

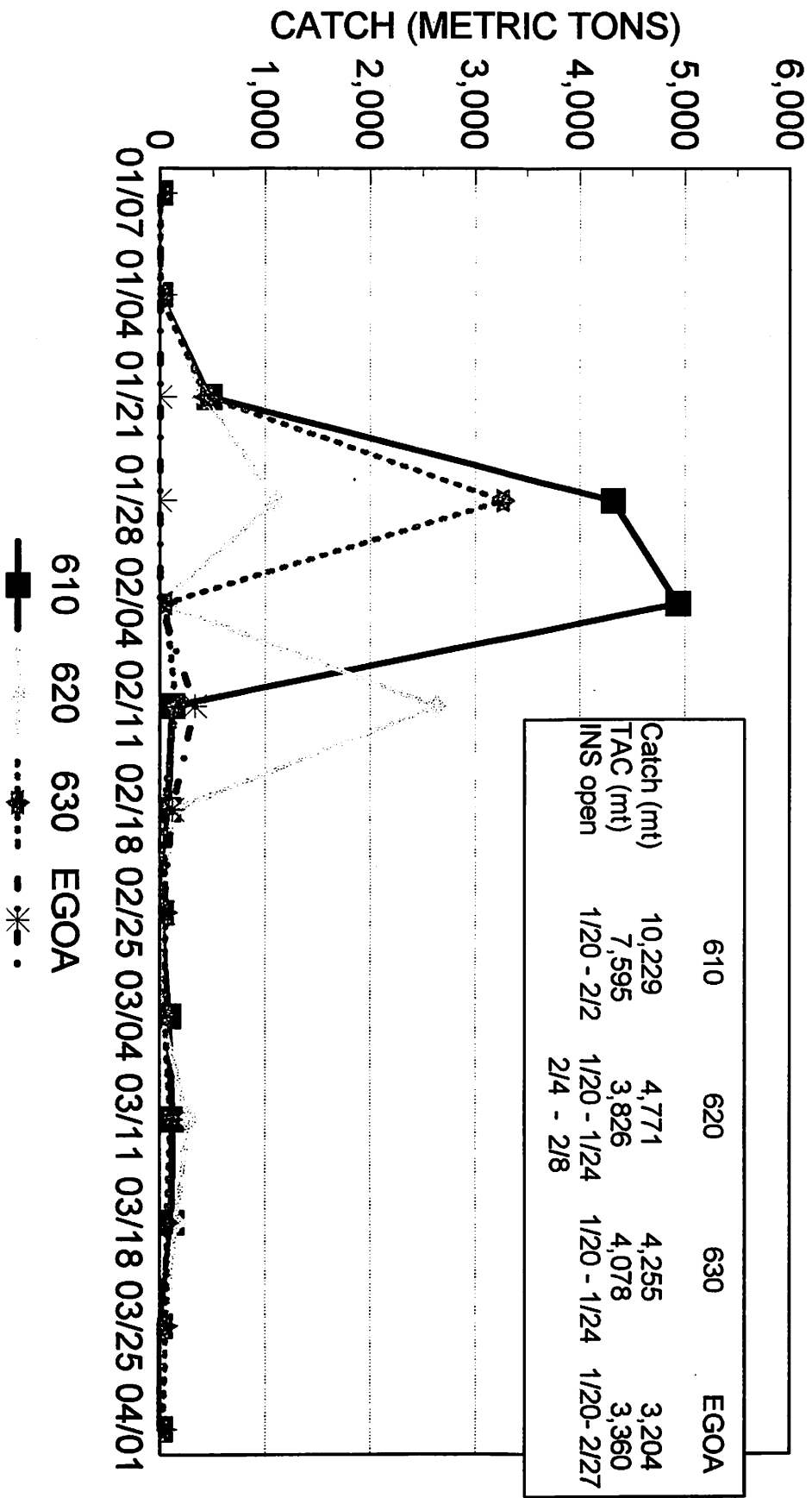
APRIL 1995

**NMFS FISHERIES
MANAGEMENT REPORT**



GULF OF ALASKA

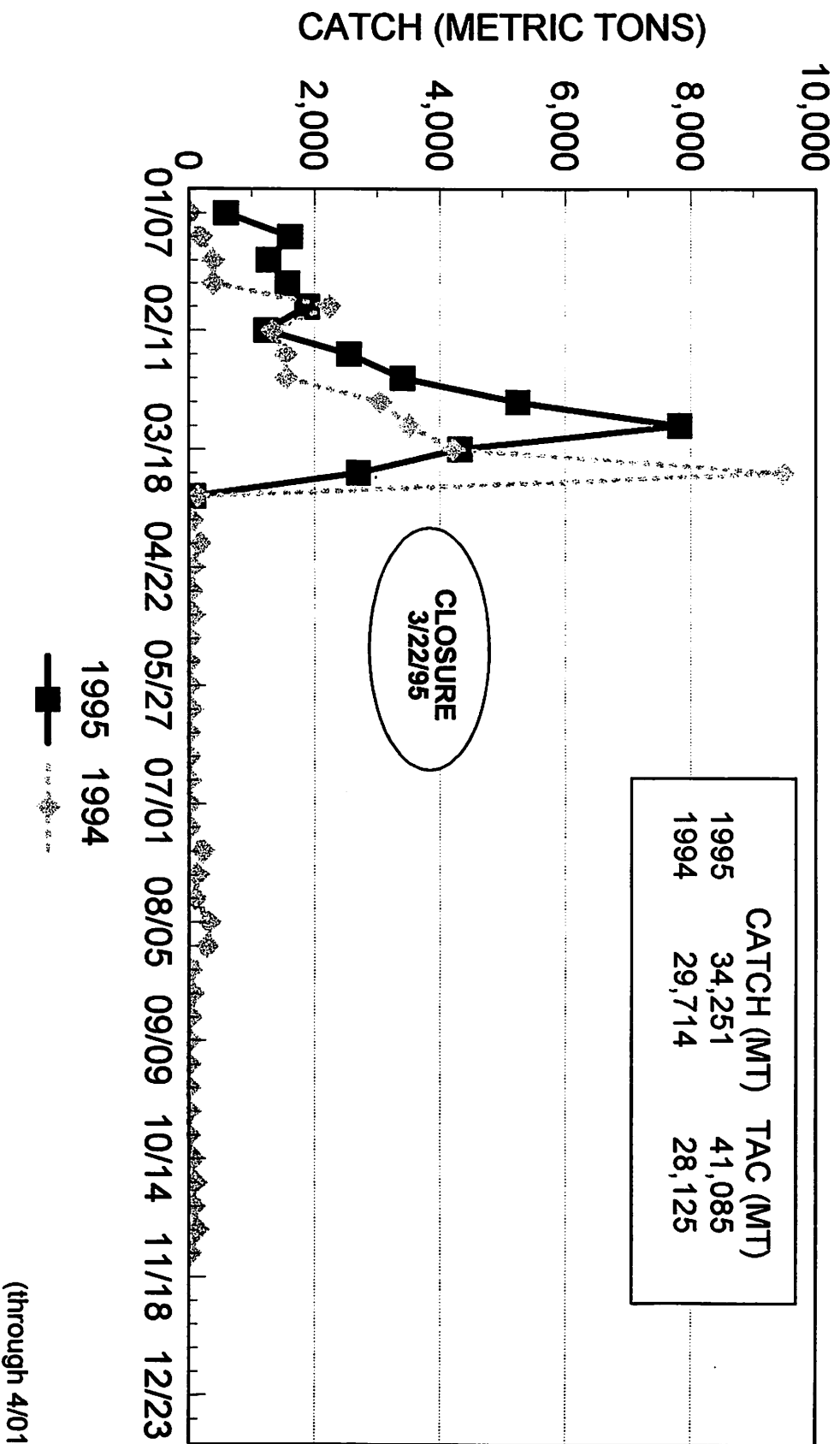
1995 GOA POLLOCK CATCH



Catch (mt)	610	620	630	EGOA
TAC (mt)	10,229	4,771	4,255	3,204
INS open	7,595	3,826	4,078	3,360
	1/20 - 2/2	1/20 - 1/24	1/20 - 1/24	1/20 - 2/27
		2/4 - 2/8		

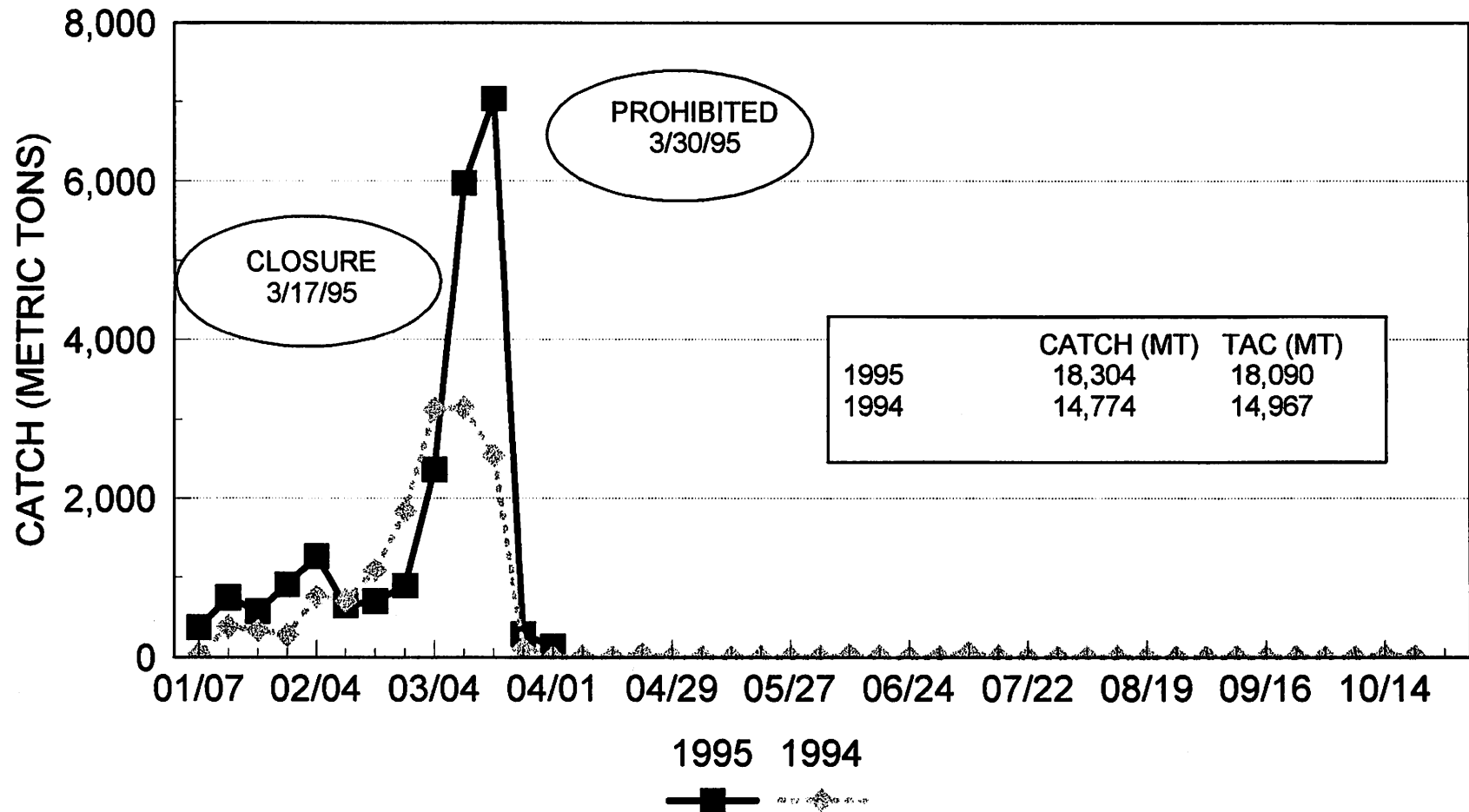
(through 4/1/95)

