

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Clarence G. Pautzke
Executive Director



ESTIMATED TIME
2 HOURS

DATE: May 30, 2000

SUBJECT: Groundfish Management

ACTION REQUIRED

Initial review to amend the TAC specification process.

BACKGROUND

In May 1998, the Council submitted the analyses for Amendments 48/48 to the groundfish fishery management plans for Secretarial review. The intent of these amendments was to streamline the Council's annual groundfish harvest specification process by: (1) rolling over final harvest specifications established for one year into the following year to serve as preliminary specifications and eliminate the need to publish interim specifications; and (2) issuing annual specifications through a single Federal Register document which would be published after the December Council meeting. NMFS subsequently identified legal and technical problems with amendments 48/48. These problems stemmed largely from compliance issues with National Environmental Policy Act (NEPA), the Administrative Procedure Act (APA), Regulatory Flexibility Act, and Endangered Species Act associated with "rolling over" TAC amounts from one year to the next, as well as the recent development of more rigorous agency guidelines for compliance with these statutes. As a result, the original concept for amendments 48/48 was tabled in mid-1999.

NMFS again is attempting to develop options for revising the existing TAC specification process to respond more effectively to the following objectives:

1. Manage fisheries based on the best available information;
2. Respond to new information or conservation concerns;
3. Comply with NEPA, ESA, and RFA provisions while minimizing unnecessary disruption to fisheries;
4. Provide adequate opportunity for public review and comment; and
5. Promote administrative efficiency, while minimizing public confusion.

NMFS staff will present an analysis for revising the annual TAC setting process for initial review. The EA/RIR/IRFA was mailed last week to you by NMFS. Final action is scheduled for the October meeting. The executive summary, containing the proposed alternatives, is attached as Item D-1(a).

EXECUTIVE SUMMARY

Each year, normally in December, proposed groundfish harvest specifications for the Bering Sea and Aleutian Islands area (BSAI) and Gulf of Alaska (GOA) are published in the Federal Register. These proposed specifications list proposed total allowable catch (TAC), acceptable biological catch (ABC) and prohibited species catch (PSC) amounts, and apportionments thereof, which have been recommended by the North Pacific Fishery Management Council (Council) for the following year. Based on public comment on the proposed specifications and information made available at the December Council meeting, final specifications are published in the Federal Register during February or early March. So that fishing may begin January 1, interim regulations are published in the Federal Register in December that authorize the release of one-fourth of each proposed TAC and apportionment thereof, one-fourth of each PSC and apportionment thereof and the first seasonal allowance of pollock and Atka mackerel. These interim specifications are superseded by the final specifications.

The existing TAC specification process is problematic for several reasons. The public is notified and given opportunity to comment on proposed specifications that often are outdated by the time they are published. The publication of proposed specifications each year can confuse the public, because incomplete and possibly erroneous information is provided due to the need to adhere to a strict time line in order to comply with all relevant regulations. Because the interim specifications are based on the proposed specifications, they do not take into account the recommendations contained in the Plan Team's final SAFE documents or the recommendations coming from public testimony, the S.C., AP, and Council at its December meeting. In addition, one fourth of the initial TAC and PSC amounts have been found to be an inadequate amount for those fisheries that attract the greatest amount of effort at the beginning of the fishing year. For these reasons, NMFS seeks to revise the TAC-specification process.

The objectives of this action relevant to the framework for specifying annual TACs are to manage fisheries based on best available information, respond to new information or conservation concerns, comply with NEPA, ESA, and RFA provisions while minimizing unnecessary disruption to fisheries, provide adequate opportunity for public review and comment, and promote administrative efficiency while minimizing public confusion regarding TAC specifications.

The management alternatives are:

Alternative 1. Status quo. (Publish proposed specifications, followed by interim and final specifications)

Alternative 2: Eliminate publication of interim specifications. Issue proposed and final specifications prior to the start of the fishing year. This alternative has three sub-alternatives; (a) base proposed and final specifications on previous year's survey data, (b) delay the start of the fishing year, or (c) conduct surveys earlier in calendar year.

Alternative 3: Issue interim specifications based on new information on status of stocks and a non-discretionary formula, followed by publication of proposed and final specifications based on December Council recommendations. This alternative would use new ABC recommendations from the December Council meeting to establish non-discretionary interim TACs.

Alternative 4: Eliminate publication of interim specifications. Rollover previous year's specifications during interim period. This alternative has two sub-alternatives; (a) Rollover followed by publication of proposed and final specifications or (b) rollover followed by publication of interim final specifications with comment period.

