500 textile products	2	1	1	0	--
7600 rubber & plastic pr.	9	1	9	0	0
7900 manufac. prod. nec	8	1	6	0	0
Total unknown or not elsewhere classified	3	0	0	2	--
9900 unknown or nec	3	0	0	2	--

Commodity	Total	Domestic			
		Lakewise		Internal	
		Receipts	Shipments	Receipts	Shipments
Total, all commodities	906	828	16	4	58
Total petroleum and petroleum products	108	41	12	4	51
Subtotal petroleum products	108	41	12	4	51
2221 kerosene	7	7	—	—	—

DETROIT HARBOR, MI (INCLUDED IN PORT OF DETROIT)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Domestic			
		Lakewise		Internal	
		Receipts	Shipments	Receipts	Shipments
2330 distillate fuel oil	0	0	—	—	—
2340 residual fuel oil	34	27	7	—	—
2430 asphalt, tar & pitch	68	7	6	4	51
Total crude materials, inedible except fuels	468	461	—	—	7
Subtotal soil, sand, gravel, rock and stone	468	461	—	—	7
4322 limestone	468	461	—	—	7
Total primary manufactured goods	330	326	4	—	—
Subtotal lime, cement and glass	330	326	4	—	—
5220 cement & concrete	330	326	4	—	—

*Includes 17 (x1000) tons of foreign inbound in-transits.

ROUGE RIVER, MI (INCLUDED IN PORT OF DETROIT)

Section Included: From the mouth of the Short Cut Canal to the Ford Motor Company. Controlling Depth: 20 feet for a minimum width of 100 feet from the mouth of the short cut to Dix Avenue Bridge, with the exception of some shoal areas, and 20 feet in the turning basin, except near the shore. Project Depth: 21.0 feet from mouth of Short Cut Canal to and including the turning basin in main channel.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	8,044	1992	7,192	1995	11,372	1998	12,626
1990	7,960	1993	7,072	1996	9,307		
1991	6,522	1994	8,569	1997	11,996		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports	Exports	Imports	Exports
Total, all commodities	1,404	59	—	1,310	35
Total petroleum and petroleum products	20	—	—	20	—
Subtotal petroleum products	20	—	—	20	—
2330 distillate fuel oil	3	—	—	3	—
2340 residual fuel oil	2	—	—	2	—
2350 lube oil & greases	5	—	—	5	—
2540 petroleum coke	10	—	—	10	—
Total chemicals and related products	3	—	—	3	—
Subtotal fertilizers	2	—	—	2	—
3110 nitrogenous fert.	2	—	—	2	—
Subtotal other chemicals and related products	1	—	—	1	—
3240 nitrogen func. comp.	0	—	—	0	—
3273 ammonia	0	—	—	0	—
3275 inorg. elem., oxides, & halogen salts	1	—	—	1	—
3282 pigments & paints	0	—	—	0	—
3283 coloring mat. nec	0	—	—	0	—
3285 perfumes & cleansers	0	—	—	0	—
3286 plastics	0	—	—	0	—
3297 chemical additives	0	—	—	0	—
3299 chem. products nec	0	—	—	0	—
Total crude materials, inedible except fuels	982	—	—	948	35
Subtotal forest products, wood and chips	40	—	—	40	—
4189 lumber	40	—	—	40	—
Subtotal soil, sand, gravel, rock and stone	199	—	—	164	35
4331 sand & gravel	199	—	—	164	35
Subtotal iron ore and scrap	411	—	—	411	—
4410 iron ore	411	—	—	411	—
Subtotal non-ferrous ores and scrap	0	—	—	0	—
4680 non-ferrous scrap	0	—	—	0	—
Subtotal sulphur, clay and salt	38	—	—	38	—
4782 clay & refrac. mat.	38	—	—	38	—
Subtotal other non-metal. min.	294	—	—	294	—
4900 non-metal. min. nec	294	—	—	294	—
Total primary manufactured goods	397	59	—	338	—
Subtotal paper products	0	—	—	0	—
5120 paper & paperboard	0	—	—	0	—
5190 paper products nec	0	—	—	0	—
Subtotal lime, cement and glass	312	24	—	288	—
5220 cement & concrete	312	24	—	288	—
Subtotal primary iron and steel products	84	35	—	50	—
5312 pig iron	50	—	—	50	—
5330 i&s plates & sheets	35	35	—	0	—
5370 i&s pipe & tube	0	—	—	0	—

ROUGE RIVER, MI (INCLUDED IN PORT OF DETROIT)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports	Exports	Imports	Exports
Subtotal primary non-ferrous metal products	0	--	--	0	--
5480 fab. metal products	0	--	--	0	--
Subtotal primary wood products	0	--	--	0	--
5540 primary wood prod.	0	--	--	0	--
Total food and farm products	0	--	--	0	--
Subtotal processed grain and animal feed	0	--	--	0	--
6782 animal feed, prep.	0	--	--	0	--
Total all manufactured equipment, machinery and products	2	--	--	2	--
7110 machinery (not elec)	0	--	--	0	--
7120 electrical machinery	0	--	--	0	--
7210 vehicles & parts	0	--	--	0	--
7230 ships & boats	0	--	--	0	--
7300 ordnance & access.	0	--	--	0	--
7400 manufac. wood prod.	1	--	--	1	--
7500 textile products	0	--	--	0	--
7600 rubber & plastic pr.	0	--	--	0	--
7900 manufac. prod. nec	0	--	--	0	--
Total unknown or not elsewhere classified	0	--	--	0	--
9900 unknown or nec	0	--	--	0	--

Commodity	Total	Domestic					
		Lakewise		Internal			
Receipts	Shipments	Receipts	Shipments	Intraport			
Total, all commodities	11,222	10,577	489	51	5	99	
Total coal	1,173	1,173	--	--	--	--	--
1100 coal lignite	1,173	1,173	--	--	--	--	--
Total petroleum and petroleum products	725	174	396	51	5	99	
Subtotal petroleum products	725	174	396	51	5	99	
2330 distillate fuel oil	0	--	0	--	--	--	--
2340 residual fuel oil	64	17	44	--	--	3	
2430 asphalt, tar & pitch	650	152	352	51	--	95	
2540 petroleum coke	11	5	--	--	5	--	
Total crude materials, inedible except fuels	9,323	9,230	93	--	--	1	
Subtotal soil, sand, gravel, rock and stone	2,623	2,599	23	--	--	1	
4322 limestone	2,297	2,288	10	--	--	--	
4323 gypsum	325	312	13	--	--	--	
4331 sand & gravel	1	--	--	--	--	1	
Subtotal iron ore and scrap	6,556	6,487	69	--	--	--	
4410 iron ore	6,556	6,487	69	--	--	--	
Subtotal slag	65	65	--	--	--	--	
4860 slag	65	65	--	--	--	--	
Subtotal other non-metal. min.	79	79	--	--	--	--	
4900 non-metal. min. nec	79	79	--	--	--	--	

ECORSE, MI (INCLUDED IN PORT OF DETROIT)

Section Included: U.S. shore of Detroit River from Great Lakes Avenue. to Ecorse River. Controlling Depth: 26.5 feet. Project Depth: 28.5 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	641	1992	350	1995	549	1998	843
1990	268	1993	276	1996	797		
1991	421	1994	712	1997	375		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports*	Exports	Imports	Exports*	Total	Lakewise	Internal
						Receipts	Shipments	Receipts
Total, all commodities	843	485	11	14	6	326	294	25
Total coal	157	--	--	--	--	157	157	--
1100 coal lignite	157	--	--	--	--	157	157	--

ECORSE, MI (INCLUDED IN PORT OF DETROIT)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			
		Imports*	Exports	Imports	Exports*	Total	Lakewise	Internal	
						Receipts	Shipments	Receipts	
Total petroleum and petroleum products	2	--	--	2	--	--	--	--	--
Subtotal petroleum products	2	--	--	2	--	--	--	--	--
2430 asphalt, tar & pitch	2	--	--	2	--	--	--	--	--
Total chemicals and related products	1	--	1	0	--	--	--	--	--
Subtotal other chemicals and related products	1	--	1	0	--	--	--	--	--
3275 inorg. elem., oxides, & halogen salts	1	--	1	--	--	--	--	--	--
3284 medicines	0	--	0	--	--	--	--	--	--
3285 perfumes & cleansers	0	--	0	--	--	--	--	--	--
3292 starches, gluten, glue	0	--	0	--	--	--	--	--	--
Total crude materials, inedible except fuels	170	--	--	--	--	170	138	25	7
Subtotal soil, sand, gravel, rock and stone	7	--	--	--	--	7	--	--	7
4322 limestone	7	--	--	--	--	7	--	--	7
Subtotal iron ore and scrap	25	--	--	--	--	25	--	25	--
4410 iron ore	25	--	--	--	--	25	--	25	--
Subtotal other non-metal. min.	138	--	--	--	--	138	138	--	--
4900 non-metal. min. nec	138	--	--	--	--	138	138	--	--
Total primary manufactured goods	513	485	9	12	6	--	--	--	--
Subtotal primary iron and steel products	501	485	9	--	6	--	--	--	--
5320 i&s primary forms	110	110	--	--	--	--	--	--	--
5330 i&s plates & sheets	381	366	9	--	6	--	--	--	--
5360 i&s bars & shapes	9	9	--	--	--	--	--	--	--
5370 i&s pipe & tube	0	0	--	--	--	--	--	--	--
5390 primary i&s nec	0	0	--	--	--	--	--	--	--
Subtotal primary non-ferrous metal products	12	--	--	12	--	--	--	--	--
5422 aluminum	12	--	--	12	--	--	--	--	--
Total all manufactured equipment, machinery and products	1	--	0	0	0	--	--	--	--
7110 machinery (not elec)	0	--	0	--	--	--	--	--	--
7120 electrical machinery	0	--	--	0	--	--	--	--	--
7230 ships & boats	0	--	--	--	0	--	--	--	--
7900 manufac. prod. nec	0	--	--	0	--	--	--	--	--

*Includes 4 (x1000) tons of foreign inbound in-transits; Includes 0 (x1000) tons of Canadian outbound in-transits.

PORT OF DETROIT, MI

Section Included: Detroit Harbor, Rouge River, Ecorse, Wyandotte, Riverview and Trenton. Controlling and Project Depths: See aforementioned project descriptions.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	20,701	1992	16,303	1995	18,661	1998	19,454
1990	17,735	1993	17,422	1996	18,604		
1991	14,321	1994	18,718	1997	18,135		

Freight Traffic, 1998 (thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports*
Total, all commodities	6,911	1,694	225	4,693	299
Total coal	447	--	--	446	2
1100 coal lignite	383	--	--	381	2
1200 coal coke	65	--	--	65	--
Total petroleum and petroleum products	364	2	0	217	144
Subtotal petroleum products	364	2	0	217	144
2330 distillate fuel oil	5	--	0	3	3
2340 residual fuel oil	36	--	--	24	12
2350 lube oil & greases	172	--	0	143	29
2410 petro. jelly & waxes	0	--	0	--	--
2429 naphtha & solvents	4	--	0	--	4
2430 asphalt, tar & pitch	8	2	0	6	--
2540 petroleum coke	138	0	0	42	96
Total chemicals and related products	69	3	56	9	--
Subtotal fertilizers	5	0	3	2	--
3110 nitrogenous fert.	2	0	--	2	--
3190 fert. & mixes nec	3	0	3	--	--
Subtotal other chemicals and related products	63	3	53	7	--
3211 acyclic hydrocarbons	0	--	0	--	--
3219 other hydrocarbons	0	--	0	--	--
3220 alcohols	1	--	1	--	--
3230 carboxylic acids	2	1	1	--	--
3240 nitrogen func. comp.	8	0	7	1	--
3250 organo - inorg. comp.	2	0	1	--	--
3260 organic comp. nec	2	0	2	--	--
3273 ammonia	1	--	--	1	--
3274 sodium hydroxide	1	--	1	--	--
3275 inorg. elem., oxides, & halogen salts	5	0	2	2	--
3276 metallic salts	2	0	2	--	--
3279 inorganic chem. nec	4	0	4	0	--
3281 radioactive material	0	--	--	0	--
3282 pigments & paints	6	0	3	3	--
3283 coloring mat. nec	0	0	0	0	--
3284 medicines	1	0	1	--	--
3285 perfumes & cleansers	12	0	12	0	--
3286 plastics	9	1	9	0	--
3291 pesticides	0	--	0	--	--
3292 starches, gluten, glue	2	0	2	0	--
3293 explosives	0	0	--	--	--
3297 chemical additives	3	0	2	0	--
3298 wood & resin chem.	0	--	0	--	--
3299 chem. products nec	2	0	2	0	--
Total crude materials, inedible except fuels	3,198	1	23	3,075	99
Subtotal forest products, wood and chips	130	0	1	129	0
4110 rubber & gums	0	--	0	--	--
4150 fuel wood	0	0	0	--	--
4170 wood in the rough	0	--	0	--	--
4189 lumber	130	--	1	129	0
4190 forest products nec	0	0	0	--	--
Subtotal pulp and waste paper	1	--	1	--	--
4225 pulp & waste paper	1	--	1	--	--
Subtotal soil, sand, gravel, rock and stone	448	0	11	368	69
4323 gypsum	1	--	1	--	--
4327 phosphate rock	10	--	--	--	10
4331 sand & gravel	437	0	10	368	59
Subtotal iron ore and scrap	2,016	--	0	1,986	30
4410 iron ore	2,016	--	0	1,986	30
4420 iron & steel scrap	0	--	0	0	--
Subtotal non-ferrous ores and scrap	1	--	1	0	--
4650 aluminum ore	0	--	0	0	--
4680 non-ferrous scrap	0	--	0	0	--
4690 non-ferrous ores nec	0	--	0	--	--
Subtotal sulphur, clay and salt	47	0	9	38	--
4741 sulphur, (dry)	0	0	--	--	--
4782 clay & refrac. mat.	47	0	9	38	--
Subtotal slag	36	0	--	35	--
4860 slag	36	0	--	35	--
Subtotal other non-metal. min.	518	--	0	518	--
4900 non-metal. min. nec	518	--	0	518	--

PORT OF DETROIT, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Foreign		Canadian	
		Imports*	Exports	Imports	Exports*
Total primary manufactured goods	2,683	1,675	30	938	39
Subtotal paper products	5	1	4	0	—
5120 paper & paperboard	4	1	4	0	—
5190 paper products nec	1	0	1	0	—
Subtotal lime, cement and glass	893	28	5	860	—
5220 cement & concrete	884	24	—	860	—
5240 glass & glass prod.	2	0	2	0	—
5290 misc. mineral prod.	6	3	3	0	—
Subtotal primary iron and steel products	1,743	1,641	13	50	39
5312 pig iron	50	—	0	50	—
5315 ferro alloys	7	7	—	—	—
5320 i&s primary forms	144	144	0	—	—
5330 i&s plates & sheets	1,467	1,417	10	0	39
5360 i&s bars & shapes	69	69	0	—	—
5370 i&s pipe & tube	4	2	2	0	—
5390 primary i&s nec	3	2	1	0	—
Subtotal primary non-ferrous metal products	37	5	4	28	0
5421 copper	0	0	0	0	0
5422 aluminum	28	0	0	28	—
5429 smelted prod. nec	0	0	0	0	—
5480 fab. metal products	8	5	3	0	—
Subtotal primary wood products	4	0	4	0	—
5540 primary wood prod.	4	0	4	0	—
Total food and farm products	58	2	41	1	15
Subtotal grain					
6344 corn	3	0	3	—	—
6442 rice	0	0	—	—	—
6447 sorghum grains	0	—	0	—	—
Subtotal oilseeds	4	—	4	—	—
6522 soybeans	4	—	4	—	—
6590 oilseeds nec	0	—	0	—	—
Subtotal vegetable products	11	1	10	—	—
6653 vegetable oils	0	0	0	—	—
6654 vegetables & prod.	11	1	10	—	—
Subtotal processed grain and animal feed	5	0	4	0	—
6746 wheat flour	0	—	0	—	—
6747 grain mill products	0	0	0	—	—
6782 animal feed, prep.	4	0	4	0	—
Subtotal other agricultural products	36	1	20	0	15
6811 meat, fresh, frozen	7	0	7	—	—
6822 dairy products	0	—	0	—	—
6835 fish, prepared	0	—	0	—	—
6838 tallow, animal oils	0	0	0	—	—
6839 animals & prod. nec	3	0	3	—	—
6857 fruit & nuts nec	1	—	1	—	—
6858 fruit juices	0	0	0	—	—
6865 molasses	15	0	0	—	15
6871 coffee	0	—	0	—	—
6872 cocoa beans	0	0	—	—	—
6885 alcoholic beverages	1	0	0	0	—
6888 water & ice	0	0	0	—	—
6889 food products nec	7	0	6	—	—
6893 cotton	0	—	0	—	—
6899 farm products nec	1	0	1	—	—
Total all manufactured equipment, machinery and products	90	11	74	4	0
7110 machinery (not elec)	25	6	17	2	0
7120 electrical machinery	6	0	5	0	0
7210 vehicles & parts	38	1	36	0	0
7220 aircraft & parts	0	0	0	—	0
7230 ships & boats	1	0	0	0	—
7300 ordnance & access.	0	0	0	0	—
7400 manufac. wood prod.	2	0	0	2	—
7500 textile products	2	1	1	0	—
7600 rubber & plastic pr.	9	1	9	0	0
7900 manufac. prod. nec	8	1	6	0	0
Total unknown or not elsewhere classified	3	0	0	2	—
9900 unknown or nec	3	0	0	2	—

Commodity	Total	Domestic					
		Lakewise		Internal			Intraport
		Receipts	Shipments	Receipts	Shipments	Intraport	
Total, all commodities	12,542	11,812	564	4	5	157	
Total coal	1,438	1,438	—	—	—	—	
1100 coal lignite	1,438	1,438	—	—	—	—	

PORT OF DETROIT, MI
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Total	Domestic					
		Lakewise		Internal			Inraport
		Receipts	Shipments	Receipts	Shipments		
Total petroleum and petroleum products	816	215	443	4	5	150	
Subtotal petroleum products	816	215	443	4	5	150	
2211 gasoline	7	—	7	—	—	—	
2221 kerosene	7	7	—	—	—	—	
2330 distillate fuel oil	27	0	27	—	—	—	
2340 residual fuel oil	98	44	51	—	—	3	
2430 asphalt, tar & pitch	667	159	358	4	—	—	147
2540 petroleum coke	11	5	—	—	5	—	
Total crude materials, inedible except fuels	9,958	9,833	118	—	—	7	
Subtotal soil, sand, gravel, rock and stone	3,095	3,064	23	—	—	7	
4322 limestone	2,769	2,753	10	—	—	7	
4323 gypsum	325	312	13	—	—	—	
4331 sand & gravel	1	—	—	—	—	1	
Subtotal iron ore and scrap	6,581	6,487	94	—	—	—	
4410 iron ore	6,581	6,487	94	—	—	—	
Subtotal slag	65	65	—	—	—	—	
4860 slag	65	65	—	—	—	—	
Subtotal other non-metal. min.	217	217	—	—	—	—	
4900 non-metal. min. nec	217	217	—	—	—	—	
Total primary manufactured goods	330	326	4	—	—	—	
Subtotal lime, cement and glass	330	326	4	—	—	—	
5220 cement & concrete	330	326	4	—	—	—	

*Includes 21 (x1000) tons of foreign inbound in-transits; Includes 0 (x1000) tons of Canadian outbound in-transits.

MONROE HARBOR, MI

Section Included: Channel in Lake Erie and 16,000 feet above Raisin River. Controlling depth: 20 feet to turning basin over a center width of 150 feet; 16.5 feet in turning basin except near the shore; 5.5 feet in 9 foot channel. Project Depth: 21 feet to the turning basin; 18 feet in the turning basin; 9 feet to lower docks at Monroe. Navigation season: Approximately 20 April to 14 December.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,490	1992	1,778	1995	1,920	1998	1,929
1990	1,585	1993	1,078	1996	1,794		
1991	1,837	1994	2,035	1997	2,750		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic	
		Imports	Exports			Lakewise	Receipts
				Imports	Exports	Imports	Exports
Total, all commodities	1,929	25	187	15	—	1,702	
Total coal	1,647	—	—	15	—	1,632	
1100 coal lignite	1,647	—	—	15	—	1,632	
Total petroleum and petroleum products	71	—	14	—	—	58	
Subtotal petroleum products	71	—	14	—	—	58	
2340 residual fuel oil	2	—	2	—	—	—	
2350 lube oil & greases	11	—	11	—	—	—	
2430 asphalt, tar & pitch	38	—	—	—	—	38	
2540 petroleum coke	20	—	—	—	—	20	
Total crude materials, inedible except fuels	80	—	67	—	—	13	
Subtotal forest products, wood and chips	19	—	19	—	—	—	
4189 lumber	19	—	19	—	—	—	
Subtotal soil, sand, gravel, rock and stone	13	—	—	—	—	13	
4322 limestone	13	—	—	—	—	13	
Subtotal other non-metal. min.	49	—	49	—	—	—	
4900 non-metal. min. nec	49	—	49	—	—	—	
Total primary manufactured goods	132	25	107	—	—	—	
Subtotal lime, cement and glass	107	—	107	—	—	—	
5220 cement & concrete	107	—	107	—	—	—	
Subtotal primary iron and steel products	25	25	—	—	—	—	
5330 i&s plates & sheets	15	15	—	—	—	—	
5360 i&s bars & shapes	10	10	—	—	—	—	
5390 primary i&s nec	0	0	—	—	—	—	

CALCITE, MI

NON-CORPS PROJECT

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	9,238	1992	7,049	1995	8,381	1998	9,389
1990	10,058	1993	6,419	1996	8,669		
1991	8,814	1994	7,456	1997	10,036		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic		
		Imports	Exports	Total	Lakewise	
					Receipts	Shipments
Total, all commodities	9,389	122	1,834	7,433	135	7,298
Total crude materials, inedible except fuels	9,389	122	1,834	7,433	135	7,298
Subtotal soil, sand, gravel, rock and stone	9,209	6	1,834	7,369	71	7,298
4322 limestone	9,203	—	1,834	7,369	71	7,298
4331 sand & gravel	6	6	—	—	—	—
Subtotal sulphur, clay and salt	44	44	—	—	—	—
4782 clay & refrac. mat.	44	44	—	—	—	—
Subtotal other non-metal. min.	136	72	—	64	64	—
4900 non-metal. min. nec	136	72	—	64	64	—

ESCANABA, MI

NON-CORPS PROJECT

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	6,767	1992	7,401	1995	8,479	1998	8,530
1990	6,400	1993	7,142	1996	9,253		
1991	6,492	1994	7,775	1997	7,261		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise	
		Receipts	Shipments
Total, all commodities	8,530	815	7,715
Total coal	243	243	—
1100 coal lignite	243	243	—
Total crude materials, inedible except fuels	8,287	572	7,715
Subtotal soil, sand, gravel, rock and stone	596	572	24
4322 limestone	596	572	24
Subtotal iron ore and scrap	7,690	—	7,690
4410 iron ore	7,674	—	7,674
4420 iron & steel scrap	16	—	16

STONEPORT, MI

NON-CORPS PROJECT

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	8,888	1992	8,650	1995	8,468	1998	9,114
1990	8,694	1993	8,752	1996	7,990		
1991	9,317	1994	8,416	1997	8,101		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic		
		Exports	Total	Lakewise		
				Receipts	Shipments	
Total, all commodities	9,114	367	8,747	233	8,514	
Total crude materials, inedible except fuels	9,114	367	8,747	233	8,514	
Subtotal soil, sand, gravel, rock and stone	9,114	367	8,747	233	8,514	
4322 limestone	9,114	367	8,747	233	8,514	

Other Harbors and Waterways 1998

Harbor or Waterway Project	Commodity	Thousand Short Tons
ALGOMA HARBOR, WI	No Commerce Reported	
ALGONAC, MI (INCLUDED IN ST. CLAIR RIVER)	4322 limestone	16
	Total Tons(x1000)	16
ASHLAND HARBOR, WI	1100 coal lignite 4322 limestone 4331 sand & gravel	89 13 0
	Total Tons(x1000)	102
AU SABLE HARBOR AND RIVER (OSCODA), MI	No Commerce Reported	
BAYFIELD HARBOR, WI	2211 gasoline 2330 distillate fuel oil 2640 liquid natural gas 4170 wood in the rough 4189 lumber 4331 sand & gravel 5220 cement & concrete 7230 ships & boats 7900 manufac. prod. nec	0 0 0 0 0 12 0 0 18
	Total Tons(x1000)	31
BEAVER BAY HARBOR, MN	No Commerce Reported	
BIG BAY HARBOR, MI	No Commerce Reported	
BLACK RIVER HARBOR, MI	No Commerce Reported	
CASEVILLE, MI	No Commerce Reported	
CEDAR RIVER HARBOR, MI	No Commerce Reported	
CHIPPEWA HARBOR (ISLE ROYALE), MI	No Commerce Reported	
CORNUCOPIA HARBOR, WI	4331 sand & gravel	1
	Total Tons(x1000)	1
DETOUR, MI AND VICINITY (INCLUDED IN ST. MARYS RIVER)	3286 plastics 3299 chem. products nec 4331 sand & gravel 4782 clay & refrac. mat. 4860 slag 4900 non-metal. min. nec 6889 food products nec 7110 machinery (not elec) 7210 vehicles & parts	0 0 56 96 0 34 0 0 0
	Total Tons(x1000)	186
DETROIT HARBOR, WI	2211 gasoline 2330 distillate fuel oil 2640 liquid natural gas 4170 wood in the rough 6134 fish (not shellfish) 9900 unknown or nec	1 1 0 1 0 6
	Total Tons(x1000)	9

Other Harbors and Waterways 1998 - continued

Harbor or Waterway Project	Commodity	Thousand Short Tons
EAGLE HARBOR, MI	No Commerce Reported	
FRANKFORT HARBOR, MI	2430 asphalt, tar & pitch 2540 petroleum coke	126 9
	Total Tons(x1000)	135
GLADSTONE HARBOR, MI	1100 coal lignite 2430 asphalt, tar & pitch 4322 limestone 4331 sand & gravel 4900 non-metal. min. nec	66 25 44 24 52
	Total Tons(x1000)	212
GRAND MARAIS HARBOR (HARBOR OF REFUGE), MI	No Commerce Reported	
GRAND MARAIS HARBOR, MN	No Commerce Reported	
GRAND TRAVERSE BAY HARBOR, MI	No Commerce Reported	
HARBOR BEACH, MI (HARBOR OF REFUGE, LAKE HURON)	1100 coal lignite	142
	Total Tons(x1000)	142
HARRISVILLE HARBOR, MI (HARBOR OF REFUGE, LAKE HURON)	No Commerce Reported	
KENOSHA HARBOR, WI	4335 waterway improv. mat	1
	Total Tons(x1000)	1
KEWAUNEE HARBOR, WI	No Commerce Reported	
KEWEENAW WATERWAY, MI	2211 gasoline 3299 chem. products nec 4189 lumber 4420 iron & steel scrap 5290 misc. mineral prod. 7110 machinery (not elec) 7400 manufac. wood prod. 8900 waste and scrap nec	0 0 0 0 0 0 0 0
	Total Tons(x1000)	1
	Total Ton-miles(x1000)	3
KNIFE RIVER HARBOR, MN	No Commerce Reported	
LA POINTE HARBOR, WI	2211 gasoline 2330 distillate fuel oil 2640 liquid natural gas 4170 wood in the rough 4331 sand & gravel 7900 manufac. prod. nec	0 0 0 0 1 18
	Total Tons(x1000)	20
LAC LA BELLE HARBOR, MI	No Commerce Reported	
LELAND HARBOR, MI	No Commerce Reported	
LIME ISLAND, MI (INCLUDED IN ST. MARYS RIVER)	No Commerce Reported	

Other Harbors and Waterways 1998 - continued

Harbor or Waterway Project	Commodity	Thousand Short Tons
LUTSEN HARBOR, MN	No Commerce Reported	
MACKINAC HARBOR, MI	7900 manufac. prod. nec	10
	Total Tons(x1000)	10
MACKINAW CITY HARBOR, MI	No Commerce Reported	
MANISTIQUE HARBOR, MI	2211 gasoline 2330 distillate fuel oil	1 1
	Total Tons(x1000)	2
NEW BUFFALO HARBOR MI	No Commerce Reported	
OCONTO HARBOR, WI	No Commerce Reported	
ONTONAGON HARBOR, MI	1100 coal lignite 4322 limestone	100 16
	Total Tons(x1000)	116
PENSAUKEE HARBOR, WI	No Commerce Reported	
PENTWATER HARBOR, MI	4331 sand & gravel	4
	Total Tons(x1000)	4
PORT SANILAC HARBOR, MI	No Commerce Reported	
PORT WING HARBOR, WI	No Commerce Reported	
PUT-IN-BAY HARBOR, OH	2211 gasoline 2330 distillate fuel oil 9900 unknown or nec	1 1 2
	Total Tons(x1000)	4
RACINE HARBOR, WI	No Commerce Reported	
ROGERS CITY, MI	No Commerce Reported	
SAUGATUCK HARBOR AND KALAMAZOO RIVER, MI	No Commerce Reported	
SAULT STE. MARIE, MI (INCLUDED IN ST. MARYS RIVER)	3250 organo - inorg. comp. 3284 medicines 3286 plastics 4225 pulp & waste paper 4322 limestone 4782 clay & refrac. mat. 4900 non-metal. min. nec 5312 pig iron 5370 i&s pipe & tube 5480 fab. metal products 6653 vegetable oils 6654 vegetables & prod. 6782 animal feed, prep. 6839 animals & prod. nec 6858 fruit juices 7110 machinery (not elec) 7900 manufac. prod. nec	1 3 0 3 15 1 47 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2
	Total Tons(x1000)	76

