

Trawl Rationalization Alternatives

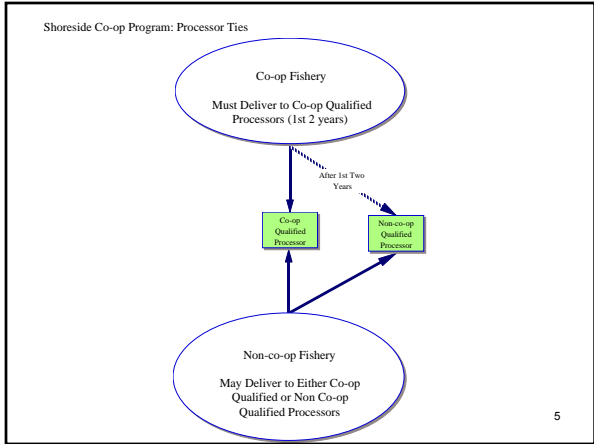
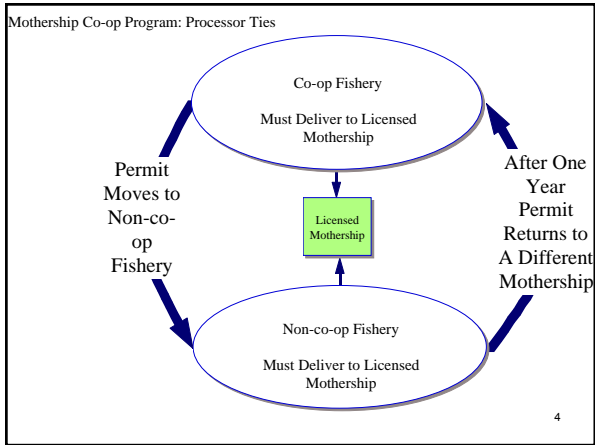
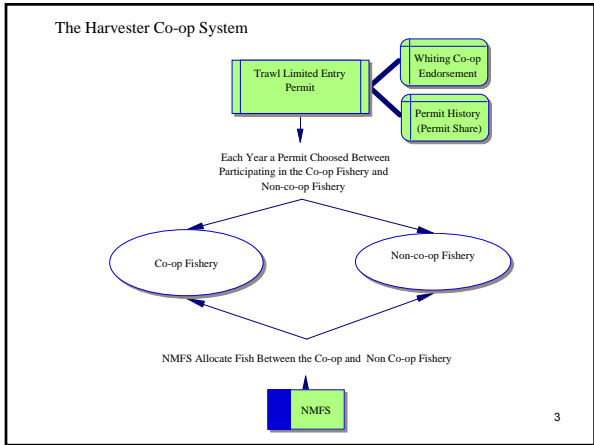
- Review IFQ Alternative Basics
- Review Co-op Alternative Basics

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IFQ Alternative

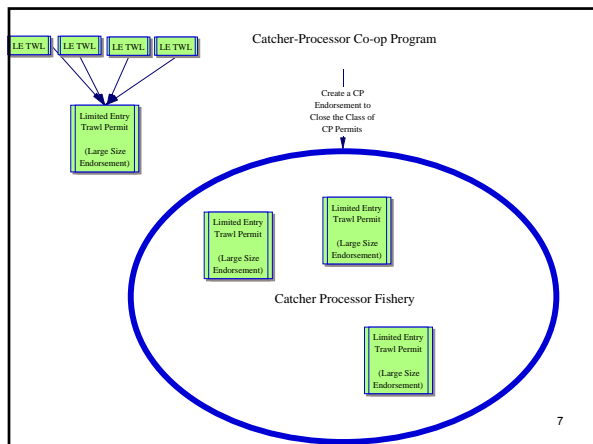
- IFQ Scope
 - All Groundfish Species
 - Caught With Directed Commercial Gear
 - By Vessels with LE Trawl Permits
 - Alternative Scope (same but no IFQ for bycatch in the whiting fishery)
- QS Issued Once At Start (To Permits and Possibly Processors)
- After Initial Issuance, QS Widely Transferable
- QP Issued Annually
- Vessels Required to Have QP
- Accumulation Limits (Vessel and Control)
- Tracking, Monitoring, Data Collection
- Adaptive Management Provision
- Halibut IBQ Option