Alternative 5: Abolish TAC Reserves

Table A summarizes the potential advantages and disadvantages of each alternative. No significant environmental impacts are expected as a result of adopting any of the alternatives. NMFS concludes that any of the considered actions could have a significant impact on a substantial number of small entities as defined under the Regulatory Flexibility Act. Environmental impacts and socioeconomic impacts resulting from changing fishing patterns as a result of the preferred alternative would be assessed annually in the EA/RIR/IRFA that accompanies the final TAC/PSC specifications.

At this time, a preferred alternative has not been identified. NMFS seeks public comments on these alternatives and on the potential impacts on fishery participants and the environment.

Table A. Summary of Alternatives Relative to the Status Quo

Alternative	Benefits	Disadvantages
Alternative 1 (Status Quo)		High administrative costs Proposed specs are misleading Economic constraints on early season high value fisheries from interim specifications
Alternative 2 (Proposed and final specs) 2A: Based on previous year's data 2B: Alter fishing year calendar 2C: Conduct surveys earlier in year	Lowers administrative costs because no interim specs needed Better planning for season by participants because final specs out before fishing year begins Opportunities for meaningful public comment on proposed specs No constraints on early season fisheries due to interim specifications	2A: Best 'available' science ? 2B: Could disadvantage high value fisheries; might require changes in fishing patterns and/or changes in seasonal apportionments, possible environmental impacts of those changes 2C: Safety concerns, decreased reliability of data, increased administrative costs associated with research
Alternative 3 (Non-discretionary interim specs, followed by proposed and final specs)	Opportunities for meaningful public comment on proposed specs Best available science Lesser constraints on early season fisheries due to interim specifications	Lower administrative costs relative to the status quo
Alternative 4 (Rollover of TACs and PSCs) 4A: followed by proposed and final specs 4B: followed by interim final rule	Lowers administrative costs because no interim specs needed Lesser constraints on early season fishery because rollover is less restrictive 4A: Opportunity for meaningful public comment on proposed specs 4B: Lowest administrative costs of any alternative	4A: Higher administrative costs than 4B 4B: Reduced opportunities for public comment to NMFS prior to approval of final specifications
Alternative 5 (Abolish TAC Reserves)	Lowers administrative costs Reduces confusion regarding available TAC	

Proposed Amendments 48/48



Revisions to the TAC-Setting Process

Current TAC-Setting Process

- Summer: Surveys
- September: Plan Team Meeting
- October: Proposed/interim spec recommendations
- November: New information on status of stocks
- December: Final spec recommendations
- February: Final specifications published

Problems with Current Process

- Proposed/interim specs issued prior to new information
- Lack of opportunity for informed comment on final specifications
- Overharvest of interim specs (25% of annual specs) & closures could disrupt fishery
- High administrative costs

Objectives

- Base management on best available info.
- Provide flexibility to respond to new info.
- Minimize unnecessary disruption to fisheries
- Provide opportunity for meaningful public comment
- Promote administrative efficiency

Alternatives

- 1 Status Quo
- 2 No interim specs; Proposed and final specs prior to start of fishing year
- 3 Interim specs using nondiscretionary formula; Proposed/final specs after December Council meeting
- 4 Interim specs using rollover; Proposed/final specs or interim final specs after Dec. meeting
- 5 Abolish TAC Reserves

Alt. 2: Proposed and Final Specs

- Publish proposed and final specs before fishing year starts;
- 2A. Base specs on previous year's survey data
 - 2B. Delay fishing year calendar
 - 2C. Conduct surveys earlier in calendar year

Alt. 3: Interim Specs Using Formula

Interim TAC ₂₀₀₀ =

$$ABC_{2000}/ABC_{1999} * 1999 \text{ TAC}$$

- Interim TAC = Calculated TAC using formula or Council-recommended TAC, whichever is lower

Alternative 3

- Proposed and final specs based on December Council recommendations
- Interim PSC limits = Adjustments based on new abundance data; rollover of apportionments
- Proposed specs + 15-day comment period; Final specs effective by May 1

