MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME:
4 HOURS
(all D-2 issues)

DATE: March 24, 2008

SUBJECT: Groundfish Management – 'Other Species' Complex

ACTION REQUIRED

(d) Final action on GOA 'other species' catch specifications amendment

BACKGROUND

In February, the Council made an initial review of an analysis that would amend the GOA groundfish FMP to require the Council to annually set an aggregate overfishing limit (OFL) and acceptable biological catch level (ABC) for the 'other species' complex. The Council currently sets total allowable catch (TAC) for the 'other species' complex according to a formula in the FMP. Under Alternative 2, the Council would instead use the OFL and ABC specifications to determine the TAC for the 'other species' complex, according to the harvest specifications procedure laid out in the FMP for other groundfish species (see table below).

Comparison of harvest specifications for the 'other species' complex under the alternatives
(illustrated using 2007 available data)

	Alternative 1 (status quo - set TAC only)	Alternative 2 (set OFL, ABC, and TAC)
ABC and OFL	none	ABC = 7,943 mt; OFL = 10,588 mt Sum of recommended Plan Team/ SSC ABCs and OFLs for component species groups (only recommended for purposes of this analysis)
Maximum permissible TAC	13,271 mt Council may set TAC at ≤ 5% of combined TACs for target species	7,943 mt Council may set TAC ≤ ABC
Actual TAC	4,500 mt Council reduces TAC from maximum, to allow for incidental catch and limited directed fisheries, but reduce risk of excessive harvest on a single stock or the complex as a whole	≤ 7,943 mt Council would retain prerogative to reduce TAC, as in Alternative 1

The analysis includes an environmental assessment, which is all that is required as this amendment does not have a regulatory component. In addition to the changes resulting from the proposed action, the FMP amendment will also make a technical change to the FMP, to add a description of Amendment 68. The proposed text for the FMP amendment is included in the analysis. The Council is scheduled to take final action at this meeting.

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
4 HOURS
(all D-2 Items)

DATE: March 14, 2008

SUBJECT: Seabird Interactions

ACTION REQUIRED

Initial review of analysis of seabird deterrence exemption in IPHC Area 4E.

BACKGROUND

At the February 2007 meeting, the Council approved changes in regulations for seabird deterrence in groundfish fisheries. As part of the motion, the Council requested an analysis of a trailing amendment to consider an exemption for small vessels from seabird deterrence regulations in all or part of IPHC Area 4E. Available data suggested that such an exemption in Area 4E might be appropriate, but an analysis of new short-tailed albatross satellite tagging data would be required to better inform such a decision.

Staff presented a preliminary analysis of available data on short-tailed albatross (STAL) distribution, abundance, and movement patterns in the eastern Bering Sea and Aleutian Islands area and a draft environmental and economic analysis of the alternatives at the February 2008 meeting. The SSC provided comments on the analysis, which have been incorporated into a revised EA/RIR/IRFA that examines several alternatives for an exemption in Area 4E. The initial draft EA/RIR/IRFA was sent out in a Council mailing on March 14. The Executive Summary is attached as Item D-2(e)(1). At this meeting, the Council is scheduled for an initial review of the analysis and to approve sending the document out for public review. The Council is scheduled to take final action in June 2008.

EXECUTIVE SUMMARY

Purpose and Need

This environmental assessment/regulatory impact review/initial regulatory flexibility analysis (EA/RIR/IRFA) assesses the potential environmental and socioeconomic impacts of a proposed federal action that would change seabird avoidance requirements for the hook-and-line groundfish fisheries in the Bering Sea and the Pacific halibut fishery in U.S. Convention waters off Alaska.

The intent of these changes is to relieve an unnecessary regulatory burden on fisheries in areas where seabird avoidance measures are not needed and to maintain their use in areas where they are. The Council plans to conduct an initial review of this proposed action in April 2008 based on analysis of the alternatives analyzed herein.

Status Quo and Action Alternatives

The alternatives are listed below and in Table 1-1, and the action area is shown in Figure 1.

Alternative 1 – No Action. Status Quo for vessels greater than 26 ft LOA in IPHC Area 4E:

a. Vessels less than 55 ft LOA with masts, poles, or rigging using snap-on hook-and-line gear are required to deploy one streamer line while setting gear. Specifically, the streamer line must be at least 45 m long and must be maintained with a minimum aerial extent of 20 m.

b. Vessels less than 55 ft LOA with masts, poles, or rigging not using snap-on hook-and-line gear (conventional gear) are required to deploy one streamer line while setting gear. Specifically, the streamer line must be a minimum of 90 m long and must be maintained with a minimum aerial extent of 40 m.

c. Vessels less than 55 ft LOA without masts, poles, or rigging and not capable of adding poles or davits to accommodate a streamer line (including bowpickers) must tow a buoy bag in such a way as to deter birds from the sinking groundline, without fouling on the gear, while setting gear.

d. Vessels greater than 55 ft LOA with snap-on gear are required to use one streamer line while setting gear. Specifically, the streamer line must be at least 45 m long and must be maintained with a minimum aerial extent of 20 m.

e. Vessels greater than 55 ft LOA with other than snap-on gear are required to use paired streamer lines while setting gear. Specifically, the streamer line must be a minimum of 90 m long and must be maintained with a minimum aerial extent of 40 m.

Alternative 2. EXEMPTION FOR 26ft to 32ft LOA VESSELS

Maintain status quo seabird protection measures except that vessels greater than 26 and less than or equal to 32 ft LOA are not required to use seabird avoidance measures in area IPHC Area 4E. One of the following options would continue to require seabird avoidance measures in the short-tailed albatross (STAL) subarea of IPHC Area 4E:

Option 1. Vessels fishing in the STAL subarea of IPHC Area 4E are required to comply with seabird avoidance regulations as detailed in Alternative 1, above.

Option 2. Vessels fishing in the STAL subarea of IPHC Area 4E are required to tow a buoy bag in such a way as to deter birds from the sinking groundline, without fouling on the gear, while setting gear.

Alternative 3. EXEMPTION FOR 26ft to 55ft LOA VESSELS

Maintain status quo seabird protection measures except that vessels greater than 26 and less than or equal to 55 ft LOA are not required to use seabird avoidance measures in area IPHC Area 4E. One of the following options would continue to require seabird avoidance measures in the STAL subarea of IPHC Area 4E:

Option 1. Vessels fishing in the STAL subarea of IPHC Area 4E are required to comply with seabird avoidance regulations as detailed in Alternative 1, above.

Option 2. Vessels fishing in the STAL subarea of IPHC Area 4E are required to tow a buoy bag in such a way as to deter birds from the sinking groundline, without fouling on the gear, while setting gear.

Alternative 4. EXEMPTION FOR ALL VESSELS OVER 26ft LOA

Seabird avoidance measures are not required in area IPHC Area 4E, except as required by one of the following options:

Option 1. Vessels fishing in the STAL subarea of IPHC Area 4E are required to comply with seabird avoidance regulations as detailed in Alternative 1, above.

Option 2. Vessels fishing in the STAL subarea of IPHC Area 4E are required to tow a buoy bag in such a way as to deter birds from the sinking groundline, without fouling on the gear, while setting gear.

NOTES:

1. Vessels less than or equal to 32 ft LOA in IPHC area 4E shoreward of the EEZ (inside 3 nm) are not required to use seabird avoidance measures under any alternatives in this analysis.
2. The weather safety standard would continue to apply to any vessel using seabird avoidance gear; that is:
    a. Use of seabird avoidance devices would be discretionary for vessels 26-55 ft LOA when winds exceed 30 knots.
    b. Use of seabird avoidance gear is discretionary in winds greater than 45 knots for all vessels, and in winds between 30 and 45 knots vessels normally required to use paired streamer lines (vessels longer than 55 ft LOA) may use only a single streamer line deployed from the windward side of the vessel.
3. This action applies only to vessels using hook-and-line gear. Fishermen using jig gear are not required to use seabird avoidance measures.
4. All requirements described here are minimum standards. Vessels may choose to use additional measures to limit interactions with seabirds if they so choose.