Other Harbors and Waterways 1998 - continued

Harbor or Waterway Project	Commodity	Thousand Short Tons
SEBEWAING, MI	No Commerce Reported	
SHEBOYGAN HARBOR, WI	No Commerce Reported	
SOUTH HAVEN HARBOR, MI	No Commerce Reported	
ST. JAMES (BEAVER ISLAND), MI	2211 gasoline 2330 distillate fuel oil 9900 unknown or nec	1 1 5
	Total Tons(x1000)	6
STURGEON BAY AND LAKE MICHIGAN SHIP CANAL, WI	2430 asphalt, tar & pitch 5220 cement & concrete	13 4
	Total Tons(x1000)	17
	Total Ton-miles(x1000)	137
TRAVERSE CITY HARBOR, MI	2211 gasoline 2330 distillate fuel oil	228 8
	Total Tons(x1000)	236
TRENTON, MI (INCLUDED IN PORT OF DETROIT)	2211 gasoline 2330 distillate fuel oil 2340 residual fuel oil 5330 i&s plates & sheets	7 27 3 13
	Total Tons(x1000)	49
TWO RIVERS HARBOR, WI	No Commerce Reported	
WARROAD HARBOR, MN	No Commerce Reported	
WHITE LAKE HARBOR, MI	4331 sand & gravel	19
	Total Tons(x1000)	19
WHITEFISH POINT HARBOR, MI	No Commerce Reported	
WYANDOTTE, MI (INCLUDED IN PORT OF DETROIT)	1100 coal lignite 4322 limestone	108 4
	Total Tons(x1000)	112
Non-project		
ALABASTER, MI	4322 limestone 4323 gypsum 4327 phosphate rock 4331 sand & gravel	29 691 5 18
	Total Tons(x1000)	743
MARBLEHEAD, OH	2211 gasoline 2330 distillate fuel oil 2350 lube oil & greases 2540 petroleum coke 2640 liquid natural gas 3110 nitrogenous fert. 3275 inorg. elem., oxides, & halogen salts 4161 wood chips 4189 lumber 4322 limestone	0 0 0 0 0 0 0 0 0 3,974

Other Harbors and Waterways 1998 - continued

Harbor or Waterway Non-project	Commodity	Thousand Short Tons
MARBLEHEAD, OH - continued	4338 soil & fill dirt 5290 misc. mineral prod. 5480 fab. metal products 6887 groceries 6889 food products nec 7110 machinery (not elec) 7120 electrical machinery 7210 vehicles & parts 7400 manufac. wood prod. 7900 manufac. prod. nec 8900 waste and scrap nec 9900 unknown or nec	0 0
	Total Tons(x1000)	3,975
POR DOLOMITE, MI	4322 limestone 4331 sand & gravel 4900 non-metal. min. nec	4,003 70 21
	Total Tons(x1000)	4,095
PORT GYPSUM, MI	4323 gypsum	508
	Total Tons(x1000)	508
PORT INLAND, MI	4322 limestone 4331 sand & gravel	5,418 71
	Total Tons(x1000)	5,489
SILVER BAY, MN	1100 coal lignite 4322 limestone 4410 iron ore	415 182 4,585
	Total Tons(x1000)	5,182

TOLEDO HARBOR, OH

Section Included: Channel in Lake Erie and 7 miles in lower Maumee River. Controlling Depths: 28 feet in the Bay Channel; 27 feet in The River Channel to the turning basin opposite the Mid-States Terminals, Inc. dock; thence 14 feet to the turning basin at the upper project limits with 13 feet in the turning basin; 20 feet in the turning basin at mile 3 and 27 feet in the turning basin at mile 6.5, project depths: 28 feet in bay and 27 feet in the river channel to the turning basin opposite the Mid-States Terminals, Inc. dock; thence 25 feet to the turning basin at upstream limits of the project with 18 feet in the turning basin; 20 feet in the turning basin at mile 3 and 27 feet in turning basin at mile 6.5. Navigation season: Approximately March 1 to December 31.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	14,806	1992	12,722	1995	14,074	1998	13,229
1990	14,668	1993	12,150	1996	13,032		
1991	12,073	1994	13,204	1997	14,422		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise	
						Receipts	Shipments	
Total, all commodities	13,229	460	446	1,079	4,800	6,445	4,081	2,364
Total coal	5,518	--	--	--	3,341	2,177	35	2,142
1100 coal lignite	5,505	--	--	--	3,341	2,163	21	2,142
1200 coal coke	14	--	--	--	--	14	14	--
Total petroleum and petroleum products	631	0	--	55	188	389	167	222
Subtotal petroleum products	631	0	--	55	188	389	167	222
2211 gasoline	76	--	--	--	47	29	--	29
2221 kerosene	7	0	--	--	--	7	--	7
2330 distillate fuel oil	63	--	--	50	5	8	--	8
2340 residual fuel oil	197	--	--	5	7	185	7	178
2350 lube oil & greases	23	--	--	--	23	--	--	--
2429 naphtha & solvents	82	--	--	--	82	--	--	--
2430 asphalt, tar & pitch	140	--	--	--	--	140	140	--
2540 petroleum coke	42	--	--	--	22	20	20	--
Total chemicals and related products	221	73	--	126	22	--	--	--
Subtotal fertilizers	158	32	--	126	--	--	--	--
3110 nitrogenous fert.	32	32	--	--	--	--	--	--
3130 potassic fert.	126	--	--	126	--	--	--	--
Subtotal other chemicals and related products	63	41	--	--	22	--	--	--
3275 inorg. elem., oxides, & halogen salts	22	--	--	--	22	--	--	--
3276 metallic salts	41	41	--	--	--	--	--	--
3284 medicines	0	0	--	--	--	--	--	--
Total crude materials, inedible except fuels	4,627	37	0	723	78	3,789	3,789	--
Subtotal soil, sand, gravel, rock and stone	350	--	--	279	55	15	15	--
4322 limestone	71	--	--	--	55	15	15	--
4331 sand & gravel	279	--	--	279	--	--	--	--
Subtotal iron ore and scrap	3,945	--	0	363	23	3,559	3,559	--
4410 iron ore	3,928	--	0	346	23	3,559	3,559	--
4420 iron & steel scrap	17	--	--	17	--	--	--	--
Subtotal non-ferrous ores and scrap	0	--	0	--	--	--	--	--
4630 copper ore	0	--	0	--	--	--	--	--
4650 aluminum ore	0	--	0	--	--	--	--	--
Subtotal sulphur, clay and salt	45	37	--	8	--	--	--	--
4782 clay & refrac. mat.	45	37	--	8	--	--	--	--
Subtotal slag	0	--	--	0	--	--	--	--
4860 slag	0	--	--	0	--	--	--	--
Subtotal other non-metal. min.	288	--	--	73	--	215	215	--
4900 non-metal. min. nec	288	--	--	73	--	215	215	--
Total primary manufactured goods	440	286	--	63	--	91	91	--
Subtotal lime, cement and glass	128	--	--	37	--	91	91	--
5220 cement & concrete	128	--	--	37	--	91	91	--
Subtotal primary iron and steel products	296	270	--	26	--	--	--	--
5312 pig iron	26	--	--	26	--	--	--	--
5320 i&s primary forms	6	6	--	--	--	--	--	--
5330 i&s plates & sheets	195	195	--	--	--	--	--	--
5360 i&s bars & shapes	69	69	--	--	--	--	--	--
5390 primary i&s nec	0	0	--	--	--	--	--	--
Subtotal primary non-ferrous metal products	16	16	--	--	--	--	--	--
5429 smelted prod. nec	15	15	--	--	--	--	--	--
5480 fab. metal products	1	1	--	--	--	--	--	--

TOLEDO HARBOR, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise Receipts	Shipments
Total food and farm products	1,782	63	444	105	1,170	—	—	—
Subtotal grain	1,110	59	229	105	718	—	—	—
6241 wheat	93	—	—	7	86	—	—	—
6344 corn	861	—	229	—	632	—	—	—
6445 oats	157	59	—	98	—	—	—	—
Subtotal oilseeds	667	—	215	—	452	—	—	—
6522 soybeans	667	—	215	—	452	—	—	—
Subtotal other agricultural products	4	4	—	—	—	—	—	—
6861 sugar	4	4	—	—	—	—	—	—
Total all manufactured equipment, machinery and products	3	1	2	—	—	—	—	—
7110 machinery (not elec)	3	1	2	—	—	—	—	—
7600 rubber & plastic pr.	0	0	—	—	—	—	—	—
Total unknown or not elsewhere classified	7	—	—	7	—	—	—	—
9900 unknown or nec	7	—	—	7	—	—	—	—

KELLEY'S ISLAND, OH

Section Included: Entire area of Kelley's Island, Ohio. Controlling Depth: Unimproved, natural depths unknown. Project depth: Approach channel, 12 feet; Entrance channel, 10 feet; and remainder of channel, 8 to 10 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	6	1992	564	1995	123	1998	1,173
1990	6	1993	564	1996	371		
1991	503	1994	521	1997	1,170		

Freight Traffic, 1998 (thousand short tons)

Commodity		Grand Total	Lakewise Receipts Shipments	
Total, all commodities		1,173	1	1,172
Total petroleum and petroleum products		1	1	—
Subtotal petroleum products		1	1	—
2211 gasoline		0	0	—
2330 distillate fuel oil		0	0	—
2540 petroleum coke		0	0	—
2640 liquid natural gas		0	0	—
Total chemicals and related products		0	0	—
Subtotal other chemicals and related products		0	0	—
3275 inorg. elem., oxides, & halogen salts		0	0	—
Total crude materials, inedible except fuels		1,172	0	1,172
Subtotal forest products, wood and chips		0	0	0
4161 wood chips		0	0	0
4189 lumber		0	0	—
Subtotal soil, sand, gravel, rock and stone		1,172	0	1,172
4322 limestone		1,172	—	1,172
4338 soil & fill dirt		0	0	—
Total primary manufactured goods		0	0	—
Subtotal lime, cement and glass		0	0	—
5290 misc. mineral prod.		0	0	—
Subtotal primary non-ferrous metal products		0	0	—
5480 fab. metal products		0	0	—
Total food and farm products		1	1	—
Subtotal other agricultural products		1	1	—
6887 groceries		0	0	—
6889 food products nec		0	0	—
Total all manufactured equipment, machinery and products		0	0	0
7110 machinery (not elec)		0	0	0
7120 electrical machinery		0	0	—
7210 vehicles & parts		0	—	0
7400 manufac. wood prod.		0	0	—
7900 manufac. prod. nec		0	0	—
Total waste and scrap nec		0	—	0
8900 waste and scrap nec		0	—	0

KELLEYS ISLAND, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Lakewise	
		Receipts	Shipments
Total unknown or not elsewhere classified	0	0	--
9900 unknown or nec	0	0	--

SANDUSKY HARBOR, OH

Section Included: Southeasterly portion of Sandusky Bay to and including passenger docks on Cedar Point. Controlling Depth: Mosely Channel, 26 feet; Bay Channel and Straight Channel from Mosely Channel to junction with Bay Channel, 25.0 feet; turning basin, 24 feet; Dock channel, 21 feet; Straight channel from dock channel to junction with Bay Channel, 21 feet. Project Depths: Mosely Channel, 26 feet; bay channel and Straight Channel from Mosely Channel to junction with Bay Channel, 25 feet; turning basin, 24 feet; Dock channel, 22 feet; and straight channel from dock channel to junction with Bay Channel, 21 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	4,485	1992	5,179	1995	3,536	1998	4,334
1990	4,600	1993	5,176	1996	3,408		
1991	4,018	1994	5,422	1997	4,403		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic		
		Imports	Exports	Total	Lakewise	
				Receipts	Shipments	
Total, all commodities	4,334	90	3,194	1,049	84	965
Total coal	4,159	--	3,194	965	--	965
1100 coal lignite	4,159	--	3,194	965	--	965
Total petroleum and petroleum products	0	--	--	0	--	0
Subtotal petroleum products	0	--	--	0	--	0
2211 gasoline	0	--	--	0	--	0
2330 distillate fuel oil	0	--	--	0	--	0
2640 liquid natural gas	0	--	--	0	--	0
Total chemicals and related products	0	--	--	0	--	0
Subtotal fertilizers	0	--	--	0	--	0
3110 nitrogenous fert.	0	--	--	0	--	0
Total crude materials, inedible except fuels	102	18	--	84	84	0
Subtotal forest products, wood and chips	0	--	--	0	--	0
4189 lumber	0	--	--	0	--	0
Subtotal soil, sand, gravel, rock and stone	54	--	--	54	54	--
4322 limestone	2	--	--	2	--	--
4323 gypsum	43	--	--	43	43	--
4331 sand & gravel	10	--	--	10	10	--
Subtotal other non-metal. min.	47	18	--	29	29	--
4900 non-metal. min. nec	47	18	--	29	29	--
Total primary manufactured goods	73	72	--	0	--	0
Subtotal lime, cement and glass	72	72	--	0	--	0
5220 cement & concrete	72	72	--	0	--	0
5290 misc. mineral prod.	0	--	--	0	--	0
Subtotal primary non-ferrous metal products	0	--	--	0	--	0
5480 fab. metal products	0	--	--	0	--	0
Total food and farm products	0	--	--	0	0	--
Subtotal other agricultural products	0	--	--	0	0	--
6857 fruit & nuts nec	0	--	--	0	0	--
Total all manufactured equipment, machinery and products	0	--	--	0	0	0
7110 machinery (not elec)	0	--	--	0	0	0
7210 vehicles & parts	0	--	--	0	0	0
7400 manufac. wood prod.	0	--	--	0	--	0
Total waste and scrap nec	0	--	--	0	0	--
8900 waste and scrap nec	0	--	--	0	0	--
Total unknown or not elsewhere classified	0	--	--	0	--	0
9900 unknown or nec	0	--	--	0	--	0

HURON HARBOR, OH

Section Included: Lake approach channel from deep water to a point opposite the outer end of east breakwater; entrance channel from its junction with the approach channel to its junction with the River Channel; River channel and turning basin to within 1,500 feet of the Penn Central Railroad Bridge. Controlling Depths: Lake approach and entrance channel, 27.5 feet; river channel, 27 feet; turning basin, 21 feet. Project Depths: Lake approach and entrance channels, 29 feet; river channel to Slip No. 1, 28 feet; from Slip No. 1 through eastern portion of the turning basin, 28 feet; turning basin, 22 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	590	1992	618	1995	1,087	1998	1,192
1990	565	1993	529	1996	1,004		
1991	524	1994	871	1997	856		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian	Domestic
		Imports	Lakewise Receipts
Total, all commodities	1,192	5	1,187
Total crude materials, inedible except fuels	1,187	--	1,187
Subtotal soil, sand, gravel, rock and stone	489	--	489
4322 limestone	489	--	489
Subtotal iron ore and scrap	698	--	698
4410 iron ore	698	--	698
Total food and farm products	5	5	--
Subtotal grain	5	5	--
6445 oats	5	5	--

LORAIN HARBOR, OH

Section Included: Outer Harbor and Black River from mouth to and including United States Steel Corp., National Tube Division dock, 3 miles. Controlling Depths: Lake Approach channel, 27.0 feet; A channel 800 feet wide through the Outer Harbor, 27 feet; remainder of Outer Harbor, 25 feet; lower 2,200 feet of River Channel, 25 feet; remainder of River Channel 24 feet except turning basin just downstream of the 21st Street Bridge which is 12 to 19 feet and the returning Basin opposite the U. S. Steel Corp., National Tube Division which is 12 to 20 feet. Project Depths: Lake Approach Channel, 29 feet; a channel 800 feet wide through the Outer Harbor, 28 feet; remainder of Outer Harbor, 25 feet; lower 2,200 feet of River Channel, 28 feet; remainder of River Channel, 27 feet; except turning basin downstream of 21st Street Bridge, 20 feet and turning basin opposite U. S. Steel Corp., National Tube Division Dock, 21 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	14,568	1992	13,282	1995	14,964	1998	14,166
1990	13,967	1993	13,677	1996	15,978		
1991	13,632	1994	14,748	1997	15,955		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign	Canadian	Domestic			Internal Inport
		Imports	Imports	Total	Lakewise	Shipments	
				Receipts	Receipts	Shipments	
Total, all commodities	14,166	9	98	14,060	8,286	5,772	1
Total crude materials, inedible except fuels	14,163	6	98	14,059	8,286	5,772	1
Subtotal soil, sand, gravel, rock and stone	552	--	19	532	498	34	1
4322 limestone	278	--	--	278	253	24	1
4323 gypsum	245	--	--	245	245	--	--
4331 sand & gravel	29	--	19	10	--	10	--
Subtotal iron ore and scrap	13,518	--	69	13,449	7,789	5,661	--
4410 iron ore	13,491	--	58	13,433	7,772	5,661	--
4420 iron & steel scrap	27	--	11	16	16	--	--
Subtotal sulphur, clay and salt	10	--	10	--	--	--	--
4782 clay & refrac. mat.	10	--	10	--	--	--	--
Subtotal slag	78	--	--	78	--	78	--
4860 slag	78	--	--	78	--	78	--
Subtotal other non-metal. min.	6	6	--	--	--	--	--
4900 non-metal. min. nec	6	6	--	--	--	--	--
Total primary manufactured goods	3	3	--	0	--	--	0
Subtotal lime, cement and glass	0	--	--	0	--	--	0
5290 misc. mineral prod.	0	--	--	0	--	--	0
Subtotal primary iron and steel products	3	3	--	--	--	--	--
5330 i&s plates & sheets	3	3	--	--	--	--	--
Subtotal primary non-ferrous metal products	0	--	--	0	--	--	0
5480 fab. metal products	0	--	--	0	--	--	0

LORAIN HARBOR, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Inraport	
		Imports	Imports	Total		Lakewise				
				Receipts	Shipments					
Total all manufactured equipment, machinery and products	0	--	--	0	--	0	--	0	0	
7110 machinery (not elec)	0	--	--	0	--	—	—	—	0	
7400 manufac. wood prod.	0	--	--	0	--	—	—	0	—	

CLEVELAND HARBOR, OH

Section Included: Outer Harbor, Old River and Cuyahoga River from mouth to and including Upper Republic Steel Corp. Dock, immediately downstream from Norfolk & Western Railway Bridge, 5.8 miles. Controlling Depth: Lake Approach Channel, 29 feet; entrance channel, West Basin and westerly 800 feet of East Basin, 28 feet; easterly 3800-foot length of East Basin, 27 feet; 500-foot channel through East Outer Harbor, 25 feet; channel between piers to Conrail Railroad Bridge, 27.0 feet; channel in Cuyahoga River from Penn Central Railroad to upper project limit, 22 feet; turning basin upstream from E.I. Dupont De Nemours And Company, Inc., Grasselli Chemical Division Dock, 19.5 feet; Old River to Sand Products Corporation Dock, 23 feet; remainder of Old River to upper project limit, 14 feet. Project Depth: Lake Approach Channel, 29 feet; West Basin, entrance channel and west end of East Basin, 28 feet; remaining 3800-foot length of East Basin, 27 feet; 500-foot channel through East Outer Harbor, 25 feet; lower Cuyahoga River from lakeward ends of the piers to immediately above junction with Old River, 27 feet; Old River to upper project limit, 27 feet; remainder of Cuyahoga River, 23 feet; turning basin upstream from E.I. Dupont De Nemours and Company, Inc., Grasseli Chemical Division Dock, 18 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	14,688	1992	13,654	1995	15,393	1998	17,865
1990	14,368	1993	14,083	1996	16,721		
1991	13,406	1994	15,284	1997	18,113		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Inraport
		Imports*	Exports	Imports	Exports	Total		Lakewise	
						Receipts	Shipments		
Total, all commodities	17,865	1,187	6	2,756	358	13,558	12,255	963	341
Total coal	134	--	--	13	--	121	107	14	--
1100 coal lignite	73	--	--	—	--	73	59	14	--
1200 coal coke	62	--	--	13	--	48	48	—	--
Total petroleum and petroleum products	461	11	5	64	--	381	379	2	--
Subtotal petroleum products	461	11	5	64	--	381	379	2	--
2211 gasoline	9	—	—	9	--	—	—	—	--
2340 residual fuel oil	175	6	—	49	--	120	120	—	--
2429 naphtha & solvents	0	--	0	—	--	—	—	—	--
2430 asphalt, tar & pitch	277	5	5	6	--	261	259	2	--
Total chemicals and related products	11	0	0	10	--	--	--	--	--
Subtotal fertilizers	10	--	--	10	--	--	--	--	--
3130 potassic fert.	10	—	—	10	--	—	—	—	--
Subtotal other chemicals and related products	0	0	0	—	--	—	—	—	--
3250 organo - inorg. comp.	0	—	0	—	--	—	—	—	--
3276 metallic salts	0	0	0	—	--	—	—	—	--
3282 pigments & paints	0	—	0	—	--	—	—	—	--
3283 coloring mat. nec	0	—	0	—	--	—	—	—	--
3285 perfumes & cleansers	0	0	—	—	--	—	—	—	--
3286 plastics	0	0	0	—	--	—	—	—	--
3299 chem. products nec	0	0	—	—	--	—	—	—	--
Total crude materials, inedible except fuels	15,108	3	0	1,772	328	13,004	11,720	944	341
Subtotal pulp and waste paper	0	--	0	--	--	--	--	--	--
4225 pulp & waste paper	0	--	0	--	--	--	--	--	--

CLEVELAND HARBOR, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			Internal Intraport
		Imports*	Exports	Imports	Exports	Total	Lakewise Receipts	Shipments	
Subtotal soil, sand, gravel, rock and stone	5,745	--	--	894	--	4,850	4,844	--	6
4322 limestone	4,745	--	--	--	--	4,745	4,739	--	6
4331 sand & gravel	999	--	--	894	--	105	105	--	--
Subtotal iron ore and scrap	7,579	--	--	368	--	7,210	6,875	--	335
4410 iron ore	7,579	--	--	368	--	7,210	6,875	--	335
Subtotal non-ferrous ores and scrap	0	0	0	--	--	--	--	--	--
4630 copper ore	0	--	0	--	--	--	--	--	--
4690 non-ferrous ores nec	0	0	--	--	--	--	--	--	--
Subtotal sulphur, clay and salt	475	3	--	471	--	--	--	--	--
4782 clay & refrac. mat.	475	3	--	471	--	--	--	--	--
Subtotal slag	90	--	--	--	--	90	--	90	--
4860 slag	90	--	--	--	--	90	--	90	--
Subtotal other non-metal. min.	1,219	0	--	38	328	853	--	853	--
4900 non-metal. min. nec	1,219	0	--	38	328	853	--	853	--
Total primary manufactured goods	2,145	1,167	0	896	30	52	50	2	--
Subtotal paper products	0	--	0	--	--	--	--	--	--
5120 paper & paperboard	0	--	0	--	--	--	--	--	--
Subtotal lime, cement and glass	948	0	0	896	--	52	50	2	--
5220 cement & concrete	947	--	--	896	--	52	50	2	--
5240 glass & glass prod.	0	0	0	--	--	--	--	--	--
5290 misc. mineral prod.	0	0	--	--	--	--	--	--	--
Subtotal primary iron and steel products	1,194	1,164	0	--	30	--	--	--	--
5320 i&s primary forms	106	106	--	--	--	--	--	--	--
5330 i&s plates & sheets	995	965	0	--	30	--	--	--	--
5360 i&s bars & shapes	88	88	--	--	--	--	--	--	--
5370 i&s pipe & tube	3	3	--	--	--	--	--	--	--
5390 primary i&s nec	3	3	--	--	--	--	--	--	--
Subtotal primary non-ferrous metal products	3	3	--	--	--	--	--	--	--
5480 fab. metal products	3	3	--	--	--	--	--	--	--
Total food and farm products	0	0	--	--	--	--	--	--	--
Subtotal other agricultural products	0	0	--	--	--	--	--	--	--
6885 alcoholic beverages	0	0	--	--	--	--	--	--	--
Total all manufactured equipment, machinery and products	5	5	0	--	--	--	--	--	--
7110 machinery (not elec)	5	5	--	--	--	--	--	--	--
7120 electrical machinery	0	0	--	--	--	--	--	--	--
7210 vehicles & parts	0	0	0	--	--	--	--	--	--
7230 ships & boats	0	--	0	--	--	--	--	--	--
7500 textile products	0	0	--	--	--	--	--	--	--
7600 rubber & plastic pr.	0	0	0	--	--	--	--	--	--

CLEVELAND HARBOR, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			
		Imports*	Exports	Imports	Exports	Total		Lakewise	Internal
						Receipts	Shipments	Intraport	
7900 manufac. prod. nec	0	0	0	—	—	—	—	—	—
Total unknown or not elsewhere classified	0	0	—	—	—	—	—	—	—
9900 unknown or nec	0	0	—	—	—	—	—	—	—

*Includes 10 (x1000) tons of foreign inbound in-transits.

FAIRPORT HARBOR, OH

Section Included: Outer harbor and Grand River from mouth to and including Diamond Alkali Company Stone Dock, 1.5 miles. Controlling Depths: Entrance Channel, 24 feet; Outer Harbor, 24.0 feet; Grand River to upstream of Republic Steel, 19.0 feet; remaining length of Grand River to the upper project limit, 19 feet; except for 1,000 feet of the upstream end of the west side of the channel, 5 feet; turning basin, 15 feet. Maintenance Depths: Entrance channel and outer harbor, 25 feet; Grand River to upstream of Republic Steel, 24 feet; remaining length of Grand River to the upper project limits, 21 feet; turning basin, 18 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	2,634	1992	2,613	1995	2,941	1998	2,880
1990	2,320	1993	2,403	1996	2,770		
1991	2,052	1994	2,955	1997	3,296		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic			
		Exports	Total	Lakewise		Receipts	Shipments
				Receipts	Shipments		
Total, all commodities	2,880	177	2,703	2,262	441		
Total crude materials, inedible except fuels	2,880	177	2,703	2,262	441		
Subtotal soil, sand, gravel, rock and stone	2,278	8	2,270	2,262	8		
4322 limestone	2,144	—	2,144	2,136	8		
4331 sand & gravel	134	8	126	126	—		
Subtotal other non-metal. min.	602	168	433	—	433		
4900 non-metal. min. nec	602	168	433	—	433		

ASHTABULA HARBOR, OH

Section Included: Outer harbor and Ashtabula River from mouth to and including city of Ashtabula Dock (Former Great Lakes Engineering Works Dock), 1.75 miles. Controlling Depth: Westerly portion of outer harbor to inner breakwater & approach channel to docks east of inner breakwater, 26.0 feet turning basin in front of inner breakwater 21.5 feet; the approach to the Penn. Central Railroad Company's slip and the lower 2,000 feet of the Ashtabula River, 23 feet; thence to car ferry slip, 10 feet; thence to a point 1,550 feet upstream from turning basin and including turning basin, 3 feet. Project Depth: Entrance channel, 29 feet; westerly portion of outer harbor to inner breakwater, 28 feet; Approach Channel to docks east of inner breakwater, 28 feet; turning basin in the easterly portion of the outer harbor, 22 feet; channel from inside the Inner Breakwater to mouth of river and 2,000 feet upstream and approach channel to Penn. Central Railroad Company's slip, 27 feet; thence to car ferry slip, 18 feet; thence to a point 1,550 feet upstream from turning basin and including turning basin, 16 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	10,322	1992	10,519	1995	10,010	1998	15,602
1990	11,852	1993	8,979	1996	9,523		
1991	10,638	1994	10,368	1997	11,929		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic			
		Imports*	Exports	Imports	Exports	Total		Lakewise	Internal
						Receipts	Shipments	Receipts	
Total, all commodities	15,602	328	28	1,196	5,727	8,323	5,785	2,538	
Total coal	8,320	—	28	50	5,727	2,516	—	2,516	
1100 coal lignite	8,243	—	—	—	5,727	2,516	—	2,516	
1200 coal coke	78	—	28	50	—	—	—	—	
Total chemicals and related products	4	—	0	4	—	—	—	—	
Subtotal other chemicals and related products	4	—	0	4	—	—	—	—	
3260 organic comp. nec	0	—	0	—	—	—	—	—	

ASHTABULA HARBOR, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports*	Exports	Imports	Exports	Total	Lakewise	
							Receipts	Shipments
3275 inorg. elem.,oxides, & halogen salts	4	—	—	4	—	—	—	—
Total crude materials, inedible except fuels	7,191	307	—	1,077	—	5,807	5,785	22
Subtotal soil, sand, gravel, rock and stone	683	—	—	7	—	676	676	—
4322 limestone	676	—	—	—	—	676	676	—
4331 sand & gravel	7	—	—	7	—	—	—	—
Subtotal iron ore and scrap	6,052	—	—	973	—	5,079	5,079	—
4410 iron ore	6,052	—	—	973	—	5,079	5,079	—
Subtotal non-ferrous ores and scrap	306	284	—	22	—	—	—	—
4680 non-ferrous scrap	217	195	—	22	—	—	—	—
4690 non-ferrous ores nec	89	89	—	—	—	—	—	—
Subtotal sulphur, clay and salt	22	17	—	5	—	—	—	—
4782 clay & refrac. mat.	22	17	—	5	—	—	—	—
Subtotal slag	28	6	—	—	—	22	—	22
4860 slag	28	6	—	—	—	22	—	22
Subtotal other non-metal. min.	100	—	—	70	—	30	30	—
4900 non-metal. min. nec	100	—	—	70	—	30	30	—
Total primary manufactured goods	86	21	—	64	0	—	—	—
Subtotal lime, cement and glass	77	13	—	64	—	—	—	—
5210 lime	13	13	—	—	—	—	—	—
5220 cement & concrete	64	—	—	64	—	—	—	—
Subtotal primary iron and steel products	5	4	—	—	0	—	—	—
5320 i&s primary forms	2	2	—	—	—	—	—	—
5330 i&s plates & sheets	1	1	—	—	0	—	—	—
5360 i&s bars & shapes	1	1	—	—	—	—	—	—
5370 i&s pipe & tube	1	1	—	—	—	—	—	—
5390 primary i&s nec	0	0	—	—	—	—	—	—
Subtotal primary non-ferrous metal products	3	3	—	—	—	—	—	—
5429 smelted prod. nec	3	3	—	—	—	—	—	—
5480 fab. metal products	0	0	—	—	—	—	—	—
Total all manufactured equipment, machinery and products	0	0	—	0	—	—	—	—
7110 machinery (not elec)	0	0	—	0	—	—	—	—
7900 manufac. prod. nec	0	0	—	—	—	—	—	—
Total unknown or not elsewhere classified	0	—	—	0	—	—	—	—
9900 unknown or nec	0	—	—	0	—	—	—	—

*Includes 2 (x1000) tons of foreign inbound in-transits.