1994 & 1995 CENTRAL GOA INSHORE PCOD CATCH



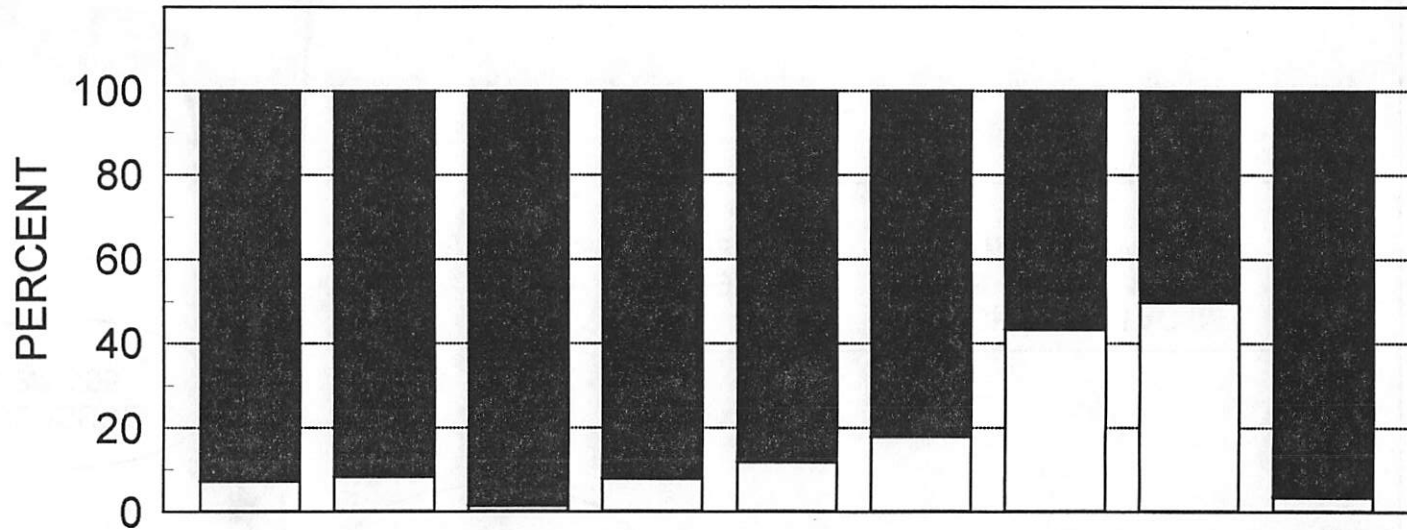
(through 4/01/95)

1994 & 1995 WESTERN GOA INSHORE PCOD CATCH



(through 4/01/95)

1995 GOA PERCENT DISCARDS BY GEAR & TARGET FISHERY



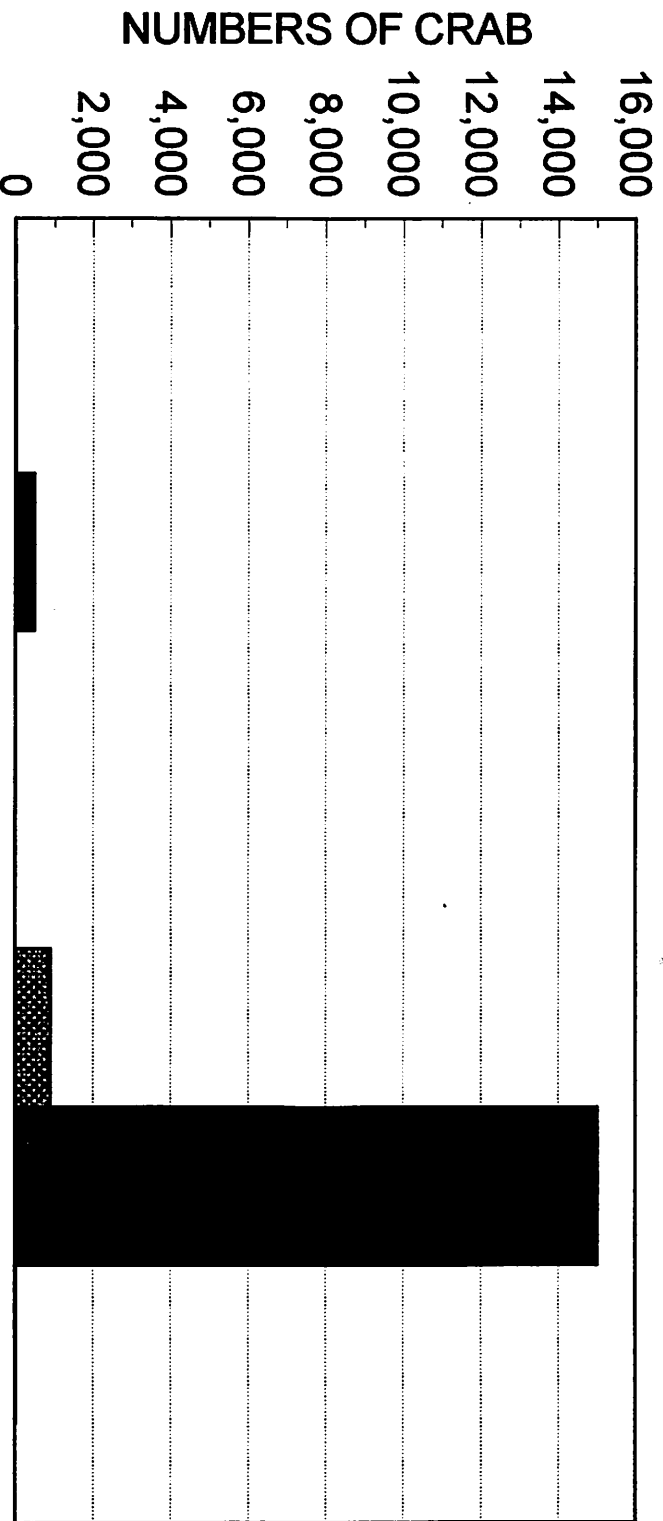
	C--HAL	S-HAL	C-POT	B-TRW	C-TRW	D-TRW	H-TRW	L-TRW	P-TRW
DISCARDED <input type="checkbox"/>	805	67	226	317	4,715	22	117	218	640
RETAINED <input checked="" type="checkbox"/>	10,222	740	14,552	3,695	35,000	102	154	221	17,516




(through 4/01/95)

LEGEND

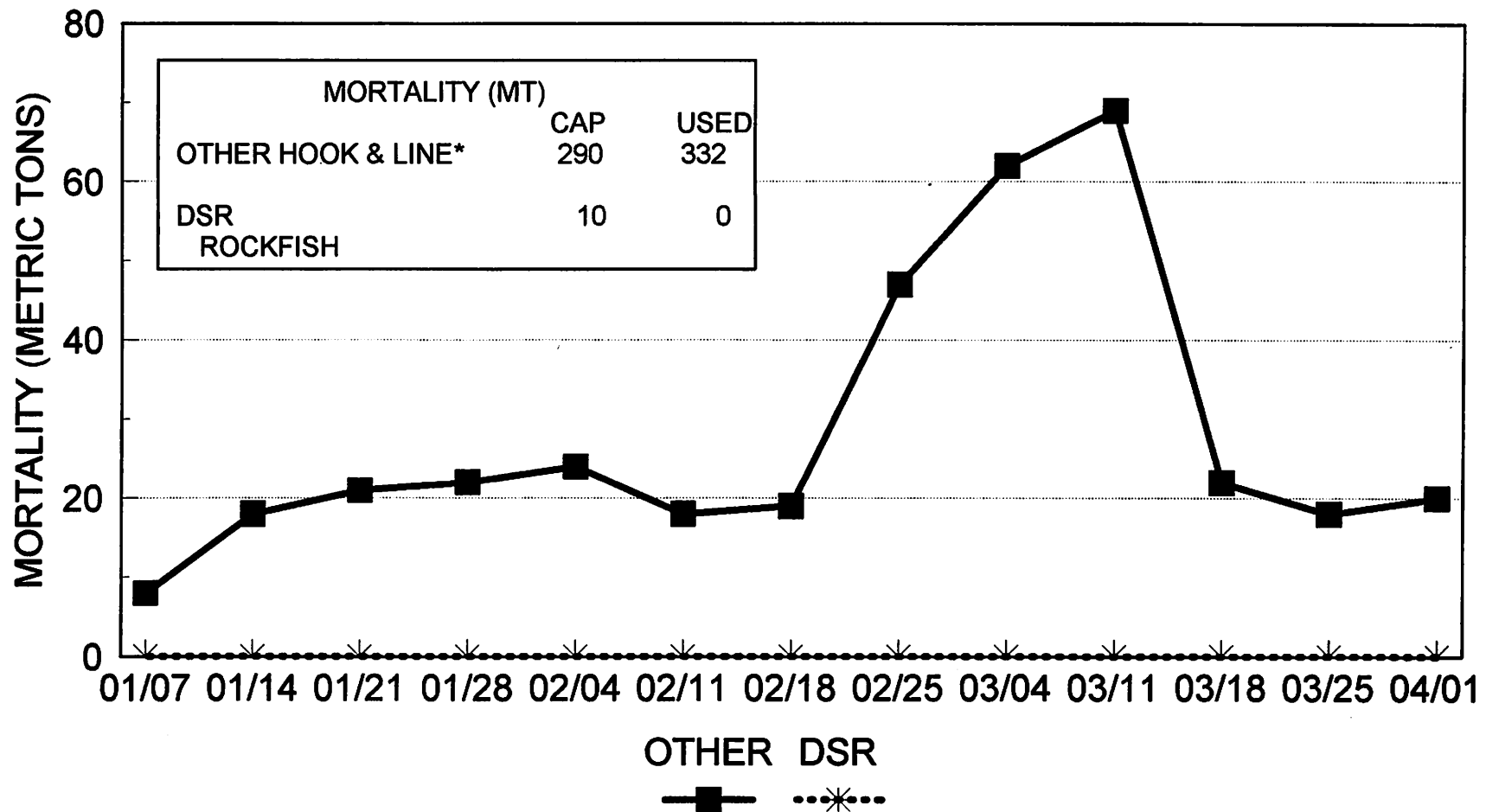
- A - Atka mackerel
- B - Bottom pollock
- C - Pacific cod
- D - Deepwater flatfish
- H - Snow water flatfish
- K - Rockfish
- L - Flathead sole
- P - Midwater pollock