Alt. 4: Rollover of Specs

- Interim specs = Previous year's specs

Proposed (+ comment period) and final specs issued
by May 1

-OR-

Interim Final Specs issued by May 1 followed by
comment period

- Final specs based on Dec. Council recommendations

Alt. 5: Abolish TAC Reserves

- Reduces confusion regarding available TAC
- Promotes administrative efficiency

- Could be considered under all alternatives

Summary				
Objective	S. Quo	Alt 2	Alt 3	Alt 4
Uses best available info.	Interim- no Prop. - no Final- no	2A: no 2B: yes, but 2C: yes, but	Interim - yes Prop. - yes Final - yes	Interim: no Prop. - yes (Interim) Final-yes
Avoids disruption to fishery?	No, disruption possible	2A: yes 2B: possibly 2C: yes	Disruption less likely	Disruption less likely
Meaningful comment	No	Yes	Yes	Yes
Lowers admin. costs?	No	Yes	Yes, but not as low as others	Yes

Beth Stewart
 Beth Stewart
 AEB

Years of Participation by Vessels with Pacific Cod Jig History in Area 610: 1995 - 1998

Year Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
1995 Summary						
0-60 Feet	12	6	2	3	1	3
1996 Summary						
0-60 Feet	13	4	5	3	1	3
1997 Summary						
0-60 Feet	33	18	10	4	1	11
61-99 Feet	1	1				1
1998 Summary						
0-60 Feet	28	15	7	5	1	12
95-98 Summary						
0-60 Feet	71	44	12	5	1	20
61-99 Feet	1	1				1

Landings of Jig Vessels with Pacific Cod Jig History in Area 610: 1995 - 1998

Species	Area	Year	Gear	Length Category	Pounds Landed	# of Vessels
Pacific Cod	610	1995	Jig	0-60 Feet	0 - 10,000 lbs	9
Pacific Cod	610	1995	Jig	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1996	Jig	0-60 Feet	0 - 10,000 lbs	10
Pacific Cod	610	1996	Jig	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1997	Jig	0-60 Feet	0 - 10,000 lbs	24
Pacific Cod	610	1997	Jig	0-60 Feet	10,001 - 50,000 lbs	9
Pacific Cod	610	1997	Jig	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1998	Jig	0-60 Feet	0 - 10,000 lbs	18
Pacific Cod	610	1998	Jig	0-60 Feet	10,001 - 50,000 lbs	7
Pacific Cod	610	1998	Jig	0-60 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1998	Jig	0-60 Feet	100,001 - 8,000,000 lbs	*

Years of Participation by Vessels with Pacific Cod Longline History in Area 610: 1995 - 1998

1995 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	11	9	1	1		5
61-99 Feet	10	6	3	1		
100-250 Feet	6		2	1	3	
1996 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	10	7	2	1		5
61-99 Feet	8	5	2	1		
100-250 Feet	6	1	1	1	3	
1997 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	16	10	6			8
61-99 Feet	4	2	1	1		1
100-250 Feet	6	1	2		3	
1998 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	13	7	5	1		5
61-99 Feet	1	1				
100-250 Feet	6	1	1	1	3	
95-98 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	41	33	7	1	0	18
61-99 Feet	18	14	3	1	0	1
100-250 Feet	10	3	3	1	3	

Landings of Longline Vessels with Pacific Cod Longline History in Area 610: 1995 - 1998

Species	Area	Year	Gear	Length Category	Pounds Landed	# of Vessels
Pacific Cod	610	1995	Longline	0-60 Feet	0 - 10,000 lbs	10
Pacific Cod	610	1995	Longline	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1995	Longline	61-99 Feet	0 - 10,000 lbs	8
Pacific Cod	610	1995	Longline	61-99 Feet	100,001 - 8,000,000 lbs	*
Pacific Cod	610	1995	Longline	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1995	Longline	100-250 Feet	100,001 - 8,000,000 lbs	5
Pacific Cod	610	1996	Longline	0-60 Feet	0 - 10,000 lbs	5
Pacific Cod	610	1996	Longline	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1996	Longline	0-60 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1996	Longline	0-60 Feet	100,001 - 8,000,000 lbs	*
Pacific Cod	610	1996	Longline	61-99 Feet	0 - 10,000 lbs	5
Pacific Cod	610	1996	Longline	61-99 Feet	100,001 - 8,000,000 lbs	3
Pacific Cod	610	1996	Longline	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1996	Longline	100-250 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1996	Longline	100-250 Feet	100,001 - 8,000,000 lbs	4
Pacific Cod	610	1997	Longline	0-60 Feet	0 - 10,000 lbs	15
Pacific Cod	610	1997	Longline	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1997	Longline	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1997	Longline	61-99 Feet	100,001 - 8,000,000 lbs	*
Pacific Cod	610	1997	Longline	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1997	Longline	100-250 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1997	Longline	100-250 Feet	100,001 - 8,000,000 lbs	4
Pacific Cod	610	1998	Longline	0-60 Feet	0 - 10,000 lbs	12
Pacific Cod	610	1998	Longline	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1998	Longline	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1998	Longline	61-99 Feet	100,001 - 8,000,000 lbs	*
Pacific Cod	610	1998	Longline	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1998	Longline	100-250 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1998	Longline	100-250 Feet	100,001 - 8,000,000 lbs	*