CONNEAUT HARBOR, OH

Section Included: Outer harbor and Conneaut River 2,450 feet upstream of the outer end of the West Pier. Controlling Depth: Westerly portion of outer harbor, 20.5 feet; access channel to city dock, 7.5 feet; easterly portion of outer harbor 23 feet. Inner Harbor, 28.5 feet; Project Depth: Easterly portion of outer harbor, 28 feet; westerly portion of outer harbor, 22 feet; access channel to city dock 8 feet: Inner Harbor, 27 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	8,890	1992	6,540	1995	5,612	1998	7,786
1990	9,567	1993	3,534	1996	5,714		
1991	6,336	1994	5,655	1997	6,205		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Canadian		Domestic		
		Imports	Exports	Total	Lakewise	
				Receipts	Shipments	
Total, all commodities	7,786	5	2,786	4,995	4,178	817
Total coal	3,532	—	2,715	817	—	817
1100 coal lignite	3,520	—	2,703	817	—	817
1200 coal coke	12	—	12	—	—	—

CONNEAUT HARBOR, OH
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Canadian		Domestic	
		Imports	Exports	Total	Lakewise
				Receipts	Shipments
Total crude materials, inedible except fuels	4,249	--	71	4,178	4,178
Subtotal soil, sand, gravel, rock and stone	938	--	71	867	867
4322 limestone	826	--	--	826	826
4323 gypsum	41	--	--	41	41
4327 phosphate rock	71	--	71	--	--
Subtotal iron ore and scrap	3,292	--	--	3,292	3,292
4410 iron ore	3,232	--	--	3,232	3,232
4420 iron & steel scrap	59	--	--	59	59
Subtotal other non-metal. min.	19	--	--	19	19
4900 non-metal. min. nec	19	--	--	19	19
Total primary manufactured goods	5	5	--	--	--
Subtotal lime, cement and glass	5	5	--	--	--
5220 cement & concrete	5	5	--	--	--

ERIE HARBOR, PA

Section Included: Southerly side of Erie Harbor and Lake Erie water frontage from harbor entrance eastward to and including Sun Oil Co dock, 3.5 miles. Controlling Depth: Entrance channel, 29 feet; channel to easterly coal and ore docks, 27 feet; and 27 feet to the Port Authority Dock; harbor basin, 21 feet; westerly portion of harbor, 18 feet. Project Depth: Entrance channel, 29 feet; Approach Channel to easterly coal and ore docks, 28 feet; approach to Port Authority Docks, 27 feet; Harbor Basin, 21 feet; westerly portion of Harbor Basin, 18 feet. The approach channel from the 28 foot channel to and including turning basin at westerly docks has been authorized, but never completed and considered inactive at the present time.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	734	1992	1,247	1995	1,057	1998	1,296
1990	811	1993	1,160	1996	1,434		
1991	1,008	1994	979	1997	1,163		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian	Domestic
		Exports	Imports	Lakewise	Receipts
				Receipts	Shipments
Total, all commodities	1,296	12	83	1,200	
Total chemicals and related products	11	--	--	11	--
Subtotal fertilizers	11	--	--	11	--
3130 potassic fert.	11	--	--	11	--
Total crude materials, inedible except fuels	1,281	12	68	1,200	
Subtotal pulp and waste paper	12	12	--	--	--
4225 pulp & waste paper	12	12	--	--	--
Subtotal soil, sand, gravel, rock and stone	1,190	--	--	29	1,162
4322 limestone	929	--	--	--	929
4331 sand & gravel	262	--	--	29	233
Subtotal sulphur, clay and salt	16	--	--	16	--
4782 clay & refrac. mat.	16	--	--	16	--
Subtotal other non-metal. min.	62	--	--	24	39
4900 non-metal. min. nec	62	--	--	24	39
Total primary manufactured goods	4	--	--	4	--
Subtotal primary iron and steel products	4	--	--	4	--
5312 pig iron	4	--	--	4	--

DUNKIRK HARBOR, NY

Section Included: City water frontage protected by west pier and breakwater west of Elk Street. Controlling depth: Entrance channel in lake, 17 feet; inner channel and basin, 16 feet. Project Depth: Entrance channel in lake, 17 feet; inner channel and basin, 16 feet. Navigation season: Opened 29 March; closed 18 December.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	0	1992	0	1995	374	1998	535
1990	0	1993	20	1996	398		
1991	0	1994	361	1997	446		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Lakewise Receipts
Total, all commodities	535	535
Total coal	535	535
1100 coal lignite	535	535

BUFFALO HARBOR, NY (INCLUDED IN PORT OF BUFFALO)

Section Included: Outer harbor, Lackawanna Canal, Union Canal. Buffalo River from mouth to Conrail R. Y. Bridge, 5.5 miles. Buffalo Ship Canal, and Black Rock Canal to the Black Rock Lock. Controlling Depths: Outer area of south entrance channel, 30 feet; south entrance channel 29.0 feet; southern portion of outer harbor, 28 feet; 900 feet wide section adjacent to the south breakwater beginning 2,000 feet north of the south breakwater and proceeding northerly 4,200 feet, 23 feet; thence 27 feet to the International Salt Company and 23 feet in the remainder of the outer harbor to the north; new north entrance channel, 25 feet; Black Rock Canal, 21 feet; Buffalo River Entrance, Buffalo River and Buffalo Ship Canal, 22 feet. Project Depth: Outer area of south entrance channel, 30 feet; south entrance channel 29 feet; southern portion of outer harbor, 28 feet; 900 feet wide section adjacent to the south breakwater beginning 2,000 feet north of the south breakwater and proceeding northerly 4,200 feet, 23 feet. Middle section of the outer harbor, 27 feet; north outer harbor, 23 feet; north entrance channel, 25 feet; Buffalo River entrance, Buffalo River and Buffalo Ship Canal, 22 feet. Black Rock Canal, 21 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	1,564	1992	1,803	1995	1,507	1998	2,072
1990	2,002	1993	1,539	1996	1,590		
1991	1,471	1994	1,399	1997	1,631		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise Receipts	Shipments
Total, all commodities	2,072	7	65	907	57	1,036	1,032	3
Total petroleum and petroleum products	306	--	0	272	24	10	7	3
Subtotal petroleum products	306	--	0	272	24	10	7	3
2211 gasoline	281	--	--	266	8	7	7	--
2221 kerosene	9	--	--	--	9	--	--	--
2350 lube oil & greases	6	--	0	6	--	--	--	--
2429 naphtha & solvents	0	--	0	--	--	--	--	--
2430 asphalt, tar & pitch	9	--	--	--	6	3	--	3
Total chemicals and related products	12	0	6	0	6	--	--	--
Subtotal fertilizers	6	--	0	--	6	--	--	--
3110 nitrogenous fert.	0	--	0	--	--	--	--	--
3190 fert. & mixes nec	6	--	0	--	6	--	--	--
Subtotal other chemicals and related products	6	0	6	0	--	--	--	--
3219 other hydrocarbons	0	--	0	--	--	--	--	--
3230 carboxylic acids	0	--	0	--	--	--	--	--
3240 nitrogen func. comp.	0	0	0	--	--	--	--	--
3250 organo - inorg. comp.	0	--	0	--	--	--	--	--
3260 organic comp. nec	1	--	1	--	--	--	--	--
3275 inorg. elem.,oxides, & halogen salts	0	0	0	--	--	--	--	--
3276 metallic salts	0	--	0	--	--	--	--	--
3282 pigments & paints	1	--	1	--	--	--	--	--
3283 coloring mat. nec	0	0	--	--	--	--	--	--
3284 medicines	0	--	0	--	--	--	--	--
3285 perfumes & cleansers	1	0	1	0	--	--	--	--
3286 plastics	2	0	2	--	--	--	--	--
3291 pesticides	0	--	0	--	--	--	--	--
3297 chemical additives	0	--	0	--	--	--	--	--
3298 wood & resin chem.	0	--	0	--	--	--	--	--
3299 chem. products nec	0	--	0	--	--	--	--	--

BUFFALO HARBOR, NY (INCLUDED IN PORT OF BUFFALO)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise	
						Receipts	Shipments	
Total crude materials, inedible except fuels	1,151	--	26	404	--	721	721	--
Subtotal forest products, wood and chips	1	--	1	--	--	--	--	--
4189 lumber	0	--	0	--	--	--	--	--
4190 forest products nec	1	--	1	--	--	--	--	--
Subtotal pulp and waste paper	0	--	0	--	--	--	--	--
4225 pulp & waste paper	0	--	0	--	--	--	--	--
Subtotal soil, sand, gravel, rock and stone	459	--	3	--	--	456	456	--
4322 limestone	156	--	—	--	--	156	156	--
4323 gypsum	243	--	0	--	--	243	243	--
4331 sand & gravel	60	--	3	--	--	57	57	--
Subtotal iron ore and scrap	0	--	0	--	--	--	--	--
4420 iron & steel scrap	0	--	0	--	--	--	--	--
Subtotal non-ferrous ores and scrap	3	--	3	--	--	--	--	--
4650 aluminum ore	3	--	3	--	--	--	--	--
4680 non-ferrous scrap	0	--	0	--	--	--	--	--
4690 non-ferrous ores nec	0	--	0	--	--	--	--	--
Subtotal sulphur, clay and salt	15	--	15	--	--	--	--	--
4782 clay & refrac. mat.	15	--	15	--	--	--	--	--
Subtotal slag	0	--	0	--	--	--	--	--
4860 slag	0	--	0	--	--	--	--	--
Subtotal other non-metal. min.	672	--	3	404	--	265	265	--
4900 non-metal. min. nec	672	--	3	404	--	265	265	--
Total primary manufactured goods	186	1	7	135	28	15	15	--
Subtotal paper products	0	0	0	0	0	--	--	--
5120 paper & paperboard	0	--	0	--	--	--	--	--
5190 paper products nec	0	--	0	--	--	--	--	--
Subtotal lime, cement and glass	152	0	2	135	--	15	15	--
5220 cement & concrete	150	--	—	135	--	15	15	--
5240 glass & glass prod.	2	0	2	0	--	--	--	--
5290 misc. mineral prod.	0	0	0	0	--	--	--	--
Subtotal primary iron and steel products	28	0	0	0	27	--	--	--
5320 i&s primary forms	27	--	—	--	27	--	--	--
5330 i&s plates & sheets	0	0	0	--	0	--	--	--
5360 i&s bars & shapes	0	0	0	--	--	--	--	--
5370 i&s pipe & tube	0	0	0	0	--	--	--	--
Subtotal primary non-ferrous metal products	5	1	4	0	--	--	--	--
5422 aluminum	0	0	0	--	--	--	--	--
5429 smelted prod. nec	1	0	1	--	--	--	--	--
5480 fab. metal products	4	1	3	0	--	--	--	--
Subtotal primary wood products	0	--	0	--	--	--	--	--
5540 primary wood prod.	0	--	0	--	--	--	--	--
Total food and farm products	388	1	3	95	0	290	290	--
Subtotal grain	387	--	2	95	--	290	290	--
6241 wheat	385	--	—	95	--	290	290	--
6344 corn	2	--	2	--	--	--	--	--
6443 barley & rye	0	--	0	--	--	--	--	--
Subtotal vegetable products	0	0	0	0	0	--	--	--
6653 vegetable oils	0	--	0	0	--	--	--	--
6654 vegetables & prod.	0	--	0	0	0	--	--	--
Subtotal processed grain and animal feed	1	--	1	0	--	--	--	--
6747 grain mill products	0	--	0	--	--	--	--	--
6782 animal feed, prep.	1	--	1	0	--	--	--	--
Subtotal other agricultural products	0	0	0	0	--	--	--	--
6811 meat, fresh, frozen	0	--	0	0	--	--	--	--
6817 meat, prepared	0	0	—	--	--	--	--	--
6822 dairy products	0	0	—	--	--	--	--	--
6839 animals & prod. nec	0	0	—	--	--	--	--	--
6858 fruit juices	0	—	—	0	--	--	--	--
6885 alcoholic beverages	0	0	—	--	--	--	--	--
6889 food products nec	0	0	—	0	--	--	--	--
6891 tobacco & products	0	--	—	0	--	--	--	--
Total all manufactured equipment, machinery and products	29	5	23	1	--	--	--	--
7110 machinery (not elec)	10	1	10	0	--	--	--	--
7120 electrical machinery	5	3	1	0	--	--	--	--

BUFFALO HARBOR, NY (INCLUDED IN PORT OF BUFFALO)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise Receipts	Shipments
7210 vehicles & parts	7	0	7	0	--	--	--	--
7230 ships & boats	0	--	0	0	--	--	--	--
7300 ordnance & access.	0	0	--	--	--	--	--	--
7400 manufac. wood prod.	2	0	2	--	--	--	--	--
7500 textile products	0	0	0	--	--	--	--	--
7600 rubber & plastic pr.	1	0	1	0	--	--	--	--
7900 manufac. prod. nec	3	0	3	--	--	--	--	--
Total unknown or not elsewhere classified	0	0	--	0	--	--	--	--
9900 unknown or nec	0	0	--	0	--	--	--	--

NIAGARA RIVER, NY (INCLUDED IN PORT OF BUFFALO)

Section Included: Black Rock Channel north of the Black Rock Lock and Niagara River to and including American Oil Co. dock, 0.5 mile south of the Tonawanda city line, the northern limit of the Niagara River section of the Port of Buffalo. Controlling and Project Depths: 21 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	581	1992	670	1995	365	1998	269
1990	560	1993	570	1996	274		
1991	284	1994	286	1997	263		

Freight Traffic, 1998 (thousand short tons)

	Commodity	Grand Total	Lakewise Receipts
Total, all commodities		269	269
Total coal		135	135
1100 coal lignite		135	135
Total petroleum and petroleum products		134	134
Subtotal petroleum products		134	134
2211 gasoline		1	1
2330 distillate fuel oil		8	8
2430 asphalt, tar & pitch		125	125
Ton-miles (x1000)		1,894	1,894
Tons All Traffic (x1000)		269	
Ton-miles All Traffic (x1000)		1,894	

PORT OF BUFFALO, NY

Section Included: Outer harbor, Lackawanna Canal, Union Canal, Buffalo River from mouth to Conrail RY Bridge 5.5 miles, Buffalo Ship Canal, Black Rock Canal, Black Rock Lock, Black Rock Channel, Niagara River, and Tonawanda to and including Buffalo Oil Terminal, Inc. Dock, located about 2,000 feet north of turning basin, Tonawanda inner Harbor, and Tonawanda Creek Channel from mouth to Main Street Bridge. Controlling and Project Depths: See Buffalo Harbor, Niagara River and Tonawanda.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	2,145	1992	2,473	1995	1,873	1998	2,341
1990	2,563	1993	2,109	1996	1,864		
1991	1,895	1994	1,685	1997	1,894		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise Receipts	Shipments
Total, all commodities	2,341	7	65	907	57	1,305	1,301	3
Total coal	135	--	--	--	--	135	135	--
1100 coal lignite	135	--	--	--	--	135	135	--
Total petroleum and petroleum products	441	--	0	272	24	145	141	3
Subtotal petroleum products	441	--	0	272	24	145	141	3
2211 gasoline	283	--	--	266	8	8	8	--
2221 kerosene	9	--	--	--	9	--	--	--
2330 distillate fuel oil	8	--	--	--	--	8	8	--

PORT OF BUFFALO, NY
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise	
						Receipts	Shipments	
2350 lube oil & greases	6	—	0	6	—	—	—	—
2429 naphtha & solvents	0	—	0	—	—	—	—	—
2430 asphalt, tar & pitch	135	—	—	—	6	129	125	3
Total chemicals and related products	12	0	6	0	6	—	—	—
Subtotal fertilizers	6	—	0	—	6	—	—	—
3110 nitrogenous fert.	0	—	0	—	—	—	—	—
3190 fert. & mixes nec	6	—	0	—	6	—	—	—
Subtotal other chemicals and related products	6	0	6	0	—	—	—	—
3219 other hydrocarbons	0	—	0	—	—	—	—	—
3230 carboxylic acids	0	—	0	—	—	—	—	—
3240 nitrogen func. comp.	0	0	0	—	—	—	—	—
3250 organo - inorg. comp.	0	—	0	—	—	—	—	—
3260 organic comp. nec	1	—	1	—	—	—	—	—
3275 inorg. elem.,oxides, & halogen salts	0	0	0	—	—	—	—	—
3276 metallic salts	0	—	0	—	—	—	—	—
3282 pigments & paints	1	—	1	—	—	—	—	—
3283 coloring mat. nec	0	0	—	—	—	—	—	—
3284 medicines	0	—	0	—	—	—	—	—
3285 perfumes & cleansers	1	0	1	0	—	—	—	—
3286 plastics	2	0	2	—	—	—	—	—
3291 pesticides	0	—	0	—	—	—	—	—
3297 chemical additives	0	—	0	—	—	—	—	—
3298 wood & resin chem.	0	—	0	—	—	—	—	—
3299 chem. products nec	0	—	0	—	—	—	—	—
Total crude materials, inedible except fuels	1,151	—	26	404	—	721	721	—
Subtotal forest products, wood and chips	1	—	1	—	—	—	—	—
4189 lumber	0	—	0	—	—	—	—	—
4190 forest products nec	1	—	1	—	—	—	—	—
Subtotal pulp and waste paper	0	—	0	—	—	—	—	—
4225 pulp & waste paper	0	—	0	—	—	—	—	—
Subtotal soil, sand, gravel, rock and stone	459	—	3	—	—	456	456	—
4322 limestone	156	—	—	—	—	156	156	—
4323 gypsum	243	—	0	—	—	243	243	—
4331 sand & gravel	60	—	3	—	—	57	57	—
Subtotal iron ore and scrap	0	—	0	—	—	—	—	—
4420 iron & steel scrap	0	—	0	—	—	—	—	—
Subtotal non-ferrous ores and scrap	3	—	3	—	—	—	—	—
4650 aluminum ore	3	—	3	—	—	—	—	—
4680 non-ferrous scrap	0	—	0	—	—	—	—	—
4690 non-ferrous ores nec	0	—	0	—	—	—	—	—
Subtotal sulphur, clay and salt	15	—	15	—	—	—	—	—
4782 clay & refrac. mat.	15	—	15	—	—	—	—	—
Subtotal slag	0	—	0	—	—	—	—	—
4860 slag	0	—	0	—	—	—	—	—
Subtotal other non-metal. min.	672	—	3	404	—	265	265	—
4900 non-metal. min. nec	672	—	3	404	—	265	265	—
Total primary manufactured goods	186	1	7	135	28	15	15	—
Subtotal paper products	0	0	0	0	0	—	—	—
5120 paper & paperboard	0	—	0	—	0	—	—	—
5190 paper products nec	0	0	0	0	—	—	—	—
Subtotal lime, cement and glass	152	0	2	135	—	15	15	—
5220 cement & concrete	150	—	—	135	—	15	15	—
5240 glass & glass prod.	2	0	2	0	—	—	—	—
5290 misc. mineral prod.	0	0	0	0	—	—	—	—
Subtotal primary iron and steel products	28	0	0	0	27	—	—	—
5320 i&s primary forms	27	—	—	—	27	—	—	—
5330 i&s plates & sheets	0	0	0	—	0	—	—	—
5360 i&s bars & shapes	0	0	0	—	—	—	—	—
5370 i&s pipe & tube	0	0	0	0	—	—	—	—
Subtotal primary non-ferrous metal products	5	1	4	0	—	—	—	—
5422 aluminum	0	0	0	—	—	—	—	—
5429 smelted prod. nec	1	0	1	—	—	—	—	—
5480 fab. metal products	4	1	3	0	—	—	—	—
Subtotal primary wood products	0	—	0	—	—	—	—	—
5540 primary wood prod.	0	—	0	—	—	—	—	—

PORT OF BUFFALO, NY
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic		
		Imports	Exports	Imports	Exports	Total	Lakewise	
Total food and farm products	388	1	3	95	0	290	290	--
Subtotal grain	387	--	2	95	--	290	290	--
6241 wheat	385	--	--	95	--	290	290	--
6344 corn	2	--	2	--	--	--	--	--
6443 barley & rye	0	--	0	--	--	--	--	--
Subtotal vegetable products	0	0	0	0	0	--	--	--
6653 vegetable oils	0	--	0	0	--	--	--	--
6654 vegetables & prod.	0	0	0	0	0	--	--	--
Subtotal processed grain and animal feed	1	--	1	0	--	--	--	--
6747 grain mill products	0	--	0	--	--	--	--	--
6782 animal feed, prep.	1	--	1	0	--	--	--	--
Subtotal other agricultural products	0	0	0	0	--	--	--	--
6811 meat, fresh, frozen	0	--	0	0	--	--	--	--
6817 meat, prepared	0	0	--	--	--	--	--	--
6822 dairy products	0	0	--	--	--	--	--	--
6839 animals & prod. nec	0	0	--	--	--	--	--	--
6858 fruit juices	0	--	--	0	--	--	--	--
6885 alcoholic beverages	0	0	--	--	--	--	--	--
6889 food products nec	0	0	--	0	--	--	--	--
6891 tobacco & products	0	--	--	0	--	--	--	--
Total all manufactured equipment, machinery and products	29	5	23	1	--	--	--	--
7110 machinery (not elec)	10	1	10	0	--	--	--	--
7120 electrical machinery	5	3	1	0	--	--	--	--
7210 vehicles & parts	7	0	7	0	--	--	--	--
7230 ships & boats	0	--	0	0	--	--	--	--
7300 ordnance & access.	0	0	--	--	--	--	--	--
7400 manufac. wood prod.	2	0	2	--	--	--	--	--
7500 textile products	0	0	0	--	--	--	--	--
7600 rubber & plastic pr.	1	0	1	0	--	--	--	--
7900 manufac. prod. nec	3	0	3	0	--	--	--	--
Total unknown or not elsewhere classified	0	0	--	0	--	--	--	--
9900 unknown or nec	0	0	--	0	--	--	--	--

OSWEGO HARBOR, NY

Section Included: Outer Harbor and Oswego River from mouth to Seneca Street. Controlling Depths: Lake approach channel, 27 feet; channel through outer harbor, 24 feet; east and west side of outer harbor, 21 feet; Oswego River channel, 24 feet. Project Depths: Lake approach channel, 27 feet; channel through outer harbor, 25 feet; lower 1,600 feet of Oswego River channel, 24 feet; remainder of Oswego River channel and Oswego Harbor, 21 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	746	1992	582	1995	435	1998	471
1990	951	1993	506	1996	511		
1991	818	1994	474	1997	640		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic	
		Imports	Exports	Imports	Exports	Lakewise	
						Receipts	Shipments
Total, all commodities	471	12	1	423	10	26	
Total petroleum and petroleum products	163	--	--	153	10	--	
Subtotal petroleum products	163	--	--	153	10	--	
2211 gasoline	74	--	--	74	--	--	--
2340 residual fuel oil	59	--	--	49	10	--	--
2540 petroleum coke	30	--	--	30	--	--	--
Total chemicals and related products	9	--	--	9	--	--	
Subtotal other chemicals and related products	9	--	--	9	--	--	
3276 metallic salts	9	--	--	9	--	--	--
Total crude materials, inedible except fuels	75	--	1	47	--	26	
Subtotal sulphur, clay and salt	1	--	1	--	--	--	
4782 clay & refrac. mat.	1	--	1	--	--	--	--
Subtotal other non-metal. min.	74	--	--	47	--	26	
4900 non-metal. min. nec	74	--	--	47	--	26	

OSWEGO HARBOR, NY
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Foreign		Canadian		Domestic
		Imports	Exports	Imports	Exports	Lakewise Receipts
Total primary manufactured goods	225	12	--	213	--	--
Subtotal lime, cement and glass	213	--	--	213	--	--
5220 cement & concrete	213	--	--	213	--	--
Subtotal primary non-ferrous metal products	12	12	--	--	--	--
5422 aluminum	12	12	--	--	--	--
Total all manufactured equipment, machinery and products	0	0	0	0	--	--
7110 machinery (not elec)	0	0	--	--	--	--
7230 ships & boats	0	--	--	0	--	--
7500 textile products	0	0	--	--	--	--
7900 manufac. prod. nec	0	--	0	--	--	--

Other Harbors and Waterways 1998

Harbor or Waterway Project	Commodity	Thousand Short Tons
BARCELONA HARBOR, NY	No Commerce Reported	
CAPE VINCENT, NY	No Commerce Reported	
GREAT SODUS BAY HARBOR, NY	No Commerce Reported	
NIAGARA FALLS, NY	No Commerce Reported	
OGDENSBURG HARBOR, NY	3250 organo - inorg. comp. 3282 pigments & paints 3284 medicines 3285 perfumes & cleansers 3286 plastics 3291 pesticides 4900 non-metal. min. nec 5120 paper & paperboard 5422 aluminum 6344 corn 7110 machinery (not elec)	0 1 0 0 4 0 123 0 9 16 0
	Total Tons(x1000)	153
PORT CLINTON HARBOR, OH	No Commerce Reported	
ROCHESTER (CHARLOTTE) HARBOR, NY	3219 other hydrocarbons 3276 metallic salts 3284 medicines 3299 chem. products nec 5220 cement & concrete 5290 misc. mineral prod. 7110 machinery (not elec) 7120 electrical machinery 7600 rubber & plastic pr. 7900 manufac. prod. nec 9900 unknown or nec	0 0 0 0 137 0 0 0 0 0 0 0 0 0 0
	Total Tons(x1000)	137
SACKETS HARBOR, NY	2211 gasoline 2330 distillate fuel oil 2640 liquid natural gas 4189 lumber 6747 grain mill products 7900 manufac. prod. nec	0 0 0 0 0 0
	Total Tons(x1000)	0
TONAWANDA HARBOR, NY (INCLUDED IN PORT OF BUFFALO)	No Commerce Reported	
VERMILION HARBOR, OH	No Commerce Reported	
WADDINGTON HARBOR, NY	No Commerce Reported	

ILLINOIS RIVER, IL (INCLUDED IN THE ILLINOIS WATERWAY CONSOLIDATED)

Section Included: Mouth of Illinois River, Grafton, IL, to Lockport, IL, 291.9 miles. Controlling Depth: 9 feet. Project Depths: 9 feet at low water stages.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	36,617	1992	39,741	1995	41,734	1998	38,623
1990	39,659	1993	42,600	1996	39,679		
1991	39,800	1994	45,265	1997	38,619		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	38,623	5,785	968	1,329	17,566	8,948	3,823	60	144
Total coal	3,026	1,182	27	49	24	1,604	139	--	2
1100 coal lignite	2,218	1,142	7	2	8	1,035	24	--	--
1200 coal coke	809	39	21	47	16	568	115	--	2
Total petroleum and petroleum products	4,934	904	270	287	953	943	1,471	11	94
Subtotal petroleum products	4,934	904	270	287	953	943	1,471	11	94
2211 gasoline	359	350	--	3	--	4	2	--	--
2221 kerosene	2	--	2	--	--	--	--	--	--
2330 distillate fuel oil	736	58	54	24	41	190	364	--	6
2340 residual fuel oil	654	80	95	60	129	98	192	--	--
2350 lube oil & greases	334	77	--	--	1	199	57	--	--
2410 petro. jelly & waxes	0	0	--	--	--	--	--	--	--
2429 naphtha & solvents	225	138	14	--	1	60	12	--	--
2430 asphalt, tar & pitch	985	198	34	153	128	196	257	11	7
2540 petroleum coke	1,638	3	72	47	653	195	587	--	81
Total chemicals and related products	4,736	2,404	40	156	487	1,366	194	47	42
Subtotal fertilizers	1,178	886	--	17	82	103	4	47	40
3110 nitrogenous fert.	583	443	--	17	6	89	3	15	11
3120 phosphatic fert.	71	57	--	--	1	11	2	--	--
3130 potassic fert.	224	91	--	--	73	--	--	32	27
3190 fert. & mixes nec	300	294	--	--	1	3	--	--	2
Subtotal other chemicals and related products	3,557	1,519	40	139	404	1,264	189	--	2
3211 acyclic hydrocarbons	4	4	--	--	--	--	--	--	--
3212 benzene & toluene	108	4	2	--	--	2	101	--	--
3219 other hydrocarbons	981	874	27	1	--	76	2	--	2
3220 alcohols	1,111	106	11	138	395	421	40	--	--
3230 carboxylic acids	36	34	--	--	--	2	--	--	--
3260 organic comp. nec	32	11	--	--	--	21	--	--	--
3273 ammonia	351	348	--	--	4	--	--	--	--
3274 sodium hydroxide	657	--	--	--	1	653	3	--	--
3275 inorg. elem., oxides, & halogen salts	104	44	--	--	1	58	--	--	--
3276 metallic salts	56	6	--	--	--	11	39	--	--
3279 inorganic chem. nec	98	73	--	--	2	20	4	--	--
3297 chemical additives	14	14	--	--	--	--	--	--	--
3299 chem. products nec	3	2	--	--	1	--	0	--	--

