MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
8 HOURS
(For all C-7 items)

DATE: May 20, 2002

SUBJECT: Improved Retention and Utilization (IR/IU) Adjustments

ACTION REQUIRED

Initial review of revised analysis for proposed IR/IU adjustments for flatfish.

BACKGROUND

In April the Council reviewed an analysis which included: AFA processing sideboards based on processing history; proposed adjustments to the IR/IU requirements for flatfish scheduled for implementation in January 2003, as a potential alternative to level the playing field between AFA and non-AFA processors; further development of a potential Halibut Mortality Avoidance Program (HMAP); and, potential reduction in the BSAI trawl halibut PSC cap. At that meeting the Council bifurcated the IR/IU issue as a separate analysis from HMAP and further bycatch controls, and postponed further consideration of processing sideboards based on catch history. The revised analysis was mailed out on May 22, and is scheduled for initial review at this meeting, final action in October. The analysis attempts to address issues raised by the SSC, as well as changes and additional alternatives included by the Council. Additional options by the Council include delaying implementation of IR/IU requirements for flatfish by one to three years, and exempting 'fisheries' with less than 5% bycatch of relevant flatfish species.

Northern Economics, Inc. conducted the analyses for this project under contract to the Council, and will present the revised analysis. Further work on HMAP or other bycatch management approaches will be the subject of a separate initiative and a new Bycatch Committee to be appointed by the Council, with a report in October.

Protecting Non-AFA Processors with Revisions to Regulations for IRIU Flatfish

NORTHERN ECONOMICS INC.

June 2002

Presentation Outline

- Changes from April Draft
- Impacts of IRIU Alternatives
  - Impacts of Status Quo
  - Impacts of Alternative Retention Rules
  - Impacts of Delayed Implementation
  - Impacts of a 5 Percent Bycatch Exemption

Changes from April Draft

- Sections specific to processing sideboards deleted
- Sections specific to Halibut Mortality Assessment Program deleted
- Sections specific to reductions in Halibut PSC cut
- Assessment of 1, 2, or 3-year delay added
- Assessment of 5% exemption added
- Tables showing bycatch and discard by fishery and sector including AFA sectors added
- Section on pros and cons of multi-species fisheries added
- Assessment of disposition costs low-value products added

Document Map

- Executive Summary
- Chapter 1: Introduction and Overview
- Chapter 2: Existing Conditions
- Chapter 3: Assessment of Alternatives
- Chapter 4: NEPA Compliance—Will be completed following June Meeting
- Appendices: Additional Catch, Bycatch, Discard and Production Details by Sector

Sectors Analyzed for Economic Impacts of IRIU Rules

- BSAI Rock Sole:
  - RSOL Target: HT-CP
  - PCOD Target: ST-CP, FT-CP, HT-CP, BSP-CP, APAI-SP
  - Additionally, HT-CP for OFLT, PLCK, YSOL
- BSAI Yellowfin Sole:
  - YSOL Target: ST-CP, HT-CP,
  - Additionally, HT-CP for OFLT, RSOL.
- GOA Shallow Water Flatfish
  - SFLT Target: HT-CP, K-SP

Summary of Anecdotal Evidence

- Additional Retention of IRIU Flatfish will decrease revenue per trip and increase costs with little or no economic value earned from the additional retention
- Under the Status Quo, the majority of HT-CP participants indicate they would exit from RSOL and YSOL target fisheries
- Participants who exit from IRIU flatfish fisheries will Increase participation in PCOD, AMCK, and ROCK.
- 20-25 Percent of HT-CP operators indicate they will cease North Pacific operations under the IRIU Status Quo

BSAI RSOL Status Quo Impact Analysis Summary for the HT-CP Sector

2000	HT-CP				
	OFLT	PCOD	PLCK	RSOL	YSOL
Participants	24	22	9	23	23
Wholesale Value ($millions)	23.35	21.09	1.06	21.30	31.82
Percent of Sector Total Value	15.42	13.92	0.70	14.06	21.00
Product tons (1000's)	15.79	9.45	1.15	12.09	37.04
RSOL Catch Tons (1000's)	2.41	6.35	0.02	28.58	6.62
Total Retained Catch Tons (1000's)	28.80	18.83	2.30	24.29	71.82
RSOL Discard Tons (1000's)	1.43	3.87	0.01	14.43	3.80
RSOL Discard % of RSOL Catch	59.33	60.93	66.35	50.50	57.36
RSOL Discard % of Total Catch	3.45	18.85	0.61	59.41	5.29
RSOL DPP	9.04	40.94	1.22	119.39	10.25