Summary of the Effects to Seabird Species in the Bering Sea

The proposed alternatives address revisions to seabird avoidance measures that would relax requirements in areas where seabird interactions are less common, and with the options, maintain some level of protection in areas where interactions are more likely to occur. The action alternatives have no effects on target and non-target fisheries and fish populations, protected species other than seabirds, or habitat and ecosystems.

The effects of incidental take of seabirds under Alternative 1 (status quo) have not substantially changed since the dramatic decrease in seabird bycatch in 2001. The effects are described in the PSEIS (NMFS 2004a) and the Alaska Groundfish Harvest Specifications EIS (NMFS, 2007). Incidental take of seabirds in the status quo BSAI groundfish fisheries is not significant at the population level for all seabird species analyzed. At the current STAL population level and the continuing 7-8% annual growth rate, the status quo level of mortality resulting from hook-and-line fisheries is not thought to represent a threat to the species' continued survival, although it could be slowing the recovery (NMFS, 2004).

Relieving the requirement for certain vessels to use seabird avoidance measures in IPHC area 4E in Alternatives 2, 3, and 4 could cause unknown impacts to short-tailed albatrosses; therefore, the Council created options for each alternative that would mitigate any potentially significant or unknown impacts that might be caused by implementation of Alternatives 2, 3, or 4. With the use of these options, no significant or unknown impacts to seabird populations are expected to occur.

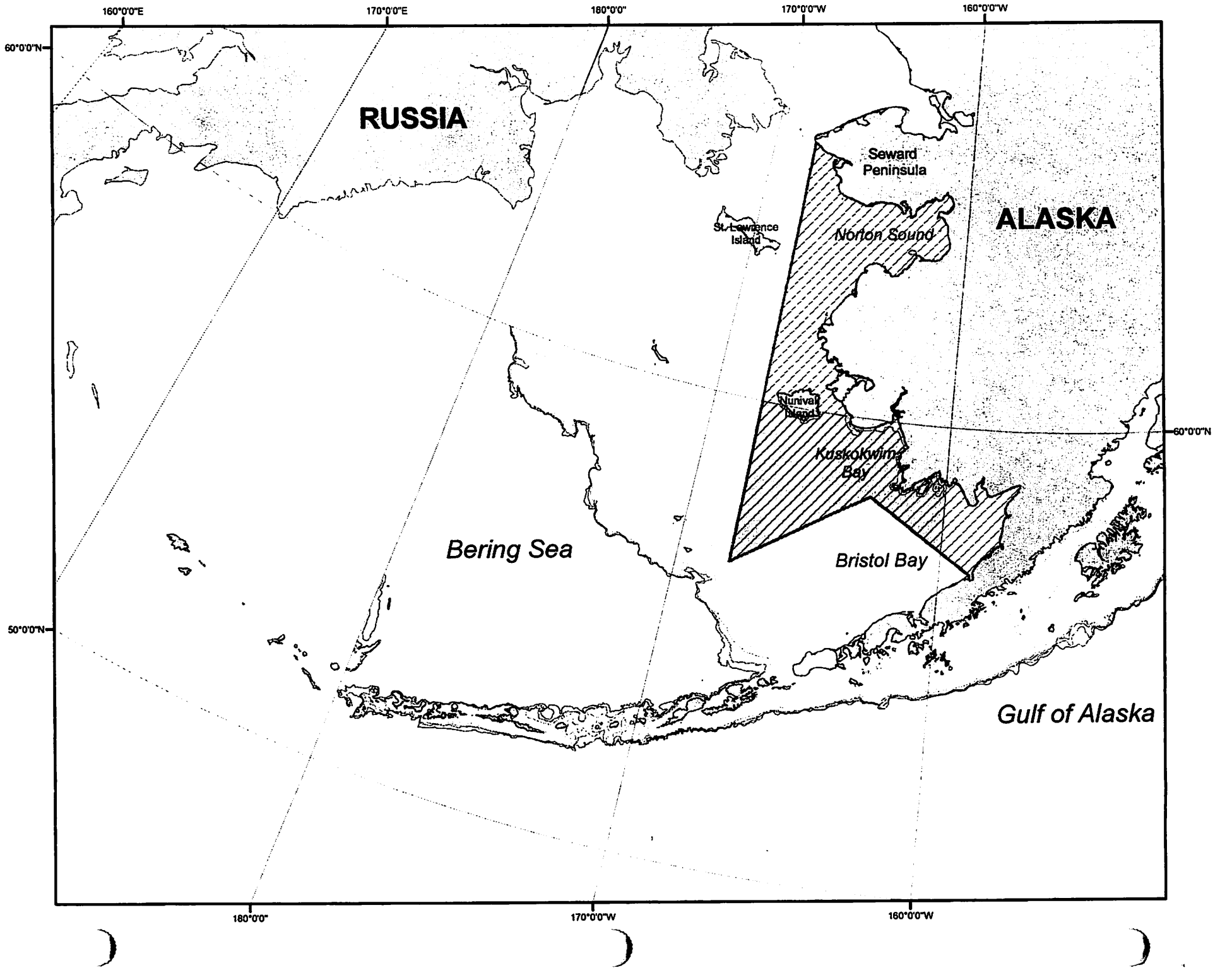
Options 1 and 2 both offer some protection to STAL in the STAL area of IPHC Area 4E. Option 1 which requires the status quo measures inside the STAL area is more precautionary than Option 2 which only requires the use of a buoy bag. If one of the options is chosen to afford protection for STAL inside the STAL area of IPHC Area 4E, then only vessels fishing in the non-STAL area of IPHC Area 4E would no longer be required to use seabird avoidance measures. Nearly all of the effort in the non-STAL area is by vessels 26-32' LOA which would get relief under Alternatives 2, 3 or 4. Alternatives 3 and 4 would provide very limited additional relief to larger vessels at current levels of participation.

Summary of the Cumulative Effects

Past effects on seabird species include hunting and harvesting for feathers, eradication of nests and relocation of adults in military programs to reduce the interaction of seabirds with military aircraft, the introduction of new species (such as rabbits) into nesting habitat, and predation by introduced species. Fisheries outside of Alaska have also likely contributed to population decline. These stressors have affected some species more than others, including black-footed albatross, short-tailed albatross, red-legged kittiwakes, and Kittlitz's murrelet, (Table 7-1)

Previous regulations on hook and line fisheries in Alaska are likely to have decreased fishery bycatch rates since 2001 (Figure 5). Future actions identified in the AGHSEIS that could impact seabirds were ecosystem-sensitive management, fisheries rationalization, traditional management tools, actions by other Federal, State, and International agencies and private action. In nearly all cases, future actions were likely to reduce the impacts on seabirds, except for subsistence harvest.
Current and future threats to seabirds other than those analyzed in this document include collisions with aircrafts, vessels, and cables on fishing vessels, plastics ingestion, and oil spills and ship bilge dumping, high seas driftnets and gillnet fisheries, and increased flightseeing near glaciers (specifically for kittlitz's murrelets).

Because these changes in the use of seabird avoidance gear are operationally conducted at the surface of the water, effects on other ecosystem components of this action, as well as the cumulative effects of similar actions, are minimal. No effects on the seafloor or other sub-surface habitat structures are expected. One potential effect on the ecosystem is the discard of streamer lines and buoy bags as marine debris when lines become entangled and unrecoverable. Discarded gear also has the potential to affect marine mammals due to the risk of entanglement. Such losses of streamer lines and buoy bags occur at a greater frequency in high winds, and the weather safety factor option in this analysis could minimize the amount of gear discarded in the ocean and thus mitigate these effects.