ILLINOIS RIVER, IL (INCLUDED IN THE ILLINOIS WATERWAY CONSOLIDATED)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
Total crude materials, inedible except fuels	4,140	862	590	824	22	1,243	600	--	--
Subtotal forest products, wood and chips	306	163	--	--	2	142	--	--	--
4161 wood chips	288	159	--	--	--	129	--	--	--
4190 forest products nec	18	4	--	--	2	12	--	--	--
Subtotal soil, sand, gravel, rock and stone	1,487	138	386	786	18	62	96	--	--
4322 limestone	127	113	--	--	--	14	--	--	--
4323 gypsum	10	--	--	--	--	--	10	--	--
4331 sand & gravel	1,349	25	386	786	18	49	86	--	--
Subtotal iron ore and scrap	726	208	152	2	--	59	306	--	--
4410 iron ore	98	--	--	--	--	39	59	--	--
4420 iron & steel scrap	628	208	152	2	--	20	247	--	--
Subtotal non-ferrous ores and scrap	172	32	--	--	2	134	4	--	--
4650 aluminum ore	28	--	--	--	--	28	--	--	--
4670 manganese ore	92	5	--	--	--	83	4	--	--
4680 non-ferrous scrap	12	12	--	--	--	--	--	--	--
4690 non-ferrous ores nec	39	15	--	--	2	23	--	--	--
Subtotal sulphur, clay and salt	61	39	1	--	--	21	--	--	--
4782 clay & refrac. mat.	61	39	1	--	--	21	--	--	--
Subtotal slag	281	6	2	36	--	63	174	--	--
4860 slag	281	6	2	36	--	63	174	--	--
Subtotal other non-metal. min.	1,107	276	49	--	--	762	19	--	--
4900 non-metal. min. nec	1,107	276	49	--	--	762	19	--	--
Total primary manufactured goods	4,386	329	40	2	42	3,644	329	--	--
Subtotal paper products	1	--	--	--	--	1	--	--	--
5120 paper & paperboard	1	--	--	--	--	1	--	--	--
Subtotal lime, cement and glass	959	13	--	--	3	936	6	--	--
5210 lime	19	--	--	--	--	19	--	--	--
5220 cement & concrete	939	13	--	--	3	917	6	--	--
Subtotal primary iron and steel products	3,143	282	40	2	36	2,478	305	--	--
5312 pig iron	740	56	--	--	--	676	8	--	--
5315 ferro alloys	179	3	1	--	5	164	7	--	--
5320 i&s primary forms	233	30	--	--	--	203	--	--	--
5330 i&s plates & sheets	1,151	96	35	--	9	764	247	--	--
5360 i&s bars & shapes	309	63	3	--	23	218	2	--	--
5370 i&s pipe & tube	17	11	--	--	--	6	--	--	--
5390 primary i&s nec	514	22	--	2	--	448	42	--	--
Subtotal primary non-ferrous metal products	283	34	--	--	3	229	18	--	--
5422 aluminum	8	--	--	--	--	8	--	--	--
5429 smelted prod. nec	35	--	--	--	--	35	--	--	--
5480 fab. metal products	239	34	--	--	3	185	18	--	--
Total food and farm products	17,370	97	1	11	16,038	127	1,087	2	6
Subtotal grain	11,777	26	--	11	10,961	44	729	2	5
6241 wheat	161	--	--	11	93	39	18	--	--
6344 corn	11,591	15	--	--	10,854	5	711	2	5

ILLINOIS RIVER, IL (INCLUDED IN THE ILLINOIS WATERWAY CONSOLIDATED)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
6443 barley & rye	11	11	—	—	—	—	—	—	—
6445 oats	5	—	—	—	5	—	—	—	—
6447 sorghum grains	9	—	—	—	9	—	—	—	—
Subtotal oilseeds	3,912	10	—	—	3,596	2	303	—	2
6522 soybeans	3,657	3	—	—	3,348	2	303	—	2
6590 oilseeds nec	255	7	—	—	248	—	—	—	—
Subtotal vegetable products	61	—	—	—	30	—	31	—	—
6653 vegetable oils	60	—	—	—	30	—	30	—	—
6654 vegetables & prod.	1	—	—	—	—	—	1	—	—
Subtotal processed grain and animal feed	1,440	32	1	—	1,384	—	23	—	—
6747 grain mill products	59	5	—	—	54	—	—	—	—
6782 animal feed, prep.	1,381	27	1	—	1,330	—	23	—	—
Subtotal other agricultural products	180	29	—	—	68	82	—	—	—
6839 animals & prod. nec	1	—	—	—	1	—	—	—	—
6861 sugar	61	—	—	—	—	61	—	—	—
6865 molasses	50	29	—	—	—	21	—	—	—
6885 alcoholic beverages	67	—	—	—	67	—	—	—	—
Total all manufactured equipment, machinery and products	32	6	—	—	1	21	3	—	—
7110 machinery (not elec)	14	6	—	—	1	6	1	—	—
7120 electrical machinery	0	—	—	—	—	—	0	—	—
7400 manufac. wood prod.	14	—	—	—	—	14	—	—	—
7600 rubber & plastic pr.	2	—	—	—	—	—	2	—	—
7900 manufac. prod. nec	1	—	—	—	—	1	—	—	—
Ton-miles (x1000)	8,249,756	1,190,349	97,442	92,311	3,137,153	2,603,862	1,112,513	4,898	11,227
Tons All Traffic (x1000)			38,623						
Ton-miles All Traffic (x1000)			8,249,756						

CALUMET-SAG CHANNEL, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)

Section Included: Calumet-Sag Channel from its junction with Chicago Sanitary and Ship Canal to Blue Island, Little Calumet and Calumet Rivers to Turning Basin No. 5 (130th Street Bridge). Project Depth: 9 feet.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	6,544	1992	7,633	1995	12,077	1998	8,805
1990	7,621	1993	7,430	1996	12,636		
1991	7,367	1994	12,874	1997	10,041		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Internal					
		Inbound		Outbound		Through	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	8,805	659	17	38	321	5,021	2,749
Total coal	1,630	—	—	—	—	1,547	83
1100 coal lignite	988	—	—	—	—	964	23
1200 coal coke	642	—	—	—	—	583	59
Total petroleum and petroleum products	1,758	55	—	38	275	497	893
Subtotal crude petroleum	2	—	—	—	—	2	—
2100 crude petroleum	2	—	—	—	—	2	—
Subtotal petroleum products	1,755	55	—	38	275	495	893
2211 gasoline	3	3	—	—	—	—	—
2221 kerosene	2	—	—	—	2	—	—

CALUMET-SAG CHANNEL, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Internal					
		Inbound		Outbound		Through	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
2330 distillate fuel oil	208	25	—	28	25	35	93
2340 residual fuel oil	230	5	—	9	42	103	71
2350 lube oil & greases	71	—	—	—	1	19	51
2429 naphtha & solvents	24	18	—	—	—	—	5
2430 asphalt, tar & pitch	469	3	—	1	104	58	302
2540 petroleum coke	749	—	—	—	101	279	370
Total chemicals and related products	686	157	15	—	28	313	173
Subtotal fertilizers	121	—	—	—	—	120	2
3110 nitrogenous fert.	107	—	—	—	—	106	2
3120 phosphatic fert.	11	—	—	—	—	11	—
3190 fert. & mixes nec	3	—	—	—	—	3	—
Subtotal other chemicals and related products	565	157	15	—	28	194	171
3212 benzene & toluene	70	10	—	—	—	1	59
3219 other hydrocarbons	23	—	—	—	—	23	—
3220 alcohols	262	135	15	—	28	15	69
3274 sodium hydroxide	131	—	—	—	—	131	—
3275 inorg. elem., oxides, & halogen salts	1	—	—	—	—	1	—
3276 metallic salts	53	12	—	—	—	2	39
3279 inorganic chem. nec	24	—	—	—	—	20	4
3299 chem. products nec	0	—	—	—	—	—	0
Total crude materials, inedible except fuels	1,622	357	—	—	5	516	745
Subtotal forest products, wood and chips	20	—	—	—	—	20	—
4161 wood chips	9	—	—	—	—	9	—
4190 forest products nec	11	—	—	—	—	11	—
Subtotal soil, sand, gravel, rock and stone	640	357	—	—	—	15	268
4322 limestone	14	11	—	—	—	3	—
4323 gypsum	10	—	—	—	—	—	10
4331 sand & gravel	460	346	—	—	—	12	102
4335 waterway improv. mat	156	—	—	—	—	—	156
Subtotal iron ore and scrap	294	—	—	—	5	59	230
4410 iron ore	97	—	—	—	—	39	57
4420 iron & steel scrap	198	—	—	—	5	20	173
Subtotal non-ferrous ores and scrap	129	—	—	—	—	125	4
4650 aluminum ore	21	—	—	—	—	21	—
4670 manganese ore	86	—	—	—	—	82	4
4690 non-ferrous ores nec	21	—	—	—	—	21	—
Subtotal sulphur, clay and salt	21	—	—	—	—	21	—
4782 clay & refrac. mat.	21	—	—	—	—	21	—
Subtotal slag	273	—	—	—	—	99	174
4860 slag	273	—	—	—	—	99	174
Subtotal other non-metal. min.	246	—	—	—	—	177	69
4900 non-metal. min. nec	246	—	—	—	—	177	69
Total primary manufactured goods	2,481	75	1	—	3	2,043	359
Subtotal lime, cement and glass	86	7	—	—	—	72	6
5210 lime	19	7	—	—	—	12	—
5220 cement & concrete	66	—	—	—	—	60	6
Subtotal primary iron and steel products	2,213	68	1	—	—	1,806	338
5312 pig iron	624	66	1	—	—	549	8
5315 ferro alloys	159	1	—	—	—	149	8
5320 i&s primary forms	171	—	—	—	—	171	—
5330 i&s plates & sheets	847	—	—	—	—	566	281
5360 i&s bars & shapes	89	—	—	—	—	84	5
5370 i&s pipe & tube	2	—	—	—	—	2	—
5390 primary i&s nec	321	—	—	—	—	285	36
Subtotal primary non-ferrous metal products	183	—	—	—	3	165	14
5422 aluminum	8	—	—	—	—	8	—
5429 smelted prod. nec	31	—	—	—	—	31	—
5480 fab. metal products	143	—	—	—	3	125	14
Total food and farm products	620	15	—	—	10	99	496
Subtotal grain	400	—	—	—	—	60	341
6241 wheat	75	—	—	—	—	57	18
6344 corn	325	—	—	—	—	3	322
Subtotal oilseeds	146	—	—	—	—	—	146
6522 soybeans	146	—	—	—	—	—	146
Subtotal vegetable products	1	—	—	—	—	—	1
6654 vegetables & prod.	1	—	—	—	—	—	1
Subtotal processed grain and animal feed	19	—	—	—	10	—	9
6782 animal feed, prep.	19	—	—	—	10	—	9
Subtotal other agricultural products	54	15	—	—	—	39	—
6861 sugar	34	—	—	—	—	34	—
6865 molasses	21	15	—	—	—	5	—
Total all manufactured equipment, machinery and products	7	—	—	—	—	6	1
7110 machinery (not elec)	7	—	—	—	—	6	1

CALUMET-SAG CHANNEL, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Internal					
		Inbound		Outbound		Through	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
7120 electrical machinery	0	—	—	—	—	—	0
Ton-miles (x1000)	197,246	9,678	185	420	4,275	120,506	62,181
Tons All Traffic (x1000)	8,805						
Ton-miles All Traffic (x1000)	197,246						

CHICAGO SANITARY AND SHIP CANAL, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)

Section Included: Chicago Sanitary and Ship Canal. Damen Avenue, Chicago to Lockport, IL. Project Depth: 9 feet at low water stages.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	16,908	1992	17,966	1995	19,704	1998	18,164
1990	18,643	1993	18,813	1996	20,493		
1991	18,763	1994	24,591	1997	18,900		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	18,164	5,463	157	1,254	2,656	5,561	2,333	480	260
Total coal	1,823	104	2	2	76	1,549	90	--	--
1100 coal lignite	1,069	73	2	—	—	964	31	—	—
1200 coal coke	753	31	—	2	76	585	59	—	—
Total petroleum and petroleum products	4,216	1,510	69	167	1,323	222	612	65	248
Subtotal crude petroleum	2	--	--	--	2	--	--	--	--
2100 crude petroleum	2	—	—	—	2	—	—	—	—
Subtotal petroleum products	4,213	1,510	69	167	1,321	222	612	65	248
2211 gasoline	9	4	—	—	2	3	—	—	—
2221 kerosene	2	—	—	—	—	—	2	—	—
2330 distillate fuel oil	905	307	5	5	453	3	22	14	96
2340 residual fuel oil	669	252	4	7	378	2	16	5	6
2350 lube oil & greases	265	182	—	—	5	19	51	4	4
2429 naphtha & solvents	94	42	—	—	21	18	5	3	5
2430 asphalt, tar & pitch	971	474	32	9	100	37	216	28	76
2540 petroleum coke	1,298	249	29	146	361	140	300	12	60
Total chemicals and related products	1,974	1,141	84	10	117	455	122	32	12
Subtotal fertilizers	124	--	--	--	3	120	2	--	--
3110 nitrogenous fert.	109	—	—	—	1	106	2	—	—
3120 phosphatic fert.	13	—	—	—	2	11	—	—	—
3190 fert. & mixes nec	3	—	—	—	—	3	—	—	—
Subtotal other chemicals and related products	1,849	1,141	84	10	114	335	121	32	12
3212 benzene & toluene	128	6	—	8	51	—	54	1	7
3219 other hydrocarbons	137	54	—	—	29	23	—	31	—
3220 alcohols	665	453	5	2	3	148	48	0	5
3230 carboxylic acids	2	2	—	—	—	—	—	—	—
3260 organic comp. nec	21	21	—	—	—	—	—	—	—
3274 sodium hydroxide	656	522	—	—	3	131	—	—	—

CHICAGO SANITARY AND SHIP CANAL, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR
ILLINOIS WATERWAY)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
3275 inorg. elem., oxides, & halogen salts	58	56	—	—	—	1	—	—	—
3276 metallic salts	158	26	80	—	28	11	13	—	—
3279 inorganic chem. nec	24	—	—	—	—	20	4	—	—
3299 chem. products nec	0	—	—	—	—	—	0	—	—
Total crude materials, inedible except fuels	4,874	1,134	—	1,065	555	1,105	634	381	—
Subtotal forest products, wood and chips	142	119	—	—	—	22	—	—	—
4161 wood chips	129	118	—	—	—	12	—	—	—
4190 forest products nec	12	2	—	—	—	11	—	—	—
Subtotal soil, sand, gravel, rock and stone	2,948	528	—	1,065	386	493	96	381	—
4322 limestone	14	—	—	—	—	14	—	—	—
4323 gypsum	10	—	—	—	—	—	10	—	—
4331 sand & gravel	2,768	528	—	1,065	386	323	86	381	—
4335 waterway improv. mat	156	—	—	—	—	156	—	—	—
Subtotal iron ore and scrap	519	2	—	—	167	59	291	—	—
4410 iron ore	98	—	—	—	—	39	59	—	—
4420 iron & steel scrap	421	2	—	—	167	20	232	—	—
Subtotal non-ferrous ores and scrap	138	9	—	—	—	125	4	—	—
4650 aluminum ore	28	6	—	—	—	21	—	—	—
4670 manganese ore	88	2	—	—	—	82	4	—	—
4690 non-ferrous ores nec	23	1	—	—	—	21	—	—	—
Subtotal sulphur, clay and salt	22	—	—	—	1	21	—	—	—
4782 clay & refrac. mat.	22	—	—	—	1	21	—	—	—
Subtotal slag	274	—	—	—	2	99	174	—	—
4860 slag	274	—	—	—	2	99	174	—	—
Subtotal other non-metal. min.	831	477	—	—	—	286	69	—	—
4900 non-metal. min. nec	831	477	—	—	—	286	69	—	—
Total primary manufactured goods	4,017	1,525	2	—	9	2,121	360	—	—
Subtotal paper products	1	—	—	—	—	1	—	—	—
5120 paper & paperboard	1	—	—	—	—	1	—	—	—
Subtotal lime, cement and glass	943	857	—	—	—	79	6	—	—
5210 lime	19	—	—	—	—	19	—	—	—
5220 cement & concrete	924	857	—	—	—	60	6	—	—
Subtotal primary iron and steel products	2,825	604	—	—	8	1,875	338	—	—
5312 pig iron	683	61	—	—	—	615	8	—	—
5315 ferro alloys	172	13	—	—	—	151	8	—	—
5320 i&s primary forms	203	32	—	—	—	171	—	—	—
5330 i&s plates & sheets	1,046	197	—	—	1	567	281	—	—
5360 i&s bars & shapes	223	134	—	—	—	84	5	—	—
5370 i&s pipe & tube	6	3	—	—	—	2	—	—	—
5390 primary i&s nec	492	165	—	—	6	285	36	—	—
Subtotal primary non-ferrous metal products	248	64	2	—	2	165	16	—	—
5422 aluminum	8	—	—	—	—	8	—	—	—

CHICAGO SANITARY AND SHIP CANAL, IL (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR
ILLINOIS WATERWAY)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
5429 smelted prod. nec	35	4	—	—	—	31	—	—	—
5480 fab. metal products	204	59	2	—	2	125	16	—	—
Total food and farm products	1,237	34	—	10	574	104	514	2	—
Subtotal grain	795	5	—	10	384	50	345	2	—
6241 wheat	78	3	—	10	—	47	18	—	—
6344 corn	717	2	—	—	384	3	327	2	—
Subtotal oilseeds	305	2	—	—	155	—	149	—	—
6522 soybeans	305	2	—	—	155	—	149	—	—
Subtotal vegetable products	31	—	—	—	30	—	1	—	—
6653 vegetable oils	30	—	—	—	30	—	—	—	—
6654 vegetables & prod.	1	—	—	—	—	—	1	—	—
Subtotal processed grain and animal feed	24	—	—	—	6	—	19	—	—
6782 animal feed, prep.	24	—	—	—	6	—	19	—	—
Subtotal other agricultural products	82	27	—	—	—	54	—	—	—
6861 sugar	61	27	—	—	—	34	—	—	—
6865 molasses	21	—	—	—	—	21	—	—	—
Total all manufactured equipment, machinery and products	24	15	—	—	2	6	1	—	—
7110 machinery (not elec)	7	—	—	—	—	6	1	—	—
7120 electrical machinery	0	—	—	—	—	—	0	—	—
7400 manufac. wood prod.	14	14	—	—	—	—	—	—	—
7600 rubber & plastic pr.	2	—	—	—	2	—	—	—	—
7900 manufac. prod. nec	1	1	—	—	—	—	—	—	—
Ton-miles (x1000)	211,902	70,358	1,825	23,263	29,526	62,221	24,710	0	0
Tons All Traffic (x1000)			18,164						
Ton-miles All Traffic (x1000)			211,902						

ILLINOIS WATERWAY, IL (CONSOLIDATED REPORT FOR ENTIRE WATERWAY)

Section Included: Illinois River, Grafton, IL to confluence of Desplaines and Kankakee Rivers then Des plaines River to Lockport, IL.; Chicago Sanitary and Ship Canal, Lockport, IL to Damen Ave. in Chicago; Chicago River (South Branch), Damen Avenue to Lake Street; Calumet-Sag Channel, from its junction with the Chicago Sanitary and Ship Canal to Blue Island; and the Little Calumet River and Calumet River to Turning Basin No. 5 (130th Street Bridge). See reports for Illinois River, Chicago Sanitary and Ship Canal, Calumet-Sag Channel, and Chicago River, South Branch. Project Depth: 9 feet at low water stages.

Comparative Statement of Traffic (thousand short tons)

Year	Total	Year	Total	Year	Total	Year	Total
1989	39,672	1992	42,668	1995	47,435	1998	41,774
1990	43,318	1993	45,636	1996	46,236		
1991	43,131	1994	50,882	1997	42,994		

Freight Traffic, 1998 (thousand short tons)

Commodity	Grand Total	Internal							
		Inbound		Outbound		Through		Intra	
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd
Total, all commodities	41,774	10,606	395	932	19,741	4,788	1,816	2,346	1,151
Total coal	3,030	1,287	24	51	104	1,498	59	—	6
1100 coal lignite	2,219	1,215	8	2	17	962	15	—	—
1200 coal coke	810	72	16	49	87	536	44	—	6

ILLINOIS WATERWAY, IL (CONSOLIDATED REPORT FOR ENTIRE WATERWAY)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Internal								
		Inbound		Outbound		Through		Intra		
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	
Total petroleum and petroleum products	6,216	2,169	123	278	2,250	121	341	376	559	
Subtotal crude petroleum	2	--	--	--	2	--	--	--	--	
2100 crude petroleum	2	--	--	--	2	--	--	--	--	
Subtotal petroleum products	6,214	2,169	123	278	2,248	121	341	376	559	
2211 gasoline	359	354	--	--	2	--	--	3	--	
2221 kerosene	2	--	--	--	--	--	--	--	2	
2330 distillate fuel oil	1,038	334	5	33	433	--	7	70	156	
2340 residual fuel oil	887	248	2	17	423	--	--	93	103	
2350 lube oil & greases	344	258	--	--	7	19	51	5	4	
2410 petro. jelly & waxes	0	0	--	--	--	--	--	--	--	
2429 naphtha & solvents	233	198	4	--	12	--	1	3	15	
2430 asphalt, tar & pitch	1,317	556	50	43	317	--	93	158	100	
2540 petroleum coke	2,035	221	62	184	1,054	102	189	44	180	
Total chemicals and related products	4,968	3,524	111	19	571	293	111	257	82	
Subtotal fertilizers	1,178	886	--	17	85	103	2	47	40	
3110 nitrogenous fert.	583	443	--	17	7	89	2	15	11	
3120 phosphatic fert.	71	57	--	--	3	11	--	--	--	
3130 potassic fert.	224	91	--	--	73	--	--	32	27	
3190 fert. & mixes nec	300	294	--	--	1	3	--	--	2	
Subtotal other chemicals and related products	3,790	2,638	111	2	486	190	109	211	42	
3211 acyclic hydrocarbons	4	4	--	--	--	--	--	--	--	
3212 benzene & toluene	132	10	--	--	48	--	54	11	9	
3219 other hydrocarbons	1,012	926	--	--	2	23	--	32	29	
3220 alcohols	1,181	529	31	2	398	13	37	165	5	
3230 carboxylic acids	36	36	--	--	--	--	--	--	--	
3260 organic comp. nec	32	32	--	--	--	--	--	--	--	
3273 ammonia	351	348	--	--	4	--	--	--	--	
3274 sodium hydroxide	657	522	--	--	4	131	--	--	--	
3275 inorg. elem., oxides, & halogen salts	104	101	--	--	1	1	--	--	--	
3276 metallic salts	164	42	80	--	26	2	13	2	--	
3279 inorganic chem. nec	98	73	--	--	2	20	4	--	--	
3297 chemical additives	14	14	--	--	--	--	--	--	--	
3299 chem. products nec	3	2	--	--	1	--	0	--	--	
Total crude materials, inedible except fuels	5,757	1,529	94	563	138	748	483	1,707	495	
Subtotal forest products, wood and chips	306	282	--	--	2	22	--	--	--	
4161 wood chips	288	277	--	--	--	12	--	--	--	
4190 forest products nec	18	5	--	--	2	11	--	--	--	
Subtotal soil, sand, gravel, rock and stone	3,104	200	--	527	18	172	96	1,705	386	
4322 limestone	127	124	--	--	--	3	--	--	--	
4323 gypsum	10	--	--	--	--	--	10	--	--	
4331 sand & gravel	2,811	76	--	527	18	14	86	1,705	386	
4335 waterway improv. mat	156	--	--	--	--	156	--	--	--	

ILLINOIS WATERWAY, IL (CONSOLIDATED REPORT FOR ENTIRE WATERWAY)
Freight Traffic, 1998 - continued
(thousand short tons)

Commodity	Grand Total	Internal								
		Inbound		Outbound		Through		Intra		
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	
Subtotal iron ore and scrap	726	208	43	--	115	59	191	2	109	
4410 iron ore	98	—	—	—	—	39	59	—	—	
4420 iron & steel scrap	628	208	43	—	115	20	132	2	109	
Subtotal non-ferrous ores and scrap	172	41	--	--	2	125	4	--	--	
4650 aluminum ore	28	6	—	—	—	21	—	—	—	
4670 manganese ore	92	6	—	—	—	82	4	—	—	
4680 non-ferrous scrap	12	12	—	—	—	—	—	—	—	
4690 non-ferrous ores nec	39	17	—	—	2	21	—	—	—	
Subtotal sulphur, clay and salt	61	39	--	--	--	21	--	--	1	
4782 clay & refrac. mat.	61	39	—	—	—	21	—	—	1	
Subtotal slag	281	6	2	36	2	63	172	--	--	
4860 slag	281	6	2	36	2	63	172	—	—	
Subtotal other non-metal. min.	1,107	753	49	--	--	286	19	--	--	
4900 non-metal. min. nec	1,107	753	49	—	—	286	19	—	—	
Total primary manufactured goods	4,389	1,929	43	--	54	2,044	317	2	--	
Subtotal paper products	1	1	--	--	--	--	--	--	--	
5120 paper & paperboard	1	1	—	—	—	—	—	—	—	
Subtotal lime, cement and glass	959	877	--	--	3	72	6	--	--	
5210 lime	19	7	—	—	—	12	—	—	—	
5220 cement & concrete	939	870	—	—	3	60	6	—	—	
Subtotal primary iron and steel products	3,145	953	41	--	44	1,807	298	2	--	
5312 pig iron	741	183	1	—	—	549	8	—	—	
5315 ferro alloys	179	17	1	—	5	149	7	—	—	
5320 i&s primary forms	233	62	—	—	—	171	—	—	—	
5330 i&s plates & sheets	1,151	293	35	—	10	567	246	—	—	
5360 i&s bars & shapes	309	197	3	—	23	84	2	—	—	
5370 i&s pipe & tube	17	15	—	—	—	2	—	—	—	
5390 primary i&s nec	514	185	—	—	6	285	36	2	—	
Subtotal primary non-ferrous metal products	284	97	2	--	7	165	13	--	--	
5422 aluminum	8	—	—	—	—	8	—	—	—	
5429 smelted prod. nec	35	4	—	—	—	31	—	—	—	
5480 fab. metal products	241	93	2	—	7	125	13	—	—	
Total food and farm products	17,382	146	--	21	16,621	78	504	4	8	
Subtotal grain	11,789	31	--	21	11,344	39	345	4	5	
6241 wheat	171	3	—	21	93	36	18	—	—	
6344 corn	11,593	16	—	—	11,238	3	327	4	5	
6443 barley & rye	11	11	—	—	—	—	—	—	—	
6445 oats	5	—	—	—	5	—	—	—	—	
6447 sorghum grains	9	—	—	—	9	—	—	—	—	
Subtotal oilseeds	3,912	12	--	--	3,750	--	149	--	2	
6522 soybeans	3,657	5	—	—	3,502	—	149	—	2	
6590 oilseeds nec	255	7	—	—	248	—	—	—	—	
Subtotal vegetable products	61	--	--	--	60	--	1	--	--	
6653 vegetable oils	60	—	—	—	60	—	—	—	—	
6654 vegetables & prod.	1	—	—	—	—	—	1	—	—	

ILLINOIS WATERWAY, IL (CONSOLIDATED REPORT FOR ENTIRE WATERWAY)
 Freight Traffic, 1998 - continued
 (thousand short tons)

Commodity	Grand Total	Internal								
		Inbound		Outbound		Through		Intra		
		Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	Upbound	Downbnd	
Subtotal processed grain and animal feed	1,440	32	--	--	1,398	--	9	--	--	1
6747 grain mill products	59	5	--	--	54	--	--	--	--	--
6782 animal feed, prep.	1,381	27	--	--	1,344	--	9	--	--	1
Subtotal other agricultural products	180	72	--	--	68	39	--	--	--	--
6839 animals & prod. nec	1	--	--	--	1	--	--	--	--	--
6861 sugar	61	27	--	--	--	34	--	--	--	--
6865 molasses	50	45	--	--	--	5	--	--	--	--
6885 alcoholic beverages	67	--	--	--	67	--	--	--	--	--
Total all manufactured equipment, machinery and products	32	22	--	--	3	6	1	--	--	--
7110 machinery (not elec)	14	6	--	--	1	6	1	--	--	--
7120 electrical machinery	0	--	--	--	--	--	0	--	--	--
7400 manufac. wood prod.	14	14	--	--	--	--	--	--	--	--
7600 rubber & plastic pr.	2	--	--	--	2	--	--	--	--	--
7900 manufac. prod. nec	1	1	--	--	--	--	--	--	--	--
Ton-miles (x1000)	8,663,400	2,527,498	33,328	38,250	3,752,739	1,504,951	590,280	120,690	95,665	
Tons All Traffic (x1000)					41,774					
Ton-miles All Traffic (x1000)					8,663,400					