Source: NPFMC Sector Profiles Database, 2001

BSAI RSOL Status Quo Impact Analysis Summary for Sectors Other Than HT-CP

2000	ST-CP PCOD*	FT-CP PCOD	BSP-SP PCOD	APAI_SP PCOD
Participants	3	3	5	8
Wholesale Value ($millions)	1.36	3.78	48.25	8.59
Percent of Sector Total Value	0.49	4.69	12.36	18.40
Product tons (1000's)	0.54	0.97	14.57	2.85
RSOL Catch Tons (1000's)	0.12	0.16	1.26	0.15
Total Retained Catch Tons (1000's)	1.91	4.22	36.92	5.16
RSOL Discard Tons (1000's)	0.11	0.14	1.26	0.14
RSOL Discard % of RSOL Catch	94.21	87.02	99.71	87.88
RSOL Discard % of Total Catch	5.92	3.37	3.20	0.82
RSOL DPP	21.12	14.70	8.63	4.76

Source: NPFMC Sector Profiles Database, 2001

* 1999 data is used instead of 2000 data due to confidentiality restrictions.

BSAI YSOL Status Quo Impact Analysis Summary

2000	ST-CP YSOL	HT-CP CFLT	HT-CP PCOD	HT-CP RSOL	HT-CP YSOL
Participants	4	24	22	23	23
Wholesale Value ($millions)	2.44	23.35	21.09	21.30	31.82
Percent of Sector Total Value	0.76	15.42	13.92	14.06	21.00
Product Tons (1000's)	4.14	15.79	9.45	12.09	37.04
YSOL Catch Tons (1000's)	7.27	6.56	1.07	2.59	62.68
Total Retained Catch Tons (1000's)	8.97	28.80	18.83	24.29	71.82
YSOL Discard Tons (1000's)	0.07	1.67	0.81	0.69	9.53
YSOL Discard % of YSOL Catch	0.98	25.50	75.88	26.49	15.20
YSOL Discard % of Total Catch	0.79	4.05	3.96	2.83	13.27
YSOL DPP	1.72	10.60	8.61	5.68	25.73

Source: NPFMC Sector Profiles Database, 2001

GOA SFLT Status Quo Impact Analysis Summary

2000	HT-CP PCOD	HT-CP SFLT**	K-SP SFLT
Participants	22	5	7
Wholesale Value ($millions)	2.38	0.14	8.27
Percent of Sector Total Value	1.57	0.12	9.23
Product Tons (1000's)	1.02	0.08	2.42
SFLT Catch Tons (1000's)	0.36	0.08	4.72
Total Retained Catch Tons (1000's)	1.70	0.14	7.46
SFLT Discard Tons	0.24	0.003	0.14
SFLT Discard % of SFLT Catch	67.52	3.28	3.02
SFLT Discard % of Total Catch	1.19	1.86	1.91
SFLT DPP	24.05	3.28	5.91

Source: NPFMC Sector Profiles Database, 2001

** 1998 data is used instead of 2000 data due to confidentiality restrictions

Summary of Findings and Conclusions

- Historical data show that the status quo may cause scale impacts greater than 10 percent in all affected sectors and target fisheries and for each of the three IRIU flatfish species
- Scale of impacts has shown a decreasing trend in recent years in several target fisheries
- The HT-CP Sector will experience scale of impacts greater than 10 percent in fisheries that generate 65 percent of their revenue
- 50 percent retention in RSOL will reduce the scale of impacts to between 5 and 10 percent based on recent years data
- 75 percent retention in YSOL will reduce the scale of impacts to approximately 5 percent based on recent years data
- 90 percent retention in SFLT will reduce the scale of impacts to below 5 percent for all but the HT-CP PCOD target fishery

NMFS Position on Enforceability of Partial Retention Alternatives

- Compliance and Enforcement Problems
  - Inability to accurately measure species specific retention rates
  - Inappropriateness of basing retention rate sampling on observer species composite samples
  - Incomplete observer coverage
  - Undue pressure on observers
- Enforcement and Compliance Principles to be Met
  - Clear standards for vessel operators to determine compliance
  - A means to monitor and verify compliance