Years of Participation by Vessels with Pacific Cod Pot History in Area 610: 1995 - 1998

Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
1995 Summary						
0-60 Feet	37	7	5	6	19	21
61-99 Feet	19	10	2	3	4	4
100-250 Feet	18	9	5	4		
1996 Summary						
0-60 Feet	35	2	6	8	19	23
61-99 Feet	16	5	5	2	4	2
100-250 Feet	20	7	6	7		
1997 Summary						
0-60 Feet	44	7	12	6	19	27
61-99 Feet	15	4	6	3	2	1
100-250 Feet	15	4	4	5	2	1
1998 Summary						
0-60 Feet	61	20	15	7	19	41
61-99 Feet	13	5	5	1	2	
100-250 Feet	20	7	6	5	2	1
95-98 Summary						
0-60 Feet	84	37	19	9	19	49
61-99 Feet	38	23	10	3	2	2
100-250 Feet	44	26	9	7	2	1

Landings of Pot Vessels with Pacific Cod Pot History in Area 610: 1995 - 1998

Species	Area	Year	Gear	Length Category	Pounds Landed	# of Vessels
Pacific Cod	610	1995	Pot	0-60 Feet	0 - 10,000 lbs	5
Pacific Cod	610	1995	Pot	0-60 Feet	10,001 - 50,000 lbs	11
Pacific Cod	610	1995	Pot	0-60 Feet	50,001 - 100,000 lbs	11
Pacific Cod	610	1995	Pot	0-60 Feet	100,001 - 8,000,000 lbs	10
Pacific Cod	610	1995	Pot	61-99 Feet	10,001 - 50,000 lbs	4
Pacific Cod	610	1995	Pot	61-99 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1995	Pot	61-99 Feet	100,001 - 8,000,000 lbs	13
Pacific Cod	610	1995	Pot	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1995	Pot	100-250 Feet	10,001 - 50,000 lbs	7
Pacific Cod	610	1995	Pot	100-250 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1995	Pot	100-250 Feet	100,001 - 8,000,000 lbs	6
Pacific Cod	610	1996	Pot	0-60 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1996	Pot	0-60 Feet	10,001 - 50,000 lbs	11
Pacific Cod	610	1996	Pot	0-60 Feet	50,001 - 100,000 lbs	11
Pacific Cod	610	1996	Pot	0-60 Feet	100,001 - 8,000,000 lbs	11
Pacific Cod	610	1996	Pot	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1996	Pot	61-99 Feet	10,001 - 50,000 lbs	4
Pacific Cod	610	1996	Pot	61-99 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1996	Pot	61-99 Feet	100,001 - 8,000,000 lbs	9
Pacific Cod	610	1996	Pot	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1996	Pot	100-250 Feet	10,001 - 50,000 lbs	5
Pacific Cod	610	1996	Pot	100-250 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1996	Pot	100-250 Feet	100,001 - 8,000,000 lbs	10
Pacific Cod	610	1997	Pot	0-60 Feet	0 - 10,000 lbs	7
Pacific Cod	610	1997	Pot	0-60 Feet	10,001 - 50,000 lbs	6
Pacific Cod	610	1997	Pot	0-60 Feet	50,001 - 100,000 lbs	5
Pacific Cod	610	1997	Pot	0-60 Feet	100,001 - 8,000,000 lbs	26
Pacific Cod	610	1997	Pot	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1997	Pot	61-99 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1997	Pot	61-99 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1997	Pot	61-99 Feet	100,001 - 8,000,000 lbs	10

Pacific Cod	610	1997	Pot	100-250 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1997	Pot	100-250 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1997	Pot	100-250 Feet	100,001 - 8,000,000 lbs	11
Pacific Cod	610	1998	Pot	0-60 Feet	10,001 - 50,000 lbs	10
Pacific Cod	610	1998	Pot	0-60 Feet	50,001 - 100,000 lbs	16
Pacific Cod	610	1998	Pot	0-60 Feet	100,001 - 8,000,000 lbs	33
Pacific Cod	610	1998	Pot	61-99 Feet	10,001 - 50,000 lbs	4
Pacific Cod	610	1998	Pot	61-99 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1998	Pot	61-99 Feet	100,001 - 8,000,000 lbs	6
Pacific Cod	610	1998	Pot	100-250 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1998	Pot	100-250 Feet	10,001 - 50,000 lbs	5
Pacific Cod	610	1998	Pot	100-250 Feet	50,001 - 100,000 lbs	4
Pacific Cod	610	1998	Pot	100-250 Feet	100,001 - 8,000,000 lbs	9