Section 2

Trips and Drafts of Vessels

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
WAUKEGAN HARBOR, IL												
Inbound												
Grand Total	382	32	--	255	95	--	381	34	--	249	98	--
FOREIGN												
Total	--	--	--	--	--	--	5	2	--	--	3	--
19	--	--	--	--	--	--	1	—	--	--	1	--
18	--	--	--	--	--	--	1	—	--	--	1	--
17	--	--	--	--	--	--	1	—	--	--	1	--
12	--	--	--	--	--	--	2	2	--	--	—	--
DOMESTIC												
Total	382	32	--	255	95	--	376	32	--	249	95	--
25	2	—	--	--	2	--	—	—	--	--	—	--
23	1	—	--	--	1	--	—	—	--	--	—	--
20	2	2	--	--	—	--	—	—	--	--	—	--
19	39	16	--	22	1	--	19	5	--	14	—	--
18	19	12	--	--	7	--	5	5	--	—	—	--
17	7	2	--	--	5	--	3	3	--	—	—	--
16	4	—	--	--	4	--	14	12	--	2	—	--
15	1	—	--	--	1	--	23	4	--	—	19	--
12	307	—	--	233	74	--	312	3	--	233	76	763
Total trips:												763
CHICAGO RIVER (MAIN AND NORTH BRANCH), IL												
Upbound												
Grand Total	727	96	--	161	447	23	2,277	1,548	--	224	490	15
DOMESTIC												
Total	727	96	--	161	447	23	2,277	1,548	--	224	490	15
12	727	96	--	161	447	23	2,277	1,548	--	224	490	15
Total trips:												3,004
CHICAGO RIVER, SOUTH BRANCH, IL												
Upbound												
Grand Total	2,702	1,548	--	237	900	17	1,099	96	--	156	822	25
DOMESTIC												
Total	2,702	1,548	--	237	900	17	1,099	96	--	156	822	25
12	2,702	1,548	--	237	900	17	1,099	96	--	156	822	25
Total trips:												3,801
LAKE CALUMET, IL												
Upbound												
Grand Total	1,264	56	38	159	834	177	1,164	51	38	142	758	175
FOREIGN												
Total	46	33	4	4	5	--	39	29	4	2	4	--
27	1	1	—	--	—	--	—	—	—	—	—	--
26	19	18	1	--	--	--	1	1	—	—	—	--
25	3	3	--	--	--	--	—	—	—	—	—	--
24	8	4	--	--	4	--	1	1	—	—	—	--
23	5	4	1	--	--	--	—	—	—	—	—	--
22	1	1	--	--	--	--	10	10	—	—	—	--
21	2	2	--	--	--	--	8	5	2	—	1	--
20	1	—	1	--	--	--	7	6	1	—	—	--
19	1	—	--	--	1	--	7	5	1	—	1	--
18	—	--	--	--	--	--	1	—	—	—	1	--
15	1	—	1	--	--	--	1	—	—	—	1	--
12	4	—	--	4	--	--	3	1	—	2	—	--

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

LAKE CALUMET, IL - continued

Upbound

Downbound

DOMESTIC

Total	1,218	23	34	155	829	177	1,125	22	34	140	754	175
27	1	—	—	—	1	—	—	—	—	—	—	—
26	2	—	—	—	2	—	—	—	—	2	—	—
22	2	—	—	—	—	—	2	—	—	—	—	—
21	18	11	—	—	7	—	—	—	—	—	—	—
20	3	3	—	—	—	—	4	4	—	—	—	—
19	3	3	—	—	—	—	5	4	—	1	—	—
18	4	3	—	1	—	—	2	1	—	—	1	—
17	4	3	—	—	1	—	14	13	—	—	—	1
16	1	—	—	—	—	1	3	—	—	—	—	1
15	—	—	—	—	—	—	3	—	—	—	—	3
14	3	—	—	3	—	—	4	—	—	4	—	—
13	50	—	28	17	5	—	15	—	2	3	10	—
12	1,127	—	6	132	813	176	1,076	—	32	130	743	171
Total trips:											2,428	

CALUMET HARBOR AND RIVER, IL AND IN

Upbound

Downbound

Grand Total	6,970	493	78	2,510	3,327	562	8,304	1,984	78	2,285	3,388	569
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FOREIGN

Total	359	314	6	14	19	6	374	318	6	16	25	9
30	1	—	1	—	—	—	3	—	—	—	—	—
28	—	—	—	—	—	—	26	—	—	—	—	—
27	7	7	—	—	—	—	138	137	1	—	—	—
26	18	18	—	—	—	—	20	20	—	—	—	—
25	—	—	—	—	—	—	48	39	—	—	8	1
24	5	5	—	—	—	—	35	33	1	—	1	—
23	25	24	—	—	1	—	19	19	—	—	—	—
22	111	111	—	—	—	—	26	23	2	—	1	—
21	30	26	3	—	1	—	10	9	1	—	—	—
20	63	62	1	—	—	—	5	5	—	—	3	2
19	38	32	1	—	5	—	10	—	—	—	1	2
18	14	10	—	—	3	1	5	2	—	—	1	2
17	11	11	—	—	—	—	3	2	—	—	1	—
16	4	2	—	—	1	1	2	—	—	—	2	—
15	4	1	—	—	3	—	2	—	1	—	1	—
14	4	3	—	1	—	—	4	—	—	1	2	1
12	24	2	—	13	5	4	23	—	—	15	5	3

DOMESTIC

Total	6,611	179	72	2,496	3,308	556	7,930	1,666	72	2,269	3,363	560
29	—	—	—	—	—	—	1	1	—	—	—	—
28	—	—	—	—	—	—	5	5	—	—	—	—
27	2	2	—	—	—	—	40	39	—	—	1	—
26	8	5	—	3	—	—	38	18	—	4	16	—
25	5	5	—	—	—	—	19	6	—	—	13	—
24	14	14	—	—	—	—	6	2	—	—	4	—
23	44	39	—	—	5	—	1	1	—	—	—	—
22	21	17	—	2	2	—	3	1	—	2	—	—
21	20	19	—	—	1	—	20	13	—	—	7	—
20	19	16	—	—	3	—	7	6	—	—	1	—
19	29	9	—	18	2	—	27	5	—	20	2	—
18	55	39	—	2	14	—	84	77	—	1	6	—
17	8	1	—	2	5	—	36	31	—	3	2	—
16	21	13	—	—	2	3	5	4	—	—	—	1
15	5	—	—	—	2	3	4	4	—	—	—	—
14	24	—	—	20	—	4	19	—	—	19	—	—
13	45	—	6	29	10	—	105	—	61	39	5	—
12	6,291	—	66	2,420	3,262	543	7,510	1,453	11	2,181	3,306	559
Total trips:											15,274	

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
PORT OF CHICAGO, IL												
Grand Total												
36,106	21,834	78	4,468	7,146	2,580	35,657	21,841	78	4,373	6,853	2,512	
FOREIGN												
Total	374	318	6	16	25	9	359	314	6	14	19	6
30	—	—	—	—	—	—	1	—	1	—	—	—
28	3	3	—	—	—	—	—	—	—	—	—	—
27	26	26	—	—	—	—	7	7	—	—	—	—
26	138	137	1	—	—	—	18	18	—	—	—	—
25	20	20	—	—	—	—	—	—	—	—	—	—
24	48	39	—	—	8	1	5	5	—	—	—	—
23	35	33	1	—	1	—	25	24	—	—	1	—
22	19	19	—	—	—	—	111	111	—	—	—	—
21	26	23	2	—	1	—	30	26	3	—	1	—
20	10	9	1	—	—	—	63	62	1	—	—	—
19	10	5	—	—	3	2	38	32	1	—	5	—
18	5	2	—	—	1	2	14	10	—	—	3	1
17	3	2	—	—	1	—	11	11	—	—	—	—
16	2	—	—	—	2	—	4	2	—	—	1	1
15	2	—	1	—	1	—	4	1	—	—	3	—
14	4	—	—	1	2	1	4	3	—	1	—	—
12	23	—	—	15	5	3	24	2	—	13	5	4
DOMESTIC												
Total	35,732	21,516	72	4,452	7,121	2,571	35,298	21,527	72	4,359	6,834	2,506
29	1	1	—	—	—	—	—	—	—	—	—	—
28	5	5	—	—	—	—	—	—	—	—	—	—
27	40	39	—	—	1	—	2	2	—	—	—	—
26	38	18	—	4	16	—	8	5	—	3	—	—
25	19	6	—	—	13	—	5	5	—	—	—	—
24	6	2	—	—	4	—	14	14	—	—	—	—
23	1	1	—	—	—	—	44	39	—	—	5	—
22	3	1	—	2	—	—	21	17	—	2	2	—
21	20	13	—	—	7	—	20	19	—	—	1	—
20	6	5	—	—	1	—	20	17	—	—	3	—
19	27	5	—	20	2	—	29	9	—	18	2	—
18	65	60	—	1	4	—	74	56	—	2	16	—
17	36	31	—	3	2	—	8	1	—	2	5	—
16	5	4	—	—	—	1	21	13	—	—	2	6
15	4	4	—	—	—	—	5	—	—	—	2	3
14	19	—	—	19	—	—	24	—	—	20	—	4
13	101	—	—	61	35	5	51	—	6	35	10	—
12	35,336	21,321	11	4,368	7,066	2,570	34,952	21,330	66	4,277	6,786	2,493
												71,763
INDIANA HARBOR, IN												
Grand Total												
2,418	345	372	899	307	495	2,461	343	372	909	287	550	
FOREIGN												
Total	11	11	—	—	—	—	10	10	—	—	—	—
28	4	4	—	—	—	—	—	—	—	—	—	—
27	7	7	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	10	10	—	—	—	—
DOMESTIC												
Total	2,407	334	372	899	307	495	2,451	333	372	909	287	550
31	5	5	—	—	—	—	—	—	—	—	—	—
30	13	13	—	—	—	—	—	—	—	—	—	—
29	12	12	—	—	—	—	—	—	—	—	—	—
28	149	148	—	1	—	—	—	—	—	—	—	—
27	180	140	—	—	40	—	1	—	—	—	1	—
26	11	6	—	1	4	—	3	—	—	1	2	—
25	5	1	—	—	4	—	—	—	—	—	—	—
24	6	—	—	—	6	—	2	2	—	—	—	—
23	1	1	—	—	—	—	33	17	—	—	16	—
22	48	—	—	47	1	—	113	71	—	42	—	46
21	4	4	—	—	—	—	218	172	—	—	—	—
20	1	1	—	—	—	—	4	4	—	—	—	—
19	—	—	—	—	—	—	15	15	—	—	—	—

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

INDIANA HARBOR, IN - continued

Inbound													Outbound					
DOMESTIC																		
18	47	1	--	46	--	--	96	46	--	48	1	1						
17	2	2	--	--	--	--	18	--	--	--	2	16						
16	122	--	--	61	--	61	107	1	--	62	4	40						
15	1	--	--	--	--	1	36	5	--	--	--	31						
14	34	--	--	34	--	--	64	--	--	38	--	26						
13	130	--	95	35	--	--	266	--	235	28	--	3						
12	1,636	--	277	675	251	433	1,475	--	137	690	277	371						
Total trips:													4,879					

BURNS WATERWAY HARBOR, IN

Inbound													Outbound					
Grand Total																		
FOREIGN																		

Total	30	26	--	2	2	--	36	32	--	2	2	--			
28	1	1	--	--	--	--	--	--	--	--	--	--			
27	17	17	--	--	--	--	2	1	--	--	1	--			
24	4	3	--	1	--	--	4	3	--	1	--	--			
23	--	--	--	--	--	--	14	14	--	--	--	--			
22	1	--	--	--	1	--	2	2	--	--	--	--			
21	5	5	--	--	--	--	5	5	--	--	--	--			
18	--	--	--	--	--	--	7	7	--	--	--	--			
13	1	--	--	--	1	--	1	--	--	--	1	--			
12	1	--	--	1	--	--	1	--	--	--	--	--			

DOMESTIC

Total	1,734	137	111	584	819	83	1,819	125	111	582	915	86			
29	1	1	--	--	--	--	--	--	--	--	--	--			
28	59	59	--	--	--	--	--	--	--	--	--	--			
27	53	53	--	--	--	--	1	1	--	--	--	--			
26	12	9	--	2	1	--	2	--	--	2	--	--			
25	2	2	--	--	--	--	--	--	--	--	--	--			
23	2	2	--	--	--	--	1	1	--	--	--	--			
22	1	1	--	--	--	--	54	54	--	--	--	--			
21	5	5	--	--	--	--	3	3	--	--	--	--			
20	1	1	--	--	--	--	26	24	--	--	2	--			
19	--	--	--	--	2	--	25	24	--	--	1	--			
18	2	--	--	--	--	--	15	15	--	--	--	--			
17	--	--	--	--	--	--	2	2	--	--	--	--			
16	2	2	--	--	--	--	1	1	--	--	--	--			
15	2	2	--	--	--	--	--	--	--	--	--	--			
13	91	--	90	1	--	--	12	--	11	1	579	912	86		
12	1,501	--	21	581	816	83	1,677	--	100	--					
Total trips:													3,619		

CHICAGO HARBOR, IL
(13 feet and less)

Upbound													Downbound					
Grand Total																		

MICHIGAN CITY HARBOR, IN
No Vessel Trips Reported

Inbound													Outbound					
Grand Total																		

BUFFINGTON HARBOR, IN

(27 feet and less)

Grand Total	99	81	7	3	8	--	99	80	7	3	9	--	Total trips:	198
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GARY HARBOR, IN

(29 feet and less)

Grand Total	934	125	1	397	411	--	1,003	127	1	445	430	--	Total trips:	1,937
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Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
TWO HARBORS (AGATE BAY), MN												
Inbound												
Grand Total	316	224	—	46	46	—	318	224	—	47	47	—
FOREIGN												
Total	9	9	—	—	—	—	1	1	—	—	—	—
27	—	—	—	—	—	—	1	1	—	—	—	—
24	8	8	—	—	—	—	—	—	—	—	—	—
21	1	1	—	—	—	—	—	—	—	—	—	—
DOMESTIC												
Total	307	215	—	46	46	—	317	223	—	47	47	—
28	1	1	—	—	—	—	126	86	—	—	40	—
27	3	3	—	—	—	—	133	126	—	—	7	—
26	96	50	—	46	—	—	53	6	—	47	—	—
25	17	17	—	—	—	—	2	2	—	—	—	—
24	94	48	—	—	46	—	—	—	—	—	—	—
23	2	2	—	—	—	—	—	—	—	—	—	—
22	20	20	—	—	—	—	1	1	—	—	—	—
21	27	27	—	—	—	—	—	—	—	—	—	—
20	20	20	—	—	—	—	2	2	—	—	—	—
19	12	12	—	—	—	—	—	—	—	—	—	—
18	15	15	—	—	—	—	—	—	—	—	—	—
Total trips:											634	
DULUTH-SUPERIOR HARBOR, MN AND WI												
Inbound												
Grand Total	1,179	1,131	—	20	25	3	1,183	1,137	—	18	25	3
FOREIGN												
Total	459	449	—	—	9	1	480	469	—	—	9	2
29	—	—	—	—	—	—	1	1	—	—	—	—
28	—	—	—	—	—	—	69	69	—	—	—	—
27	43	43	—	—	—	—	190	190	—	—	—	—
26	11	11	—	—	—	—	107	105	—	—	2	—
25	50	50	—	—	—	—	9	9	—	—	—	—
24	73	73	—	—	—	—	38	38	—	—	—	—
23	64	59	—	—	5	—	8	8	—	—	—	—
22	44	44	—	—	—	—	11	11	—	—	—	—
21	37	34	—	—	2	1	8	7	—	—	—	1
20	108	108	—	—	—	—	15	15	—	—	—	—
19	7	7	—	—	—	—	1	1	—	—	—	—
18	10	10	—	—	—	—	5	4	—	—	—	1
17	2	2	—	—	—	—	1	1	—	—	—	—
16	2	2	—	—	—	—	5	4	—	—	1	—
15	4	2	—	—	—	—	3	—	—	—	3	—
14	—	—	—	—	—	—	2	—	—	—	2	—
13	—	—	—	—	—	—	2	2	—	—	—	—
12	4	4	—	—	—	—	5	4	—	—	1	—
DOMESTIC												
Total	720	682	—	20	16	2	703	668	—	18	16	1
29	1	1	—	—	—	—	5	5	—	—	—	—
28	7	7	—	—	—	—	245	245	—	—	—	—
27	56	56	—	—	—	—	194	193	—	—	1	—
26	30	23	—	4	3	—	29	25	—	4	—	—
25	27	27	—	—	—	—	36	36	—	—	—	—
24	14	13	—	—	1	—	26	22	—	—	4	—
23	135	135	—	—	—	—	24	21	—	—	3	—
22	119	108	—	11	—	—	41	24	—	11	6	—
21	73	73	—	—	—	—	22	21	—	—	1	—
20	26	26	—	—	—	—	16	16	—	—	—	—
19	74	74	—	—	—	—	23	23	—	—	—	—
18	116	116	—	—	—	—	25	25	—	—	—	—
17	13	13	—	—	—	—	3	3	—	—	—	—
16	2	2	—	—	—	—	—	—	—	—	—	—
15	8	7	—	—	—	—	7	7	—	—	—	—
14	1	1	—	—	—	—	—	—	—	—	—	—
13	1	—	—	—	—	—	—	—	—	—	—	—
12	17	—	—	5	12	—	7	2	—	—	3	1
Total trips:											2,362	

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
TACONITE HARBOR, MN												
Inbound												
Grand Total	176	138	--	19	19	--	191	149	--	21	21	--
DOMESTIC												
Total	176	138	--	19	19	--	191	149	--	21	21	--
29	—	—	--	—	—	--	4	4	--	—	—	--
28	1	1	--	—	—	--	78	78	--	—	—	--
27	5	4	--	—	1	--	65	48	--	—	17	--
26	—	—	--	—	—	--	14	10	--	—	4	--
25	1	1	--	—	—	--	3	3	--	—	—	--
24	5	5	--	—	—	--	—	—	--	—	—	--
23	61	58	--	—	3	--	—	—	--	—	—	--
22	35	11	--	19	5	--	21	—	--	21	—	--
21	14	13	--	—	1	--	—	—	--	—	—	--
20	10	10	--	—	—	--	1	1	--	—	—	--
19	10	10	--	—	—	--	2	2	--	—	—	--
18	18	18	--	—	—	--	3	3	--	—	—	--
17	1	1	--	—	—	--	—	—	--	—	—	--
16	1	1	--	—	—	--	—	—	--	—	—	--
15	5	5	--	—	—	--	—	—	--	—	—	--
9	9	—	--	—	9	--	—	—	--	—	—	--
Total trips:											367	
PRESQUE ISLE HARBOR, MI												
Inbound												
Grand Total	278	274	--	2	2	--	272	268	--	2	2	--
FOREIGN												
Total	26	26	--	—	—	--	23	23	--	—	—	--
24	6	6	--	—	—	--	23	23	--	—	—	--
23	7	7	--	—	—	--	—	—	--	—	—	--
22	10	10	--	—	—	--	—	—	--	—	—	--
20	3	3	--	—	—	--	—	—	--	—	—	--
DOMESTIC												
Total	252	248	--	2	2	--	249	245	--	2	2	--
29	—	—	--	—	—	--	5	5	--	—	—	--
28	6	6	--	—	—	--	85	85	--	—	—	--
27	13	13	--	—	—	--	62	61	--	—	1	--
26	2	2	--	—	—	--	70	69	--	—	1	--
25	7	7	--	—	—	--	1	1	--	—	—	--
24	11	11	--	—	—	--	—	—	--	—	—	--
23	21	21	--	—	—	--	18	18	--	—	—	--
22	4	2	--	2	—	--	3	1	--	2	—	--
21	6	6	--	—	—	--	—	—	--	—	—	--
20	15	15	--	—	—	--	—	—	--	—	—	--
19	26	26	--	—	—	--	—	—	--	—	—	--
18	124	124	--	—	—	--	5	5	--	—	—	--
17	13	13	--	—	—	--	—	—	--	—	—	--
16	1	1	--	—	—	--	—	—	--	—	—	--
15	1	1	--	—	—	--	—	—	--	—	—	--
12	2	—	--	—	2	--	—	—	--	—	—	--
Total trips:											550	
MARQUETTE HARBOR, MI												
Inbound												
Grand Total	36	36	--	--	--	--	39	39	--	--	--	--
DOMESTIC												
Total	36	36	--	—	—	--	39	39	--	—	—	--
24	1	1	--	—	—	--	—	—	--	—	—	--
23	8	8	--	—	—	--	—	—	--	—	—	--
22	24	24	--	—	—	--	—	—	--	—	—	--
21	1	1	--	—	—	--	—	—	--	—	—	--
20	1	1	--	—	—	--	8	8	--	—	—	--
19	1	1	--	—	—	--	10	10	--	—	—	--
18	—	—	--	—	—	--	7	7	--	—	—	--
17	—	—	--	—	—	--	14	14	--	—	—	--
Total trips:											75	

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
DRUMMOND ISLAND, MI												
Inbound												
Grand Total	12,910	12,874	—	17	19	—	12,913	12,877	—	17	19	—
FOREIGN												
Total	11	9	—	1	1	—	11	9	—	1	1	—
26	—	—	—	—	—	—	1	1	—	—	—	—
25	—	—	—	—	—	—	2	2	—	—	—	—
24	—	—	—	—	—	—	3	3	—	—	—	—
23	3	3	—	—	—	—	2	2	—	—	—	—
21	1	1	—	—	—	—	1	1	—	—	—	—
20	4	4	—	—	—	—	—	—	—	—	—	—
19	1	1	—	—	—	—	—	—	—	—	—	—
12	2	—	—	1	1	—	2	—	—	1	1	—
DOMESTIC												
Total	12,899	12,865	—	16	18	—	12,902	12,868	—	16	18	—
27	—	—	—	2	—	—	1	1	—	2	2	—
26	2	—	—	—	—	—	5	1	—	—	—	—
25	—	—	—	—	—	—	16	6	—	—	10	—
24	4	4	—	—	—	—	24	19	—	—	5	—
23	4	4	—	—	—	—	10	9	—	—	1	—
22	4	—	—	4	—	—	18	14	—	4	—	—
20	8	8	—	—	—	—	4	4	—	—	—	—
19	7	7	—	—	—	—	—	—	—	—	—	—
18	12	9	—	—	3	—	—	—	—	—	—	—
17	8	3	—	—	5	—	—	—	—	—	—	—
16	17	11	—	—	6	—	—	—	—	—	—	—
15	7	7	—	—	—	—	2	2	—	—	—	—
14	6	—	—	6	—	—	—	—	—	—	—	—
13	4	—	—	4	—	—	10	—	—	10	—	—
12	12,816	12,812	—	—	4	—	12,812	12,812	—	—	—	—
												Total trips: 25,823
ST. MARYS RIVER, MI												
Upbound												
Grand Total	26,500	26,070	2	165	209	54	25,985	25,646	4	101	185	49
FOREIGN												
Total	1,206	985	2	63	104	52	840	645	4	30	113	48
29	—	—	—	—	—	—	1	1	—	—	—	—
28	—	—	—	—	—	—	63	63	—	—	—	—
27	45	45	—	—	—	—	212	211	—	—	1	—
26	32	24	1	7	—	—	168	157	—	3	2	6
25	58	57	—	—	—	1	35	24	—	—	2	9
24	132	132	—	—	—	—	96	78	—	1	12	5
23	263	263	—	—	—	—	41	28	—	—	8	5
22	138	138	—	—	—	—	30	27	—	—	1	2
21	67	61	1	—	3	2	26	16	—	—	7	3
20	179	169	—	—	—	10	33	16	1	—	14	2
19	49	38	—	—	5	6	15	7	—	—	6	2
18	25	21	—	—	4	—	9	3	1	—	5	—
17	13	10	—	2	1	—	10	2	—	2	6	—
16	9	2	—	—	6	1	26	4	2	—	20	—
15	25	2	—	1	16	6	36	2	—	—	21	13
14	28	6	—	5	4	13	5	3	—	—	1	1
13	14	—	—	11	3	—	4	1	—	2	1	—
12	129	17	—	37	62	13	30	2	—	22	6	—

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

ST. MARYS RIVER, MI - continued

Upbound

Downbound

DOMESTIC

Total	25,294	25,085	—	102	105	2	25,145	25,001	—	71	72	1
29	2	2	—	—	—	—	35	35	—	—	—	—
28	9	9	—	—	—	—	528	488	—	—	40	—
27	61	61	—	—	—	—	489	464	—	—	25	—
26	133	78	—	50	5	—	246	194	—	47	5	—
25	65	55	—	—	10	—	40	40	—	—	—	—
24	141	93	—	—	48	—	16	16	—	—	—	—
23	204	203	—	—	1	—	3	3	—	—	—	—
22	184	155	—	29	—	—	27	3	—	23	1	—
21	115	115	—	—	—	—	1	1	—	—	—	—
20	68	68	—	—	—	—	5	5	—	—	—	—
19	133	133	—	—	—	—	8	8	—	—	—	—
18	332	329	—	—	3	—	3	3	—	—	—	—
17	20	15	—	—	5	—	1	1	—	—	—	—
16	21	15	—	—	6	—	—	—	—	—	—	—
15	16	15	—	—	—	1	—	—	—	—	—	—
14	7	1	—	6	—	—	—	—	—	—	—	—
13	15	—	—	14	—	1	—	—	—	—	—	—
12	23,768	23,738	—	3	27	—	23,743	23,740	—	1	1	1

Total trips: 52,485

ST. MARYS FALLS CANAL, MI AND SAULT STE. MARIE, ONTARIO SHIP CANAL, CN (INCLUDED IN ST. MARYS RIVER)

Upbound

Downbound

Grand Total

Grand Total	2,549	2,278	1	86	131	53	2,474	2,184	1	86	156	47
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FOREIGN

Total	759	629	1	16	62	51	671	525	1	15	84	46
29	—	—	—	—	—	—	1	1	—	—	—	—
28	—	—	—	—	—	—	62	62	—	—	—	—
27	43	43	—	—	—	—	200	200	—	—	—	—
26	23	16	—	7	—	—	136	125	—	3	2	6
25	46	45	—	—	—	1	27	16	—	—	2	9
24	99	99	—	—	—	—	73	65	—	—	4	4
23	90	90	—	—	—	—	24	12	—	—	7	5
22	82	82	—	—	—	—	12	10	—	—	—	2
21	53	48	1	—	2	2	19	10	—	—	6	3
20	159	149	—	—	—	10	24	11	—	—	11	2
19	25	18	—	—	1	6	12	5	—	—	5	2
18	21	19	—	—	2	—	7	3	—	—	4	—
17	11	10	—	—	1	—	7	1	—	—	6	—
16	7	2	—	—	5	—	21	3	1	—	17	—
15	20	1	—	1	12	6	29	—	—	—	17	12
14	16	1	—	—	2	13	1	—	—	—	—	1
13	—	—	—	—	—	—	3	1	—	1	1	—
12	64	6	—	8	37	13	13	—	—	11	2	—

DOMESTIC

Total	1,790	1,649	—	70	69	2	1,803	1,659	—	71	72	1
29	2	2	—	—	—	—	35	35	—	—	—	—
28	9	9	—	—	—	—	528	488	—	—	40	—
27	60	60	—	—	—	—	489	464	—	—	25	—
26	125	76	—	46	3	—	246	194	—	47	5	—
25	50	50	—	—	—	—	40	40	—	—	—	—
24	115	72	—	—	43	—	16	16	—	—	—	—
23	193	193	—	—	—	—	3	3	—	—	—	—
22	172	151	—	21	—	—	27	3	—	23	1	—
21	115	115	—	—	—	—	1	1	—	—	—	—
20	56	56	—	—	—	—	5	5	—	—	—	—
19	126	126	—	—	—	—	8	8	—	—	—	—
18	320	320	—	—	—	—	3	3	—	—	—	—
17	12	12	—	—	—	—	1	1	—	—	—	—
16	4	4	—	—	—	—	—	—	—	—	—	—
15	7	6	—	—	—	1	—	—	—	—	—	—
14	1	1	—	—	—	—	—	—	—	—	—	—
13	1	—	—	—	—	1	—	—	—	—	—	—
12	422	396	—	3	23	—	401	398	—	1	1	1

Total trips: 5,023

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels			
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker		
GRAYS REEF PASSAGE, MI														
Grand Total														
1,743	1,171	4	258	168	142	1,286	751	5	281	116	133			
FOREIGN														
Total	2	1	--	--	1	--	3	1	1	--	1	--		
21	1	1	--	--	--	--	1	1	1	--	--	--		
14	—	—	—	—	—	—	1	1	—	—	—	—		
12	1	—	—	—	1	—	1	—	—	—	1	—		
DOMESTIC														
Total	1,741	1,170	4	258	167	142	1,283	750	4	281	115	133		
26	56	43	—	13	—	—	13	—	—	13	—	—		
25	24	22	—	—	2	—	69	25	—	—	44	—		
24	93	51	—	—	42	—	62	40	—	—	22	—		
23	88	63	—	—	9	16	78	70	—	—	8	—		
22	151	120	2	27	2	—	110	77	—	29	4	—		
21	119	109	1	—	9	—	47	46	1	—	—	—		
20	59	51	—	—	8	—	27	25	—	—	1	—		
19	117	73	—	42	2	—	89	25	—	63	1	—		
18	213	136	—	21	9	47	60	16	—	21	8	15		
17	52	39	—	—	6	7	17	17	—	—	—	—		
16	132	30	—	69	5	28	121	9	—	62	1	49		
15	96	21	—	—	52	23	2	1	—	—	—	1		
14	40	—	—	28	—	12	23	—	—	23	—	—		
13	17	3	—	12	—	2	37	—	—	17	20	—		
12	484	409	1	46	21	7	528	399	2	53	6	68		
Total trips:											3,029			
CHARLEVOIX HARBOR, MI														
Grand Total														
485	365	—	80	40	—	476	365	—	68	43	—	—		
FOREIGN														
Total	2	1	--	--	1	--	2	1	--	--	1	--		
21	—	—	—	—	—	—	1	1	—	—	—	—		
14	1	1	—	—	—	—	—	—	—	—	—	—		
12	1	—	—	—	1	—	—	—	—	—	—	—		
10	—	—	—	—	—	—	1	—	—	—	1	—		
DOMESTIC														
Total	483	364	—	80	39	—	474	364	—	68	42	—		
22	9	9	—	—	—	—	4	4	—	—	—	—		
21	2	2	—	—	—	—	73	47	—	—	26	—		
20	2	2	—	—	—	—	24	15	—	—	9	—		
18	4	4	—	—	—	—	2	2	—	—	—	—		
17	3	3	—	—	—	—	5	2	—	—	3	—		
16	57	57	—	—	—	—	6	5	—	—	1	—		
15	—	—	—	—	—	—	3	2	—	—	1	—		
13	38	—	—	—	38	—	2	—	—	—	2	—		
12	1	—	—	—	1	—	—	—	—	—	—	—		
9	80	—	—	80	—	—	68	—	—	68	—	—		
8	287	287	—	—	—	—	287	287	—	—	—	961		
Total trips:											961			
MANISTEE HARBOR, MI														
Grand Total														
90	31	—	39	4	16	75	30	—	25	4	16	—		
FOREIGN														
Total	1	1	--	--	--	--	1	1	--	--	--	--		