Analysis of Delayed Implementation

- **Potential to Realize Benefits and Costs Increases with Length of Delay**
- **Benefits Include**
  - **Economic Value from Continued Operation**
  - **Allows Time to Consider Rationalization**
  - **Decreasing Discard Trends May Continue**
  - **Technological Developments may occur during the delay**
  - **Viable Enforcement Methods Could be Developed**
  - **Discard Mortality Assessments Could be Conducted**

Analysis of Delayed Implementation

- **Costs Include**
  - **Administrative Costs**
    - Analysis, Studies, Review
    - Working groups
    - Council Consideration of Findings
  - **Continuation of Discards**
    - Present levels could continue
  - **Negative Public Perceptions**

Analysis of 5 Percent Bycatch Exemption

- **Defining Bycatch**
  - **NPFMC says bycatch = incidental catch**
  - **MSFCMA says bycatch = discards**
- **Defining Fisheries**
  - **Define by Official Allocation in Reg's (Area, Species, Gear, CDQ)**
  - **Define by sector or other means within official allocations (eg. AFA Trawl CP Pacific cod and non-AFA Trawl CP Pacific cod)**
- **Defining Bycatch Rate Measurement Period**
  - **Most recent year**
  - **Weighted average of most recent three years**
  - **Weighted average from 1995-2001**

Bycatch as a Percent of Total Groundfish Catch in Aleutian Islands Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in Aleutian Island Subarea Fisheries									
AI IFQ Sablefish	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
AI IFQ CDQ Sablefish	NA	NA	0.0	0.0	0.0	0.0	NA	0.0	0.0
AI TWL Sablefish	0.0	NA	NA	NA	NA	NA	NA	0.0	NA
AI Rockfish–All Gears	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AI Rockfish–All Gears CDQ	NA	NA	0.0	0.1	0.2	0.0	NA	0.1	0.1
AI Greenland Turbot–All gears	0.1	0.0	0.0	0.1	0.0	0.0	NA	0.0	0.0
AI CDQ Greenland Turbot–All gears	NA	NA	0.0	0.0	NA	0.0	NA	0.0	0.0
AI Atka Mackerel–All gears	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
AI CDQ Atka Mackerel–All gears	NA	NA	NA	0.2	0.1	0.0	NA	0.1	0.0
AI Pollock Mothership–All gears	NA	0.0	NA	NA	NA	NA	NA	0.0	NA
AI Pollock Catcher Processor–All gears	0.0	0.0	0.0	0.0	0.0	NA	NA	0.0	0.0
AI Pollock Shoreside–All gears	0.0	0.0	0.0	0.0	NA	NA	NA	0.0	NA
AI CDQ Pollock–All gears and processor	0.0	0.0	0.0	0.0	NA	NA	NA	0.0	NA

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
3) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
4) Averages shown in the last two columns are weighted averages of available data.

Bycatch as a Percent of Total Groundfish Catch in Bering Sea Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in Bering Sea Subarea Fisheries									
BS IFQ Sablefish	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BS IFQ CDQ Sablefish	NA	NA	0.0	0.0	0.0	0.0	NA	0.0	0.0
BS TWL Sablefish	0.0	0.2	NA	1.6	NA	NA	NA	0.1	NA
BS TWL CDQ Sablefish	NA	NA	NA	0.0	NA	NA	NA	0.0	NA
BS Rockfish--All Gears	0.0	0.1	4.5	3.1	0.0	1.0	0.0	0.5	0.3
BS Rockfish--All Gears CDQ	NA	NA	0.0	NA	NA	NA	NA	0.0	NA
BS Greenland Turbot--All gears	0.3	0.1	0.2	0.2	1.0	0.1	0.2	0.3	0.5
BS CDQ Greenland Turbot--All gears	NA	NA	0.0	0.3	0.0	0.0	NA	0.1	0.0
BS Atka Mackerel--All gears	NA	0.1	NA	2.6	1.8	0.9	NA	1.6	1.7
BS CDQ Atka Mackerel--All gears	NA	NA	NA	NA	0.7	NA	NA	0.7	0.7
BS Pollock Mothership--All gears	0.1	0.1	0.1	0.0	0.2	0.3	0.1	0.1	0.2
BS Pollock Catcher Processor--All gears	0.4	0.6	0.4	0.4	0.3	0.7	0.2	0.4	0.4
BS Pollock Shoreside--All gears	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
BS CDQ Pollock--All gears and processors	0.2	0.3	0.0	0.0	0.2	0.4	NA	0.2	0.3

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
3) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
4) Averages shown in the last two columns are weighted averages of available data.