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- Ties with shoreside processors are broken similar to the means described for motherships (1 year in the non-co-op fishery)

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Whiting Sector Bycatch Management

- IFQ Program Option: IFQ for all bycatch species
 - Option: No IFQ for bycatch species
 - Allocation to all sectors combined (option for seasonal releases)
 - Allocation to each whiting sector (option for rollovers)
- Co-ops
 - Allocation to all sectors combined (option for seasonal releases)
 - Allocation to each whiting sector (option for rollovers)

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- Review details of alternatives.
 - D.7.b, Attachment 2 – Trawl Rationalization Alt
 - Table 4 on (Page 16)
 - Whiting Sector Management Under Co-ops (Page 38)
 - D.7.b, Attachment 3 – Restatement of Mothership and Shoreside Co-op Alt
 - D.7.b, Attachment 2 – Trawl Rationalization Alt
 - Co-ops for Catcher-Processors (Page 47)

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Quota Share Allocation Formula and Accumulation Limits

- These two factors will significantly affect the quantitative analysis to be conducted over the next six months.
- For the QS allocation formula in particular, changes made down the road will be costly in terms of time and effort for reanalysis.

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QS Allocation Formula (A-2.1.3)

- Drop Years
 - Takes into account exigencies that may reduce a permit's ability to participate for a period of time (e.g. hardships)
 - Tends to benefit those with variable history at the expense of consistent participants, leveling out the distribution.
- Relative Pounds
 - Takes into account relative intensity of a fisherman's effort and commitment to the fishery in the face of more constraining regulations.
 - Benefits those catching more when trawl history is lower
 - Because of the recent downward trend, this gives more credit to more recent entrants
 - (see Supplemental D.7.b, Attachment 4, pages 19-23)
- Method for Allocating Overfished Species

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Relative Shares

- There may be some larger differences in credit given for equivalent amounts of landing in two different years.
- For target species, the range is relative narrow.
- For overfished species, species rarely caught in trawl gear, and shelf species the range may be wide.
- Effects will be greatest on those who have history of short duration.

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	Year										QS Abs	QS Rel	% Chng
	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03			
Sablefish	.66	.63	.56	.63	1.08	.74	.86	.92	1.61	1.00			
Relative Credit - 2002 vs. 1995									2.44				
Str Early	24,065	41,773	60,763	49,192	35,528	56,317	43,925	32,718	0	0	.49	.45	-8
Str Late	0	0	0	30	0	1,318	1,972	20,897	15,124	18,694	.10	.13	+36
Consistent	2,892	2,344	9,913	8,631	12,169	15,392	7,997	33,450	16,335	19,848	.20	.24	+18
Lingcod	.04	.06	.05	.05	.28	.28	.91	1.04	.26	.05	1.00		
Relative Credit - 2001 vs. 1994									26				
Str Early	2,162	2,969	31,230	72,004	3,143	1,810	715	38	0	0	.93	.52	-44
Str Late	109	146	102	94	85	129	134	386	466	2,152	.06	.44	+666
Consistent	5,020	2,789	2,195	3,029	2,321	2,817	1,332	1,011	1,128	2,234	.21	.68	+216
Canary	.01	.01	.01	.01	.01	.01	.21	.32	.18	1.00			
Relative Credit - 2003 vs. 1994										100			
Str Early	12,542	10,277	82,980	31,806	33,781	18,020	0	61	-	-	1.79	.95	-47
Str Late	21	0	0	4	54	164	402	106	398	11	.01	.15	+1182
Consistent	2,077	2,104	1,957	1,639	3,296	3,659	903	771	479	299	.16	.53	+228
Kelp Grnling	.13	.01	.33	.00	.35	.00	.00	.85	34.00	1.00			
Relative Credit - 2002 vs. 1995									261.5				
Consistent	.00	.00	.00	.00	.00	.00	.00	1.00	0.03	9.09	13		+35240