160°0'0"E
170°0'0"E
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170°0'0"W
160°0'0"W
60°0'0"N
50°0'0"N
RUSSIA
ALASKA
Seward Peninsula
St. Lawrence Island
Norton Sound
Nunivak Island
Kuskokwim Bay
Bering Sea
Bristol Bay
Gulf of Alaska
180°0'0"
170°0'0"W
160°0'0"W

Table 1-1. Seabird Avoidance Measures Alternatives for Hook and Line Gear in IPHC Area 4E for vessels > 26' LOA

Location, Vessel Size & Config	26-55' in the EEZ >32' to ≤ 55' in 0-3 nm w/o masts, poles, or rigging	26- 55' in the EEZ >32' to ≤ 55' in 0-3 nm with masts, poles, or rigging	>55' in the EEZ >55' in 0-3 nm
Alt 1 (Status Quo)	**1 buoy bag line**	**1 streamer line with standard (snap-on gear)[1]**	**1 streamer line with standard (snap-on gear)[1]**
		1 streamer line with standard (other than snap-on gear)[2]	**Paired streamer lines with standard (other than snap-on gear)[2]**
Alt 2	**26-32' - no seabird avoidance measures required in 4E, >32' - status quo**		
option 1	**Vessels 26-32' LOA fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.**		
option 2	**Vessels 26-32' LOA fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.**		
Alt 3	**26- 55' - no seabird avoidance measures required in 4E, > 55' - status quo**		
option 1	**Vessels 26-55' LOA fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.**		
option 2	**Vessels 26-55' LOA fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.**		
Alt 4	**all vessels - no seabird avoidance measures required in 4E**		
option 1	**All vessels fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.**		
option 2	**All vessels fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.**		

1 Streamer line standard that is 45 m in length and in the air for 20 m aft of stern.
2 Streamer line standard that is 90 m in length and in the air for 40 m aft of stern.
3 STAL subarea - southwestern portion of IPHC Area 4E where fisheries are more likely to interaction with STAL. See Figure 1.

Revising Regulations for Seabird Avoidance Measures in the Hook-and-line Fisheries off Alaska in IPHC Area 4E

Initial Review
March 2008

Seabird Avoidance in 4E — March 2008

Purpose and Need

Providing adequate protection to seabirds while imposing no unnecessary burden on fishermen.

Seabird Avoidance in 4E — March 2008

Potential seabird/fisheries interactions

Risk of Incidental take – depends on foraging behavior and nearshore preferences

- Potentially at risk - Albatross, Fulmars, Shearwaters, Gulls
- Not likely to be at risk - Cormorants, Terns, Guillemots, Murrelets, Rhinoceros Auklet, Kittiwakes, Puffins, Eiders

Seabird Avoidance in 4E — March 2008

Estimated average annual seabird mortality by region from 2000-2004

Annual estimate 2000-2004	GOA	BS	AI
Seabird takes	428	7,785	656
Effort (Number of Hooks)	43,415	219,056	18,615
Bycatch Composition			
% Fulmar	39	51	71
% Gulls	23	31	5
% Albatross	31	2	17
% other	7	16	7

Seabird Avoidance in 4E — March 2008

AFSC average annual estimates of Alaska seabird takes in Alaska demersal groundfish hook-and-line fisheries, 2000-2004.

Species or group	GOA	BS	AI	Pop Estimate GOA	Pop Estimate BSAI	Pop Estimate world
Short-tailed albatross	0	0	0			~2,000
Laysan albatross	42	128	111			2.5 million
Black-footed albatross	88	6	2			250,000
Unidentified albatross	4	4	1			
Northern fulmar	166	3,970	468	600,000	1,500,000	
Shearwaters	4	415	23			>53 million
Unidentified procellarids	0	63	0			
Gulls	98	2,411	33	>400,000	>200,000	
Auklets	0	14	0			
Other seabirds	0	27	4			
Unidentified seabirds	17	749	14			
Totals	428	7,785	656			

Seabird Avoidance in 4E — March 2008

DRAFT Alternatives for HAL vessels >26' in 4E

Location, Vessel Size & Config	>26' to < 55' in the EEZ >32' to < 55' in 0-3 nm with mastls, poles, or rigging	>26' to < 55' in the EEZ >12' to < 55' in 0-3 nm with mastls, poles, or rigging	>55' in the EEZ >55' in the EEZ in 0-3 nm
Alt 1 (Status Quo)	1 buoy bag line	1 streamer line with standard (snap-on gear)1	1 streamer line with standard (snap-on gear)
		1 streamer line with standard (other than snap-on gear)2	Paired streamer lines with standard (other than snap-on gear)
Alt 2	132' - no seabird avoidance measures required in 4E. >32' - status quo		
option 1	Vessels >32' LOA fishing in the STAL subarea3 of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	Vessels < 32' LOA fishing in the STAL subarea3 of 4E are required to use only a buoy bag to deter seabirds.		
Alt 3	>26' to < 55' no seabird avoidance measures required in 4E. >55' status quo		
option 1	Vessels 26 - 55 LOA fishing in the STAL subarea3 of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	Vessels 26 - 55 LOA fishing in the STAL subarea3 of 4E are required to use only a buoy bag to deter seabirds.		
Alt 4	all vessels - no seabird avoidance measures required in 4E		
option 1	All vessels fishing in the STAL subarea3 of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	All vessels fishing in the STAL subarea3 of 4E are required to use only a buoy bag to deter seabirds.		

1 Streamer line standard that is 45 m in length and in the air for 20 m aft of stern.
2 Streamer line standard that is 90 m in length and in the air for 40 m aft of stern.
3 STAL subarea - yet to be defined portion of 4E where albatross presence is more likely to occur. Area to be defined in analysis package.

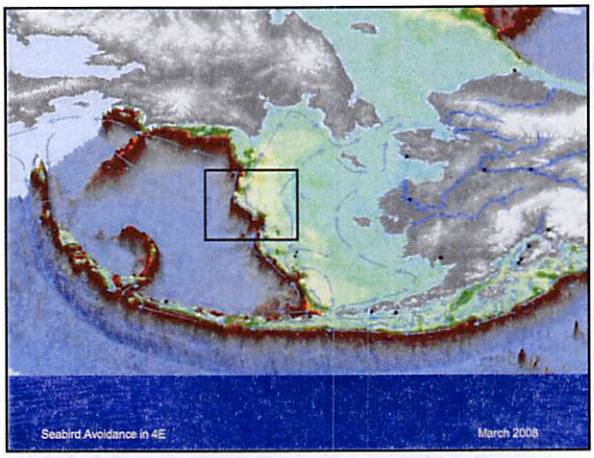
Other alternatives considered

Adding 4C

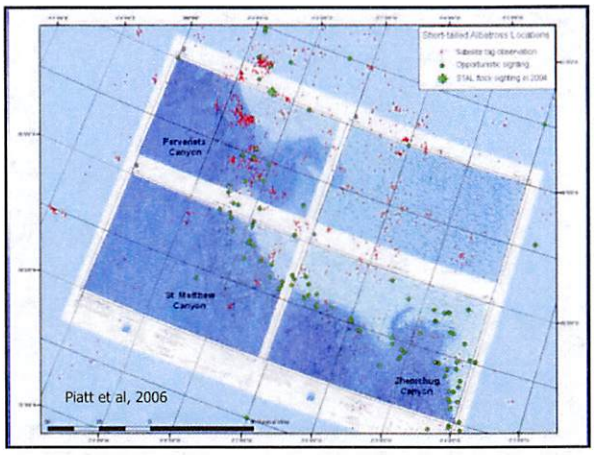
- Near shelf-break highly utilized habitat
- Lots of STAL observe here
- 1 STAL taken here