Bycatch as a Percent of Total Groundfish Catch in BSAI-Wide Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in BSAI-wide Fisheries									
BSAI Pacific Cod--Freezer Longliner	0.1	0.2	0.2	0.3	0.2	0.3	0.5	0.3	0.4
BSAI Pacific Cod--Longline CV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BSAI Pacific Cod--Trawl CP	14.2	12.9	15.2	11.6	14.5	22.1	19.3	15.3	18.2
BSAI Pacific Cod--Trawl CV	10.9	9.5	9.5	6.4	10.2	3.7	3.8	8.4	6.3
BSAI Pacific Cod—Pot	0.4	0.8	0.3	0.8	0.4	0.4	0.3	0.5	0.4
BSAI Pacific Cod—Jig	NA	NA	0.3	NA	16.7	0.0	0.0	0.6	0.8
BSAI Pacific Cod—CDQ	2.8	NA	0.0	0.1	0.6	0.1	NA	0.3	0.3
BSAI Other Groundfish--All Gears	0.0	0.0	2.6	0.0	0.0	0.0	NA	0.1	0.0
BSAI Other Flatfish—All Gears	41.8	36.0	57.7	34.0	5.7	13.2	NA	36.8	9.8
BSAI CDQ Other Flatfish--All Gears	NA	NA	NA	NA	0.6	NA	NA	0.6	0.6
BSAI Flathead Sole—All Gears	19.8	27.3	16.8	23.6	19.5	21.9	NA	21.8	20.8
BSAI CDQ Flathead Sole--All Gears	NA	NA	NA	23.7	9.3	25.1	NA	18.4	16.5
BSAI Arrowtooth--All Gears	0.8	11.9	0.6	5.0	2.8	3.0	1.5	2.8	2.2
BSAI CDQ Arrowtooth--All Gears	NA	NA	NA	0.0	0.8	1.6	NA	0.7	0.9

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
3) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
4) Averages shown in the last two columns are weighted averages of available data.

Bycatch as a Percent of Total Groundfish Catch in Western GOA Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in Western Gulf Fisheries									
WG IFQ Sablefish	0.5	0.0	0.1	0.0	0.7	0.1	0.0	0.2	0.3
WG TWL Sablefish	0.0	NA	NA	NA	NA	0.9	NA	0.8	0.9
WG Rockfish–All Gears	0.0	0.3	0.5	0.0	0.0	0.2	0.4	0.2	0.1
WG Rex Sole–All gears	0.0	0.1	1.4	0.4	0.9	0.8	0.1	0.7	0.6
WG Offshore Pacific Cod–All gears	1.1	0.3	0.5	1.3	0.1	15.1	1.0	0.4	4.9
WG Inshore Pacific Cod–All gears	1.0	0.5	0.8	1.0	0.8	0.7	0.8	0.1	0.8
WG Offshore Pollock–All gears	0.4	0.0	2.0	0.0	0.0	NA	NA	0.2	0.0
WG Inshore Pollock—All gears	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
WG Flathead Sole–All gears	1.4	18.5	1.4	3.1	NA	10.8	8.2	4.2	8.4
WG Deep-water Flatfish–All gears	0.0	NA	4.1	NA	0.0	NA	NA	0.2	0.0
WG Atka Mackerel–All gears	NA	1.7	NA	NA	NA	NA	NA	1.7	NA
WG Arrowtooth–All gears	NA	4.0	NA	0.0	0.4	0.6	0.2	0.5	0.4

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
3) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
4) Averages shown in the last two columns are weighted averages of available data.

Bycatch as a Percent of Total Groundfish Catch in Central GOA Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in Central Gulf Fisheries									
CG IFQ Sablefish	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
CG TWL Sablefish	0.0	6.0	NA	NA	NA	0.0	NA	1.8	0.0
CG Rockfish–All Gears	2.2	2.4	0.6	0.6	0.3	1.8	2.1	1.1	0.7
CG Rex Sole—All gears	0.4	0.2	0.6	0.2	0.1	0.5	0.1	0.3	0.2
CG Offshore Pacific Cod–All gears	0.7	0.2	7.6	0.9	0.3	0.6	1.4	0.1	0.7
CG Inshore Pacific Cod—All gears	3.3	3.3	6.7	3.6	2.8	1.6	6.0	0.6	3.3
CG Offshore Pollock–All gears	0.0	0.0	NA	NA	NA	6.9	NA	0.0	6.9
CG Inshore Pollock–All gears	0.1	0.6	0.3	0.0	0.1	0.1	0.4	0.0	0.2
CG Flathead Sole–All gears	2.8	3.2	4.3	16.5	NA	0.1	9.4	4.5	8.2
CG Deep-water Flatfish—All gears	6.0	9.4	5.4	2.6	1.6	9.3	1.9	5.1	3.0
CG Atka Mackerel–All gears	0.0	NA	NA	NA	NA	NA	NA	0.0	NA
CG Arrowtooth–All gears	6.0	2.2	5.4	0.4	0.5	4.8	10.1	3.8	4.4