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

MANISTEE HARBOR, MI - continued

Inbound

Outbound

DOMESTIC

Total	89	30	--	39	4	16	74	29	--	25	4	16
27	1	1	--	--	--	--	--	--	--	--	--	--
26	3	3	--	--	--	--	--	--	--	--	--	--
24	4	4	--	--	--	--	--	--	--	--	--	--
23	7	7	--	--	--	--	--	--	--	--	--	--
22	4	4	--	--	--	--	--	--	--	--	--	--
21	5	5	--	--	--	--	--	--	--	--	--	--
20	2	2	--	--	--	--	--	--	--	--	--	--
19	3	3	--	--	--	--	--	--	--	--	--	--
18	1	1	--	--	--	--	5	5	--	--	--	--
17	--	--	--	--	--	--	18	18	--	--	--	--
16	--	--	--	--	--	--	3	3	--	--	--	--
15	--	--	--	--	--	--	3	3	--	--	--	--
13	2	--	--	2	--	--	2	--	--	2	--	--
12	57	--	--	37	4	16	43	--	--	23	4	16

Total trips: 165

LUDINGTON HARBOR, MI

Inbound

Outbound

Grand Total	386	248	2	88	10	38	383	247	3	83	11	39
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FOREIGN

Total	27	12	--	7	6	2	29	12	1	8	7	1
27	2	1	--	--	1	--	1	1	--	--	--	--
26	5	5	--	--	--	--	--	--	--	--	--	--
25	3	3	--	--	--	--	2	2	--	--	--	--
24	3	2	--	1	--	--	3	2	--	1	--	--
23	--	--	--	--	--	--	2	1	1	--	--	--
22	--	--	--	--	--	--	1	1	--	--	--	--
21	--	--	--	--	--	--	3	2	--	--	--	1
20	--	--	--	--	--	--	1	1	--	--	--	--
19	1	1	--	--	--	--	2	2	--	--	--	--
14	--	--	--	--	--	--	1	--	--	1	--	--
12	13	--	--	6	5	2	13	--	--	7	6	--

DOMESTIC

Total	359	236	2	81	4	36	354	235	2	75	4	38
28	2	2	--	--	--	--	--	--	--	--	--	--
27	12	12	--	--	--	--	--	--	--	--	--	--
26	10	5	--	1	4	--	1	--	--	1	--	--
24	1	1	--	--	--	--	--	--	--	--	--	--
22	1	1	--	--	--	--	2	--	2	--	--	--
21	--	--	--	--	--	--	6	6	--	--	--	--
18	174	174	--	--	--	--	192	188	--	--	4	--
16	--	--	--	--	--	--	9	--	--	--	9	3
15	--	--	--	--	--	--	3	--	--	--	--	1
14	41	41	--	--	--	--	42	41	--	--	--	1
13	--	--	--	--	--	--	1	--	--	--	--	1
12	118	--	2	80	--	36	98	--	--	74	--	24

Total trips: 769

MUSKEGON HARBOR, MI

Inbound

Outbound

Grand Total	303	193	--	53	57	--	302	190	--	53	59	--
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FOREIGN

Total	11	10	--	1	1	--	10	9	--	1	1	--
26	2	2	--	--	--	--	1	1	--	--	--	--
25	4	4	--	--	--	--	2	2	--	--	--	--
24	2	2	--	--	--	--	--	--	--	--	--	--
22	--	--	--	--	--	--	2	2	--	--	--	--
21	1	1	--	--	--	--	3	3	--	--	--	--
19	1	1	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	--	--	1	1	--	--	--	--
12	1	--	--	--	1	--	1	--	--	1	--	--

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

MUSKEGON HARBOR, MI - continued

Inbound Outbound

DOMESTIC

Total	292	183	—	53	56	—	292	181	—	53	58	—
29	1	1	—	—	—	—	—	—	—	—	—	—
27	8	8	—	—	—	—	—	—	—	—	—	—
26	7	5	—	2	—	—	2	—	—	—	2	—
25	9	5	—	—	4	—	—	—	—	—	—	—
24	5	5	—	—	—	—	—	—	—	—	—	—
23	20	18	—	—	2	—	4	4	—	—	—	—
22	12	11	—	—	1	—	3	3	—	—	—	—
21	6	6	—	—	—	—	7	7	—	—	—	—
20	12	12	—	—	—	—	9	9	—	—	—	—
19	29	12	—	14	3	—	23	10	—	13	—	—
18	2	1	—	—	1	—	26	22	—	—	4	—
17	2	—	—	—	2	—	22	21	—	—	1	—
16	1	—	—	—	1	—	5	3	—	1	1	—
15	1	—	—	—	1	—	11	—	—	—	11	—
13	—	—	—	—	—	—	2	2	—	—	—	—
12	177	99	—	37	41	—	178	100	—	37	41	605

Total trips:

GRAND HAVEN HARBOR AND GRAND RIVER, MI
Upbound Downbound

Grand Total	123	85	—	28	10	—	102	84	—	8	10	—
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FOREIGN

Total	16	16	—	—	—	—	15	15	—	—	—	—
25	3	3	—	—	—	—	1	1	—	—	—	—
23	5	5	—	—	—	—	4	4	—	—	—	—
22	3	3	—	—	—	—	4	4	—	—	—	—
21	4	4	—	—	—	—	2	2	—	—	—	—
20	—	—	—	—	—	—	1	1	—	—	—	—
19	1	1	—	—	—	—	3	3	—	—	—	—

DOMESTIC

Total	107	69	—	28	10	—	87	69	—	8	10	—
25	1	—	—	1	—	—	1	—	—	1	—	—
24	6	6	—	—	—	—	—	—	—	—	—	—
23	2	2	—	—	—	—	—	—	—	—	—	—
22	17	16	—	—	1	—	3	3	—	—	—	—
21	33	29	—	—	4	—	14	14	—	—	—	—
20	10	10	—	—	—	—	1	1	—	—	—	—
19	1	1	—	—	—	—	6	6	—	—	—	—
18	—	—	—	—	—	—	21	20	—	—	1	—
17	1	—	—	—	1	—	19	19	—	—	—	—
16	3	3	—	—	—	—	5	5	—	—	—	—
15	2	1	—	—	1	—	—	—	—	—	—	—
13	2	—	—	—	2	—	8	—	—	—	8	—
12	29	1	—	27	1	—	9	1	—	7	1	225

Total trips:

HOLLAND HARBOR, MI

Grand Total	37	37	—	—	—	—	37	37	—	—	—	—
--------------------	-----------	-----------	---	---	---	---	-----------	-----------	---	---	---	---

DOMESTIC

Total	37	37	—	—	—	—	37	37	—	—	—	—
26	4	4	—	—	—	—	—	—	—	—	—	—
25	1	1	—	—	—	—	—	—	—	—	—	—
24	7	7	—	—	—	—	—	—	—	—	—	—
23	10	10	—	—	—	—	—	—	—	—	—	—
22	3	3	—	—	—	—	—	—	—	—	—	—
21	8	8	—	—	—	—	—	—	—	—	—	—

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

HOLLAND HARBOR, MI - continued

Inbound	Outbound
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DOMESTIC

19	2	2	--	--	--	--	29	29	--	--	--	--
17	--	--	--	--	--	--	3	3	--	--	--	--
16	--	--	--	--	--	--	3	3	--	--	--	--
15	--	--	--	--	--	--	2	2	--	--	--	--
6	2	2	--	--	--	--						

Total trips: 74

ST. JOSEPH HARBOR, MI

Upbound	Downbound
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Grand Total	73	41	--	16	16	--	69	40	--	15	14	--
-------------	----	----	----	----	----	----	----	----	----	----	----	----

DOMESTIC

Total	73	41	--	16	16	--	69	40	--	15	14	--
26	1	--	--	1	--	--	1	--	--	1	--	--
24	1	1	--	--	--	--						
23	9	8	--	--	1	--	2	2	--	--	--	--
22	22	21	--	--	1	--						
21	2	1	--	--	1	--						
20	10	7	--	--	3	--	3	3	--	--	--	--
19	19	2	--	15	2	--	19	8	--	11	--	--
18	2	1	--	--	1	--	5	3	--	2	--	--
17	3	--	--	--	3	--	1	--	--	1	--	--
16	2	--	--	--	2	--	16	13	--	3	--	--
15	2	--	--	--	2	--	21	10	--	11	--	--
12	--	--	--	--	--	--	1	1	--	--		

Total trips: 142

CHEBOYGAN HARBOR, MI

Inbound	Outbound
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Grand Total	1,476	1,352	--	62	--	62	1,480	1,352	--	66	--	62
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DOMESTIC

Total	1,476	1,352	--	62	--	62	1,480	1,352	--	66	--	62
23	16	--	--	--	--	16	--	--	--	--	--	--
18	46	--	--	--	--	46	14	--	--	--	--	14
16	62	--	--	62	--	--	110	--	--	62	--	48
11	--	--	--	--	--	--	2	--	--	2	--	--
9	--	--	--	--	--	--	2	--	--	2	--	--
6	788	788	--	--	--	--	788	788	--	--	--	--
5	--	--	--	--	--	--	564	564	--	--	--	--
3	564	564	--	--	--	--	--	--	--	--	--	

Total trips: 2,956

MILWAUKEE HARBOR, WI

Inbound	Outbound
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Grand Total	3,268	1,165	--	1,931	134	38	3,253	1,151	--	1,934	131	37
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FOREIGN

Total	104	99	--	5	--	89	86	--	--	3	--	
28	1	1	--	--	--	--	4	4	--	--	--	--
27	22	22	--	--	--	--	8	8	--	--	--	--
26	17	17	--	--	--	--	3	3	--	--	--	--
25	8	8	--	--	--	--	5	5	--	--	--	--
24	6	4	--	2	--	--	27	27	--	--	--	--
23	11	11	--	--	--	--	13	13	--	--	--	--
22	8	8	--	--	--	--	3	3	--	--	--	--
21	11	11	--	--	--	--	6	6	--	--	--	--
20	5	5	--	--	--	--	5	5	--	--	--	--
19	5	5	--	--	--	--	6	6	--	--	--	--
18	3	3	--	--	--	--	3	3	--	--	--	--
17	--	--	--	--	--	--	3	3	--	--	--	--

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels					Non-Self Propelled Vessels		Self Propelled Vessels					Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker		

MILWAUKEE HARBOR, WI - continued

Inbound Outbound

FOREIGN

16	1	1	--	--	--	--	1	--	--	--	--	1	--
15	—	—	—	—	—	—	1	1	—	—	—	—	—
14	1	1	—	—	—	—	1	1	—	—	—	—	—
12	5	2	—	—	3	—	3	1	—	—	2	—	—

DOMESTIC

Total	3,164	1,066	--	1,931	129	38	3,164	1,065	--	1,934	128	37	
29	5	5	—	—	—	—	—	—	—	—	—	—	—
28	2	2	—	—	—	—	—	—	—	—	—	—	—
27	16	16	—	—	—	—	—	—	—	—	—	—	—
26	6	6	—	—	—	—	—	—	—	—	—	—	—
25	27	8	—	—	19	—	—	—	—	—	—	—	—
24	17	11	—	—	6	—	—	—	—	—	—	—	—
23	15	14	—	—	1	—	2	2	—	—	—	—	—
22	9	9	—	—	—	—	2	2	—	—	—	—	—
21	10	7	—	—	3	—	22	21	—	—	1	—	—
20	6	5	—	—	1	—	7	5	—	—	2	—	—
19	33	7	—	26	—	—	35	5	—	25	5	—	—
18	22	5	—	17	—	—	34	15	—	15	4	—	—
17	4	2	—	—	—	2	21	16	—	—	5	—	—
16	18	1	—	—	—	17	27	23	—	—	4	—	—
15	7	—	—	—	—	7	10	6	—	—	4	—	—
14	16	—	—	9	—	7	9	—	—	9	—	—	—
13	11	1	—	10	—	—	14	1	—	10	3	—	—
12	2,940	967	—	1,869	99	5	2,981	969	—	1,875	100	37	6,521

Total trips: 6,521

PORT WASHINGTON HARBOR, WI

Inbound Outbound

Grand Total	23	21	--	1	1	--	22	20	--	1	1	--
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DOMESTIC

Total	23	21	--	1	1	--	22	20	--	1	1	--	
26	1	1	—	—	—	—	—	—	—	—	—	—	—
25	5	5	—	—	—	—	—	—	—	—	—	—	—
24	4	4	—	—	—	—	—	—	—	—	—	—	—
23	8	7	—	—	1	—	8	8	—	—	—	—	—
22	4	4	—	—	—	—	—	—	—	—	—	—	—
18	—	—	—	—	—	—	12	11	—	—	1	—	—
15	—	—	—	—	—	—	1	1	—	—	—	—	—
13	1	—	—	1	—	—	1	—	—	—	—	—	—

Total trips: 45

MANITOWOC HARBOR, WI

Inbound Outbound

Grand Total	423	235	--	103	85	--	426	236	--	103	87	--
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DOMESTIC

Total	423	235	--	103	85	--	426	236	--	103	87	--	
27	1	1	—	—	—	—	—	—	—	—	—	—	—
26	1	1	—	—	—	—	—	—	—	—	—	—	—
23	2	2	—	—	—	—	—	—	—	—	—	—	—
22	2	2	—	—	—	—	—	—	—	—	—	—	—
21	15	12	—	—	3	—	2	2	—	—	—	—	—
20	2	2	—	—	—	—	—	—	—	—	—	—	—
19	1	1	—	—	—	—	—	—	—	—	—	—	—
18	173	173	—	—	—	—	176	176	—	—	—	—	—
17	2	—	—	2	—	—	4	1	—	3	—	—	—
16	—	—	—	—	—	—	15	15	—	—	—	—	—
15	—	—	—	—	—	—	1	1	—	—	—	—	—
14	52	41	—	11	—	—	52	41	—	11	—	—	—
13	11	—	—	11	—	—	14	—	—	11	3	—	—
12	161	—	—	79	82	—	162	—	—	78	84	—	849

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

GREEN BAY HARBOR, WI

Grand Total	Upbound						Downbound					
	1,229	101	4	562	548	14	1,193	101	4	541	534	13
FOREIGN												
Total	32	20	4	--	8	--	26	21	4	--	1	--
27	1	1	--	--	--	--	--	--	--	--	--	--
26	2	2	--	--	--	--	--	--	--	--	--	--
25	3	3	--	--	--	--	1	--	1	--	--	--
24	12	10	--	--	2	--	2	--	2	--	--	--
23	9	3	--	--	6	--	11	10	1	--	--	--
22	--	--	--	--	--	--	6	6	--	--	--	--
21	--	--	--	--	--	--	1	--	--	--	--	--
20	4	--	4	--	--	--	1	1	--	--	--	--
19	1	1	--	--	--	--	1	1	--	--	--	--
18	--	--	--	--	--	--	1	1	--	--	--	--
17	--	--	--	--	--	--	1	1	--	--	--	--
16	--	--	--	--	--	--	1	--	--	--	1	--
DOMESTIC												
Total	1,197	81	--	562	540	14	1,167	80	--	541	533	13
26	2	1	--	--	1	--	--	--	--	--	--	--
25	7	3	--	--	4	--	--	--	--	--	--	--
24	26	20	--	--	6	--	--	--	--	--	--	--
23	12	7	--	--	5	--	1	1	--	--	--	--
22	21	19	--	--	2	--	1	1	--	--	--	--
21	21	20	--	--	1	--	10	10	--	--	--	--
20	9	7	--	--	2	--	6	6	--	--	--	--
19	14	1	--	13	--	--	18	10	--	8	--	--
18	5	1	--	3	1	--	19	14	--	3	2	--
17	5	1	--	--	1	3	16	11	--	5	--	--
16	4	1	--	--	--	3	21	18	--	1	2	--
15	3	--	--	--	--	3	15	6	--	6	--	--
14	6	--	--	4	--	2	6	--	--	5	--	--
13	12	--	--	12	--	1	6	1	--	5	--	--
12	1,050	--	--	530	517	3	1,048	2	--	518	515	13
Total trips:												2,422

ALPENA HARBOR, MI

Grand Total	Inbound						Outbound					
	258	138	--	57	63	--	297	153	--	71	73	--
FOREIGN												
Total	11	11	--	--	--	--	12	12	--	--	--	--
26	1	1	--	--	--	--	1	1	--	--	--	--
25	1	1	--	--	--	--	3	3	--	--	--	--
23	1	1	--	--	--	--	2	2	--	--	--	--
22	2	2	--	--	--	--	2	2	--	--	--	--
21	2	2	--	--	--	--	3	3	--	--	--	--
20	1	1	--	--	--	--	1	1	--	--	--	--
19	2	2	--	--	--	--	1	1	--	--	--	--
15	1	1	--	--	--	--	1	1	--	--	--	--
DOMESTIC												
Total	247	127	--	57	63	--	285	141	--	71	73	--
26	4	2	--	2	5	--	5	3	--	2	--	--
25	1	1	--	--	--	--	81	37	--	44	--	--
24	8	5	--	--	3	--	37	24	--	13	--	--
23	23	22	--	--	1	--	24	17	--	7	--	--
22	14	14	--	--	--	--	8	6	--	2	--	--
21	6	6	--	--	--	--	3	3	--	--	--	--
20	22	21	--	--	1	--	6	4	--	2	--	--
19	76	29	--	47	--	--	69	--	--	69	--	--
18	7	7	--	--	--	--	21	17	--	4	--	--
17	1	1	--	--	--	--	23	23	--	--	--	--
16	8	--	--	8	--	--	3	3	--	--	--	--
15	58	--	--	--	58	--	5	4	--	1	--	--
13	4	4	--	--	--	--	--	--	--	--	--	--
12	15	15	--	--	--	--	--	--	--	--	--	--
Total trips:												555

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
MENOMINEE HARBOR AND RIVER, MI AND WI												
Inbound												
Grand Total	2,182	32	--	1,945	205	--	2,183	32	--	1,946	205	--
FOREIGN												
Total	30	30	--	--	--	--	31	30	--	1	--	--
24	6	6	--	--	--	--	1	1	--	1	--	--
23	13	13	--	--	--	--	2	2	--	1	--	--
22	3	3	--	--	--	--	7	7	--	1	--	--
21	1	1	--	--	--	--	10	10	--	1	--	--
20	2	2	--	--	--	--	5	5	--	1	--	--
19	5	5	--	--	--	--	1	1	--	1	--	--
18	--	--	--	--	--	--	2	2	--	1	--	--
17	--	--	--	--	--	--	1	1	--	1	--	--
16	--	--	--	--	--	--	2	2	--	1	--	--
14	--	--	--	--	--	--	1	1	--	1	--	--
DOMESTIC												
Total	2,152	2	--	1,945	205	--	2,152	2	--	1,945	205	--
22	1	1	--	--	--	--	1	1	--	1	--	--
20	1	1	--	--	--	--	1	1	--	1	--	--
17	--	--	--	--	--	--	1	1	--	1	--	--
16	--	--	--	--	--	--	1	1	--	1	--	--
12	2,150	--	--	1,945	205	--	2,150	--	--	1,945	205	--
Total trips:												4,365
SAGINAW RIVER, MI												
Upbound												
Grand Total	461	335	15	57	34	20	488	364	15	51	39	19
FOREIGN												
Total	89	73	10	3	1	2	86	73	5	4	2	2
26	--	--	1	--	--	--	10	10	--	1	--	--
25	1	--	1	--	--	--	11	11	--	1	--	--
24	4	4	--	--	--	--	8	8	--	1	--	--
23	6	3	3	--	--	--	12	11	1	1	--	--
22	10	9	1	--	--	--	12	11	1	1	--	--
21	21	19	2	--	--	--	12	12	--	1	--	--
20	12	12	--	--	--	--	4	2	1	1	--	--
19	21	18	2	1	--	--	2	1	1	1	--	--
18	4	4	--	--	--	--	4	1	1	1	2	--
17	1	1	--	--	--	--	1	1	--	1	--	--
16	1	--	--	--	--	--	1	1	--	1	--	--
15	2	--	1	1	--	--	1	1	--	1	--	--
14	5	2	--	1	--	2	9	6	--	1	--	2
13	--	--	--	--	--	1	1	1	1	1	--	--
12	1	--	--	--	--	1	1	1	1	1	--	--
DOMESTIC												
Total	372	262	5	54	33	18	402	291	10	47	37	17
27	--	--	--	--	--	--	1	1	--	1	--	--
26	9	--	--	9	--	--	38	29	--	9	--	--
25	--	--	--	--	--	--	13	12	--	1	--	--
24	--	--	--	--	--	--	39	32	--	7	--	--
23	--	--	--	--	--	--	43	26	--	17	--	--
22	1	--	--	1	--	--	75	63	4	1	7	--
21	--	--	--	--	--	--	22	21	1	--	--	--
20	4	4	--	--	--	--	23	22	--	1	--	--
19	16	9	--	7	--	--	31	25	--	6	--	--
18	51	31	--	2	18	--	49	48	--	1	--	--
17	152	149	--	--	3	--	6	4	--	1	--	2
16	44	40	--	--	4	--	12	3	--	1	--	9
15	24	19	--	--	5	--	2	2	--	1	--	3
14	4	1	--	3	--	--	14	11	--	1	--	2
13	5	1	--	4	--	--	14	11	5	19	3	--
12	62	8	5	28	3	18	32	5	5	19	3	--
Total trips:												949

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

ST. CLAIR RIVER, MI

Grand Total	Upbound							Downbound					
	4,096	3,051	85	376	360	224	3,711	2,720	61	321	385	224	
FOREIGN													
Total	2,128	1,513	74	164	254	123	1,713	1,160	55	109	277	112	
30	4	4	—	—	—	—	2	—	2	—	—	—	
29	52	52	—	—	—	—	7	7	—	—	—	—	
28	83	83	—	—	—	—	67	67	—	—	—	—	
27	124	124	—	—	—	—	246	245	—	—	1	—	
26	185	173	3	9	—	—	231	220	—	3	2	6	
25	125	123	1	—	—	1	62	48	3	—	2	9	
24	182	180	1	1	—	—	99	88	4	2	1	4	
23	212	209	3	—	—	—	108	94	7	—	2	5	
22	144	137	6	—	1	—	128	123	2	—	1	2	
21	116	104	9	—	2	1	99	79	7	—	8	5	
20	197	172	14	1	—	10	82	62	1	—	13	6	
19	90	64	6	2	6	12	68	33	10	—	13	12	
18	39	26	2	2	6	3	47	22	—	—	15	10	
17	19	6	2	5	6	—	50	13	—	1	24	12	
16	31	2	12	6	9	2	56	6	10	6	32	2	
15	37	4	5	2	16	10	54	3	9	—	23	19	
14	32	8	—	3	6	15	20	5	—	8	2	5	
13	11	—	6	—	3	2	8	1	—	7	—	—	
12	445	42	4	133	199	67	279	44	—	89	131	15	
DOMESTIC													
Total	1,968	1,538	11	212	106	101	1,998	1,560	6	212	108	112	
29	7	7	—	—	—	—	43	43	—	—	—	—	
28	2	2	—	—	—	—	320	313	—	—	7	—	
27	26	25	—	—	1	—	406	392	—	—	14	—	
26	60	40	—	18	2	—	392	347	—	19	26	—	
25	15	14	—	1	—	—	130	113	—	1	16	—	
24	60	48	—	—	12	—	94	80	—	—	14	—	
23	205	202	—	—	3	—	49	41	—	—	8	—	
22	158	135	2	18	3	—	115	94	—	20	1	—	
21	86	84	1	—	1	—	72	63	—	—	9	—	
20	133	130	1	—	2	—	54	46	—	—	8	—	
19	149	145	—	2	2	—	12	7	—	3	2	—	
18	467	432	—	21	13	1	31	6	—	23	1	1	
17	153	139	—	—	13	1	10	3	—	—	1	6	
16	89	70	—	1	17	1	21	1	—	—	1	19	
15	58	56	—	—	1	1	25	4	—	—	—	21	
14	40	2	—	37	—	1	35	—	—	24	—	11	
13	50	—	—	27	20	3	44	—	—	43	—	1	
12	210	7	7	87	16	93	145	7	6	79	—	53	
												Total trips:	7,807

PORT HURON, MI

Grand Total	Inbound							Outbound					
	79	43	7	11	18	--	68	36	6	11	15	--	
FOREIGN													
Total	56	30	5	3	18	--	43	25	--	3	15	--	
27	1	1	—	—	—	—	1	1	—	—	—	—	
26	7	6	—	1	—	—	2	2	—	—	—	—	
25	2	2	—	—	—	—	1	1	—	—	—	—	
24	3	3	—	—	—	—	—	—	—	—	—	—	
22	1	1	—	—	—	—	—	—	—	—	—	—	
21	1	1	—	—	—	—	4	4	—	—	—	—	
20	—	—	—	—	—	—	1	1	—	—	—	—	
18	1	—	—	—	1	—	—	—	—	—	—	—	
17	1	—	—	1	—	—	—	—	—	—	—	—	
16	4	—	4	—	—	—	—	—	—	—	—	—	
15	1	—	1	—	—	—	—	—	—	—	—	—	
12	34	16	—	1	17	—	34	16	—	3	15	—	

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

PORT HURON, MI - continued

Inbound

Outbound

DOMESTIC

Total	23	13	2	8	—	—	25	11	6	8	—	—
26	7	7	—	—	—	—	—	—	—	—	—	—
25	1	1	—	—	—	—	—	—	—	—	—	—
22	2	2	—	—	—	—	—	—	—	—	—	—
21	3	3	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	10	10	—	—	—	—
16	—	—	—	—	—	—	1	1	—	—	—	—
12	10	—	2	8	—	—	14	—	6	8	—	—

Total trips: **147**

MARYSVILLE, MI

Inbound

Outbound

Grand Total	136	70	—	34	11	21	140	71	—	44	3	22
--------------------	------------	-----------	---	-----------	-----------	-----------	------------	-----------	---	-----------	----------	-----------

FOREIGN

Total	30	11	—	9	10	—	29	12	—	16	1	—
28	1	1	—	—	—	—	—	—	—	—	—	—
27	4	4	—	—	—	—	1	1	—	—	—	—
26	2	2	—	—	—	—	3	3	—	—	—	—
24	1	1	—	—	—	—	2	2	—	—	—	—
23	1	1	—	—	—	—	1	1	—	—	—	—
22	1	1	—	—	—	—	4	4	—	—	—	—
21	1	1	—	—	—	—	1	1	—	—	—	—
19	2	—	—	—	2	—	—	—	—	—	—	—
12	17	—	—	9	8	—	17	—	—	16	1	—

DOMESTIC

Total	106	59	—	25	1	21	111	59	—	28	2	22
29	2	2	—	—	—	—	—	—	—	—	—	—
28	1	1	—	—	—	—	—	—	—	—	—	—
27	1	1	—	—	—	—	—	—	—	—	—	—
26	24	23	—	1	—	—	1	—	—	1	—	—
24	7	6	—	—	1	—	—	—	—	—	—	—
23	6	6	—	—	—	—	—	—	—	—	—	—
22	10	10	—	—	—	—	—	—	—	—	—	—
21	4	4	—	—	—	—	2	2	—	—	—	—
20	3	3	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	2	2	—	—	—	—
18	1	1	—	—	—	—	24	21	—	1	2	—
17	1	1	—	—	—	—	23	23	—	—	—	—
16	1	1	—	—	—	—	3	3	—	—	—	—
15	—	—	—	—	—	—	8	8	—	—	—	—
13	2	—	—	2	—	—	2	—	—	2	—	—
12	43	—	—	22	—	21	46	—	—	24	—	22

Total trips: **276**

ST. CLAIR, MI

Inbound

Outbound

Grand Total	155	114	—	20	—	21	156	111	—	24	2	19
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FOREIGN

Total	2	—	—	1	—	1	7	—	—	5	2	—
18	1	—	—	—	—	1	—	—	—	—	—	—
15	—	—	—	—	—	—	1	—	—	1	—	—
12	1	—	—	1	—	—	6	—	—	4	2	—

DOMESTIC

Total	153	114	—	19	—	20	149	111	—	19	—	19
28	37	37	—	—	—	20	—	—	—	—	—	—
27	52	52	—	—	—	—	—	—	—	—	—	—
25	19	19	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	25	25	—	—	—	—
22	—	—	—	—	—	—	34	34	—	—	—	—
21	2	2	—	—	—	—	26	26	—	—	—	—
20	4	4	—	—	—	—	19	19	—	—	—	—
19	—	—	—	—	—	—	7	7	—	—	—	—
14	1	—	—	—	—	1	—	—	—	—	—	—
12	38	—	—	19	—	19	38	—	—	19	—	19

Total trips: **311**

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

MARINE CITY, MI

Inbound													Outbound	
Grand Total	107	101	--	3	3	--	106	100	--	3	3	--		
DOMESTIC														
Total	107	101	--	3	3	--	106	100	--	3	3	--		
28	42	42	--	—	—	—	—	—	—	—	—	—		
27	12	12	--	—	—	—	—	—	—	—	—	—		
26	26	23	--	1	2	—	1	—	—	—	1	—		
25	7	7	--	—	—	—	—	—	—	—	—	—		
24	2	1	--	—	1	—	—	—	—	—	—	—		
23	1	1	--	—	—	—	50	50	—	—	—	—		
22	4	4	--	—	—	—	—	—	—	—	—	—		
21	6	6	--	—	—	—	1	1	—	—	—	—		
20	4	4	--	—	—	—	2	2	—	—	—	—		
19	—	—	--	—	—	—	2	2	—	—	—	—		
18	—	—	--	—	—	—	4	3	—	—	1	—		
17	1	1	--	—	—	—	26	26	—	—	—	—		
16	—	—	--	—	—	—	7	5	—	—	2	—		
15	—	—	--	—	—	—	11	11	—	—	—	—		
13	2	—	--	2	—	—	2	—	—	2	—	—		