1995 GOA TRW BYCATCH, TANNER & RED KING CRAB



	DW FLAT	SW FLAT
OTANN 	5	903
BAIRDI 	500	15,019
RED KING 	0	12

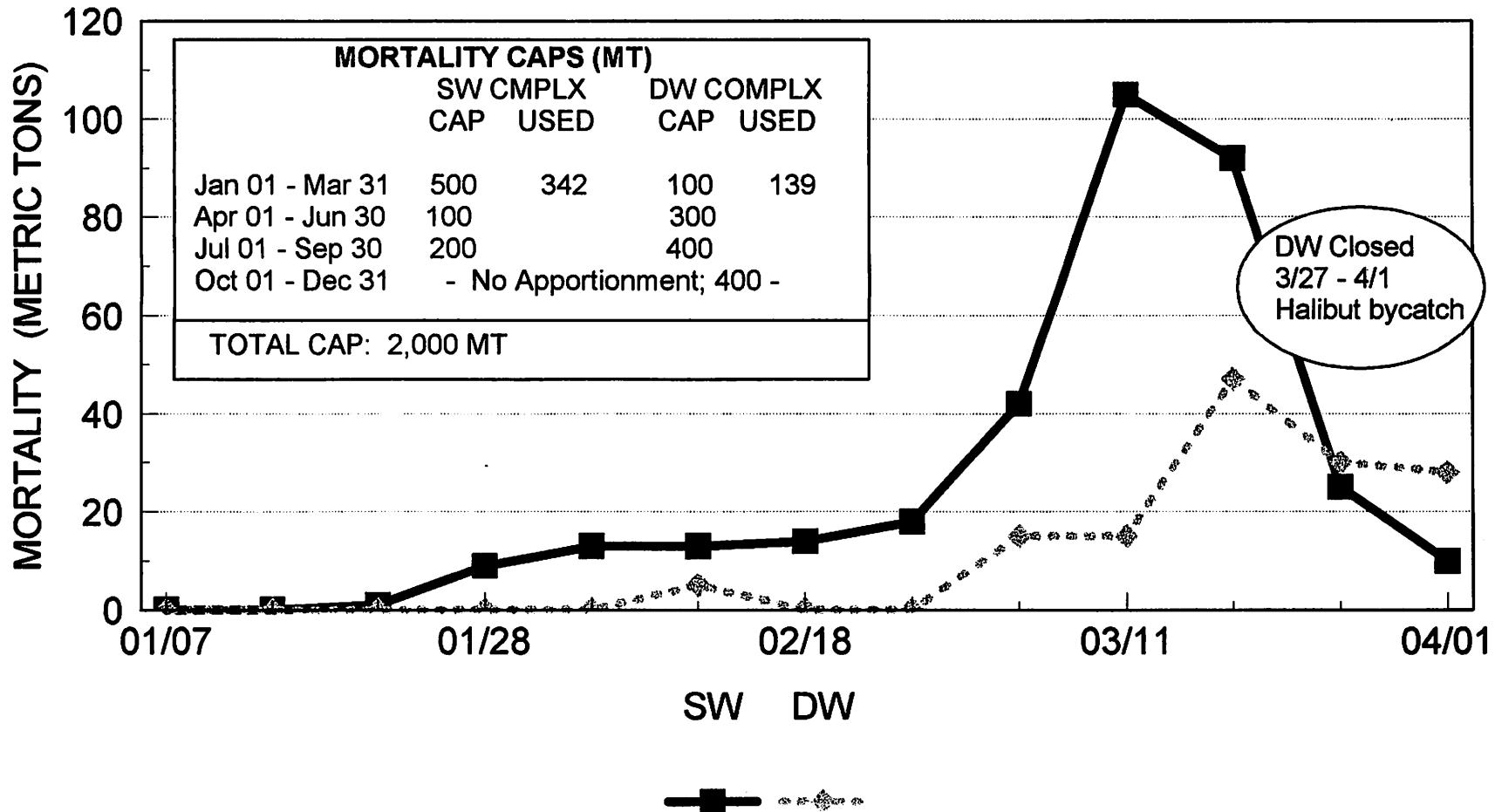
1995 GOA HALIBUT BYCATCH MORTALITY, HOOK & LINE



(through 4/01/95)

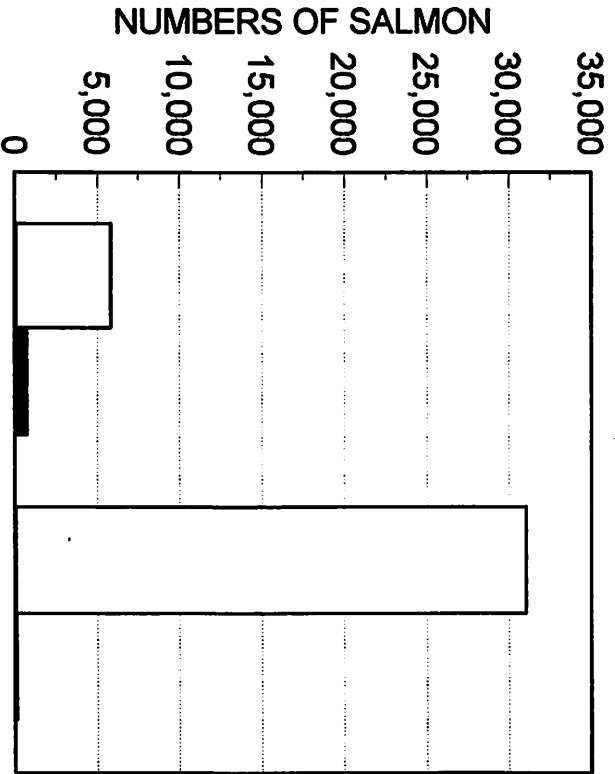
*Sablefish exempt

1995 GOA SW & DW TRAWL HALIBUT BYCATCH MORTALITY

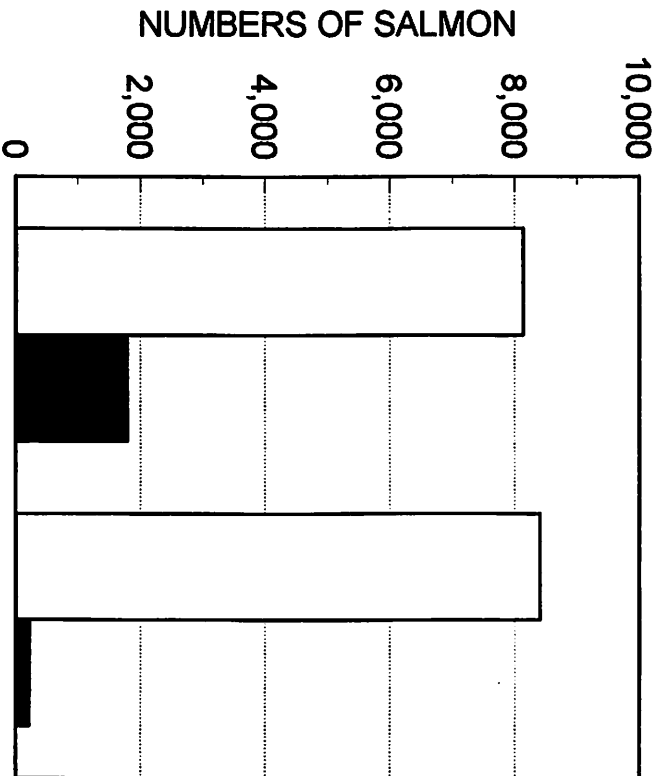


(through 4/01/95)

1994-95 GOA TRW BYCATCH, CHINOOK & OTHER SALMON,



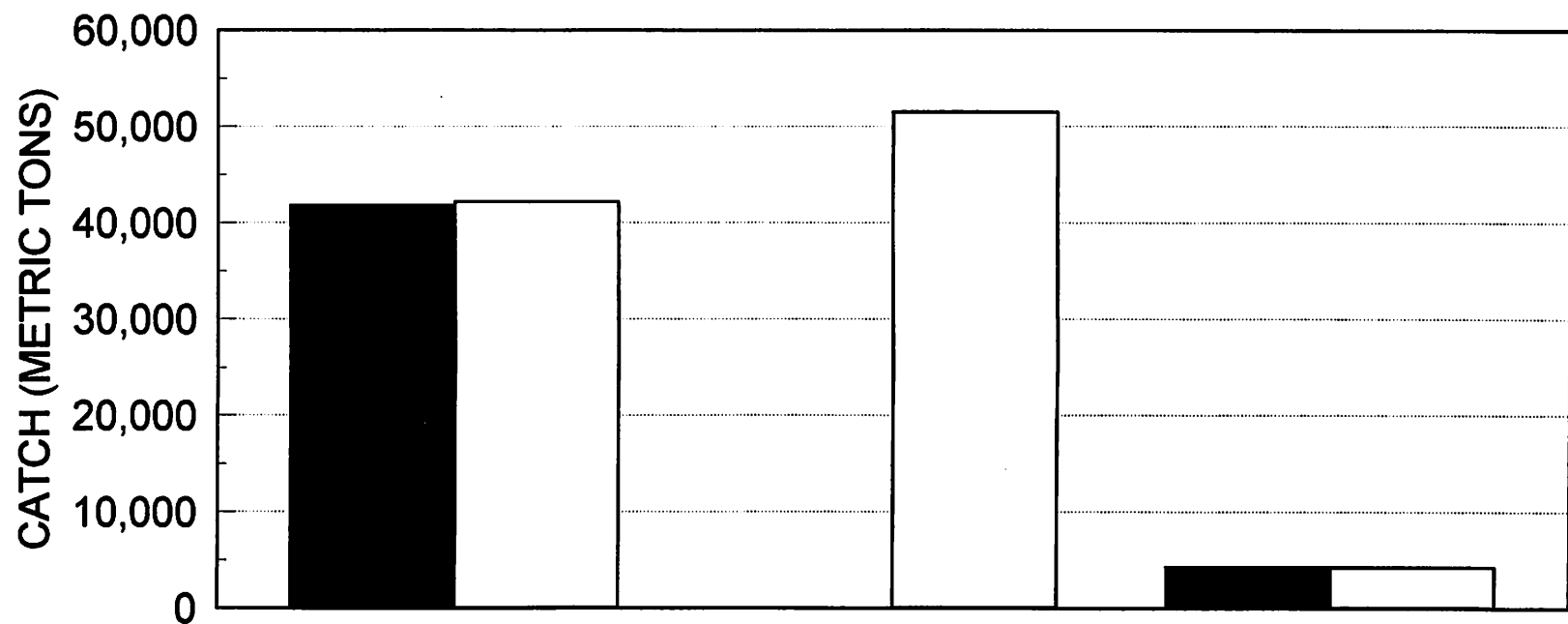
MIDWATER PLCK



OTHER FISHERIES

**BERING SEA &
ALEUTIAN ISLANDS**

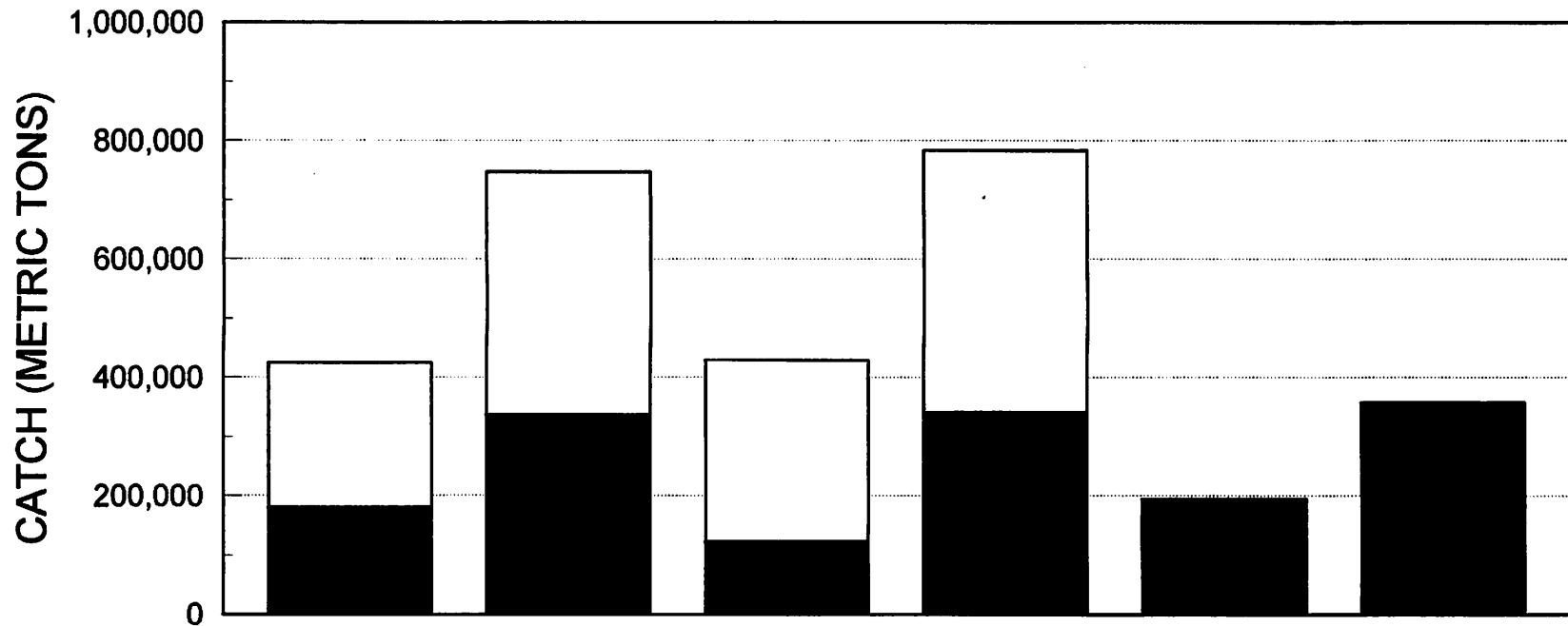
1995 BSAI CDQ POLLOCK



	BS 'A' SEASON	BS 'NON-A' SEASON	ALEUTIANS
CATCH ■	41,785	0	4,242
QUOTA □	42,187	51,563	4,245

(through 4/01/95)