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
3) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
4) Averages shown in the last two columns are weighted averages of available data.

Bycatch as a Percent of Total Groundfish Catch in Eastern GOA Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in Eastern Gulf Fisheries									
EG IFQ Sablefish	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EG TWL Sablefish	NA	0.0	NA	NA	0.0	NA	NA	0.0	0.0
EG Rockfish–All Gears	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
EG Rex Sole–All gears	0.4	1.3	0.6	1.3	NA	NA	NA	0.9	NA
EG Offshore Pacific Cod–All gears	NA	NA	0.0	NA	NA	NA	NA	0.0	NA
EG Inshore Pacific Cod–All gears	0.0	0.0	1.1	[redacted]	1.4	0.0	0.0	0.0	0.6
EG Offshore Pollock–All gears	0.0	NA	0.6	NA	NA	NA	NA	0.0	NA
EG Inshore Pollock–All gears	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EG Flathead Sole–All gears	NA	1.8	[redacted]	NA	NA	3.9	NA	2.0	3.9
EG Deep-water Flatfish—All gears	0.2	0.1	0.3	0.0	0.6	1.2	NA	0.4	0.7
EG Arrowtooth–All gears	0.0	0.5	NA	NA	0.3	0.5	NA	0.3	0.3
Bycatch of IRIU Flatfish as Percent of Total Groundfish in Gulf-wide Fisheries									
GOA Other Groundfish–All Gears	0.0	0.0	[redacted]	2.1	[redacted]	0.4	0.0	3.9	4.6

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
3) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
4) Averages shown in the last two columns are weighted averages of available data.

Summary and Conclusions of 5 Percent Bycatch Exemption Analysis

- Exemption does not apply to IRIU flatifsh target fisheries
- Fisheries that would <u>not</u> be exempted
  - BSAI Trawl CV and Trawl CP PCOD (non-CDQ)
  - BSAI OFLT and FSOL (non-CDQ)
  - BSAI CDQ FSOL
  - WG and CG FSOL
  - CG Offshore Pollock

Enforcement Issues of the 5 Percent Bycatch Exemption

- **Exempt to Non-Exempt IRIU Fishery Switching**
  - **Vessel clearance from NMFS**
  - **Inspection requirement**
  - **Offloading requirement**

Bycatch as a % of Total GFSH in Trawl BSAI PCOD Fisheries –AFA/Non-AFA (1 of 2)

	1995	1996	1997	1998	1999	2000	Average 1995-2000	Average 1999-2000
AFA Catcher Processors (Excludes MV Ocean Peace) with Trawl Gear								
Total Groundfish Catch (1,000 mt)	8.3	10.6	15.2	8.4	12.9	4.9	10.0	8.9
Total IRIU Flatfish Catch (1,000 mt)	0.2	0.4	0.4	0.2	0.4	0.2	0.3	0.3
Total IRIU Flatfish Discards (1,000 mt)	0.2	0.4	0.4	0.2	0.4	0.1	0.3	0.3
IRIU Flatfish Catch--Percent of Total	2.9	3.9	2.7	2.5	3.1	3.4	3.0	3.2
IRIU Flatfish Discards--Percent of IRIU Flatfish	99.8	97.3	96.5	94.6	98.3	87.1	96.4	95.0
AFA Motherships with Trawl Gear								
Total Groundfish Catch (1,000 mt)	1.0	2.7	8.0	0.0	0.0	0.0	1.9	0.0
Total IRIU Flatfish Catch (1,000 mt)	0.1	0.2	1.1	0.0	0.0	0.0	0.2	0.0
Total IRIU Flatfish Discards (1,000 mt)	0.1	0.2	1.1	0.0	0.0	0.0	0.2	0.0
IRIU Flatfish Catch--Percent of Total	9.2	6.8	13.1	NA	NA	NA	11.7	NA
IRIU Flatfish Discards--Percent of IRIU Flatfish	100.0	99.9	100.0	NA	NA	NA	100.0	NA
AFA Shore Plants and Floating Processors with Trawl Gear								
Total Groundfish Catch (1,000 mt)	55.6	67.7	64.9	39.1	41.0	35.3	50.6	38.1
Total IRIU Flatfish Catch (1,000 mt)	6.0	6.6	5.9	2.5	4.2	1.4	4.4	2.8
Total IRIU Flatfish Discards (1,000 mt)	5.6	6.2	5.9	2.5	4.2	1.4	4.3	2.8
IRIU Flatfish Catch--Percent of Total	10.8	9.7	9.2	6.4	10.2	4.0	8.8	7.3
IRIU Flatfish Discards--Percent of IRIU Flatfish	92.5	94.7	99.4	100.0	100.0	99.5	96.8	99.9