	Year																															
	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03																						
NShelf Rock	.02	.02	.02	.02	.02	.05	.36	.10	.43	1.00																						
Relative Credit - 2002 vs. 1995									2.44																							
Str Erly	3,792	11,305	27,646	12,575	10,657	7,486	327	4	-	-																						
Str Late	51	1	0	3	11	102	181	121	384	105																						
Const	4,682	172	315	208	323	585	143	161	764	17																						
	<table border="1"> <thead> <tr> <th rowspan="2">Total Catch History</th> <th colspan="3">QS</th> </tr> <tr> <th>Abs</th> <th>QS Rel</th> <th>%Chng</th> </tr> </thead> <tbody> <tr> <td>Str Erly</td> <td>73,793</td> <td>.57</td> <td>.37</td> <td>-35</td> </tr> <tr> <td>Str Late</td> <td>961</td> <td>.01</td> <td>.08</td> <td>+36</td> </tr> <tr> <td>Const</td> <td>7,457</td> <td>.06</td> <td>.15</td> <td>+18</td> </tr> </tbody> </table>										Total Catch History	QS			Abs	QS Rel	%Chng	Str Erly	73,793	.57	.37	-35	Str Late	961	.01	.08	+36	Const	7,457	.06	.15	+18
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For More Info On Previous Slides
See

Agenda Item D.7.b
Supplemental Attachment 5
Pages 19-23

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Proposed Accumulation Limits

Agenda Item D.7.b
Supplemental Attachment 1
Components Discussion Paper
Table 17, Pages 33

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Methods and Approach for Analysis

Overview

- A description of issues addressed by developing models and other analytical tools
- Preliminary results of 3 analytical tools
- A description of the “analytical scenarios” that will serve as the basis for the analysis
 - Analytical scenarios combine the existing alternatives and sub-options into several rationalization “programs”
 - Scenarios are also constructed with the intention of illustrating the key trade-offs that exist within the alternatives

Issues Assessed with Analytical Tools

- The impact of the initial allocation of IFQ,
- The amount of fleet consolidation expected to occur
- The amount of harvesting cost savings expected to occur,
- The potential for shifts in the location of fishing effort,
- The potential for changes in revenue and catch as a result of changes in bycatch rates,
- The comparative advantage of ports and regions in a rationalized fishery,
- Negotiation and bargaining power between harvesters and processors,
- The regional economic impacts of trawl fishing activity,
- The effect on the California current ecosystem resulting from changes in trawl activity

Preliminary Results of 3 Developing Analytical Tools

- Exvessel revenue estimates in the non-whiting trawl sector
- Fleet consolidation and harvester cost savings in the non-whiting trawl sector
- Distributional effects of trawl rationalization on West Coast trawl communities

Initial Exvessel Revenue Estimates in the Non-whiting Trawl Sector

Assessment is based on the following key assumptions

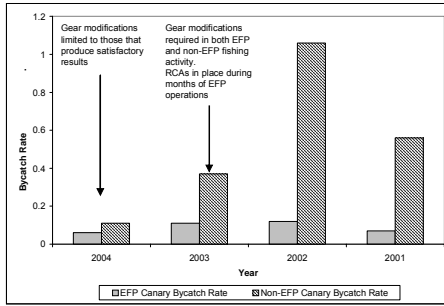
- Exvessel prices remain constant
- Overfished species bycatch rates may change substantially as fishermen find creative ways to avoid overfished stocks
- Overfished stocks are assumed to be as constraining to SQ management in the future as they are currently