This alternative was not carried forward in the analysis

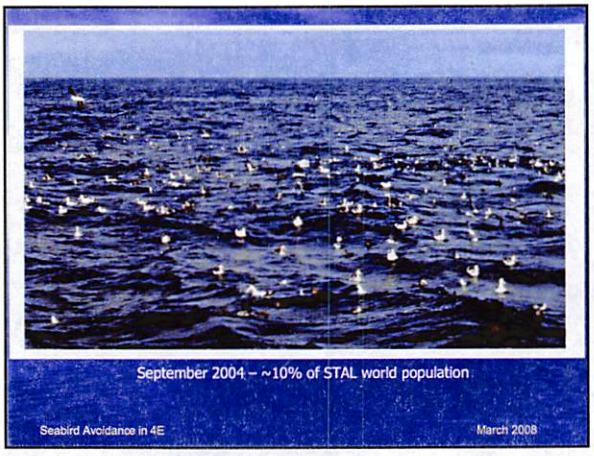
Seabird Avoidance in 4E March 2008



Seabird Avoidance in 4E March 2008

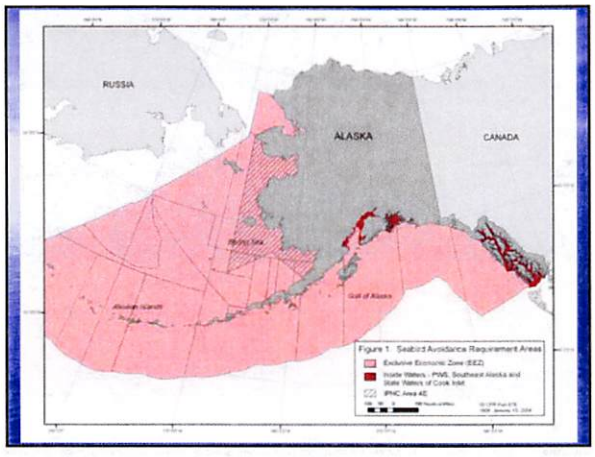


Platt et al, 2006



September 2004 – ~10% of STAL world population

Seabird Avoidance in 4E March 2008



STAL Data Sources

- SeaGrant seabird surveys*
- IPHC surveys*
- NPPSD/FWS opportunistic sightings
- Locations of STAL takes
- OSU satellite tagging studies '02- '07*
- FWS 2007 survey data*

Seabird Avoidance in 4E March 2008

Options for analysis

- Kernel density distribution
- Inverse Distance Weighting
- Kriging

Seabird Avoidance in 4E March 2008

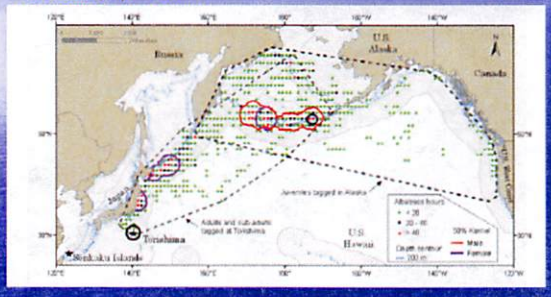
Kernel Density

- Distributes a measured quantity of input points across a landscape to produce a continuous surface
- Output is measured value per unit area
- Decision points
  - Search radius
  - Simple versus kernel density
  - Using value or only location
  - Output cell size

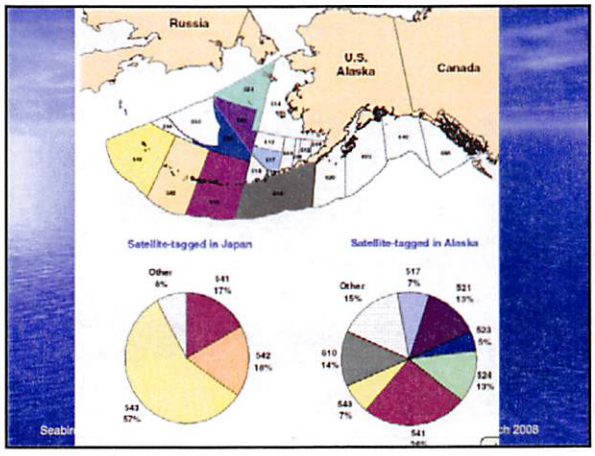
Seabird Avoidance in 4E March 2008

Migratory routes of short-tailed albatrosses: Use of exclusive economic zones of North Pacific Rim countries and spatial overlap with commercial fisheries in Alaska

Robert M. Suryan, Kimberly S. Dietrich, Edward F. Melvin, Gregory R. Balogh, Fumio Sato, Kiyoaki Ozaki



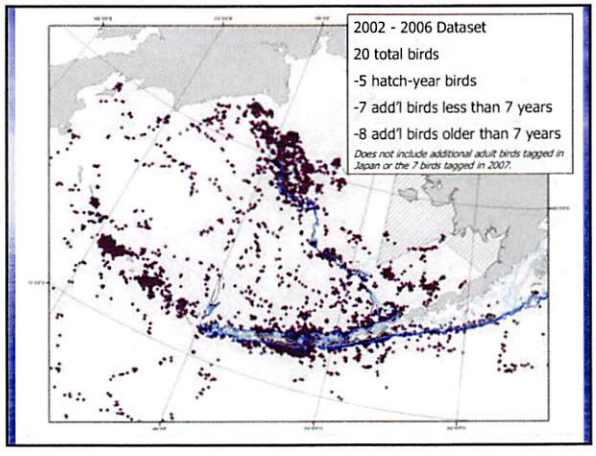
Seabird Avoidance in 4E March 2008

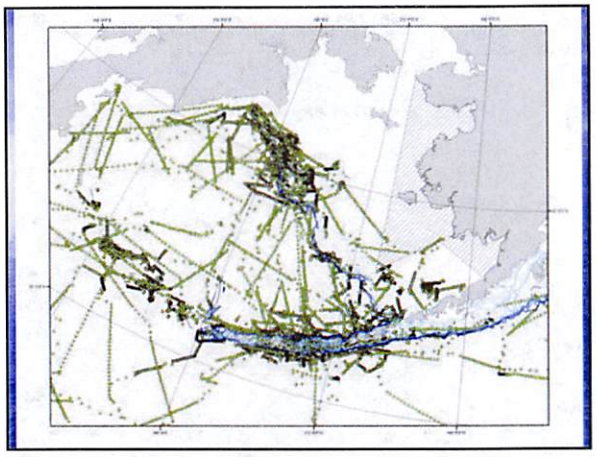


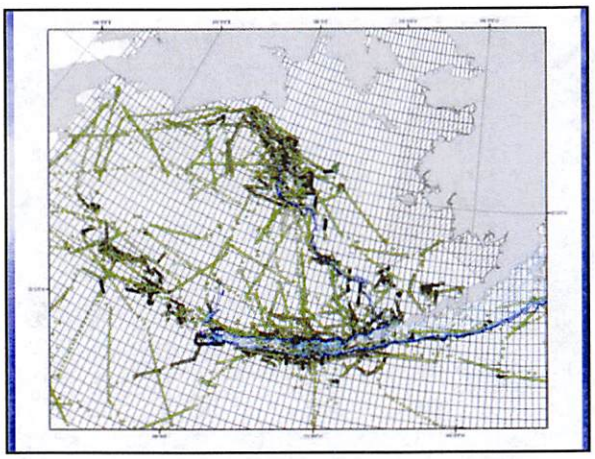
Results from Suryan et al

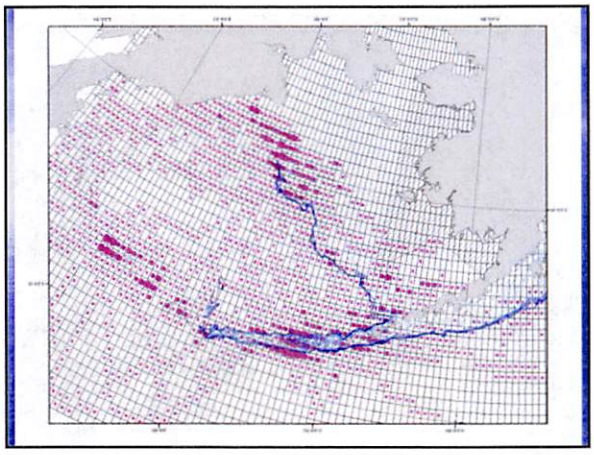
- *"Juvenile STAL have greater exposure to fisheries on the Bering sea shelf"*
- In Bering Sea, *"individual STAL did spend more time on the shelf domain compared to other regions, thereby potentially interacting with the much larger Pacific cod fishery"*
- Radius of attraction to fishing vessels for albatross sp. has been estimated between <5 – 6 km