Bycatch as a % of Total GFSH in Trawl BSAI PCOD Fisheries –AFA/Non-AFA (2 of 2)

	1995	1996	1997	1998	1999	2000	Average 1995-2000	Average 1999-2000
Non-AFA Catcher Processors (*Includes MV Ocean Peace* and catcher processors removed under AFA) with Trawl Gear								
Total Groundfish Catch (1,000 mt)	47.8	29.5	39.7	27.6	30.8	29.5	34.1	30.1
Total IRIU Flatfish Catch (1,000 mt)	7.7	4.8	7.9	3.9	5.9	7.4	6.3	6.7
Total IRIU Flatfish Discards (1,000 mt)	5.7	2.8	5.3	2.7	3.8	4.7	4.1	4.2
IRIU Flatfish Catch--Percent of Total								
IRIU Flatfish Discards--Percent of IRIU Flatfish	73.2	58.6	66.2	67.7	64.2	63.1	65.9	63.6
Non-AFA Shore Plants and Floaters with Trawl Gear								
Total Groundfish Catch (1,000 mt)	4.0	3.0	3.8	0.8	2.1	12.5	4.4	7.3
Total IRIU Flatfish Catch (1,000 mt)	0.5	0.2	0.3	0.0	0.2	0.3	0.3	0.3
Total IRIU Flatfish Discards (1,000 mt)	0.3	0.2	0.3	0.0	0.2	0.3	0.2	0.3
IRIU Flatfish Catch--Percent of Total				4.7		2.7		3.9
IRIU Flatfish Discards--Percent of IRIU Flatfish	59.6	100.0	100.0	100.0	100.0	94.4	86.0	96.7

Bycatch of IRIU Flatfish as Percent of Total Groundfish by Gear and Area in GOA Pacific Cod Fisheries, 1995-2001

Fishery	1995	1996	1997	1998	1999	2000	2001	Averages 1995-2001	Averages 1999-2001
Bycatch of IRIU Flatfish as Percent of Total Groundfish in by Gear and Area in GOA Pacific Cod Fisheries									
WG Pacific Cod Hook and Line	0.0	0.0	0.0	0.0	0.1	0.0	NA	0.1	0.0
WG Pacific Cod Jig	NA	NA	NA	NA	NA	0.0	NA	0.0	0.0
WG Pacific Cod Pot	0.3	0.0	0.0	0.0	0.0	0.0	NA	0.1	0.0
WG Pacific Cod Trawl	1.6	0.7	0.9	1.3	1.0	3.4	NA	1.4	1.4
CG Pacific Cod Hook and Line	0.0	0.0	0.1	0.1	0.4	0.0	NA	0.1	0.1
CG Pacific Cod Jig	NA	NA	0.0	NA	0.0	0.0	NA	0.0	0.0
CG Pacific Cod Pot	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0	0.0
CG Pacific Cod Trawl		4.7			4.9	3.8	NA		2.7
EG Pacific Cod Hook and Line	0.0	0.0	0.0	0.0	0.2	0.0	NA	0.1	0.1
EG Pacific Cod Pot	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0	0.0
EG Pacific Cod Trawl	NA	NA	4.0		2.0	NA	NA		0.8

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2001.

Notes:

1) NA indicates that no data for the fishery/year were available.
2) Gear area bycatch data for 2001 were not available for this analysis.
3) "0.0" indicates that bycatch of IRIU flatfish was less than 1/20th of 1 percent.
4) Shaded cell indicate the years in which bycatch of IRIU flatfish exceed 5 percent of total catch.
5) Averages shown in the last two columns are weighted averages of available data.