– For more detail, see Agenda Item D.7.b Attachment 4

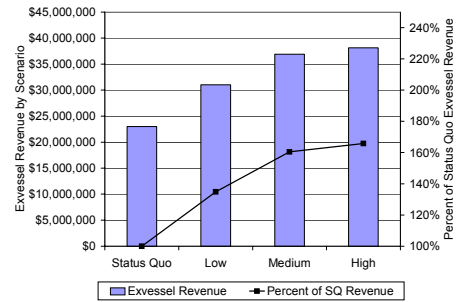
Effects Underlying Exvessel Revenue Projections

- Several under-utilized species will be increasingly accessible as the bycatch of constraining stocks is reduced
- Some species with large OYs will not be fully utilized (Dover sole, arrowtooth, other flatfish)
- Species that are more highly associated with overfished stocks will not be fully utilized (eg. yellowtail and chilipepper rockfish)

Major Assumption for Predicted Changes in Non-whiting Trawl Revenue



Preliminary Estimates of Potential Exvessel Revenue in the Non-Whiting Trawl Fishery

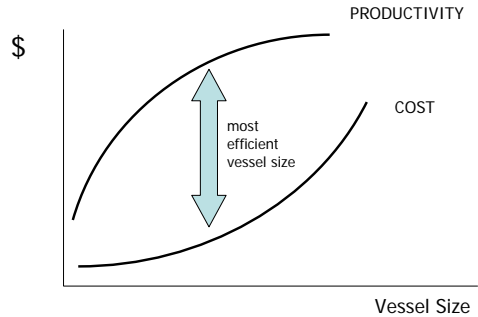


Potential Cost Savings and Fleet Consolidation in the Non-Whiting Trawl Fishery

This ongoing assessment uses the NWFSC cost-earnings survey and basic economic theory to estimate

- The most “efficient” vessel size,
- The amount of fleet consolidation that could be expected and,
- Fleet-wide cost savings

Theory behind vessel efficiency estimate



Preliminary Outcomes of Efficiency and Cost Savings Model

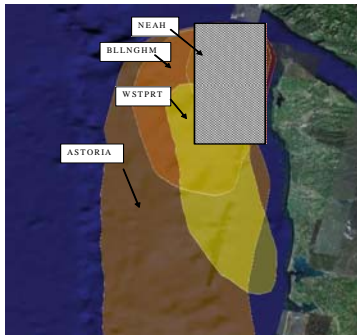
- Initial analysis shows non-whiting trawl fishery participants are making zero economic profit under status quo
- Fleet consolidation should be expected to occur, but to a point (ie. the fleet won't consolidate down to a single vessel)
- Substantial reductions in harvesting costs can occur because of fleet consolidation
- Substantial cost savings can occur by allowing consolidation to occur toward the most efficient vessel size
 - Maintaining vessel/permit size restrictions will restrict cost savings
 - Limiting consolidation will restrict cost savings

Preliminary Community Assessment

In this assessment we examine the relative comparative advantage of various trawl communities in a rationalized fishery

- This preliminary assessment indexes communities based on several factors including:
 - Local fleet productivity
 - Whether the local fleet is dependent on fishing grounds in a relatively high constraining species bycatch area
 - Whether there is the presence of other fishery services in those communities (the presence of other business creates efficiencies)
 - The initial allocation of IFQ made to each community

Fishing Grounds of Select Ports and Location of Relatively High Overfished Species Bycatch Area



Port	Fleet Production Score	Bycatch Dependent Area Score	Shoreside Support Business	Initial Allocation of Grndfish	Preliminary Score
ASTORIA	+	+	+	--	+
BELLINGHAM BAY	+	--	+	--	+
BROOKINGS	+	+	--	+	+
CHARLESTON (COOS BAY)	+	+	+	+	+
CRESCENT CITY	--	+	+	--	--
EUREKA	--	+	+	+	--
FORT BRAGG	--	+	+	?	--
MORRO BAY	?	+	--	--	--
MOSS LANDING	--	+	+	?	--
NEAH BAY	--	--	--	?	--
NEWPORT	+	--	+	?	--
PRINCETON / HALF MOON BAY	--	--	+	+	+
SAN FRANCISCO	--	+	+	+	+
WESTPORT	--	+	+	?	--