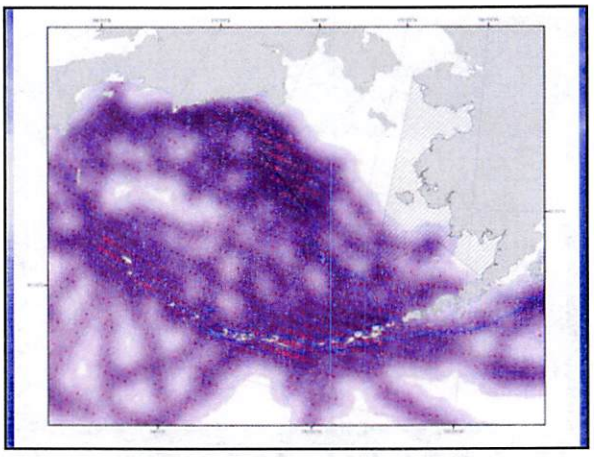
Seabird Avoidance in 4E March 2008

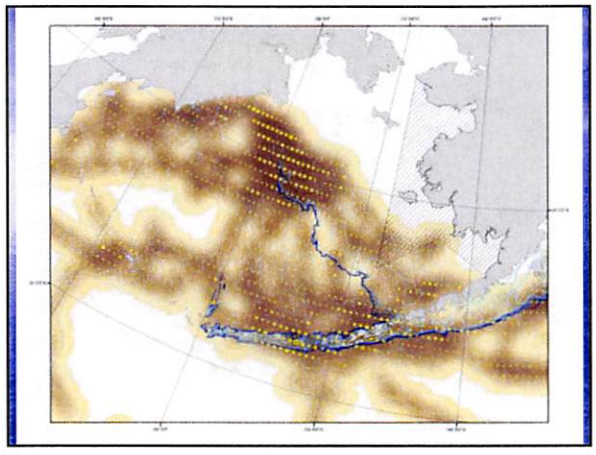


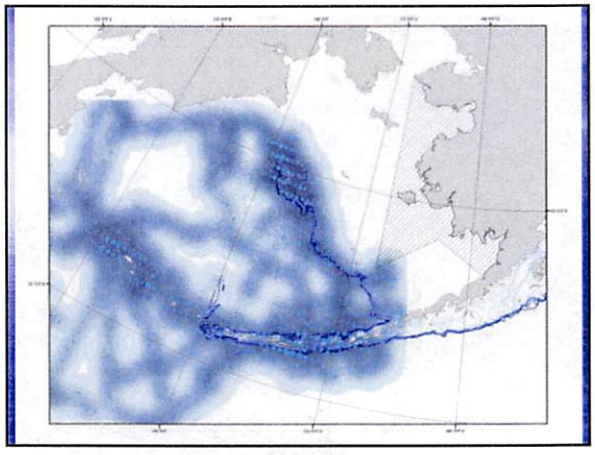


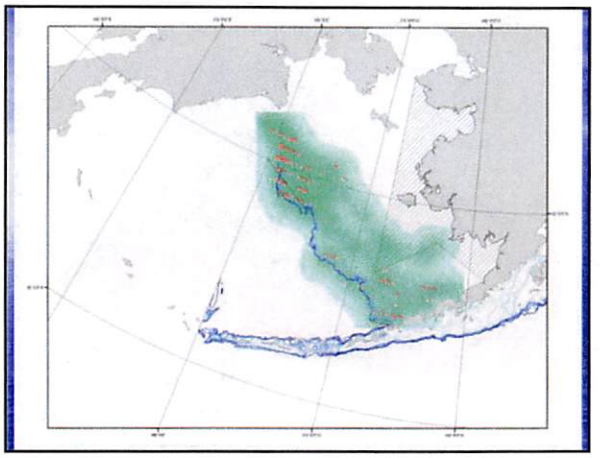












STAL Data Sources

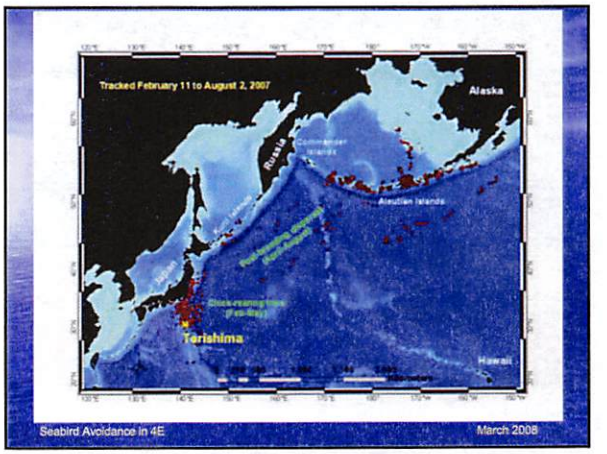
- SeaGrant seabird surveys*
- IPHC surveys*
- NPPSD/FWS opportunistic sightings
- Locations of STAL takes
- OSU satellite tagging studies '02- '07*
- FWS 2007 survey data*

Seabird Avoidance in 4E March 2008

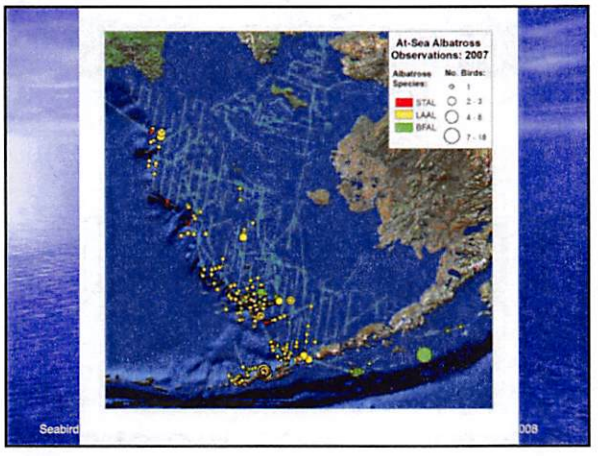
Seabird observations in 4E during 2006 IPHC summer survey

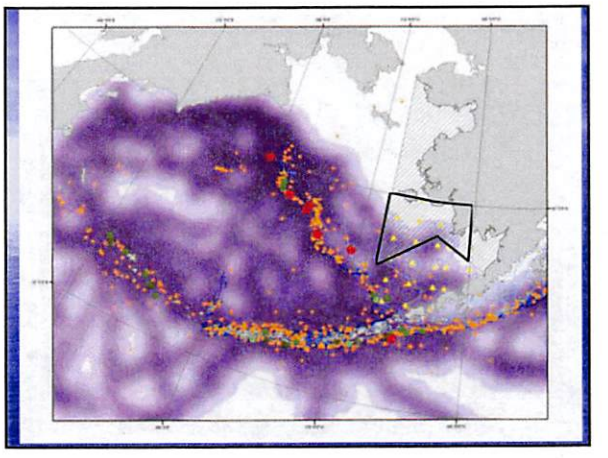
IPHC Area	Numbers of Observed Seabirds	
2C	1,140	
3A	13,468	
3B	20,946	
4A	8,596	
4B	7,038	
4C	1,799	
4D	9,253	
4E	227 ** no species of conservation concern	0.3%
Closed Area	631	