Total IRIU Bycatch and Discards in Non-Exempt and Exempt BSAI Fisheries, 1995-2000

							Average	
	BSAI "Non-Exempt" Total							
Total Groundfish Catch (1,000 mt)	380.5	367.1	470.7	290.7	255.1	287.7	342.0	271.4
Total IRIU Flatfish Catch (1,000 mt)	176.5	172.1	248.1	131.8	108.4	129.1	161.0	118.8
Total IRIU Flatfish Discards (1,000 mt)	58.5	51.8	69.6	39.6	36.7	38.2	49.1	37.4
IRIU Flatfish Catch–Percent of Total	46.4	46.9	52.7	45.4	42.5	44.9	47.1	43.8
IRIU Flatfish Discards–Percent of IRIU Flatfish	33.2	30.1	28.1	30.1	33.8	29.6	30.5	31.5
	BSAI "Exempt" Total							
Total Groundfish Catch (1,000 mt)	1,549.3	1,481.6	1,359.8	1,329.9	1,172.1	1,326.4	1,369.8	1,249.3
Total IRIU Flatfish Catch (1,000 mt)	3.2	4.5	2.5	3.1	1.9	4.7	3.3	3.3
Total IRIU Flatfish Discards (1,000 mt)	2.6	3.7	2.4	2.2	1.4	3.2	2.6	2.3
IRIU Flatfish Catch–Percent of Total	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.3
IRIU Flatfish Discards–Percent of IRIU Flatfish	80.8	82.0	95.0	71.5	73.0	69.7	78.1	70.6

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2000.
Note: Shaded cells indicate years and fisheries in which catch of IRIU flatfish is greater than 5 percent of total groundfish catch.

Total IRIU Bycatch and Discards in Non-Exempt and Exempt GOA Fisheries, 1995-2000

	1995	1996	1997	1998	1999	2000	Average 1995-2000	Average 1999-2000
	GOA "Non-Exempt" Total							
Total Groundfish Catch (1,000 mt)	8.3	17.6	14.1	7.1	1.6	9.9	9.8	5.8
Total IRIU Flatfish Catch (1,000 mt)	2.8	6.8	3.8	1.6	0.9	4.7	3.4	2.8
Total IRIU Flatfish Discards (1,000 mt)	0.6	0.7	0.6	0.1	0.1	0.1	0.4	0.1
IRIU Flatfish Catch–Percent of Total	33.5	38.7	27.1	23.1	55.2	47.7	35.9	48.6
IRIU Flatfish Discards–Percent of IRIU Flatfish	20.6	10.8	15.5	7.5	8.6	3.0	10.9	3.9
	GOA "Exempt" Total							
Total Groundfish Catch (1,000 mt)	201.9	182.0	212.8	236.7	225.5	199.0	209.6	212.3
Total IRIU Flatfish Catch (1,000 mt)	2.6	2.5	3.9	1.9	1.7	2.2	2.5	1.9
Total IRIU Flatfish Discards (1,000 mt)	1.0	0.6	1.3	0.5	0.5	0.6	0.7	0.6
IRIU Flatfish Catch–Percent of Total	1.3	1.4	1.8	0.8	0.7	1.1	1.2	0.9
IRIU Flatfish Discards–Percent of IRIU Flatfish	38.7	22.2	32.3	24.8	28.7	29.1	29.9	28.9

Source: Estimated by Northern Economics using NMFS Blend Data, 1995-2000.
Notes:
1) Shaded cells indicate years and fisheries in which catch of IRIU flatfish is greater than 5 percent of total groundfish catch.
2) In 2001, WG/CG bycatch of IRIU flatfish in the flathead sole fisheries was 8.8% and raised the 3-year average bycatch rate to 8.4%.

Protecting Non-AFA Processors with Revisions to Regulations for IRIU Flatfish

June 2002

6/12 SM: 11:22A as amended, carries w/o obj. C-7b

Council motion IR/IU - June 12, 2002

The Council moves that the problem statement for IR/IU be revised to state that 100% retention of rocksole and yellowfin sole result in severe economic losses to certain participants in the fishery while less than 100% retention is of only these species is not enforceable: and that the document be released for initial review with the following changes to the alternatives:

Alternative 2 - Suboption - exempt arrowtooth from 100% retention requirement.

Alternative 3- Incorporate a qualitative description of the following trailing amendments.