1993-95 INSHORE/OFFSHORE PLCK CATCH*, BERING SEA

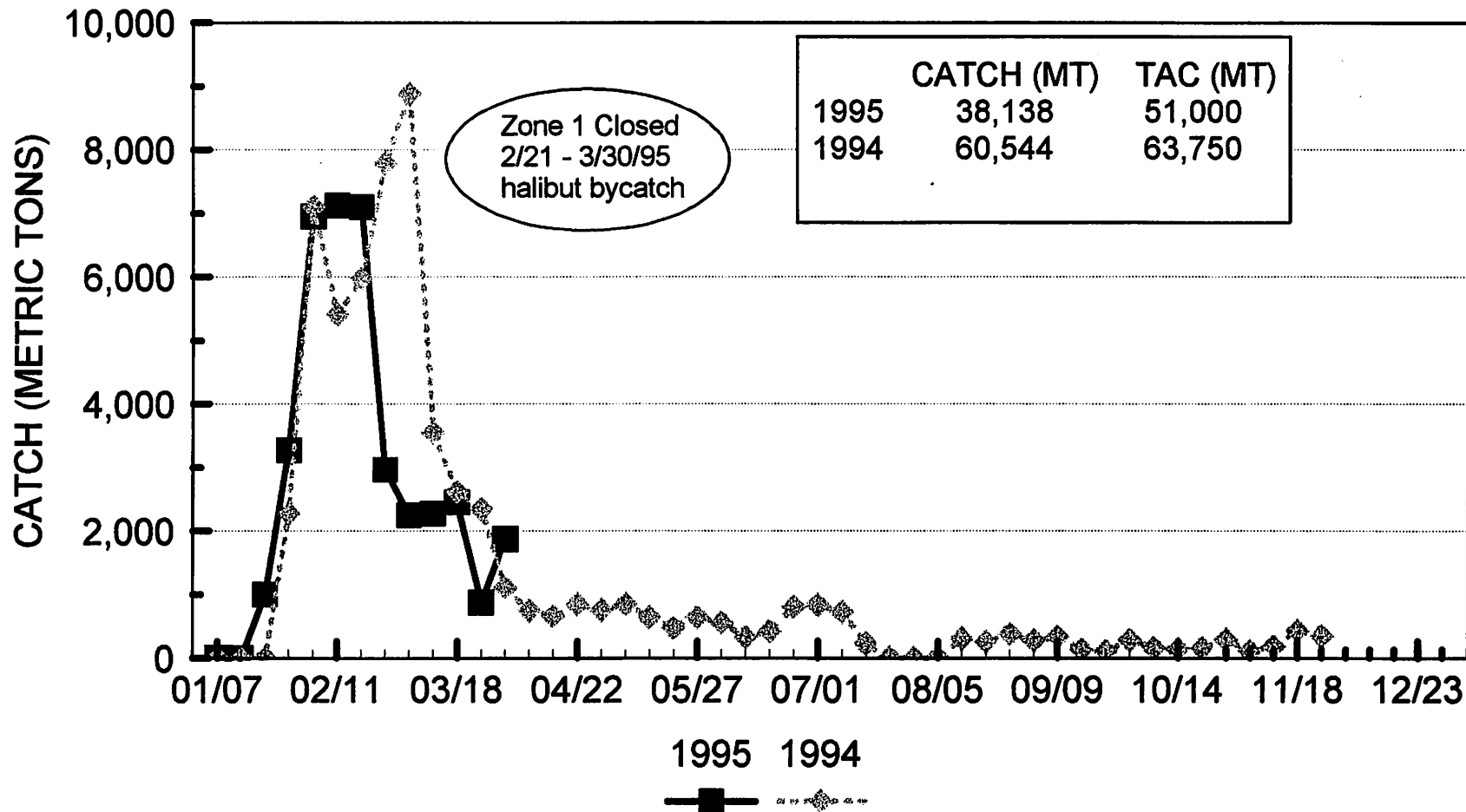


	93 INSHORE	93 OFFSHORE	94 INSHORE	94 OFFSHORE	95 INSHORE	95 OFFSHORE
A SEASON ■	180,276	336,703	122,178	340,901	195,426	357,914
B SEASON □	244,696	411,327	308,259	442,837		

*EXCLUDES CDQ POLLOCK

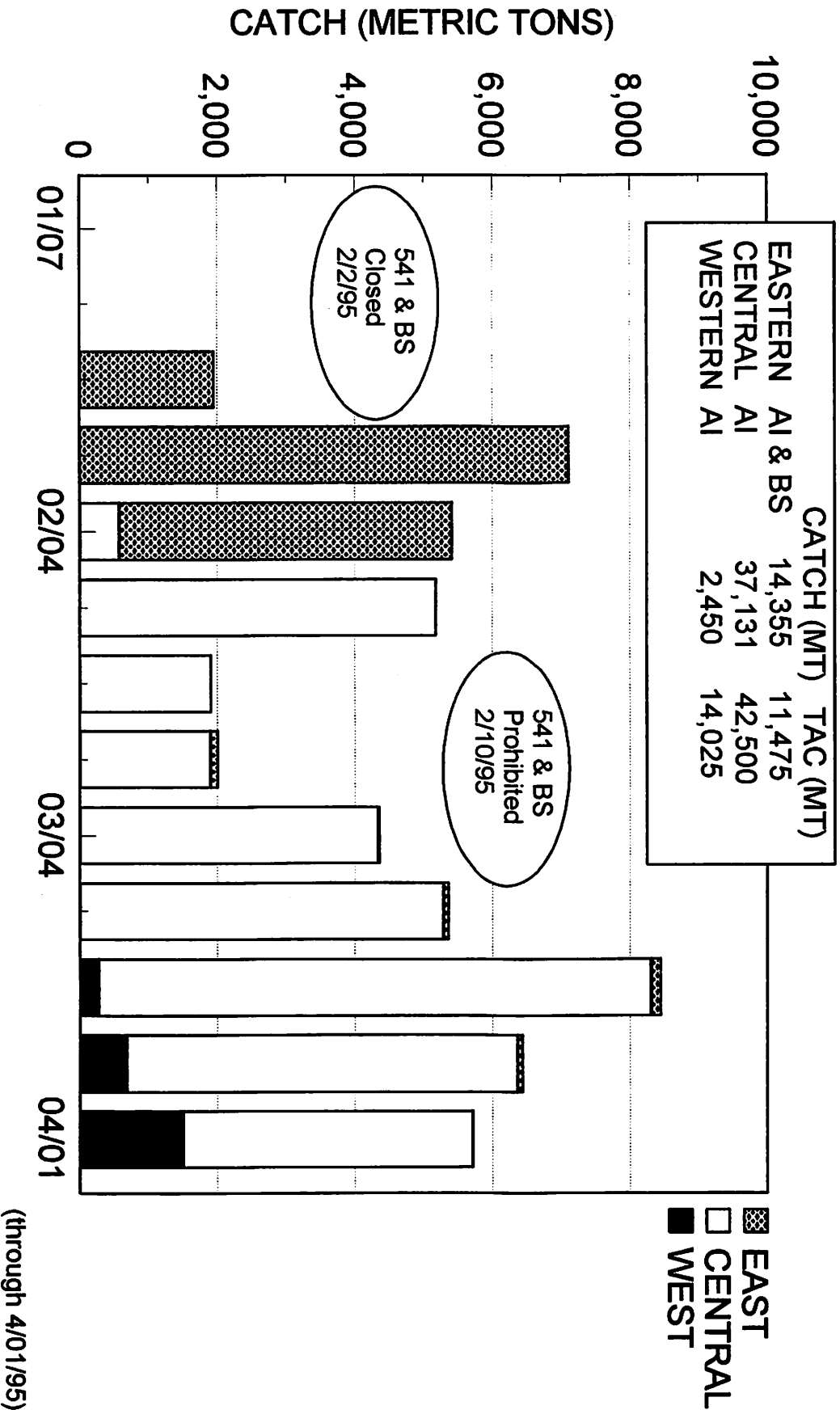
(through 4/01/95)

1994 & 1995 BSAI TRAWL ROCK SOLE CATCH

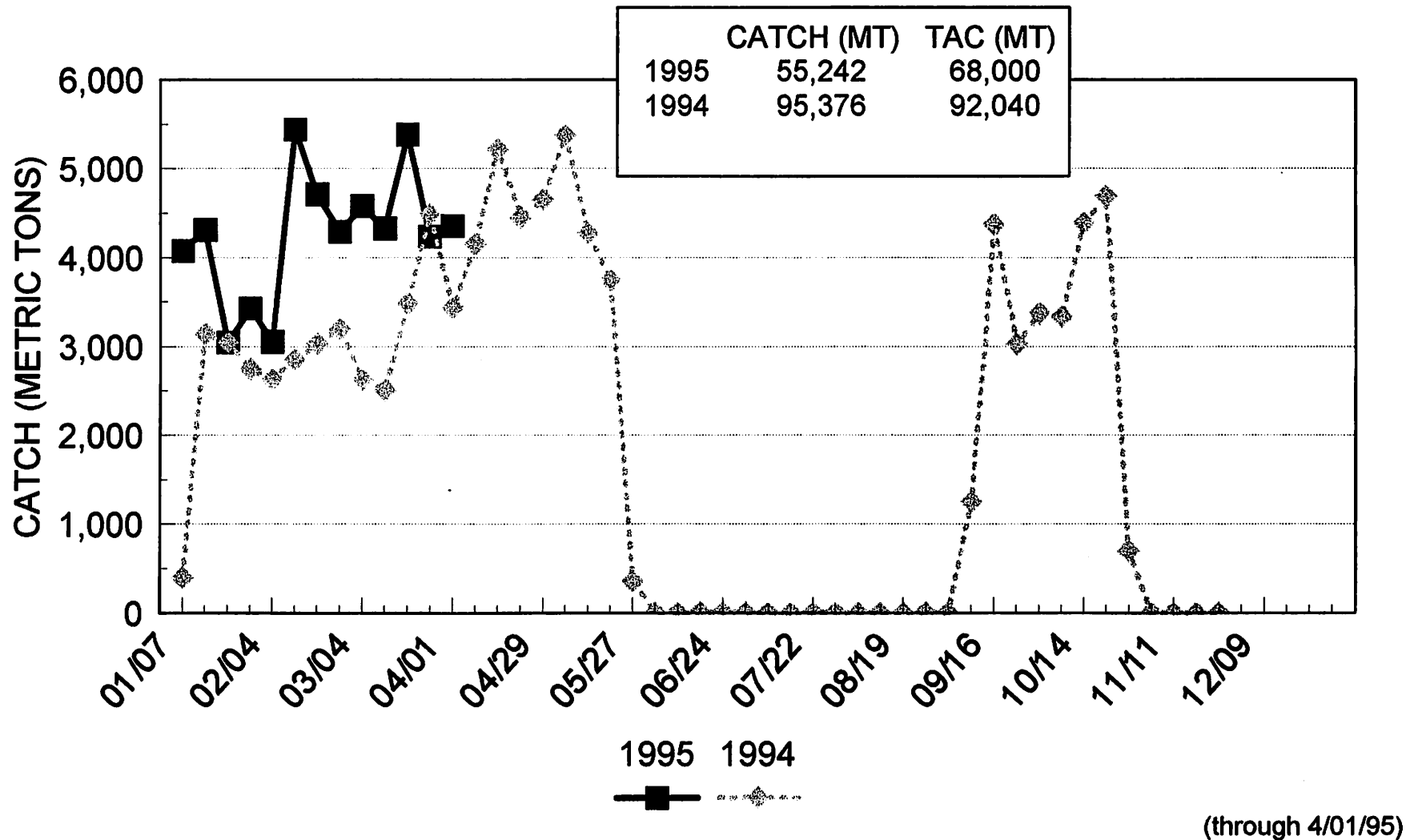


(through 4/01/95)