Analytical Scenarios

- Analytical scenarios will serve as the basis for the analysis
- Analytical scenarios are constructed with the intention of showing the impact of rationalization programs (as opposed to the effect of individual sub-options)
- These scenarios were constructed with the intention of showing the effect of a range of market flexibility and individual accountability in the program
 - Within those scenarios, other key sub-options are ranged to show their impact on the program as a whole

Description of Analytical Scenarios

- Scenario 1 is status quo
- Scenario 2a and 2b are intended to be market-centric with a high level of individual accountability of catch. This is largely achieved by issuing IFQ to all sectors and covering all species with IQ.
 - 2.b adds an initial allocation of IFQ to processors while 2.a does not
- Scenario 3 imposes harvest coops on the whiting sectors, IFQ for the non-whiting sector, and imposes sub-options to mitigate against a purely market-driven program
- Scenario 4 is intended to be moderate to scenario 2 and 3 by imposing harvest coops on the at-sea portion of the fishery and fewer, or less restrictive, sub-options to mitigate against a purely market-driven program

ELEMENT	Scenario 2.a	Scenario 2.b
Catch Control Tool	• IFQ for all Trawl Sectors	• IFQ for all trawl sectors
Initial Allocation	• Based on catch history (no buyback sharing)	
Processor Initial Ownership / Coop Affiliations	• None	• 25% of groundfish • 50% whiting to shoreside and motherships
Species Covered	• All grndfish and Pacific halibut	• All grndfish and Pacific halibut
Number of Trawl Sectors	• Three	• Four
Adaptive Management	• No adaptive mgmt	• No adaptive mgmt
Roll-over	• Roll-over exists	• Roll-over exists
Overfished Species Provisions	• none	• none
Accumulation Limits	• SB non-whiting grnd: 5% • SB whiting: 25% ctrl & 12% per vessel • Mothership: 25% ctrl & 50% per vessel • CP: 60% ctrl & 75% per vessel	

ELEMENT	Scenario 3
Catch Control Tool	• IFQ for Non-Whiting Trawl • Coops for Whiting Trawl
Initial Allocation	• Equal sharing of buyback history in Non-whiting • Whiting sectors: placeholder
Processor Initial Ownership / Coop Affiliations	• Processor affiliations in mothership and SB whiting sectors. • 25% SB processor ownership of SB groundfish
Species Covered	• All groundfish in non-whiting sector • Whiting in whiting sectors with bycatch pools that are common across all whiting sectors
Number of Trawl Sectors	• Four
Adaptive Management	• Adaptive mgmt for non-whiting
Roll-over	• No roll-over
Overfished Species Provisions	• placeholder
Accumulation Limits	• SB grnd: 1.5% • SB whiting: 15% • Mothership: 20% • CV(MS): 10% • CP: none

ELEMENT	Scenario 4
Catch Control Tool	<ul style="list-style-type: none"> • IFQ for Shorebased Trawl (whiting & non-whiting) • Coops for At-Sea Trawl
Initial Allocation	<ul style="list-style-type: none"> • Equal sharing of buyback history in Non-whiting • Whiting sectors: placeholder
Processor Initial Ownership / Coop Affiliations	<ul style="list-style-type: none"> • Processor affiliation in Mothership sector • 50% SB processor ownership of SB whiting • No processor ownership of SB groundfish
Species Covered	<ul style="list-style-type: none"> • All groundfish in shorebased sector • Whiting is covered at sea. At sea sector bycatch is covered through sector-specific pools
Number of Trawl Sectors	<ul style="list-style-type: none"> • Three
Adaptive Management	<ul style="list-style-type: none"> • Adaptive mgmt for shorebased
Roll-over	<ul style="list-style-type: none"> • Roll-over exists
Overfished Species Provisions	<ul style="list-style-type: none"> • placeholder
Accumulation Limits	<ul style="list-style-type: none"> • SB grnd: 3% • SB whiting: 10% • Mothershp: 30% • CV(MS): 15% • CP: none