Seabird Avoidance in 4E March 2008



Seabird Avoidance in 4E March 2008

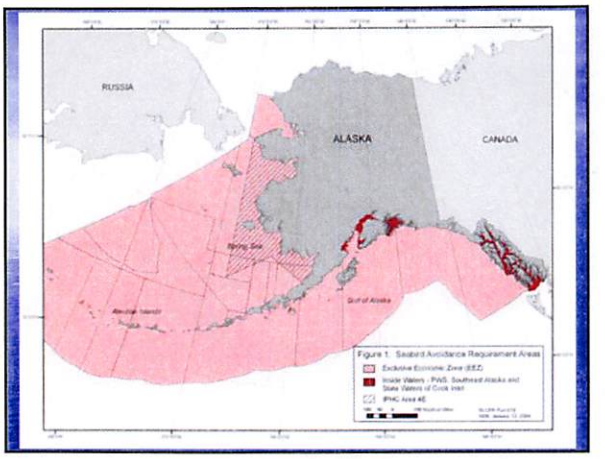




Fishing Effort in 4E

- All Pacific halibut harvest is CDQ in 4E, most are small vessels
- Small vessels have few crew, limited space, and limited $$ for crew training, materials, and maintenance
- Using streamer lines and buoy bags presents a safety concern in harsh weather of Bering Sea for small vessels
- Small vessels have low fishing effort and fewer total interactions
- Some cod longline effort in southern portion of 4E

Seabird Avoidance in 4E March 2008



DRAFT Alternatives for HAL vessels >26′ in 4E

Location, Vessel Size & Config	>26′ to < 55′ in the EEZ >32′ to < 55′ in 0-3 nm w/o mech. poles, or rigging	>26′ to < 55′ in the EEZ >32′ to < 55′ in 0-3 nm w/ mech. poles, or rigging	>55′ in the EEZ >55′ in the EEZ in 0-3 nm
Alt 1 (Status Quo)	1 buoy bag line	1 streamer line with standard (snap-on gear)1	1 streamer line with standard (snap-on gear)
		1 streamer line with standard (other than snap-on gear)2	Paired streamer lines with standard (other than snap-on gear)
Alt 2	>32′ - no seabird avoidance measures required in 4E. <32′ - status quo		
option 1	Vessels >32′ LOA fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	Vessels >32′LOA fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.		
Alt 3	>26′ to < 55′ no seabird avoidance measures required in 4E. <26′ status quo		
option 1	Vessels 26 - 55 LOA fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	Vessels 26 - 55 LOA fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.		
Alt 4	all vessels - no seabird avoidance measures required in 4E		
option 1	All vessels fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	All vessels fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.		

1 Streamer line standard that is 45 m in length and in the air for 20 m aft of stern.
2 Streamer line standard that is 90 m in length and in the air for 40 m aft of stern.
3 STAL subarea - yet to be defined portion of 4E where albatross presence is more likely to occur. Area to be defined in analysis package.

Halibut catch in 4E

Halibut Landed Catch (pounds)	2005	2006	2007
Total catch in Area 4E	363,842	354,314	580,737
All CDQ Catch – all areas	2,043,262	1,908,673	2,134,471
All IFQ Catch – all areas	55,192,929	52,217,429	49,328,713
Total Halibut (CDQ + IFQ) all areas	57,236,191	54,126,102	51,463,184
4E catch as a percent of CDQ halibut catch	17.81%	18.56%	27.21%
4E catch as a percent of total halibut	0.635%	0.655%	1.128%

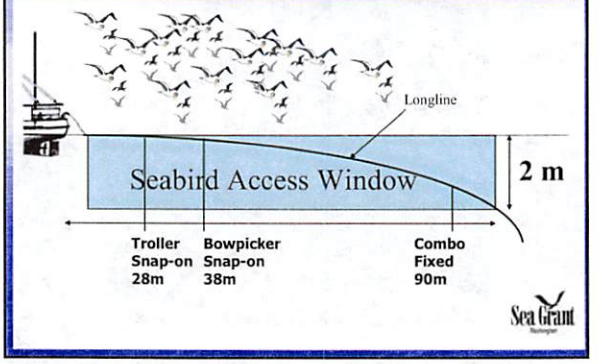
Seabird Avoidance in 4E March 2008

CDQ Halibut Fishing Effort in 4E

Fleet	Vessel Size	Number of Vessels	Setting speed	Type of Gear
Bristol Bay CDQ fleet	32′ limit	33 vessels	Maximum of 4 knots	Mainly snap-on gear
Coastal Villages Region Fund	All are <35 feet	136 vessels (34 are 26-32′)	2-4 knots	Mostly jig gear
Norton Sound CDQ fleet	Most 32′ or less	10 vessels	3-4 knots	Mainly snap-on gear

Seabird Avoidance in 4E March 2008

Incidental Take of Seabirds



Halibut catch in 4E

2003		2004		2005		2006		2007	
Vessel Count	Pounds	Vessel Count	Pounds	Vessel Count	Pounds	Vessel Count	Pounds	Vessel Count	Pounds
61	265,306	69	203,142	67	215,380	64	197,661	66	317,916
2	*	4	36,374	3	21,055	2	*	4	75,025
1	*	2	*	1	*	0	0	0	0

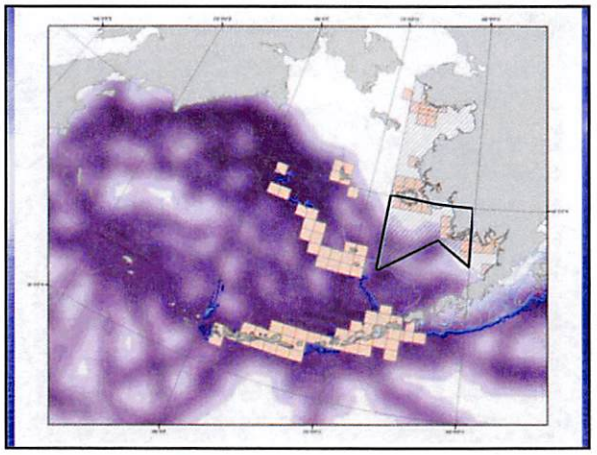
Data from NMFS Alaska RAM division

Seabird Avoidance in 4E March 2008

Halibut harvest inside the STAL area as a percentage of total IPHC Area 4E harvest.

2003	2004	2005	2006	2007
11.07%	2.90%	8.59%	11.57%	2.83%

Seabird Avoidance in 4E March 2008



Numbers of vessels participating in Halibut fisheries in the STAL area of 4EIPHC Area 4E and their catch.