Years of Participation by Vessels with Pacific Cod and Pollock Trawl History in Area 610: 1995 - 1998

1995 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	42	1	1	2	38	38
61-99 Feet	26	8	5	5	8	5
100-250 Feet	53	3	20	17	13	
1996 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	41		1	2	38	38
61-99 Feet	12	1		3	8	4
100-250 Feet	35	1	10	11	13	
1997 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	42	2		2	38	37
61-99 Feet	14	1	3	3	7	4
100-250 Feet	52	6	16	16	14	1
1998 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	42	4			38	37
61-99 Feet	22	10	2	3	7	4
100-250 Feet	38		7	17	14	1
95-98 Summary	No. of Vessels	No. with 1 Year	No. with 2 Years	No. with 3 Years	No. with 4 Years	No. with Other Gear Types
0-60 Feet	48	7	1	2	38	39
61-99 Feet	35	20	4	4	7	5
100-250 Feet	73	9	29	21	14	1

Landings of Trawl Vessels with Pacific Cod Trawl History in Area 610: 1995 - 1998

Species	Area	Year	Gear	Length Category	Pounds Landed	# of Vessels
Pacific Cod	610	1995	Trawl	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1995	Trawl	0-60 Feet	100,001 - 8,000,000 lbs	41
Pacific Cod	610	1995	Trawl	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1995	Trawl	61-99 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1995	Trawl	61-99 Feet	50,001 - 100,000 lbs	4
Pacific Cod	610	1995	Trawl	61-99 Feet	100,001 - 8,000,000 lbs	17
Pacific Cod	610	1995	Trawl	100-250 Feet	0 - 10,000 lbs	22
Pacific Cod	610	1995	Trawl	100-250 Feet	10,001 - 50,000 lbs	4
Pacific Cod	610	1995	Trawl	100-250 Feet	100,001 - 8,000,000 lbs	16
Pacific Cod	610	1996	Trawl	0-60 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1996	Trawl	0-60 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1996	Trawl	0-60 Feet	100,001 - 8,000,000 lbs	39
Pacific Cod	610	1996	Trawl	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1996	Trawl	61-99 Feet	100,001 - 8,000,000 lbs	8
Pacific Cod	610	1996	Trawl	100-250 Feet	0 - 10,000 lbs	9
Pacific Cod	610	1996	Trawl	100-250 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1996	Trawl	100-250 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1996	Trawl	100-250 Feet	100,001 - 8,000,000 lbs	7
Pacific Cod	610	1997	Trawl	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1997	Trawl	0-60 Feet	100,001 - 8,000,000 lbs	41
Pacific Cod	610	1997	Trawl	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1997	Trawl	61-99 Feet	100,001 - 8,000,000 lbs	12
Pacific Cod	610	1997	Trawl	100-250 Feet	0 - 10,000 lbs	9
Pacific Cod	610	1997	Trawl	100-250 Feet	10,001 - 50,000 lbs	7
Pacific Cod	610	1997	Trawl	100-250 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1997	Trawl	100-250 Feet	100,001 - 8,000,000 lbs	19
Pacific Cod	610	1998	Trawl	0-60 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1998	Trawl	0-60 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1998	Trawl	0-60 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1998	Trawl	0-60 Feet	100,001 - 8,000,000 lbs	38

Pacific Cod	610	1998	Trawl	61-99 Feet	0 - 10,000 lbs	*
Pacific Cod	610	1998	Trawl	61-99 Feet	10,001 - 50,000 lbs	5
Pacific Cod	610	1998	Trawl	61-99 Feet	50,001 - 100,000 lbs	*
Pacific Cod	610	1998	Trawl	61-99 Feet	100,001 - 8,000,000 lbs	14
Pacific Cod	610	1998	Trawl	100-250 Feet	0 - 10,000 lbs	26
Pacific Cod	610	1998	Trawl	100-250 Feet	10,001 - 50,000 lbs	*
Pacific Cod	610	1998	Trawl	100-250 Feet	100,001 - 8,000,000 lbs	8