A. A bycatch reduction coop structured as follows:

1. PSC caps for halibut and crab in the BSAI are subdivided into two pools. One pool is for vessels that wish to participate in a bycatch reduction program. The other pool is for vessels remaining in open access. The subdivision of PSC is calculated by summing the groundfish catch by target for each group, applying an appropriate bycatch rate to each target and assigning that bycatch to the BRC and the open access fishery.
2. Companies in the BRC will be required to agree to limit each vessel to the above calculated share of halibut and crab relative to total groundfish catch. Evidence of binding private contracts and remedies for violations of contractual agreements must be provided to NMFS for the BRC to be approved. Participants in the BRC must demonstrate an adequate system for the estimation, monitoring, reporting and overall accounting of the PSC available to the BRC.
3. Bycatch reduction will be accomplished by:
    a. Bycatch rate reduction that results in a more efficient use of the PSC available to the BRC
    b. PSC available to the BRC will be reduced by 5% beginning in year two of the program
    c. A periodic review of PSC use and PSC available to the cooperative to allow consideration of further reductions of PSC allocated to the BRC. Further PSC reductions should be based on achieving a balance between the optimum yield objectives and the bycatch reduction objectives contained in the MSA.
4. THE BRC is for the non-pollock catcher processor sector.
5. The BRC will be as inclusive as possible for all non-pollock CP's in the BSAI (i.e. both AFA and non-AFA , TAC controlled fisheries and PSC controlled fisheries.)
6. Subdivision of current PSC caps between sectors (CV's CP's and/or AFA CP's and non AFA CP's may be necessary)
7. Allocation within the BRC such as qualifying years or amounts of PSC available to individual vessels will be decided by members of the BRC.
8. Monitoring requirements and costs will be distributed equitably among BRC members.
9. Monitoring requirements will be developed with one objective being minimizing these costs to BRC members
10. Protections for non-cooperative fisheries, if necessary, will be specified.

B. An alternative to create discard caps for the flatfish fisheries upon triggering a cap, 100% retention would be required.

Alternative 4 - exempt fisheries with IRIU flatfish bycatch less than 5%.

1. Calculate discards (as opposed to 'incidental catch') of IR/IU species as a percentage of total catch, such that credit is awarded for the retention of those species.
2. Analyze the use of a rolling average (1-3 years) to calculate the discard rate for determination of IR/IU exemption under Alternative 4.
3. Analyze a suboption to which would allow separate exemptions by TAC region, CV and CP, and AFA/Non-AFA.

Additionally the analysis should:

1. Define "bycatch" so that it is consistent with MSA and the intent of flatfish Improved Retention and Improved Utilization. Specifically, the analysis should include the incidental catch of yellowfin sole and rocksole for each BSAI fishery and sector and the retention of those species in both tons and as a percentage of the total groundfish catch. The remaining discarded amount will be the bycatch amount in that fishery, including the direct yellowfin sole and rocksole fisheries. The numbers should be displayed in summary tables so that the Council and the public can easily understand and compare the bycatch rates as defined here for each fishery and sector.

2. Define AFA Cps as a single group rather than as surimi Cps and fillet Cps. ~~These separate designations are anachronisms since all now produce both surimi and fillets.~~

To assist in the task of the Council Bycatch Committee, NMFS should include specific recommendations in management of the fisheries that would permit reduced incidental catch of unwanted fish and increased retention of IRIU flatfish species. Specifically, the agency should make recommendations regarding catch and bycatch monitoring, MR (MRB) adjustments and or other recommendations that will help focus the Committee and Council on solutions that will allow the intent of a modified flatfish IRIU program to be captured in an extended timeline.

3. The Council request the Bycatch Committee;
Come up with two prototypes:
   1. Reduce PSC usage in flatfish fisheries
      i.e as proposed in AP proposal
   2. Reduce discards of IRIU flatfish species
      i.e. as proposed in item B of AP motion.

PUBLIC TESTIMONY SIGN-UP SHEET FOR AGENDA ITEM ~~D-1 DPSEIS~~ C7(b) IRIU

PLEASE SIGN ON THE NEXT BLANK LINE.
LINES LEFT BLANK WILL BE DELETED.

	NAME	AFFILIATION
1.	Paul MacGregor	At-Sea Processors
2.	JOHN GAUVIN	GROUNDFISH FORUM
3.	Donna Parker	Pollock Conservation Coop
4.	JOHN HENDERSCHEDT	PREMIER PACIFIC SEAFOODS
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