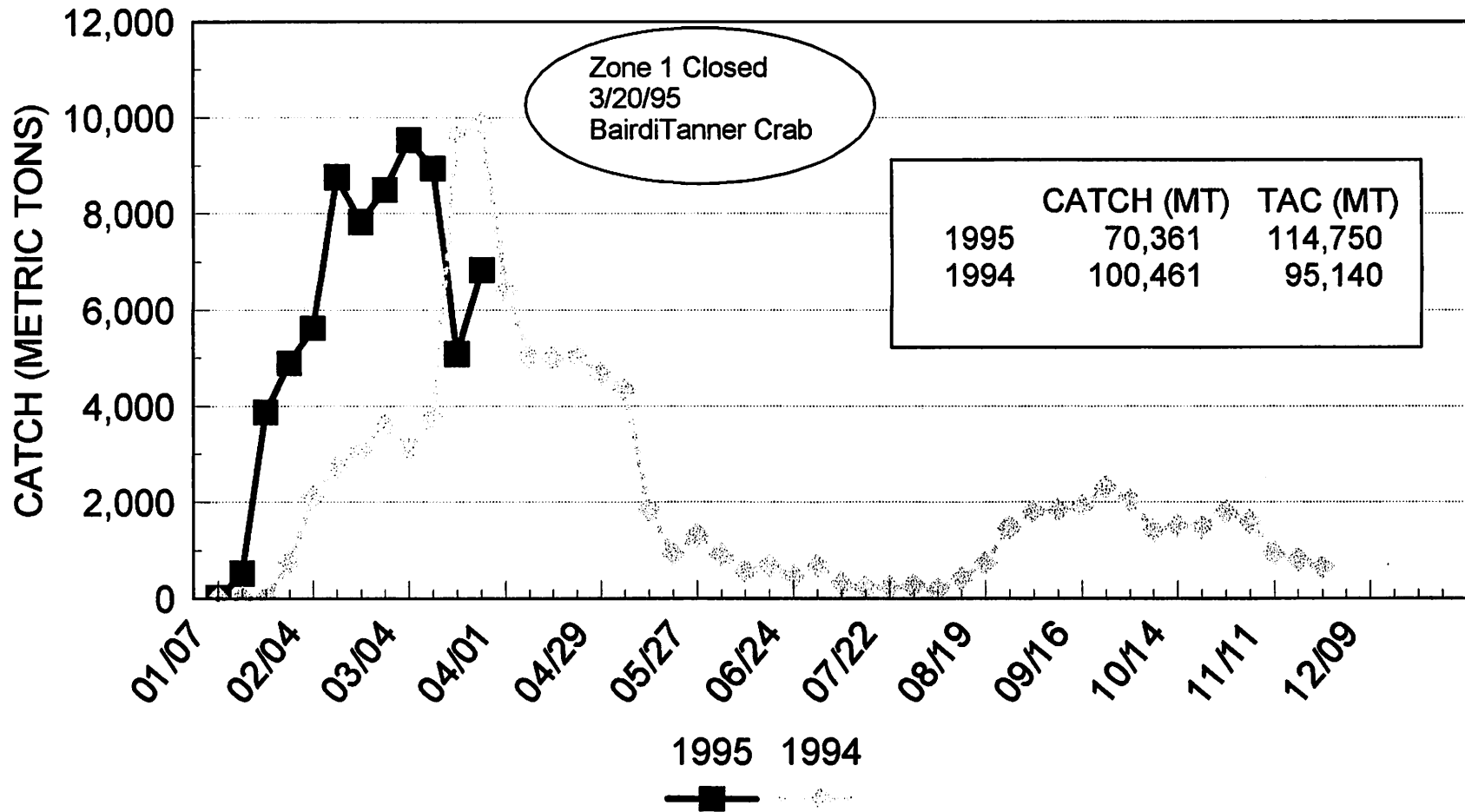
1995 BERING SEA/ALEUTIANS TRW ATKA MACKEREL CATCH



1994 & 1995 BSAI FIXED GEAR PCOD CATCH

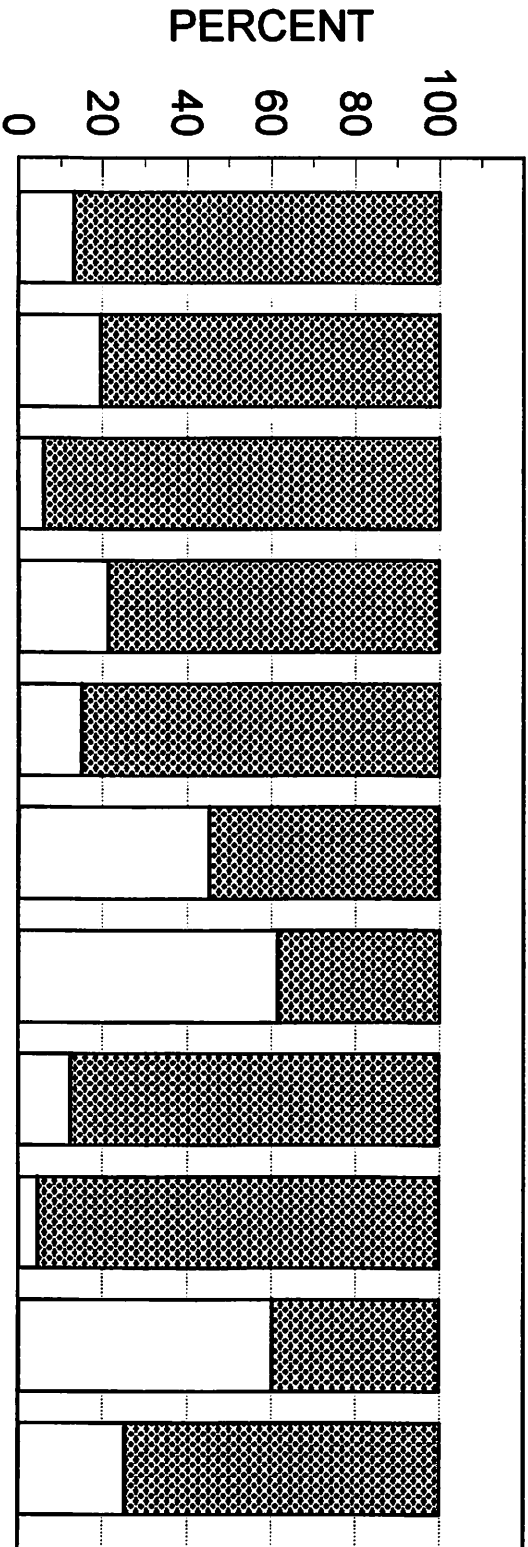


1994 & 1995 BSAI TRAWL PCOD CATCH



(through 4/01/95)

1995 BSAI PERCENT DISCARDS BY GEAR & TARGET FISHERY

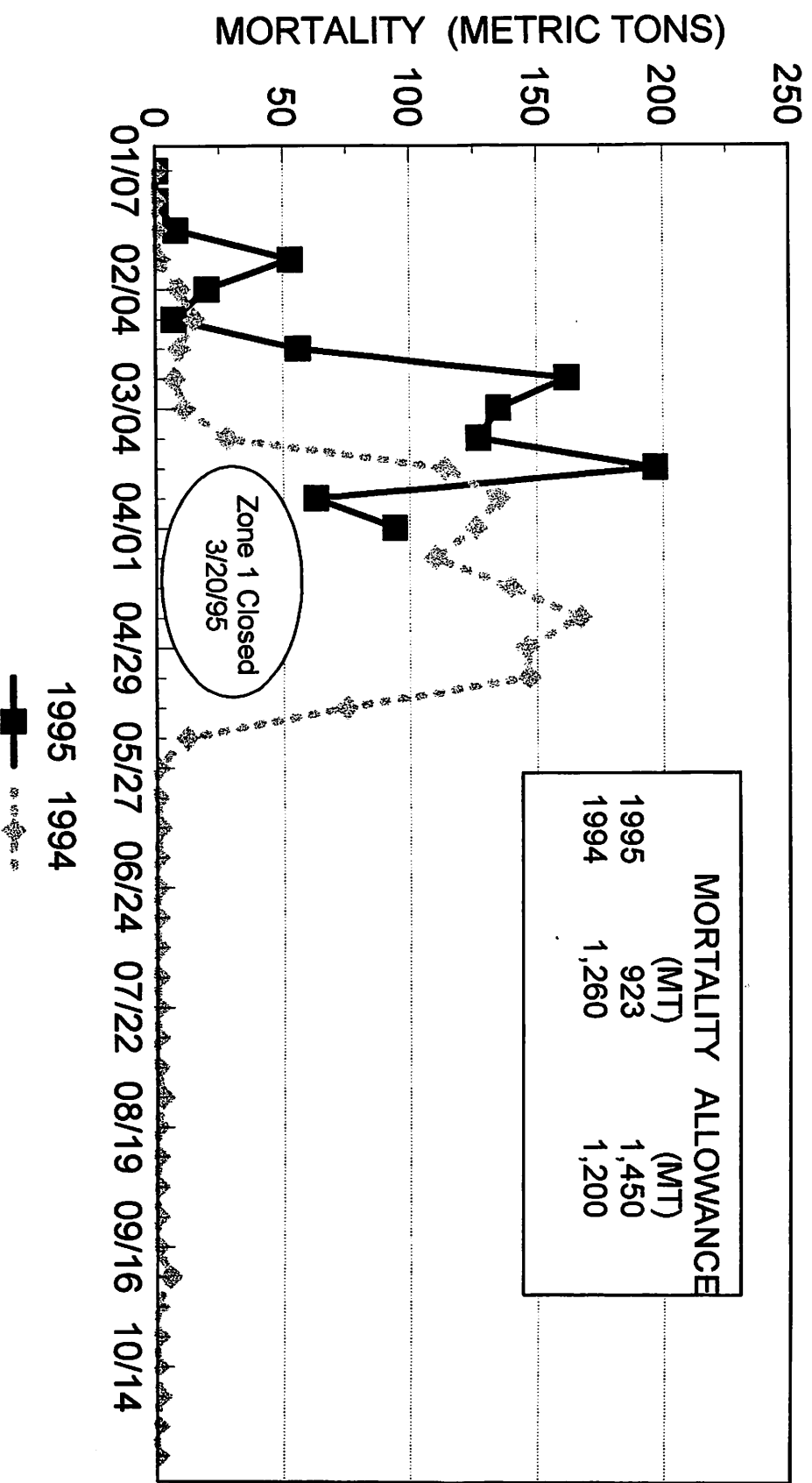


	C-HAL	S-HAL	C-POT	A-TRW	B-TRW	C-TRW	F-TRW	K-TRW	P-TRW	R-TRW	Y-TRW
DISCARDED <input type="checkbox"/>	8,035	8	143	12,321	12,848	36,580	576	824	24,274	24,678	9,176
RETAINED <input checked="" type="checkbox"/>	52,466	33	2,278	45,290	72,099	44,131	359	5,873	515,222	16,293	27,126

(through 4/01/95)