Total trips: 213

CHANNELS IN LAKE ST. CLAIR

Upbound													Downbound	
Grand Total	3,235	2,517	42	259	234	183	3,047	2,326	33	248	258	182		
FOREIGN														
Total	1,538	1,224	35	65	132	82	1,315	1,015	28	45	153	74		
30	2	2	—	—	—	—	—	—	—	—	—	—		
29	28	28	—	—	—	—	7	7	—	—	—	—		
28	44	44	—	—	—	—	66	66	—	—	—	—		
27	102	102	—	—	—	—	236	235	—	—	1	—		
26	153	145	1	7	—	—	208	197	—	3	2	6		
25	90	88	1	—	—	1	51	37	3	—	2	9		
24	152	150	1	1	—	—	78	68	3	2	1	4		
23	181	180	1	—	—	—	91	81	3	—	2	5		
22	120	117	2	—	1	—	111	108	—	—	1	2		
21	103	96	4	—	2	1	82	68	3	—	7	4		
20	180	159	10	1	—	10	75	57	1	—	13	4		
19	72	59	4	1	1	7	50	33	4	—	6	7		
18	28	23	1	1	2	1	35	22	—	—	10	3		
17	12	6	1	3	2	—	33	11	—	1	15	6		
16	12	2	2	3	4	1	41	6	6	3	25	1		
15	29	4	2	—	15	8	46	3	5	—	22	16		
14	27	8	—	1	5	13	12	5	—	3	2	2		
13	7	—	3	—	3	1	5	1	—	4	—	5		
12	196	11	2	47	97	39	88	10	—	33	40	5		

DOMESTIC

Grand Total	1,697	1,293	7	194	102	101	1,732	1,311	5	203	105	108		
29	7	7	—	—	—	—	42	42	—	—	—	—		
28	2	2	—	—	—	—	240	233	—	—	7	—		
27	26	25	—	—	1	—	341	327	—	—	14	—		
26	58	40	—	16	2	—	339	297	—	18	24	—		
25	15	14	—	1	—	—	104	87	—	1	16	—		
24	60	48	—	—	12	—	93	80	—	—	13	—		
23	132	129	—	—	3	—	48	40	—	—	8	—		
22	132	109	2	18	3	—	109	88	—	20	1	—		
21	75	73	1	—	1	—	59	50	—	—	9	—		
20	118	115	1	—	2	—	48	40	—	—	8	—		
19	139	135	—	2	2	—	12	7	—	3	2	—		

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

CHANNELS IN LAKE ST. CLAIR - continued

	Upbound						Downbound																	
DOMESTIC																								
18	441	408	—	21	11	1	31	6	—	23	1	1												
17	95	81	—	—	13	1	9	2	—	—	1	6												
16	77	60	—	1	15	1	21	1	—	—	1	19												
15	40	38	—	—	1	1	25	4	—	—	—	21												
14	40	2	—	37	—	1	34	—	—	24	—	10												
13	48	—	—	25	20	3	40	—	—	39	—	1												
12	192	7	3	73	16	93	137	7	5	75	—	50												
											Total trips:	6,282												

DETROIT RIVER, MI

Grand Total	Upbound						Downbound					
	5,459	3,884	53	540	508	474	5,158	3,683	45	510	536	384
FOREIGN												
Total	2,601	1,802	40	201	400	158	2,421	1,613	37	190	417	164
30	2	2	—	—	—	—	—	—	—	—	—	—
29	28	28	—	—	—	—	7	7	—	—	—	—
28	44	44	—	—	—	—	66	66	—	—	—	—
27	140	140	—	—	—	—	252	251	—	—	1	—
26	271	261	1	8	1	—	268	256	—	4	2	6
25	121	119	1	—	—	1	74	60	3	—	2	9
24	261	255	2	1	2	1	175	165	3	2	1	4
23	256	255	1	—	—	—	179	169	3	—	2	5
22	142	139	2	—	1	—	196	192	1	—	1	2
21	134	123	4	—	5	2	114	90	4	—	9	11
20	197	176	10	1	—	10	123	92	4	—	13	14
19	92	73	5	1	1	12	71	46	8	—	6	11
18	57	49	1	1	3	3	60	40	—	—	10	10
17	19	13	1	3	2	—	60	38	—	1	15	6
16	16	4	2	4	4	2	47	10	6	5	25	1
15	35	4	2	—	15	14	48	5	5	—	22	16
14	29	9	—	2	5	13	21	6	—	11	2	2
13	12	—	4	—	5	3	5	1	—	—	4	—
12	745	108	4	180	356	97	655	119	—	167	302	67

DOMESTIC

Total	2,858	2,082	13	339	108	316	2,737	2,070	8	320	119	220
29	7	7	—	—	—	—	42	42	—	—	—	—
28	2	2	—	—	—	—	241	234	—	—	7	—
27	27	26	—	—	1	—	340	326	—	—	14	—
26	60	41	—	17	2	—	344	297	—	23	24	—
25	18	17	—	1	—	—	104	87	—	1	16	—
24	68	55	—	—	13	—	93	80	—	—	13	—
23	144	141	—	—	3	—	49	41	—	—	8	—
22	171	148	2	18	3	—	118	95	1	21	1	—
21	93	91	1	—	1	—	66	57	—	—	9	—
20	132	128	1	—	3	—	59	51	—	—	8	—
19	144	137	3	2	2	—	19	13	—	4	2	—
18	508	414	—	80	12	2	198	45	—	90	10	53
17	97	82	—	—	13	2	17	7	—	—	3	7
16	77	60	—	1	15	1	32	8	—	—	1	23
15	40	38	—	—	1	1	42	8	—	—	—	34
14	47	2	—	44	—	1	44	—	—	33	—	11
13	55	—	—	29	22	4	45	—	—	41	1	3
12	1,168	693	6	147	17	305	884	679	7	107	2	89
											Total trips:	10,617

DETROIT HARBOR, MI

Grand Total	Inbound						Outbound					
	1,146	905	2	66	88	85	1,153	911	2	63	86	91
FOREIGN												
Total	352	241	2	17	58	34	385	244	2	32	69	38
28	2	2	—	—	—	—	—	—	—	—	—	—
27	26	26	—	—	—	—	1	1	—	—	—	—

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

DETROIT HARBOR, MI - continued

Inbound

Outbound

FOREIGN

26	66	66	—	—	—	—	12	10	—	2	—	—
25	11	11	—	—	—	—	8	8	—	—	—	—
24	68	66	1	—	—	1	70	70	—	—	—	—
23	17	17	—	—	—	—	44	44	—	—	—	—
22	9	9	—	—	—	—	43	42	1	—	—	—
21	8	8	—	—	—	—	8	8	—	—	—	—
20	4	3	—	—	—	1	15	12	—	—	—	3
19	6	4	—	—	—	2	4	4	—	—	—	—
18	7	7	—	—	—	—	9	9	—	—	—	—
17	12	3	—	—	5	4	10	10	—	—	—	—
16	22	2	—	—	19	1	5	2	—	—	3	—
15	1	—	—	—	1	—	—	—	—	—	—	—
14	4	1	—	1	1	1	3	—	—	1	2	—
13	3	—	—	—	3	—	1	—	—	—	—	1
12	86	16	1	16	29	24	152	24	1	29	64	34

DOMESTIC

Total	794	664	—	49	30	51	768	667	—	31	17	53
27	3	—	—	—	3	—	—	—	—	—	—	—
26	6	1	—	1	4	—	1	—	—	1	—	—
25	16	14	—	—	2	—	—	—	—	—	—	—
24	11	9	—	—	—	—	—	—	—	—	—	—
23	4	3	—	—	1	—	1	1	—	—	—	—
22	6	3	—	3	—	—	11	7	—	3	1	—
21	14	5	—	—	9	—	3	3	—	—	—	—
20	22	16	—	—	6	—	14	14	—	—	—	—
19	3	1	—	2	—	—	6	4	—	2	—	—
18	3	1	—	1	—	1	17	14	—	1	2	—
17	3	1	—	—	1	1	7	4	—	3	—	—
16	1	—	—	—	—	1	10	7	—	2	1	—
15	—	—	—	—	—	—	1	—	—	—	1	—
14	—	—	—	—	—	—	3	—	—	3	—	—
13	10	—	—	7	2	1	10	—	—	4	6	—
12	692	610	—	35	—	47	684	613	—	17	51	—

Total trips: **2,299**

ROUGE RIVER, MI

Inbound

Outbound

Grand Total	1,048	417	9	237	172	213	1,051	411	10	259	138	233
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FOREIGN

Total	338	64	3	87	151	33	313	61	8	86	118	40
27	9	9	—	4	1	6	8	2	—	6	—	—
26	41	30	—	4	—	1	9	3	2	—	—	1
25	15	5	—	—	1	—	—	4	3	—	—	—
24	7	7	—	—	—	—	—	3	—	—	1	—
23	4	3	—	—	1	—	13	13	—	—	—	—
22	1	—	—	—	—	1	9	9	—	—	—	—
21	5	2	—	—	1	2	9	4	1	—	1	3
20	2	—	—	—	—	2	25	15	3	—	—	7
19	5	1	1	—	1	2	15	4	4	—	1	6
18	8	2	—	—	5	1	3	—	—	—	—	3
17	12	3	—	—	9	—	8	7	—	—	1	—
16	7	—	—	4	2	1	5	—	—	4	1	—
15	6	—	—	—	2	4	5	—	—	—	—	5
14	2	—	—	2	—	—	11	—	—	3	—	8
13	2	—	1	—	—	1	—	—	—	—	—	—
12	212	2	1	77	128	4	195	2	—	73	113	7

DOMESTIC

Total	710	353	6	150	21	180	738	350	2	173	20	193
28	70	70	—	—	1	—	1	—	—	—	—	—
27	65	64	—	—	—	—	1	1	—	—	—	—
26	99	79	—	7	13	—	10	2	—	8	—	—
25	28	27	—	1	—	—	1	1	—	—	—	—
24	20	18	—	—	2	—	1	—	—	—	1	—
23	16	15	—	—	1	—	1	—	—	—	1	—
22	46	43	—	3	—	—	5	2	—	3	—	—
21	23	23	—	—	—	—	3	3	—	—	—	—

Trips and Drafts of Vessels, 1998 (draft in feet)

Draft	(Leave blank)						Self Propelled Vessels						Non-Self Propelled Vessels					
	Self Propelled Vessels			Non-Self Propelled Vessels			Self Propelled Vessels			Non-Self Propelled Vessels								
	Total	Pass & Drv Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Drv Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker						

ROUGE RIVER, MI - continued

Inbound

Outbound

DOMESTIC

ECORSE, MI

Inbound

Outbound

Grand

REIGN											
Total	79	78	--	1	--	--	86	82	--	2	2
23	54	54	--	--	--	--	38	38	--	--	--
22	4	4	--	--	--	--	6	6	--	--	--
21	3	3	--	--	--	--	2	2	--	--	--
20	2	2	--	--	--	--	3	3	--	--	--
19	--	--	--	--	--	--	4	4	--	--	--
18	2	2	--	--	--	--	2	2	--	--	--
17	1	1	--	--	--	--	3	3	--	--	--
16	--	--	--	--	--	--	2	2	--	--	--
15	--	--	--	--	--	--	2	2	--	--	--
14	--	--	--	--	--	--	1	1	--	--	--
12	13	12	--	1	--	--	23	19	--	2	2

DOMESTIC

PORT OF DETROIT, MI

Inbound

Outbound

Total

REIGN												
Total	771	384	6	105	209	67	785	388	10	120	189	78
28	2	2	—	—	—	—	—	—	—	—	—	—
27	35	35	—	—	—	—	1	1	—	—	—	—
26	113	102	—	4	1	6	22	14	—	8	—	—
25	28	18	—	—	1	9	13	12	—	—	—	1
24	92	90	1	—	—	1	85	84	—	—	—	1
23	51	50	—	—	1	—	80	80	—	—	—	—
22	14	13	—	—	—	1	58	57	1	—	—	—
21	16	13	—	—	1	2	19	14	1	—	1	3
20	8	5	—	—	—	3	43	30	3	—	—	10
19	11	5	1	—	1	4	24	13	4	—	1	6
18	17	11	—	—	5	1	14	11	—	—	—	3
17	25	7	—	—	14	4	21	20	—	—	1	—
16	30	2	1	4	21	2	12	4	—	4	4	—
15	7	—	—	—	3	4	7	2	—	—	—	5
14	6	1	—	3	1	1	15	1	—	4	2	8
13	5	—	1	—	3	1	1	—	—	—	—	1
12	311	30	2	94	157	28	370	45	1	104	179	41

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

PORT OF DETROIT, MI - continued

Inbound

Outbound

DOMESTIC

Total	1,648	1,118	6	223	49	252	1,555	1,109	3	215	39	189
28	70	70	—	—	—	—	—	—	—	—	—	—
27	68	64	—	—	4	—	1	1	—	—	—	—
26	105	80	—	8	17	—	11	2	—	9	—	—
25	45	42	—	1	2	—	—	—	—	—	—	—
24	31	27	—	—	4	—	1	—	—	—	1	—
23	21	19	—	—	2	—	3	2	—	—	1	—
22	65	59	—	6	—	—	16	8	1	6	1	—
21	40	31	—	—	9	—	8	8	—	—	—	—
20	38	31	—	—	7	—	34	34	—	—	—	—
19	11	5	3	3	—	—	29	26	—	3	—	—
18	81	6	—	70	1	4	398	250	—	83	15	50
17	8	1	—	—	1	6	42	36	—	4	2	2
16	9	—	—	—	—	9	50	42	—	3	5	5
15	9	—	—	—	—	9	25	14	—	—	11	—
14	18	—	—	14	—	4	22	2	—	18	—	2
13	15	—	—	12	2	1	19	—	—	8	6	5
12	1,014	683	3	109	—	219	896	684	2	88	8	114

Total trips: **4,759**

MONROE HARBOR, MI

Inbound

Outbound

Grand Total	82	62	—	10	—	10	76	60	—	8	1	7
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FOREIGN

Total	10	4	—	3	—	3	7	3	—	1	1	2
24	2	2	—	—	—	—	—	—	1	—	—	—
22	—	—	—	—	—	—	1	1	1	—	—	—
19	1	1	—	—	—	—	1	1	—	—	—	—
18	1	—	—	—	—	1	—	—	—	—	—	—
17	2	—	—	—	—	2	—	—	—	—	—	—
16	—	—	—	—	—	—	1	—	—	—	—	1
14	2	—	—	2	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	1	—	—	1	—	—
10	1	1	—	—	—	—	1	1	—	—	—	—
7	1	—	—	1	—	—	1	—	—	1	—	—
6	—	—	—	—	—	—	1	—	—	—	—	1

DOMESTIC

Total	72	58	—	7	—	7	69	57	—	7	—	5
27	1	1	—	—	—	—	—	—	—	—	—	—
25	9	9	—	—	—	—	—	—	—	—	—	—
24	10	10	—	—	—	—	—	—	—	—	—	—
23	2	2	—	—	—	—	10	10	—	—	—	—
22	9	9	—	—	—	—	17	17	—	—	—	—
21	18	18	—	—	—	—	—	—	—	—	—	—
20	5	5	—	—	—	—	3	3	—	—	—	—
19	1	1	—	—	—	—	10	10	—	—	—	—
18	5	2	—	3	—	—	16	13	—	3	—	—
17	2	1	—	—	—	1	1	1	—	—	—	—
16	3	—	—	—	—	3	2	2	—	—	—	—
15	3	—	—	—	—	3	1	1	—	—	—	—
14	4	—	—	4	—	—	2	—	—	2	—	—
13	—	—	—	—	—	—	2	—	—	2	—	—
7	—	—	—	—	—	—	1	—	—	—	—	2
6	—	—	—	—	—	—	2	—	—	—	—	1
3	—	—	—	—	—	—	2	—	—	—	—	2

Total trips: **158**

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels			
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker		
CALCITE, MI														
Inbound														
Grand Total	442	419	—	9	14	—	446	421	—	10	15	—		
FOREIGN														
Total	80	80	—	—	—	—	77	77	—	—	—	—		
27	—	—	—	—	—	—	10	10	—	—	—	—		
26	2	2	—	—	—	—	38	38	—	—	—	—		
25	3	3	—	—	—	—	5	5	—	—	—	—		
24	5	5	—	—	—	—	4	4	—	—	—	—		
23	13	13	—	—	—	—	6	6	—	—	—	—		
22	28	28	—	—	—	—	5	5	—	—	—	—		
21	11	11	—	—	—	—	1	1	—	—	—	—		
20	6	6	—	—	—	—	4	4	—	—	—	—		
19	8	8	—	—	—	—	—	—	—	—	—	—		
17	—	—	—	—	—	—	2	2	—	—	—	—		
16	3	3	—	—	—	—	1	1	—	—	—	—		
14	1	1	—	—	—	—	1	1	—	—	—	—		
DOMESTIC														
Total	362	339	—	9	14	—	369	344	—	10	15	—		
29	—	—	—	—	—	—	2	2	—	—	—	—		
28	—	—	—	—	—	—	2	2	—	—	—	—		
27	2	2	—	—	—	—	101	101	—	—	—	—		
26	6	1	—	5	—	—	93	80	—	5	8	—		
25	2	2	—	—	—	—	36	36	—	—	—	—		
24	—	—	—	—	—	—	23	18	—	5	—	—		
23	3	2	—	—	1	—	21	20	—	1	—	—		
22	27	27	—	—	—	—	41	40	—	1	—	—		
21	23	23	—	—	—	—	19	19	—	—	—	—		
20	50	50	—	—	—	—	17	17	—	—	—	—		
19	30	30	—	—	—	—	3	3	—	—	—	—		
18	85	76	—	—	9	—	1	1	—	—	—	—		
17	90	88	—	—	2	—	3	3	—	—	—	—		
16	22	20	—	—	2	—	1	1	—	—	—	—		
15	18	18	—	—	—	—	1	1	—	—	—	—		
14	2	—	—	2	—	—	—	—	—	—	—	—		
13	2	—	—	2	—	—	5	—	—	5	—	—		
Total trips:											888			
ESCANABA, MI														
Inbound														
Grand Total	309	241	—	32	36	—	320	246	—	36	38	—		
DOMESTIC														
Total	309	241	—	32	36	—	320	246	—	36	38	—		
31	—	—	—	—	—	—	5	5	—	—	—	—		
30	—	—	—	—	—	—	14	14	—	—	—	—		
29	—	—	—	—	—	—	16	16	—	—	—	—		
28	—	—	—	—	—	—	84	83	—	1	—	—		
27	1	1	—	—	—	—	102	72	—	30	—	—		
26	6	4	—	2	—	—	20	13	—	2	5	—		
25	21	21	—	—	—	—	4	2	—	2	—	—		
24	3	3	—	—	—	—	4	4	—	—	—	—		
23	16	16	—	—	—	—	2	2	—	—	—	—		
22	89	63	—	26	—	—	33	4	—	29	—	—		
21	64	64	—	—	—	—	18	18	—	—	—	—		
20	5	5	—	—	—	—	4	4	—	—	—	—		
19	11	11	—	—	—	—	1	1	—	—	—	—		
18	44	39	—	—	5	—	7	7	—	—	—	—		
17	9	8	—	—	1	—	1	1	—	—	—	—		
16	6	3	—	—	3	—	—	—	—	—	—	—		
15	3	3	—	—	—	—	—	—	—	—	—	—		
14	3	—	—	3	—	—	—	—	—	—	—	—		
13	1	—	—	1	—	—	5	—	—	5	—	—		
9	27	—	—	—	27	—	—	—	—	—	—	—		
Total trips:											629			

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
STONEPORT, MI												
Inbound												
Grand Total	506	431	--	33	42	--	516	433	--	37	46	--
FOREIGN												
Total	10	10	--	--	--	--	10	10	--	--	--	--
27	—	—	—	—	—	—	5	5	—	—	—	—
26	1	1	—	—	—	—	4	4	—	—	—	—
25	2	2	—	—	—	—	1	1	—	—	—	—
24	2	2	—	—	—	—	—	—	—	—	—	—
23	1	1	—	—	—	—	—	—	—	—	—	—
22	1	1	—	—	—	—	—	—	—	—	—	—
21	2	2	—	—	—	—	—	—	—	—	—	—
20	1	1	—	—	—	—	—	—	—	—	—	—
DOMESTIC												
Total	496	421	--	33	42	--	506	423	--	37	46	--
29	—	—	—	—	—	—	3	3	—	—	—	—
28	—	—	—	—	—	—	5	5	—	—	—	—
27	1	1	—	—	—	—	67	62	—	—	5	—
26	13	5	—	8	—	—	107	83	—	8	16	—
25	—	—	—	—	—	—	39	34	—	—	5	—
24	4	4	—	—	—	—	66	55	—	—	11	—
23	2	2	—	—	—	—	34	28	—	—	6	—
22	11	7	—	4	—	—	70	61	—	6	3	—
21	10	10	—	—	—	—	23	23	—	—	—	—
20	14	14	—	—	—	—	11	11	—	—	—	—
19	22	22	—	—	—	—	13	13	—	—	—	—
18	118	101	—	—	17	—	42	42	—	—	—	—
17	180	170	—	—	10	—	3	3	—	—	—	—
16	61	50	—	—	11	—	—	—	—	—	—	—
15	33	33	—	—	—	—	—	—	—	—	—	—
14	11	2	—	—	9	—	—	—	—	—	—	—
13	12	—	—	—	12	—	23	—	—	23	—	—
9	4	—	—	—	4	—	—	—	—	—	—	—
Total trips:											1,022	

ALGOMA HARBOR, WI
No Vessel Trips Reported

ALGONAC, MI												
(20 feet and less)												
Grand Total	4	4	--	--	--	--	4	4	--	--	--	8
ASHLAND HARBOR, WI												
(23 feet and less)												
Grand Total	15	15	--	--	--	--	15	15	--	--	--	30
AU SABLE HARBOR AND RIVER (OSCODA), MI												
No Vessel Trips Reported												

BAYFIELD HARBOR, WI												
(10 feet and less)												
Grand Total	6,768	6,768	--	--	--	--	6,768	6,768	--	--	--	13,536
BEAVER BAY HARBOR, MN												
No Vessel Trips Reported												

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels			Non-Self Propelled Vessels		Self Propelled Vessels			Non-Self Propelled Vessels		
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo

BIG BAY HARBOR, MI
No Vessel Trips Reported

BLACK RIVER HARBOR, MI
No Vessel Trips Reported

CASEVILLE, MI
No Vessel Trips Reported

CEDAR RIVER HARBOR, MI
No Vessel Trips Reported

CHIPPEWA HARBOR (ISLE ROYALE), MI
No Vessel Trips Reported

CORNUCOPIA HARBOR, WI
(5 feet and less)

Grand Total	Inbound						Outbound					
	6	6	--	--	--	--	6	6	--	--	Total trips:	--
												12

DETOUR, MI AND VICINITY
(25 feet and less)

Grand Total	Inbound						Outbound					
	12,826	12,825	--	1	--	--	12,825	12,824	--	1	Total trips:	--
												25,651

DETROIT HARBOR, WI
(8 feet and less)

Grand Total	Inbound						Outbound					
	4,431	4,431	--	--	--	--	4,431	4,431	--	--	Total trips:	--
												8,862

EAGLE HARBOR, MI
No Vessel Trips Reported

FRANKFORT HARBOR, MI
(18 feet and less)

Grand Total	Inbound						Outbound					
	56	--	--	32	--	24	47	--	--	24	Total trips:	--
												103

GLADSTONE HARBOR, MI
(24 feet and less)

Grand Total	Inbound						Outbound					
	18	10	--	4	--	4	18	10	--	4	Total trips:	--
												36

GRAND MARAIS HARBOR (HARBOR OF REFUGE), MI
No Vessel Trips Reported

GRAND MARAIS HARBOR, MN
No Vessel Trips Reported

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

GRAND TRAVERSE BAY HARBOR, MI
(10 feet and less)

				Inbound								Outbound
Grand Total	394	394	--	--	--	--	394	394	--	--	Total trips:	--

HARBOR BEACH, MI (HARBOR OF REFUGE, LAKE HURON)
(26 feet and less)

				Inbound								Outbound
Grand Total	14	6	--	3	5	--	14	6	--	3	5	--

HARRISVILLE HARBOR, MI (HARBOR OF REFUGE, LAKE HURON)
No Vessel Trips Reported

KENOSHA HARBOR, WI
(8 feet and less)

				Inbound								Outbound
Grand Total	12	--	--	4	8	--	12	--	--	4	8	--

KEWAUNEE HARBOR, WI
No Vessel Trips Reported

KEWEENAW WATERWAY, MI
(12 feet and less)

				Upbound								Downbound
Grand Total	71	63	--	--	6	2	72	64	--	--	6	2

KNIFE RIVER HARBOR, MN
No Vessel Trips Reported

LA POINTE HARBOR, WI
(8 feet and less)

				Inbound								Outbound
Grand Total	6,269	6,269	--	--	--	--	6,269	6,269	--	--	Total trips:	--

LAC LA BELLE HARBOR, MI
No Vessel Trips Reported

LELAND HARBOR, MI
(6 feet and less)

				Inbound								Outbound
Grand Total	215	215	--	--	--	--	215	215	--	--	Total trips:	--

LIME ISLAND, MI
No Vessel Trips Reported

LUTSEN HARBOR, MN
No Vessel Trips Reported

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
MACKINAC HARBOR, MI (10 feet and less)												
Inbound												
Grand Total	22,050	22,050	--	--	--	--	21,718	21,718	--	--	Total trips:	--
												43,768
MACKINAW CITY HARBOR, MI (11 feet and less)												
Inbound												
Grand Total	14,624	14,624	--	--	--	--	14,971	14,969	--	--	2 Total trips:	--
												29,595
MANISTIQUE HARBOR, MI (13 feet and less)												
Inbound												
Grand Total	45	--	--	23	--	22	47	--	--	--	24 Total trips:	--
												23 92
NEW BUFFALO HARBOR, MI No Vessel Trips Reported												
OCONTO HARBOR, WI No Vessel Trips Reported												
ONTONAGON HARBOR, MI (20 feet and less)												
Inbound												
Grand Total	7	7	--	--	--	--	7	7	--	--	Total trips:	--
												14
PENSAUKEE HARBOR, WI No Vessel Trips Reported												
PENTWATER HARBOR, MI (11 feet and less)												
Inbound												
Grand Total	11	--	--	5	6	--	11	--	--	--	5 Total trips:	6
												-- 22
PORT SANILAC HARBOR, MI No Vessel Trips Reported												
PORT WING HARBOR, WI No Vessel Trips Reported												
PUT-IN-BAY HARBOR, OH (8 feet and less)												
Inbound												
Grand Total	8,855	8,756	99	--	--	--	8,854	8,755	99	--	Total trips:	--
												17,709
RACINE HARBOR, WI (2 feet and less)												
Inbound												
Grand Total	6	--	--	2	4	--	6	--	--	--	2 Total trips:	4
												-- 12
ROGERS CITY, MI No Vessel Trips Reported												

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

SAUGATUCK HARBOR AND KALAMAZOO RIVER, MI
(7 feet and less)

	Upbound						Downbound					
Grand Total	800	800	--	--	--	--	800	800	--	--	Total trips:	1,600

SAULT STE. MARIE, MI
(26 feet and less)

	Inbound						Outbound					
Grand Total	23,034	23,002	--	20	12	--	23,031	23,000	--	18	Total trips:	46,065

SEBEWAING, MI
No Vessel Trips Reported

SHEBOYGAN HARBOR, WI
No Vessel Trips Reported

SOUTH HAVEN HARBOR, MI
No Vessel Trips Reported

ST. JAMES (BEAVER ISLAND), MI
(8 feet and less)

	Inbound						Outbound					
Grand Total	333	287	--	23	--	23	330	287	--	21	Total trips:	22

STURGEON BAY AND LAKE MICHIGAN SHIP CANAL, WI
(26 feet and less)

	Upbound						Downbound					
Grand Total	6	2	--	4	--	--	75	38	--	31	Total trips:	3

TRAVERSE CITY HARBOR, MI
(21 feet and less)

	Inbound						Outbound					
Grand Total	517	394	3	60	--	60	516	394	2	61	Total trips:	59

TRENTON, MI
(24 feet and less)

	Inbound						Outbound					
Grand Total	39	1	1	19	--	18	40	1	1	19	Total trips:	19

TWO RIVERS HARBOR, WI
No Vessel Trips Reported

WARROAD HARBOR, MN
No Vessel Trips Reported

WHITE LAKE HARBOR, MI
(9 feet and less)

	Inbound						Outbound					
Grand Total	42	1	--	18	23	--	42	1	--	18	Total trips:	23

WHITEFISH POINT HARBOR, MI
No Vessel Trips Reported

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
WYANDOTTE, MI (21 feet and less)												
Inbound												
Grand Total	80	80	--	--	--	--	80	80	--	--	Total trips:	--
												160
ALABASTER, MI (25 feet and less)												
Inbound												
Grand Total	55	53	--	1	1	--	58	56	--	1	Total trips:	1
												113
MARBLEHEAD, OH (26 feet and less)												
Inbound												
Grand Total	13,233	13,113	--	42	78	--	13,234	13,113	--	42	Total trips:	79
												26,467
PORT DOLOMITE, MI (29 feet and less)												
Inbound												
Grand Total	221	182	--	16	23	--	220	181	--	16	Total trips:	23
												441
PORT GYPSUM, MI (22 feet and less)												
Inbound												
Grand Total	33	33	--	--	--	--	33	33	--	--	Total trips:	--
												66
PORT INLAND, MI (29 feet and less)												
Inbound												
Grand Total	275	246	--	10	19	--	280	249	--	11	Total trips:	20
												555
SILVER BAY, MN (29 feet and less)												
Inbound												
Grand Total	172	172	--	--	--	--	180	180	--	--	Total trips:	--
												352

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

TOLEDO HARBOR, OH

Grand Total	Inbound						Outbound					
	2,288	1,957	43	152	38	98	2,296	1,957	43	154	46	96