	2003		2004		2005		2006		2007	
Vessel Size	Vessel Count	Pounds	Vessel Count	Pounds	Vessel Count	Pounds	Vessel Count	Pounds	Vessel Count	Pounds
<=32	21	33,009	17	6,942	15	20,308	17	25,450	13	11,135
>32 and <=55	0	0	0	0	0	0	0	0	0	0
>55	0	0	0	0	0	0	0	0	0	0

Seabird Avoidance in 4E March 2008

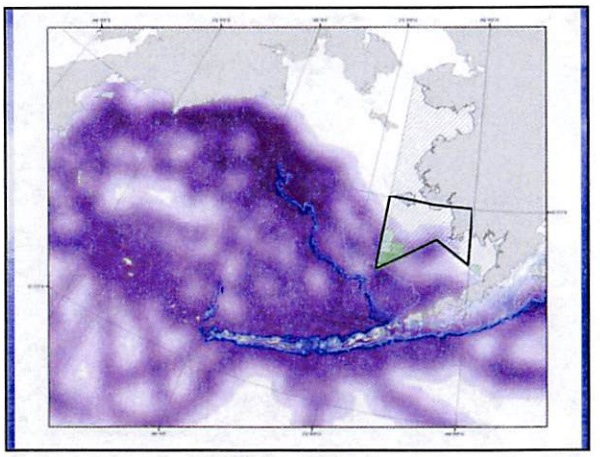
	2003			2004			2005			2006			2007		
	#Vsl	% Harvest		#Vsl	% Harvest		#Vsl	% Harvest		#Vsl	% Harvest		#Vsl	% Harvest	
GOA group	IN	IN	OUT	IN	IN	OUT	IN	IN	OUT	IN	IN	OUT	IN	IN	OUT
BEAR	13	18.6	81.4	6	4.6	95.4	5	9.9	90.1	5	8.8	91.2	1	*	*
CHRI	8	5.6	94.4	11	4.0	96.0	10	11.7	88.3	12	18.1	81.9	12	5.5	94.5
NEEDC	0	0	100	0	0	100	0	0	100	0	0	100	0	0	100
YDFDA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

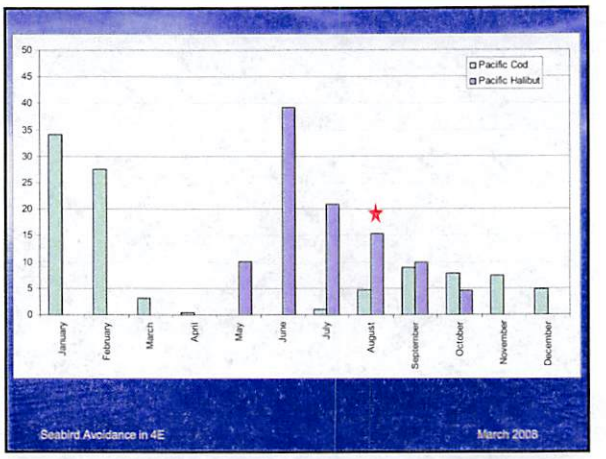
Seabird Avoidance in 4E March 2008

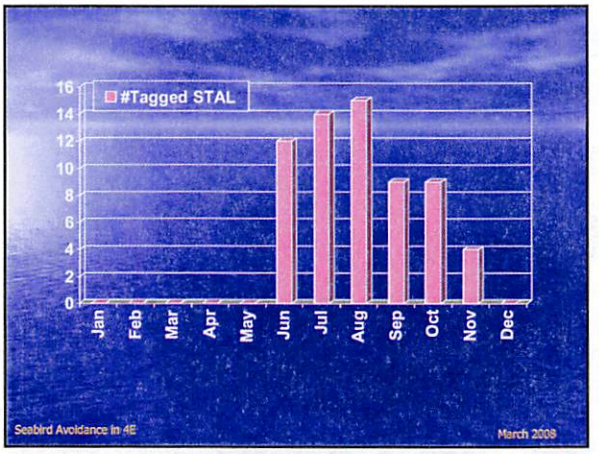
Pacific cod harvest inside 4E

	2003		2004		2005		2006	
Vessel Size	Vessel Count	Tons	Vessel Count	Tons	Vessel Count	Tons	Vessel Count	Tons
<=60	0	0	0	0	0	0	0	0
>60 <=125	5	511.45	2	1,096.80	4	164.11	4	170.03
>125	16	4,216.58	12	3,415.05	15	6,524.448	14	7,430.68

Seabird Avoidance in 4E March 2008




Pacific Cod
Pacific Halibut
January
February
March
April
May
June
July
August
September
October
November
December
Seabird Avoidance in 4E
March 2008


#Tagged STAL
Jan
Feb
Mar
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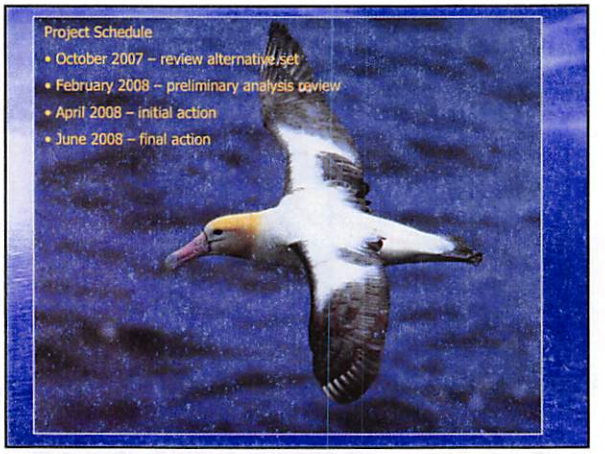
Seabird Avoidance in 4E
March 2008


Project Schedule
• October 2007 – review alternative set
• February 2008 – preliminary analysis review
• April 2008 – initial action
• June 2008 – final action


Revising Regulations for Seabird Avoidance Measures in the Hook-and-line Fisheries off Alaska
List of preparers and contributors:
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Hatfield Marine Science Center
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International Pacific Halibut Commission
Bill Wilson
North Pacific Fishery Management Council
Seabird Avoidance in 4E
March 2008

Findings of the Regulatory Impact Review and Initial Regulatory Flexibility Analysis

Of Proposed Alternatives to Seabird Avoidance Regulations in IPHC Area 4E.

Impact Categories Not Affected

- No Impact Foreseen on
  - Use or Non-Use Benefits, Revenue, Related Fisheries, and Communities.
  - Equipment Costs (streamer lines provided without cost, buoy bag gear readily available on vessels).
  - Consumers of Fishery Products.
  - USCG Regulatory and Enforcement Programs.
  - Fisheries Management.

Vessels Affected by the Alternatives

- Alternative 2 affects vessels that are up to 32 feet in length, fish in the EEZ, and are presently required to deploy the appropriate seabird avoidance device. 66 such vessels participated in the CDQ halibut fishery in IPHC area 4E in 2007 (NMFS RAM division 2007 data).
- Alternative 3 includes 4 vessels between 32 and 55 feet in length that harvested CDQ Halibut in IPHC area 4E in 2007 (NMFS RAM, 2007). No vessels up to 55 feet in length harvested Pacific cod within IPHC area 4E in 2007 (NMFS Catch in Areas Database).

Vessels Affected by the Alternatives

- Alternative 4 would eliminate seabird avoidance requirements for all hook and line vessels operating in IPHC area 4E. This alternative adds the larger (greater than 55 feet in length) hook and line CP and CV vessels that operate in the Bering Sea to those under 55 feet.
  - Hook and line vessel participation and landings data indicate that 52 CVs and 40 CPs harvested groundfish using hook and line gear in the BSAI in 2006.
  - A review of spatial data (NMFS Alaska Region Catch in Areas Database) shows that 18 of the 92 hook and line vessels that harvested BSAI groundfish in 2006 reported harvests, totaling approximately 7,600 metric tons or about 6 percent of their BSAI total of 123,000 metric tons, in IPHC area 4E.

Operational Cost Effects

- Each alternative would decrease affected vessel operational costs associated with the time required to train crew, deploy and retrieve the devices, and perform maintenance.
- However, vessel operating cost data are not presently available. Thus, it is not possible to quantify the savings that might occur under the alternatives or the options to the alternatives.
- Further, it is not possible to quantify the difference in benefits between the alternatives.