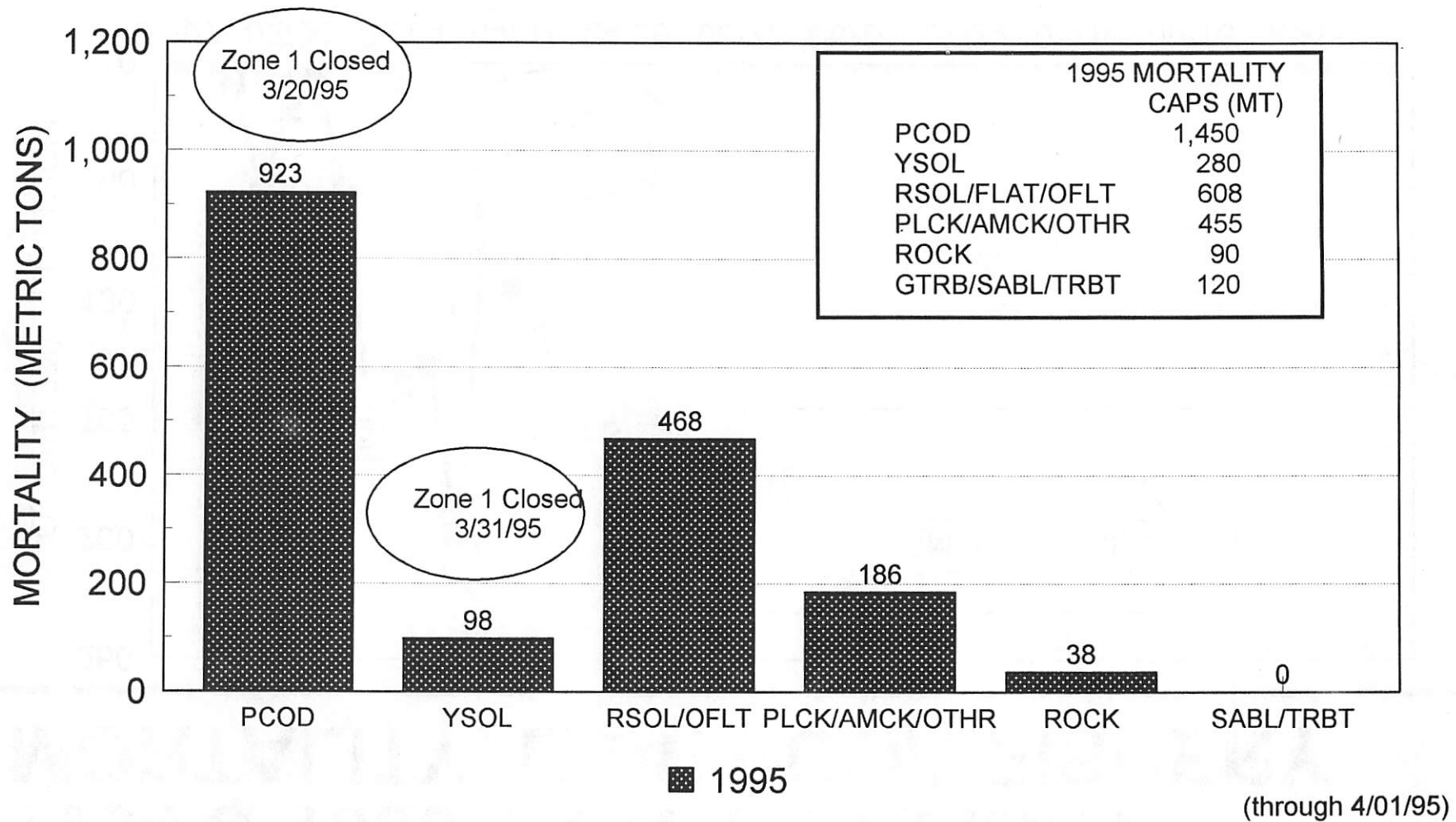
LEGEND	
A - Atka mackerel	P - Midwater pollock
B - Bottom pollock	R - Rock sole
C - Pacific cod	S - Sablefish
F - "Other" flatfish	T - Greenland turbot
K - Rockfish	Y - Yellowfin sole

1994 & 1995 TRAWL HALIBUT MORTALITY, BSAI PCOD FISHERY



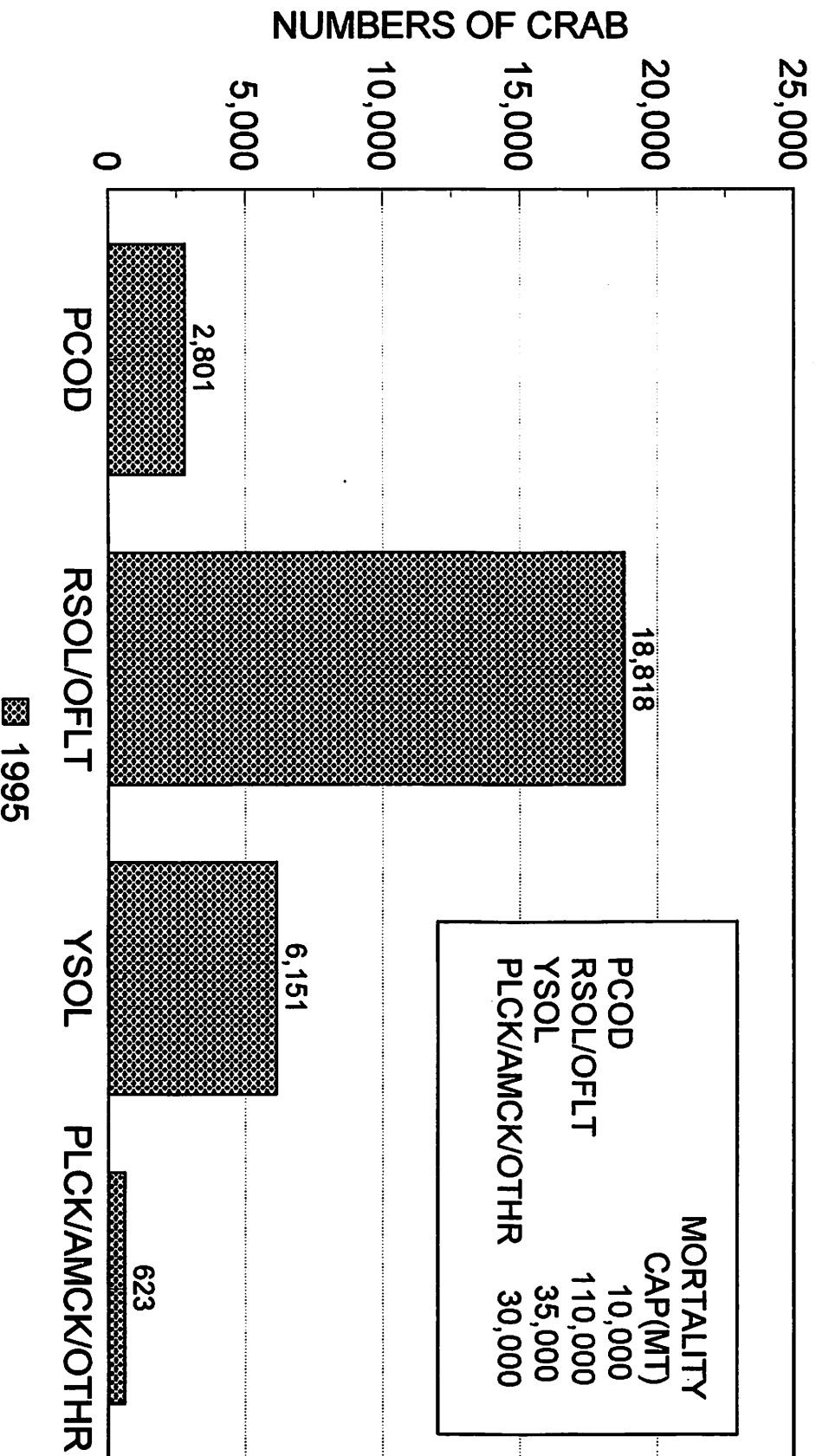
(through 4/01/95)

1995 BSAI HALIBUT BYCATCH MORTALITY, TRAWL



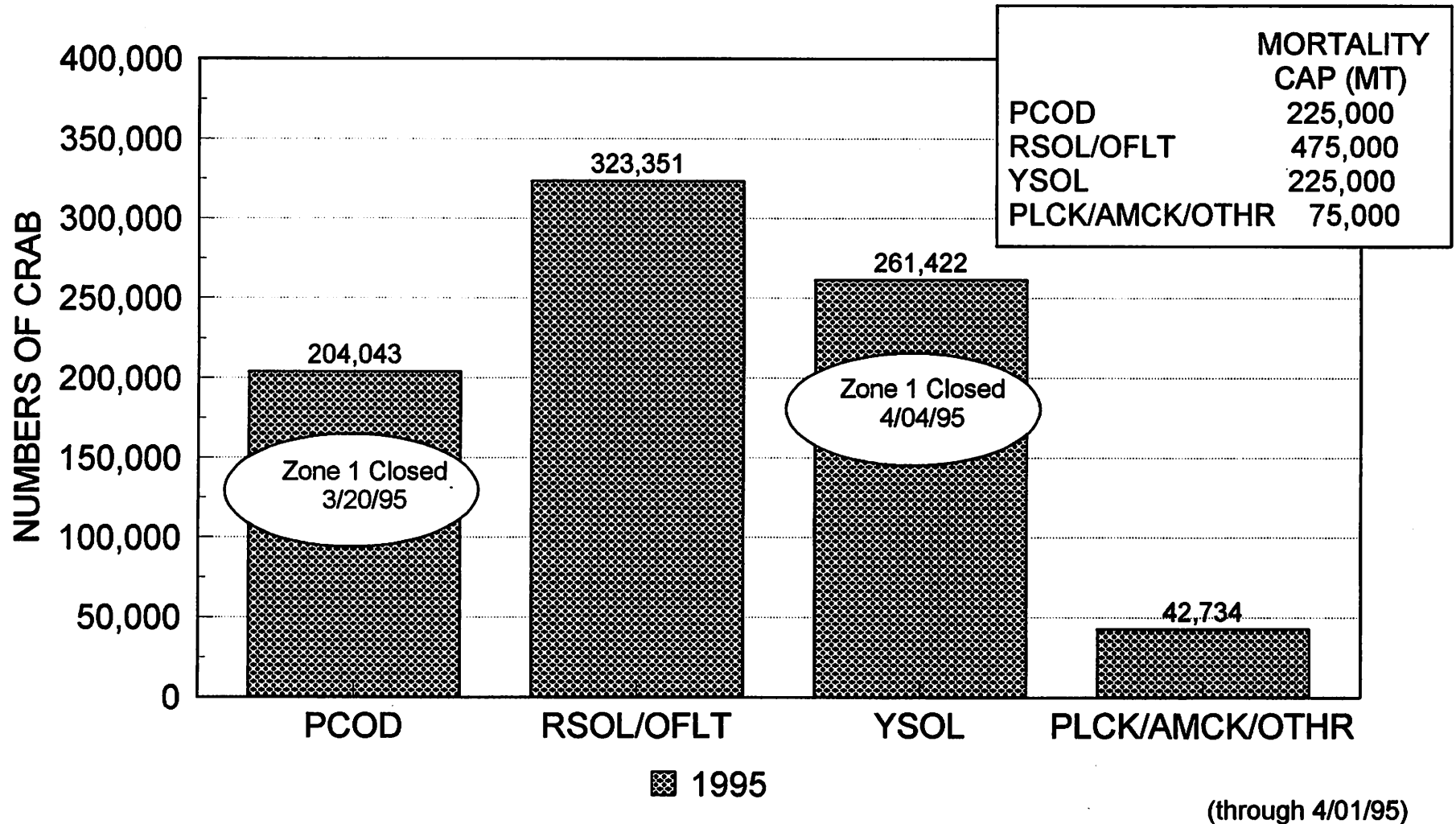
*Closures shown are those closures due to halibut bycatch