FOREIGN

Total	517	469	17	—	23	8	548	472	29	6	28	13
29	—	—	—	—	—	—	1	1	—	—	—	—
28	—	—	—	—	—	—	21	21	—	—	—	—
27	8	8	—	—	—	—	63	63	—	—	—	—
26	32	29	1	—	2	—	144	143	1	—	—	—
25	23	23	—	—	—	—	34	34	—	—	—	—
24	75	74	1	—	—	—	45	45	—	—	—	—
23	101	100	1	—	—	—	58	58	—	—	—	—
22	126	125	—	—	1	—	37	35	2	—	—	—
21	36	35	—	—	1	—	22	17	5	—	—	—
20	31	25	1	—	5	—	21	14	7	—	—	—
19	23	21	—	—	—	2	29	18	9	—	—	2
18	7	4	—	—	1	2	3	1	1	—	—	1
17	2	1	—	—	—	—	—	—	—	—	—	—
16	9	—	6	—	3	—	8	—	4	—	1	3
15	9	4	4	—	1	—	5	1	—	—	4	—
14	2	—	1	—	—	1	—	2	—	—	—	—
13	5	—	3	—	2	—	4	—	—	—	4	—
12	28	19	—	—	5	4	51	19	—	6	19	7

DOMESTIC

Total	1,771	1,488	26	152	15	90	1,748	1,485	14	148	18	83
29	6	6	—	—	—	—	2	2	—	—	—	—
28	5	5	—	—	—	—	—	—	—	—	—	—
27	42	42	—	—	—	—	3	3	—	—	—	—
26	86	84	—	2	—	—	11	8	—	2	1	—
25	4	4	—	—	—	—	2	2	—	—	—	—
24	1	1	—	—	—	—	8	8	—	—	—	—
23	2	2	—	—	—	—	25	23	—	—	2	—
22	5	5	—	—	—	—	39	35	3	—	1	—
21	22	22	—	—	—	—	26	24	1	—	1	—
20	18	16	—	—	2	—	33	31	1	—	1	—
19	15	14	—	1	—	—	41	37	3	1	—	—
18	64	41	—	17	3	3	98	83	—	13	—	2
17	25	20	—	—	5	—	8	7	—	—	1	—
16	19	9	—	—	—	10	6	5	—	—	—	1
15	15	8	—	—	1	6	9	8	—	—	1	—
14	14	—	—	10	—	4	7	—	—	6	—	1
13	20	—	—	16	4	—	44	—	—	13	11	20
12	1,408	1,209	26	106	—	67	1,386	1,209	6	113	—	58

Total trips: 4,584

KELLEY ISLAND, OH

Grand Total	Inbound						Outbound					
	13,292	13,056	—	118	118	—	13,266	13,030	—	118	118	—

DOMESTIC

Total	13,292	13,056	—	118	118	—	13,266	13,030	—	118	118	—
20	—	—	—	—	—	—	87	—	—	—	87	—
19	—	—	—	—	—	—	25	—	—	—	25	—
18	—	—	—	—	—	—	2	—	—	—	2	—
17	—	—	—	—	—	—	4	—	—	—	4	—
13	52	—	—	52	—	—	52	—	—	52	—	—
10	66	—	—	66	—	—	66	—	—	66	—	—
8	118	118	—	—	—	—	92	92	—	—	—	—
7	10,366	10,366	—	—	—	—	10,366	10,366	—	—	—	—
6	288	170	—	—	118	—	170	170	—	—	—	—
4	2,402	2,402	—	—	—	—	2,402	2,402	—	—	—	—

Total trips: 26,558

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
SANDUSKY HARBOR, OH												
Inbound												
Grand Total	343	337	--	2	4	--	369	363	--	2	4	--
FOREIGN												
Total	61	61	--	--	--	--	60	60	--	--	--	--
29	—	—	—	—	—	—	13	13	—	—	—	—
28	—	—	—	—	—	—	5	5	—	—	—	—
27	—	—	—	—	—	—	23	23	—	—	—	—
26	2	2	—	—	—	—	—	—	—	—	—	—
25	2	2	—	—	—	—	—	—	—	—	—	—
24	16	16	—	—	—	—	—	—	—	—	—	—
23	21	21	—	—	—	—	—	—	—	—	—	—
22	1	1	—	—	—	—	—	—	—	—	—	—
21	2	2	—	—	—	—	1	1	—	—	—	—
12	17	17	—	—	—	—	18	18	—	—	—	—
DOMESTIC												
Total	282	276	--	2	4	--	309	303	--	2	4	--
27	—	—	—	—	1	—	1	1	—	—	—	—
26	1	—	—	—	—	—	2	1	—	1	—	—
24	—	—	—	—	—	—	5	5	—	—	—	—
23	—	—	—	—	—	—	11	11	—	—	—	—
22	2	2	—	—	—	—	15	15	—	—	—	—
21	—	—	—	—	—	—	6	6	—	—	—	—
20	7	6	—	—	1	—	7	6	—	—	1	—
19	7	7	—	—	—	—	6	4	—	—	2	—
18	27	24	—	—	3	—	6	1	—	—	—	—
17	6	6	—	—	—	—	3	3	—	—	—	—
16	9	9	—	—	—	—	5	5	—	—	—	—
15	5	5	—	—	—	—	1	1	—	—	—	—
12	218	217	—	1	—	—	246	244	—	1	1	712
Total trips:												
HURON HARBOR, OH												
Inbound												
Grand Total	72	42	--	11	19	--	67	43	--	9	15	--
FOREIGN												
Total	2	--	--	--	2	--	2	--	--	--	2	--
25	1	—	—	—	1	—	—	—	—	—	—	—
24	1	—	—	—	1	—	—	—	—	—	—	—
21	—	—	—	—	—	—	2	—	—	—	2	—
DOMESTIC												
Total	70	42	—	11	17	—	65	43	—	9	13	—
29	1	1	—	—	6	—	—	—	—	—	—	—
27	14	8	—	—	1	—	—	—	—	—	—	—
26	28	27	—	—	—	—	—	—	—	—	—	—
25	3	3	—	—	—	—	—	—	—	—	—	—
23	1	1	—	—	—	—	—	—	—	—	—	—
22	7	—	—	7	—	—	8	2	—	6	—	—
21	1	1	—	—	—	—	4	4	—	—	—	—
20	—	—	—	—	—	—	5	5	—	—	—	—
19	—	—	—	—	—	—	4	4	—	—	—	—
18	—	—	—	—	—	—	14	14	—	—	—	—
17	—	—	—	—	—	—	12	12	—	—	—	—
15	—	—	—	—	—	—	1	1	—	—	—	—
12	15	1	—	4	10	—	17	1	—	3	13	—
Total trips:												139

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

LORAIN HARBOR, OH

Inbound													Outbound	
Grand Total	574	491	—	29	54	—	582	491	—	33	58	—		
FOREIGN														
Total	11	9	—	—	2	—	13	11	—	—	2	—		
27	4	4	—	—	—	—	—	—	—	—	—	—		
26	1	1	—	—	—	—	1	1	—	—	—	—		
25	1	—	—	—	1	—	—	5	5	—	—	—		
24	—	—	—	—	—	—	—	—	—	—	—	—		
23	1	1	—	—	—	—	1	1	—	—	—	—		
22	3	2	—	—	1	—	—	—	—	—	—	—		
21	—	—	—	—	—	—	1	1	—	—	—	—		
20	1	1	—	—	—	—	1	1	—	—	—	—		
18	—	—	—	—	—	—	1	1	—	—	—	—		
15	—	—	—	—	—	—	2	1	—	—	1	—		
14	—	—	—	—	—	—	1	—	—	—	1	—		
DOMESTIC														
Total	563	482	—	29	52	—	569	480	—	33	56	—		
29	3	3	—	—	—	—	—	—	—	—	—	—		
28	55	55	—	—	—	—	—	—	—	—	—	—		
27	97	96	—	—	1	—	15	14	—	—	1	—		
26	13	12	—	—	1	—	29	29	—	—	—	—		
25	4	4	—	—	—	—	78	77	—	—	1	—		
24	12	12	—	—	—	—	93	82	—	—	11	—		
23	1	1	—	—	—	—	100	97	—	—	3	—		
22	16	13	—	3	—	—	36	31	—	3	2	—		
21	4	4	—	—	—	—	29	29	—	—	—	—		
20	4	2	—	—	2	—	32	32	—	—	—	—		
19	5	5	—	—	—	—	12	12	—	—	—	—		
18	6	3	—	—	3	—	32	32	—	—	—	—		
17	76	72	—	—	4	—	2	2	—	—	—	—		
16	159	151	—	—	8	—	7	7	—	—	—	—		
15	30	30	—	—	—	—	17	17	—	—	—	—		
14	3	—	—	3	—	—	—	—	—	—	—	—		
13	6	—	—	6	—	—	12	—	—	12	—	—		
12	69	19	—	17	33	—	75	19	—	18	38	—		
													Total trips:	1,156

CLEVELAND HARBOR, OH

Inbound													Outbound	
Grand Total	2,183	1,527	3	310	229	114	2,190	1,535	3	308	232	112		
FOREIGN														
Total	347	264	3	—	45	35	345	263	2	—	40	40		
27	13	13	—	—	—	—	1	1	—	—	—	—		
26	103	102	—	—	1	—	8	8	—	—	—	—		
25	30	30	—	—	—	—	10	10	—	—	—	—		
24	56	52	—	—	—	4	42	42	—	—	—	—		
23	23	18	—	—	—	5	48	48	—	—	—	—		
22	26	23	2	—	—	1	33	31	2	—	—	—		
21	14	9	—	—	4	1	24	24	—	—	—	—		
20	20	10	—	—	8	2	30	25	—	—	1	4		
19	12	3	—	—	5	4	9	6	—	—	—	3		
18	7	1	—	—	4	2	51	51	—	—	—	—		
17	5	2	1	—	2	—	15	14	—	—	1	—		
16	2	1	—	—	1	—	—	—	—	—	—	—		
15	32	—	—	—	19	13	15	1	—	—	9	5		
14	1	—	—	—	—	1	9	—	—	—	3	6		
13	—	—	—	—	—	—	1	—	—	—	1	—		
12	3	—	—	—	1	2	49	2	—	—	25	22		
DOMESTIC														
Total	1,836	1,263	—	310	184	79	1,845	1,272	1	308	192	72		
29	2	2	—	—	—	—	—	—	—	—	—	—		
28	21	21	—	—	—	—	—	—	—	—	—	—		
27	28	—	—	—	—	—	—	—	—	—	—	—		
26	72	59	—	12	1	—	13	2	—	—	11	—		
25	102	98	—	—	4	—	6	6	—	—	—	5		
24	158	136	—	—	22	—	10	5	—	—	—	—		
23	89	72	—	—	17	—	6	6	—	—	—	—		
22	64	59	—	1	4	—	46	45	—	1	—	—		
21	21	21	—	—	—	—	14	14	—	—	—	—		
20	112	14	—	—	98	—	20	20	—	—	—	—		

Trips and Drafts of Vessels, 1998 (draft in feet)

Draft	(Enter in Tons)						Self Propelled Vessels						Non-Self Propelled Vessels					
	Self Propelled Vessels			Non-Self Propelled Vessels			Self Propelled Vessels			Non-Self Propelled Vessels								
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker						

CLEVELAND HARBOR, OH - continued

Inbound

Outbound

DOMESTIC

19	31	3	—	1	27	—	16	16	—	—	—	—	
18	78	19	—	30	2	27	111	61	—	27	23	—	
17	27	22	—	—	5	—	145	134	—	—	11	—	
16	15	11	—	—	2	2	195	183	—	1	11	—	
15	20	7	—	—	1	12	91	89	—	—	2	—	
14	15	—	—	11	—	4	17	—	—	17	—	—	
13	115	—	—	92	1	22	95	—	—	—	85	10	—
12	866	691	—	163	—	12	1,060	691	1	166	130	72	Total trips: 4,373

FAIRPORT HARBOR, OH

Inbound

Outbound

Grand
Total

FOREIGN 383 362 — 23 23 — 347 458 — 24 27 —

FOREIGN

DOMESTIC

ASHTABULA HARBOR OH

Inbound

Outbound

Grand

Total	635	615	--	8	12	--	629	611	--	7	11	--
FOREIGN												
Total	312	311	--	--	1	--	313	312	--	--	1	--
30	—	—	--	--	—	--	11	11	--	--	—	--
29	—	—	--	--	—	--	45	45	--	--	—	--
28	—	—	--	--	—	--	50	50	--	--	—	--
27	16	16	--	--	—	--	49	49	--	--	—	--
26	35	35	--	--	—	--	62	62	--	--	—	--
25	21	21	--	--	—	--	4	4	--	--	—	--
24	57	57	--	--	—	--	8	8	--	--	—	--
23	99	99	--	--	—	--	28	28	--	--	—	--
22	42	42	--	--	—	--	10	10	--	--	—	--
21	16	16	--	--	—	--	29	29	--	--	—	--
20	6	6	--	--	—	--	13	13	--	--	—	--
19	1	1	--	--	—	--	—	—	--	--	—	--
18	—	—	--	--	—	--	1	1	--	--	—	--
16	1	—	--	--	1	--	1	—	--	--	1	--
15	1	1	--	--	—	--	—	—	--	--	—	--
14	17	17	--	--	—	--	2	2	--	--	—	--

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

ASHTABULA HARBOR, OH - continued

Inbound

Outbound

DOMESTIC

Total	323	304	—	8	11	—	316	299	—	7	10	—
29	28	28	—	—	—	—	5	5	—	—	—	—
28	57	57	—	—	—	—	3	3	—	—	—	—
27	49	46	—	—	3	—	19	19	—	—	—	—
26	44	38	—	3	3	—	13	10	—	2	1	—
25	3	1	—	—	2	—	8	7	—	1	—	—
24	5	4	—	—	1	—	13	13	—	—	—	—
23	7	7	—	—	—	—	47	47	—	—	—	—
22	7	4	—	3	—	—	17	14	—	2	1	—
21	20	20	—	—	—	—	46	46	—	—	—	—
20	4	4	—	—	—	—	27	27	—	—	—	—
19	3	3	—	—	—	—	31	31	—	—	—	—
18	38	37	—	—	1	—	56	50	—	—	6	—
17	27	27	—	—	—	—	8	8	—	—	—	—
16	14	14	—	—	—	—	9	8	—	—	1	—
15	14	14	—	—	—	—	11	11	—	—	—	—
13	2	—	—	2	—	—	2	—	—	2	—	—
12	1	—	—	—	1	—	1	—	—	—	1	—

Total trips: 1,264

CONNEAUT HARBOR, OH

Inbound

Outbound

Grand Total	214	198	—	8	8	—	211	197	—	7	7	—
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FOREIGN

Total	53	53	—	—	—	—	53	53	—	—	—	—
30	—	—	—	—	—	—	11	11	—	—	—	—
29	—	—	—	—	—	—	16	16	—	—	—	—
28	—	—	—	—	—	—	5	5	—	—	—	—
27	—	—	—	—	—	—	8	8	—	—	—	—
25	9	9	—	—	—	—	1	1	—	—	—	—
24	22	22	—	—	—	—	—	—	—	—	—	—
23	10	10	—	—	—	—	1	1	—	—	—	—
22	—	—	—	—	—	—	10	10	—	—	—	—
21	2	2	—	—	—	—	1	1	—	—	—	—
15	10	10	—	—	—	—	—	—	—	—	—	—

DOMESTIC

Total	161	145	—	8	8	—	158	144	—	7	7	—
29	1	1	—	—	7	—	—	—	—	—	—	—
28	31	24	—	—	—	—	—	—	—	—	—	—
27	49	49	—	—	—	—	—	—	—	—	—	—
26	18	9	—	8	1	—	28	21	—	7	—	—
25	4	4	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	27	21	—	—	6	—
23	1	1	—	—	—	—	6	6	—	—	—	—
22	5	5	—	—	—	—	13	13	—	—	—	—
21	2	2	—	—	—	—	10	10	—	—	—	—
20	6	6	—	—	—	—	15	15	—	—	—	—
19	5	5	—	—	—	—	23	23	—	—	—	—
18	25	25	—	—	—	—	29	28	—	—	1	—
17	3	3	—	—	—	—	3	3	—	—	—	—
16	3	3	—	—	—	—	1	1	—	—	—	—
15	8	8	—	—	—	—	3	3	—	—	—	—

Total trips: 425

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels			
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker		
ERIE HARBOR, PA														
Inbound														
Grand Total	404	400	--	2	2	--	403	399	--	2	2	--		
FOREIGN														
Total	12	12	--	--	--	--	12	12	--	--	--	--		
27	—	—	—	—	—	—	1	1	—	—	—	—		
26	2	2	—	—	—	—	3	3	—	—	—	—		
25	4	4	—	—	—	—	—	—	—	—	—	—		
24	3	3	—	—	—	—	1	1	—	—	—	—		
22	1	1	—	—	—	—	2	2	—	—	—	—		
21	—	—	—	—	—	—	2	2	—	—	—	—		
20	—	—	—	—	—	—	3	3	—	—	—	—		
18	1	1	—	—	—	—	—	—	—	—	—	—		
16	1	1	—	—	—	—	—	—	—	—	—	—		
DOMESTIC														
Total	392	388	--	2	2	--	391	387	--	2	2	--		
29	1	1	—	—	—	—	—	—	—	—	—	—		
28	1	1	—	—	—	—	—	—	—	—	—	—		
27	1	1	—	—	—	—	—	—	—	—	—	—		
26	15	13	—	1	1	—	1	—	—	1	—	—		
25	6	6	—	—	—	—	—	—	—	—	—	—		
24	18	17	—	—	1	—	—	—	—	—	—	—		
23	1	1	—	—	—	—	—	—	—	—	—	—		
22	3	3	—	—	—	—	—	—	—	—	—	—		
21	3	3	—	—	—	—	2	2	—	—	—	—		
19	—	—	—	—	—	—	4	4	—	—	—	—		
18	—	—	—	—	—	—	9	7	—	—	2	—		
17	—	—	—	—	—	—	6	6	—	—	—	—		
16	—	—	—	—	—	—	5	5	—	—	—	—		
15	—	—	—	—	—	—	23	23	—	—	—	—		
14	341	341	—	—	—	—	—	340	—	—	1	—		
12	2	1	—	1	—	—	—	—	—	—	—	807		
Total trips:														
DUNKIRK HARBOR, NY														
Inbound														
Grand Total	41	41	--	--	--	--	41	41	--	--	--	--		
FOREIGN														
Total	—	—	—	—	—	—	1	1	—	—	—	—		
19	—	—	—	—	—	—	1	1	—	—	—	—		
DOMESTIC														
Total	41	41	—	—	—	—	40	40	—	—	—	—		
19	21	21	—	—	—	—	20	20	—	—	—	—		
18	20	20	—	—	—	—	18	18	—	—	—	—		
17	—	—	—	—	—	—	2	2	—	—	—	82		
Total trips:														
BUFFALO HARBOR, NY														
Upbound														
Grand Total	367	307	11	23	25	1	362	307	10	19	25	1		
FOREIGN														
Total	105	53	6	21	25	—	102	51	9	17	25	—		
27	1	1	—	—	—	—	5	5	—	—	—	—		
26	1	1	—	—	—	—	4	4	—	—	—	—		
25	1	1	—	—	—	—	1	1	—	—	—	—		
24	2	2	—	—	—	—	4	4	—	—	—	—		
23	1	1	—	—	—	—	7	7	—	—	—	—		
22	7	7	—	—	—	—	10	10	—	—	—	—		
21	5	4	—	—	1	—	7	6	—	—	1	—		
20	3	3	—	—	—	—	1	1	—	—	—	—		
19	1	1	—	—	—	—	—	—	—	—	—	—		
Downbound														

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker

BUFFALO HARBOR, NY - continued

Upbound

Downbound

FOREIGN

18	11	11	—	—	—	—	7	2	5	—	—	—
17	17	16	1	—	—	—	3	1	—	—	2	—
16	10	—	1	9	—	—	32	5	4	7	16	—
15	18	—	1	11	6	—	16	—	—	10	6	—
14	3	—	3	—	—	—	—	—	—	—	—	—
12	24	5	—	1	18	—	5	5	—	—	—	—

DOMESTIC

Total	262	254	5	2	—	1	260	256	1	2	—	1
27	—	—	—	—	—	—	4	4	—	—	—	—
26	1	1	—	—	—	—	4	4	—	—	—	—
25	3	3	—	—	—	—	12	12	—	—	—	—
24	4	4	—	—	—	—	12	12	—	—	—	—
23	—	—	—	—	—	—	10	10	—	—	—	—
22	2	2	—	—	—	—	14	13	1	—	—	—
21	—	—	—	—	—	—	1	1	—	—	—	—
20	2	2	—	—	—	—	4	4	—	—	—	—
19	6	6	—	—	—	—	2	2	—	—	—	—
18	23	23	—	—	—	—	—	—	—	—	—	—
17	13	13	—	—	—	—	1	1	—	—	—	—
16	7	7	—	—	—	—	—	—	—	—	—	—
15	3	3	—	—	—	—	—	—	—	—	—	—
13	1	—	—	—	—	1	—	—	—	—	—	—
12	197	190	5	2	—	—	196	193	—	2	—	1

Total trips: 729

NIAGARA RIVER, NY

Upbound

Downbound

Grand Total	5,697	5,666	2	15	3	11	5,713	5,668	3	21	—	21
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FOREIGN

Total	8	—	1	4	3	—	2	—	2	—	—	—
19	1	—	—	1	—	—	2	—	2	—	—	—
18	1	—	—	1	—	—	—	—	—	—	—	—
17	3	—	—	2	1	—	—	—	—	—	—	—
13	1	—	1	—	—	—	—	—	—	—	—	—
12	2	—	—	—	2	—	—	—	—	—	—	—

DOMESTIC

Total	5,689	5,666	1	11	—	11	5,711	5,668	1	21	—	21
22	—	—	—	—	—	—	1	—	1	—	—	—
20	—	—	—	—	—	—	13	13	—	—	—	—
18	11	—	—	11	—	—	40	—	—	21	—	19
15	14	14	—	—	—	—	1	—	—	—	—	1
12	5,664	5,652	1	—	—	11	5,656	5,655	—	—	—	1

Total trips: 11,410

PORT OF BUFFALO, NY

Inbound

Outbound

Grand Total	5,887	5,786	13	41	25	22	5,871	5,781	13	37	28	12
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FOREIGN

Total	104	51	11	17	25	—	113	53	7	25	28	—
27	5	5	—	—	—	—	1	1	—	—	—	—
26	4	4	—	—	—	—	1	1	—	—	—	—
25	1	1	—	—	—	—	1	1	—	—	—	—
24	4	4	—	—	—	—	2	2	—	—	—	—
23	7	7	—	—	—	—	1	1	—	—	—	—
22	10	10	—	—	—	—	7	7	—	—	—	—
21	7	6	—	—	1	—	5	4	—	—	1	—
20	1	1	—	—	—	—	3	3	—	—	—	—
19	2	—	2	—	—	—	2	1	—	—	1	—
18	7	2	5	—	—	—	12	11	—	1	—	—
17	3	1	—	—	2	—	20	16	1	2	1	—

Trips and Drafts of Vessels, 1998 (draft in feet)

Draft	(Leave blank)						Self Propelled Vessels						Non-Self Propelled Vessels					
	Self Propelled Vessels			Non-Self Propelled Vessels			Self Propelled Vessels			Non-Self Propelled Vessels								
	Total	Pass & Drv Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Drv Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker						

PORT OF BUFFALO, NY - continued

Inbound

Outbound

FOREIGN

16	32	5	4	7	16	—	10	—	1	9	—	—
15	16	—	—	10	6	—	18	—	1	11	6	—
14	—	—	—	—	—	—	3	—	3	—	—	—
13	—	—	—	—	—	—	1	—	1	—	—	—
12	5	5	—	—	—	—	26	5	—	1	20	—

DOMESTIC

OSWEGO HARBOR, NY

Upbound

Downbound

Grand
Total

EIGN												
Total	137	63	56	-	1	17	170	84	67	-	2	17
27	-	-	-	-	-	-	1	1	-	-	-	-
25	-	-	-	-	-	-	2	2	-	-	-	-
24	1	1	-	-	-	-	3	3	-	-	-	-
23	1	1	-	-	-	-	3	3	-	-	-	-
22	2	2	-	-	-	-	10	8	2	-	-	-
21	1	1	-	-	-	-	16	15	-	-	-	1
20	3	3	-	-	-	-	39	27	8	-	-	4
19	5	2	3	-	-	-	43	1	35	-	-	7
18	12	10	2	-	-	-	17	-	16	-	-	1
17	42	40	2	-	-	-	8	1	5	-	-	2
16	3	-	3	-	-	-	1	-	1	-	-	-
15	2	-	-	-	-	2	-	-	-	-	-	-
14	1	-	1	-	-	-	-	-	-	-	-	-
13	26	-	26	-	-	-	1	-	-	-	-	1
12	38	-	3	19	-	1	15	26	23	-	-	2

DOMESTIC

BARCELONA HARBOR, NY
No Vessel Trips Reported

CAPE VINCENT, NY
No Vessel Trips Reported

GREAT SODUS BAY HARBOR, NY
No Vessel Trips Reported

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
NIAGARA FALLS, NY (7 feet and less)												
Inbound												
Grand Total	5,408	5,408	--	--	--	--	5,408	5,408	--	--	Total trips:	--
												10,816
OGDENSBURG HARBOR, NY (22 feet and less)												
Inbound												
Grand Total	24	24	--	--	--	--	26	26	--	--	Total trips:	--
												50
PORT CLINTON HARBOR, OH (8 feet and less)												
Inbound												
Grand Total	3,234	3,234	--	--	--	--	3,233	3,233	--	--	Total trips:	--
												6,467
ROCHESTER (CHARLOTTE) HARBOR, NY (20 feet and less)												
Inbound												
Grand Total	80	80	--	--	--	--	79	79	--	--	Total trips:	--
												159
SACKEETS HARBOR, NY (4 feet and less)												
Inbound												
Grand Total	17	17	--	--	--	--	17	17	--	--	Total trips:	--
												34
TONAWANDA HARBOR, NY (12 feet and less)												
Inbound												
Grand Total	5,518	5,518	--	--	--	--	5,408	5,408	--	--	Total trips:	--
												10,926
VERMILION HARBOR, OH No Vessel Trips Reported												
WADDINGTON HARBOR, NY No Vessel Trips Reported												

Trips and Drafts of Vessels, 1998
(draft in feet)

Draft	Self Propelled Vessels				Non-Self Propelled Vessels		Self Propelled Vessels				Non-Self Propelled Vessels	
	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker	Total	Pass & Dry Cargo	Tanker	Tow or Tug	Dry Cargo	Tanker
ILLINOIS RIVER, IL												
Grand Total												
	39,937	15,071	—	5,007	16,318	3,541	41,920	14,149	—	5,489	18,718	3,564
DOMESTIC												
Total	39,937	15,071	—	5,007	16,318	3,541	41,920	14,149	—	5,489	18,718	3,564
12	47	—	—	—	30	17	70	—	—	—	60	10
11	132	—	—	—	3	84	45	166	—	—	5	32
10	391	—	—	—	38	286	67	332	—	—	37	24
9	10,298	4,432	—	1,421	3,007	1,438	12,472	4,432	—	1,442	6,100	498
8	6,773	966	—	2,182	2,813	812	10,981	966	—	2,571	6,850	594
7	11,194	9,671	—	669	662	192	9,899	8,749	—	599	474	77
6	629	2	—	422	148	57	589	2	—	429	72	86
5	540	—	—	256	256	28	428	—	—	394	26	8
4	104	—	—	3	64	37	57	—	—	2	1	54
3	112	—	—	—	1	47	64	234	—	—	1	40
2	9,273	—	—	12	8,500	761	6,371	—	—	—	9	4,515
1	444	—	—	—	421	23	321	—	—	—	180	141
												Total trips: 81,857
CALUMET-SAG CHANNEL, IL												
Grand Total												
	5,678	—	—	1,349	3,473	856	7,287	1,453	—	1,441	3,404	989
DOMESTIC												
Total	5,678	—	—	1,349	3,473	856	7,287	1,453	—	1,441	3,404	989
12	17	—	—	6	11	—	26	—	—	11	10	5
11	86	—	—	45	34	7	61	—	—	35	23	3
10	231	—	—	181	39	11	243	—	—	187	18	38
9	1,888	—	—	225	1,398	265	1,260	56	—	244	586	374
8	2,043	—	—	628	1,321	94	1,337	—	—	693	473	171
7	426	—	—	123	283	20	463	220	—	120	101	22
6	191	—	—	126	62	3	162	—	—	132	22	8
5	129	—	—	15	106	8	1,074	1,052	—	14	6	2
4	41	—	—	—	23	18	129	125	—	—	1	3
3	46	—	—	—	15	31	38	—	—	—	25	13
2	568	—	—	—	177	391	2,429	—	—	5	2,075	349
1	12	—	—	—	4	8	65	—	—	—	64	1
												Total trips: 12,965
CHICAGO SANITARY AND SHIP CANAL, IL												
Grand Total												
	14,120	1,455	—	3,024	7,074	2,567	12,615	2	—	2,956	7,163	2,494
DOMESTIC												
Total	14,120	1,455	—	3,024	7,074	2,567	12,615	2	—	2,956	7,163	2,494
12	14,120	1,455	—	3,024	7,074	2,567	12,615	2	—	2,956	7,163	2,494
												Total trips: 26,735
ILLINOIS WATERWAY, IL												
Grand Total												
	46,835	16,617	—	7,686	17,790	4,742	45,129	14,243	—	6,520	20,421	3,945
DOMESTIC												
Total	46,835	16,617	—	7,686	17,790	4,742	45,129	14,243	—	6,520	20,421	3,945
12	46,835	16,617	—	7,686	17,790	4,742	45,129	14,243	—	6,520	20,421	3,945
												Total trips: 91,964

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