Effects on CDQ Emerging Small Vessel Halibut Fishery

- The small boat (26-32 ft LOA, plus 4 vessels up to 55') IPHC Area 4E halibut fishery is still in its development stages.
- These small vessels have few crew members and any further restrictions, requirements, or operational costs could make this fishery cost prohibitive and/or unsafe to prosecute (pers. Comm.. Andy Ruby and Robert Williams).
- The benefits of reduced cost for these small vessels are contained in all three alternatives.

Vessel Safety Effects

- The elimination of seabird avoidance requirements in IPHC area 4E would alleviate some of the safety concerns, particularly for the smallest vessels.
- The additional vessels between 32 and 55 feet in length (Alternative 3) may gain additional benefits associated with vessel safety.
- This may also be true, but perhaps to a lesser extent, for vessels greater than 55 feet that would be included under Alternative 4.

Effects of the Options

- Option 1 would continue to require the status quo seabird avoidance requirements in the STAL area.
- Option 2 would change the current requirements by requiring only a buoy bag line for all vessels affected by the alternative regardless of their rigging configuration and gear type.
- Thus, Option 2 is slightly less restrictive, than Option 1, because it would eliminate the streamer line requirements and performance standards for vessels that have masts, poles, or rigging while operating in the STAL area.

Initial Regulatory Flexibility Analysis

- The 70 vessels that fished in the CDQ halibut fishery in IPHC area 4E (66 are less than 33 feet in length) are considered to be small entities
- 58 of the 92 vessels that participated in the BSAI hook and line fishery are considered small entities. (Hiatt, et. al., 2006, Table 36 and 37)
- In total, this analysis has identified 128 vessels that are considered to be small entities
- A review of American Fisheries Act permit data revealed that none of the vessels with gross revenue less than the $4 million small entity threshold in 2006 are AFA permitted vessels.

Summary of RIR/IRFA Findings.

- The alternatives to the status quo are not likely to impose costs on industry or affect other use or non-use values.
- The alternatives will tend to reduce affected vessel operational cost and improve affected vessel safety.
- Ignoring affiliations, 128 vessels could be considered small entities.
- The proposed actions would not be expected to meet or exceed the threshold for a "significant" action (as that term is defined in E.O. 12866).

Table 1-1. Seabird Avoidance Measures Alternatives for Hook and Line Gear in IPHC Area 4E for vessels > 26' LOA

Location, Vessel Size & Config	26-55' in the EEZ >32' to ≤ 55' in 0-3 nm w/o masts, poles, or rigging	26- 55' in the EEZ >32' to ≤ 55' in 0-3 nm with masts, poles, or rigging	>55' in the EEZ >55' in 0-3 nm
Alt 1 (Status Quo)	1 buoy bag line	1 streamer line with standard (snap-on gear)[1]	1 streamer line with standard (snap-on gear)[1]
		1 streamer line with standard (other than snap-on gear)[2]	Paired streamer lines with standard (other than snap-on gear)[2]
Alt 2	26-32' - no seabird avoidance measures required in 4E, >32' - status quo		
option 1	Vessels 26-32' LOA fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	Vessels 26-32' LOA fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.		
Alt 3	26- 55' - no seabird avoidance measures required in 4E, > 55' - status quo		
option 1	Vessels 26-55' LOA fishing in the STAL subarea[3] of 4E are required to use seabird avoidance regulations as detailed in alternative 1, above.		
option 2	Vessels 26-55' LOA fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.		
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option 2	All vessels fishing in the STAL subarea[3] of 4E are required to use only a buoy bag to deter seabirds.		

1 Streamer line standard that is 45 m in length and in the air for 20 m aft of stern.
2 Streamer line standard that is 90 m in length and in the air for 40 m aft of stern.
3 STAL subarea - southwestern portion of IPHC Area 4E where fisheries are more likely to interaction with STAL. See Figure 1.

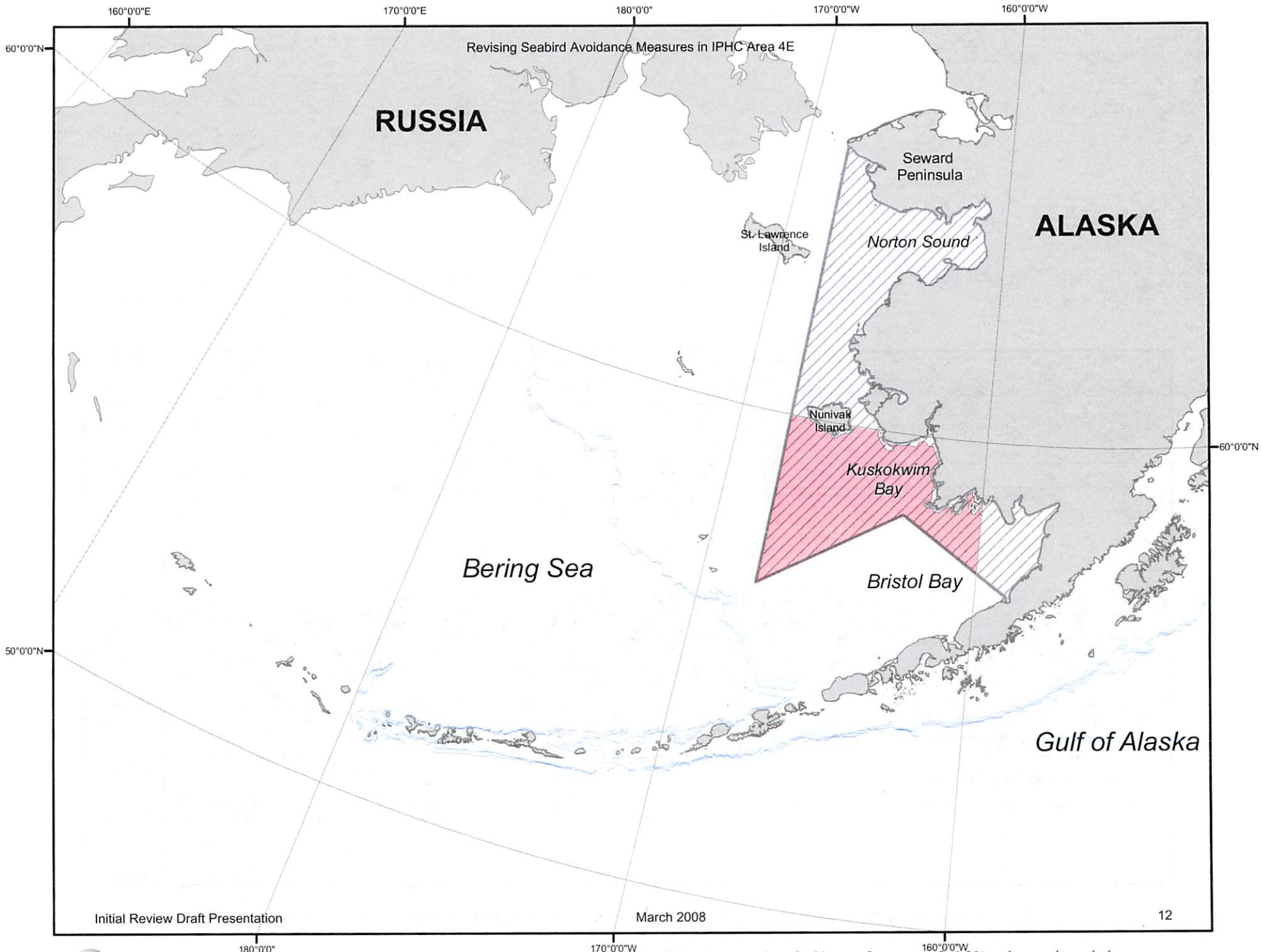

Figure 1. IPHC Area 4E shown in diagonal hatch and STAL subarea inside 4E south of 60N and west of 160W shown in pink. 0-3 nm waters are not included in the STAL area.