1995 BSAI ZONE 1 TRAWL RED KING CRAB BYCATCH

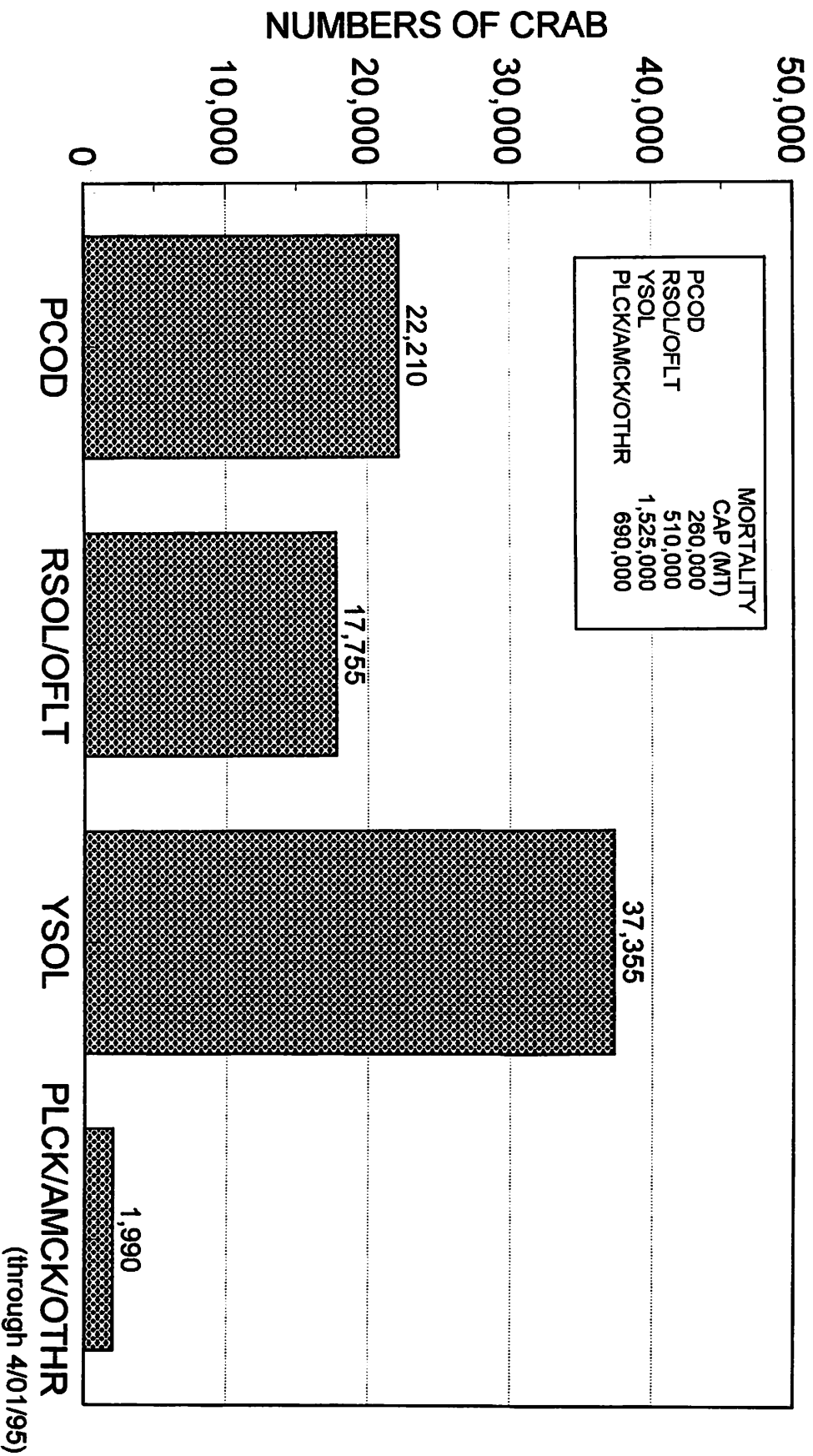


(through 4/01/95)

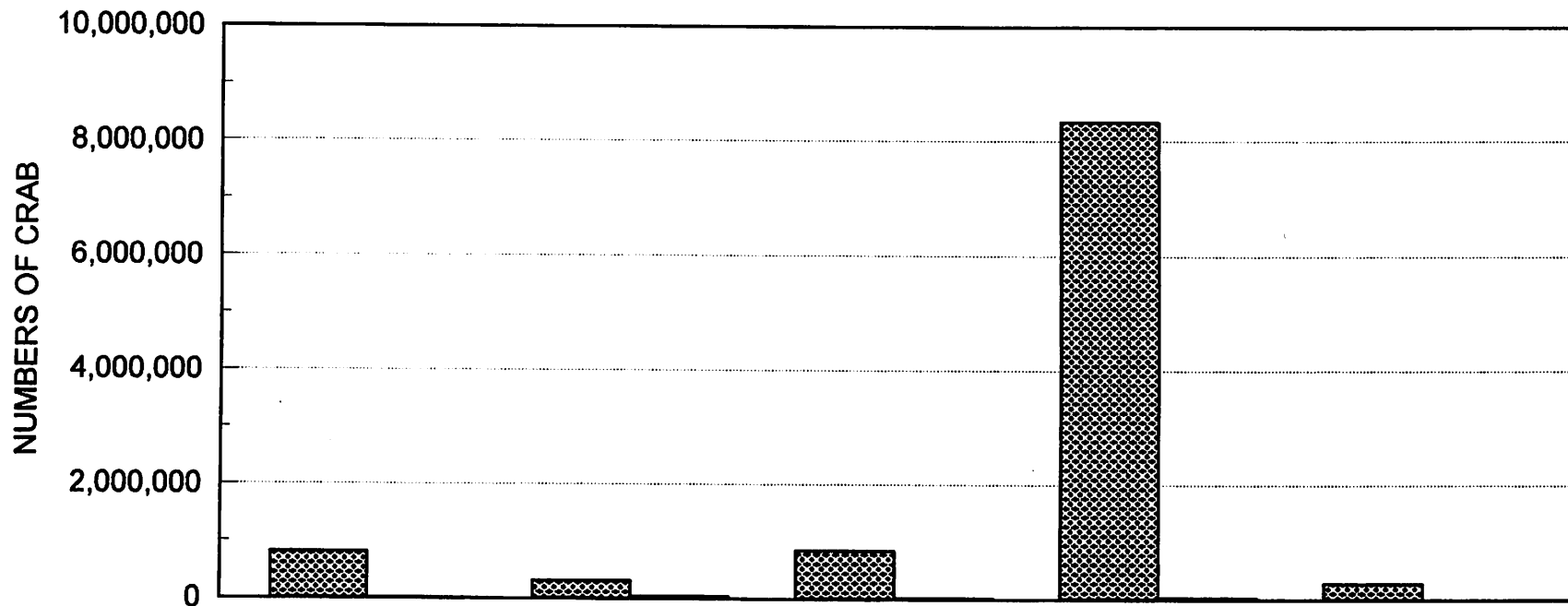
1995 TRAWL BYCATCH, BAIRDI TANNER CRAB, BSAI ZONE 1





1995 BSAI ZONE 2 TRW BAIRDI TANNER CRAB BYCATCH



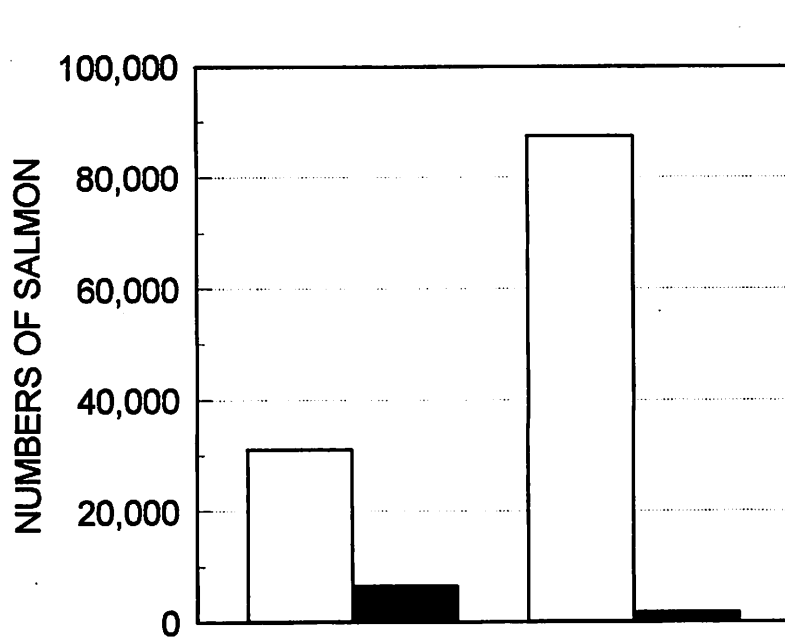
1994-95 BSAI TRW BYCATCH, OPILO TANNER CRAB



	PLCK/AMCK/OTHER	PCOD	RSOL/FSOL/OFLT	YSOL	GTRB/ARTH/SABL
1994 	811,309	311,701	844,198	8,350,194	278,030
1995 	12,291	45,984	26,271	30,110	0

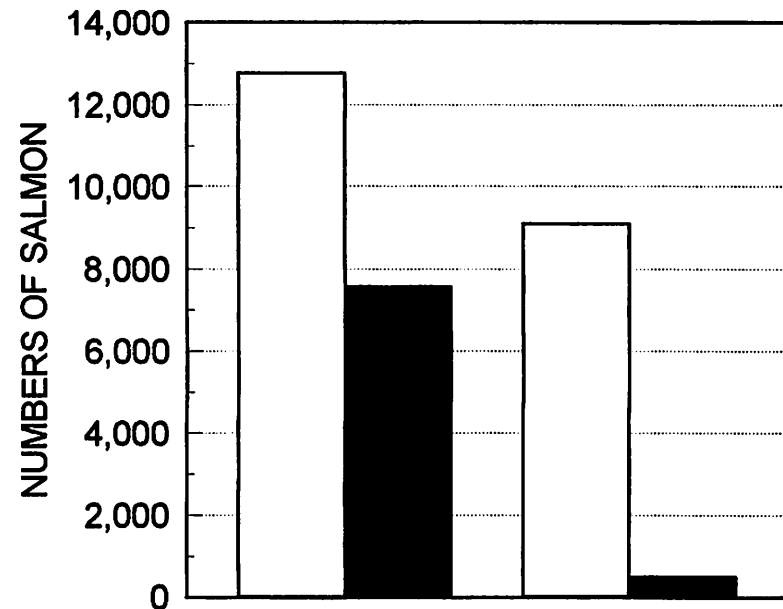
(through 4/01/95)

1994-95 BSAI TRW SALMON BYCATCH, CHINOOK & OTHER



	CHINOOK	OTHR SALM
1994 □	31,038	87,570
1995 ■	6,479	1,801

MIDWATER PLCK



	CHINOOK	OTHR SALM
1994 □	12,783	9,103
1995 ■	7,578	506

OTHER FISHERIES

STATUS REPORT
Proposed Rule to Require Weighing in the Pollock Fisheries

April 19, 1995

At its September, 1994 meeting, the Council "adopted a proposed regulation whereby the total weight of all pollock harvested or processed by all processors while engaged in directed pollock fisheries must be determined by weighing on a scale that meets specific performance standards prior to discard or processing" (Council newsletter, 10/21/94).

This status report summarizes progress on preparation of the proposed rule (PR) by Fisheries Management Staff. Information provided in this status report has not yet been submitted as a proposed rule for review by Enforcement, General Counsel, or the Regional Director.

Who will be required to weigh?

The Council specified that this proposed regulation would apply to "all processors while engaged in directed pollock fisheries".

Table 1 summarizes the number of processors that participated in the 1994 pollock fisheries in the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands area (BSAI).

Table 1. Number of processors that participated in the 1994 pollock directed fisheries in the GOA and BSAI.

Processor	GOA	BSAI			All Areas
		Pelagic	Bottom	Total	
Shoreside plants	16	7	0	7	17
Floating processors ^{1/}	0	2	2	2	2
Trawl catcher/proc.	0	36	41	45	45
Motherships	0	3	2	3	3

1/ mothership processors operating exclusively within State waters.

The regulations to weigh groundfish catch will most significantly impact at-sea processor vessel operators who currently are not required to report catch based on a scale weight.

In 1994, 66 processor vessels reported as either trawl catcher/processors or motherships taking deliveries from trawl catcher vessels. Of these, 45 trawl catcher/processors and 3

motherships reported catch in the pelagic or bottom trawl pollock fisheries in the GOA or BSAI. Under the PR, each of these 48 processor vessels would be required to purchase and install a scale system that is capable of weighing catch before it is processed or discarded.

The effect of the Council recommendation only to require scales for processors participating in the pollock fisheries is that catch for these 48 vessels in other groundfish target fisheries, and all catch for the 18 remaining processor vessels, will continue to be estimated through a combination of observers' volumetric-based estimates and back-calculation of product weight plus estimated discard weight as reported on processor's Weekly Production Reports (WPR). In other words, even if a vessel has a marine scale onboard, if it is not participating in a pollock fishery, it would not be required to weigh catch.

The distribution of catch by at-sea trawl processor vessels (based on 1994 blend estimates) is as follows:

48 processor vessels in pollock fishery		
Estimated catch in pollock fishery:	916,084 mt	(65%)
Estimated catch in other targets:	315,048 mt	(23%)
18 processor vessels not in pollock fishery		
Estimated catch in other targets:	<u>170,842 mt</u>	<u>(12%)</u>
Est. catch all trawl processor vessels:	1,401,974 mt	(100%)

The 48 processor vessels that will be required to weigh catch in the pollock fisheries can be categorized into three groups:

1. 23 primarily surimi processors (also produce fillets and H&G) of which 13 process only pollock and 10 also participate in the cod, flatfish, and Atka mackerel fisheries (BSAI fisheries only);
2. 9 processor vessels that produce primarily fillets, 4 of which participate only in the pollock fisheries and 5 also participate in the cod fishery (BSAI fisheries only);
3. 16 primarily head-and-gut processors (also produce fillets and whole product), all of which participate in a wide variety of fisheries in both the GOA and BSAI including cod, flatfish, rockfish, Atka mackerel, sablefish, and Greenland turbot.

What will be weighed?

Although the Council only specified that pollock was to be weighed, NMFS is recommending that **all catch in the pollock fisheries** be weighed.

For catcher/processors:

- All catch in each haul by a catcher/processor in the pollock fisheries would have to be weighed before discard or processing.

For processors taking deliveries from catcher vessels:

- All fish delivered by a catcher vessel participating in the pollock fisheries to a processor vessel or a shoreside processing plant must be weighed before discard or processing at the plant.

For all processors:

- Sorting of catch before weighing will be allowed if the processor has more than one scale and wishes to weigh retained catch separately from discarded catch.

All catch in the pollock fishery includes the catch of all pollock, all groundfish species, and all non-allocated species. In other words, all fish and marine invertebrates must be weighed prior to discard or processing, unless otherwise specified in regulation (prohibited species, for example).

NMFS is requesting that all catch in the pollock fisheries be weighed for two reasons. First, if scales are to be required on processor vessels, NMFS believes it is important to use these scales to improve our estimates of the mortality of all fish and marine invertebrates - not just the pollock. Second, this requirement more closely follows current observer catch estimation procedures for trawl processor vessels.

In general, the procedure followed on a trawl catcher/processor or mothership processor is:

- (1) fish are dumped from the net into several different fishing holding bins,
- (2) observers estimate the total catch weight of fish in the bins using volumetric methods,
- (3) fish flow from these bins onto a conveyor belt,
- (4) observers obtain samples from unsorted catch to determine the species composition of the total catch,

(5) vessel crew sort fish to be retained from those to be discarded,

(6) fish are discarded through chutes located near the bins and sorting area,

(7) retained fish enter the factory for processing.

A scale to weigh total catch would remove the need for the second step - the observer's volumetric estimate of catch weight. However, observers would still need to sample unsorted catch to estimate the distribution of various species in the catch, including prohibited species.

A requirement to weigh only pollock rather than total catch would result in the observer continuing to have to make volumetric estimates of total catch weight in order to estimate the weight of all non-pollock species in the catch. In addition, the requirement to weigh only pollock may also add an additional step to processors' groundfish sorting. Weighing pollock separately from other groundfish catch would require processors to (1) sort all pollock from other groundfish, (2) weigh the pollock, and (3) sort out the pollock to be retained from that to be discarded.

Effect of scales on ability to monitor discards

Several proposals before the Council would require NMFS to estimate not only the weight and species distribution of the catch, but also whether this catch was retained or discarded. Proposals for increased retention/utilization and the Harvest Priority program would require monitoring compliance with requirements either to retain all catch of particular species or to limit discards to a certain proportion of the catch (a discard rate standard). Discussion papers prepared on these proposals detail NMFS's concern about our ability to monitor discard rates on individual vessels. Much of this concern will not be alleviated by the installation of a scale to weigh total catch because processors will not be required to weigh retained catch separately from catch to be discarded (although some may chose to do so).

How will at-sea scales be monitored?

Obtaining an accurate weight at-sea requires a scale that has the capability to compensate for vessel motion. Although many features of the marine scale are similar to land based scales of the same type, regulations governing the certification of marine scales in the U.S. have not yet been developed for two primary reasons. First, the performance of the motion compensation technology has not been evaluated or tested by a U.S. Weights and Measures agency. Second, the only marine scale currently in use (Marel) must be tested and recalibrated at least daily by the

operator to assure that the scale continues to weigh accurately. This process is contrary to the commercial scale code requirements that calibration and adjustment mechanisms remain sealed once a scale has been certified.

The use and performance of marine scales will need to be monitored on a regular basis while the scale is being used to weigh catch processed at sea. NMFS proposes that regulations governing use of marine scales include the following elements:

1. Processors must notify NMFS at least six months prior to either the initial effective date of this regulation or entry of the processor into the pollock fishery (if entry occurs after the effective date of the regulation) as to the type of scale that will be used on the processor vessel. Notification must include a written description of the scale system that will be used to weigh catch and a diagram of the location of the scale or scales on the processor vessel. The purpose of this requirement is to assure that onboard test procedures for the particular type of scale in question have been developed by NMFS in consultation with the scale manufacturer and the Weights and Measures agencies.
2. The processor vessel operator must provide a scale or scale system that will meet NMFS's performance standards and the ability to print reports from the scale.
3. Onboard test procedures will be developed for each type of scale that will be used to weigh groundfish. At this time, NMFS anticipates having to develop test procedures for an in-line conveyor scale and a hopper scale system. The test procedure will involve placing material of known weight (a certified test weight, for example) on, in, or over the scale. The reported weight of the test material would be required to be within 3 percent of the known weight of the test material.
4. The scale must maintain a cumulative record of the number of hours the scale has been operating and the weight of catch passing over or through the scale. This cumulative record must be permanent and accessible to the scale operator or the observer (read only) but that cannot be changed or deleted (no write capability). The Marel scale currently provides this information. The purpose of this requirement is to provide information to determine whether the scale has been operating or weighing material that has not been reported.

5. Printed output from the scale on each haul must provide the following information:
 - (a) haul number;
 - (b) starting date and time of haul;
 - (c) total weight of catch in each haul;
 - (d) end date and time of haul.
6. Installation or use of the scale(s) must not prevent observers from taking a random sample of unsorted catch.
7. Processors will be prohibited from processing, sorting, or discarding unweighed catch if the scale system for weighing catch is not operating properly. Proper operation means that onboard tests have been performed as described and that the scale met performance standards. No back-up systems will be allowed.

In addition, NMFS is working with the California Division of Measurement Standards to try to develop procedures to include the following elements in the PR:

8. Marine scales will be required to meet as many of the commercial scale requirements in Handbook 44 (HB 44) as is practical based on recommendations by scale manufacturers and the Weights and Measures agencies. This will be accomplished by referencing certain sections of the commercial scale code that address basic elements of scale design, installation, and performance. The purpose of this requirement is to impose minimum quality standards on scales. However, the requirement will not assure that a particular scale will weigh accurately or consistently at sea.
9. Marine scales must be certified prior to initial use by a State Weights and Measures official. The purpose of the initial certification will be to check compliance with HB 44 standards, to perform an initial test of accuracy and performance dockside, and to verify that equipment and procedures necessary for the onboard test procedure are on the vessel and understood by the person who will be responsible for performing the onboard tests. This requirement is similar to the testing and certification process used for scales in commercial use, although the standards will be tailored to marine scales.

How will shoreside scales be monitored?

Shoreside and floating processors operate within the State of Alaska and are, therefore, subject to State laws that seafood (except shellfish) are to be "offered or exposed for sale and

sold by weight" (AS 45.75.240). Scales used by shoreside processors must be certified by the State Division of Weights and Measures.

The recommendation made by the Council and NMFS's decision to propose weighing all catch by at-sea processors rather than just pollock catch results in a difference between the way these regulations will affect at-sea and shoreside processors. Specifically,

- All catch attributed to the shoreside component is not weighed due to at-sea discards from catcher vessels.¹ Processor vessels will be required to weigh all catch brought onboard the vessel prior to discard.
- Observers in shoreside plants are not responsible for verifying that scales are weighing accurately. Observers on processor vessels will monitor the use and performance of at-sea scales.
- Shoreside processors do not provide printed output or other verification of the scale weights from all of their scales, particularly those used to weigh non-pollock landings. At-sea processors will be required to provide a printed record for each haul weight and the results of scale tests.
- Shoreside plant scales are required to be certified by the Alaska Division of Weights and Measures. For processors in the pollock fishery, scale testing usually occurs twice a year. It has not yet been determined whether scales on at-sea processors will require periodic Weights and Measures certification.

Cost of purchasing and installing scales on processor vessels

Processor vessel operators will be allowed to choose the type of scale they purchase and where to install the scale on their vessel. Most processors probably will purchase a scale that will fit into the conveyor line that moves fish from the holding bins to the sorting and processing areas. NMFS is aware of one company that currently markets and in-line marine scale and at least one marine scale system that is being developed.

Some information on the potential cost of purchasing and installing scales on processor vessels presented to the Council

¹Observer reports from catcher vessels in 1993 indicate that between 3 percent and 4 percent of catch in the pelagic pollock fisheries and about 20 percent of the catch in the bottom pollock fisheries is discarded at sea.

in the September, 1994 draft analysis (EA/RIR/IRFA) needs to be clarified or corrected.

1. estimated purchase price: The Marel in-line flow scale appears to be the only scale available that could meet the use and performance standards suggested by NMFS. The purchase price of this scale ranges from \$41,000 to \$49,000. One other scale company is developing a marine scale and estimates the purchase price at about \$20,000. However, this scale currently is not available, so the cost estimate is much less certain than that of the Marel scale.
2. estimated installation costs: The draft analysis states that "NMFS estimates from \$5,000 to \$25,000 to install the scale...These costs could be substantially more than \$25,000 for vessels with already very crowded factories."

Since the Council recommendation in September, 1994, NMFS has received information from both fishing industry members and companies that specialize in factory design and construction that indicate that installation costs will be higher than estimated in the draft EA/RIR/IRFA. Due to space constraints on many processor vessels, the likely need to relocate sorting space and processing equipment, the possibility that more than one scale would be required on some vessels, and the wide range of configurations on individual vessels, the installation cost range for the scales is revised to be between \$25,000 and \$250,000.

In other words, the total catch of purchasing and installing marine scales to weigh groundfish catch on processor vessels may range between \$75,000 and \$300,000. Independent substantiation of these estimates would require NMFS to contract to obtain estimates for a range of specific processor vessels.