

# Preliminary Discussion and Analysis of Overfished Species Management Constraints in a Rationalization Program

# Overview

- A perspective on how constraining overfished species will be
- Some potential repercussions
- A description of potential tools to deal with overfished species in addition to IQ

# What are we worried about?

- In a rationalized fishery, overfished species are likely to continue constraining fishing opportunities
- When allocated to individual permits, each permit may receive minimal amounts. In some cases this may be the equivalent of one or two fish for a year...or less
- Under severe circumstances market-based mechanisms (IFQ) may not be effective enough on their own to successfully manage fishery harvests while achieving desired outcomes

# Market theory in fisheries

Market-based mechanisms typically are effective at moving IQ to entities that need them and this means catch levels are typically not exceeded

- In a market, participants need a couple of things including information, the ability to make transactions, and they need to know their production possibilities.
  1. Known production possibilities implies that fishermen know precisely what they will catch when deploying fishing gear.
- To some degree we know that's not the case and that there is uncertainty about what will be caught when deploying a net.
  - For species with high enough OYs there is room for some unknown and uncertainty. In the case of species with low OYs there may not be room for uncertainty

Uncertainty about catch levels in the case of species with constraining OYs means their management is best viewed as risk management

- There is a risk that fishermen will catch more of something than they think they will
- There is a risk that they will not have enough quota to cover their catch
- There is a risk that there will not be available quota on the market to cover catch
- There is a risk that unanticipated catch levels without sufficient IQ could pre-empt other fishers

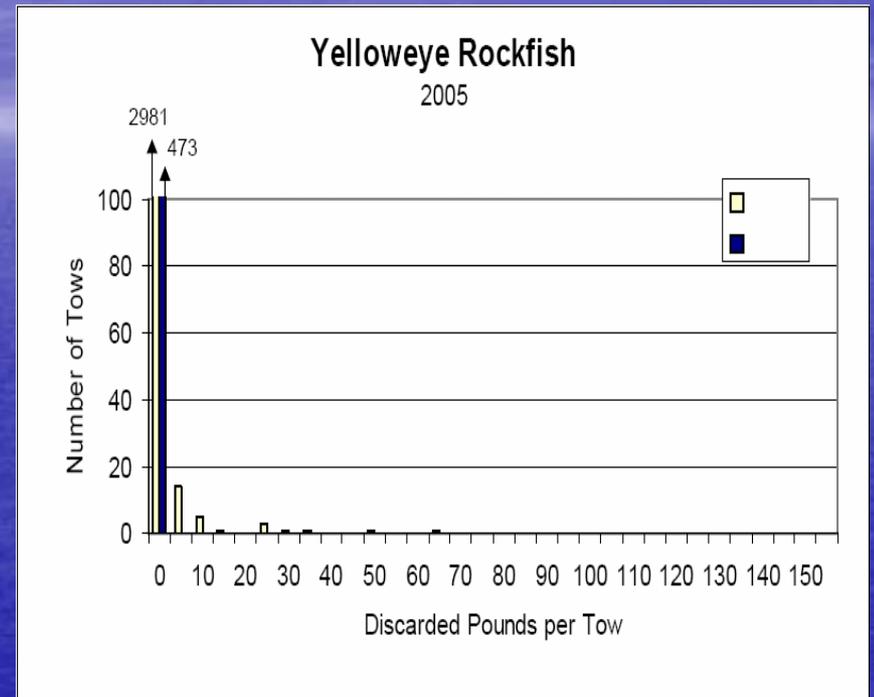
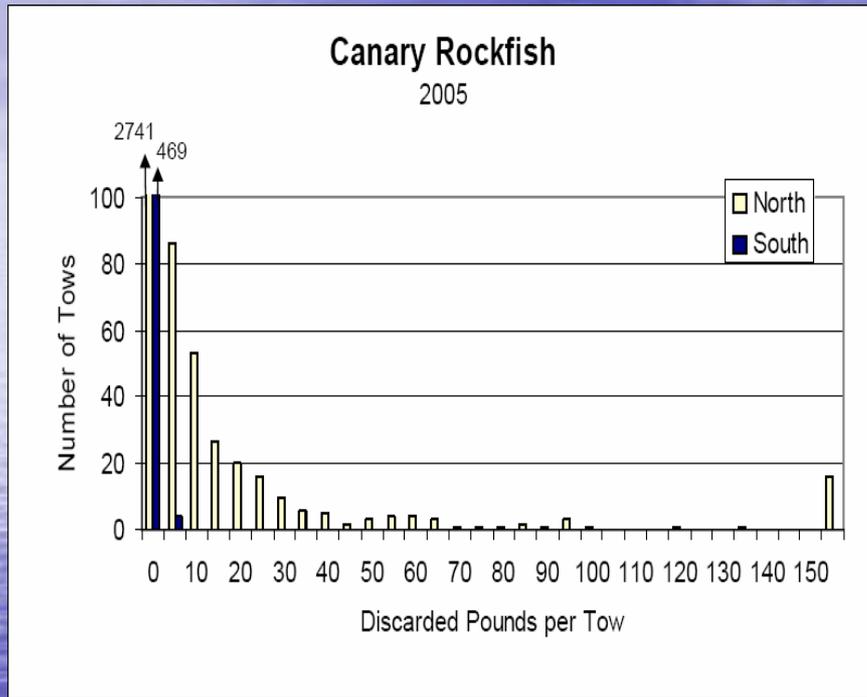
## What is the magnitude of the problem?

- Initial calculations of overfished species allocations show that the average permit will get very little of some species.
- Available observer data shows that some tows result in overfished species catch that are several times larger than the average initial allocation

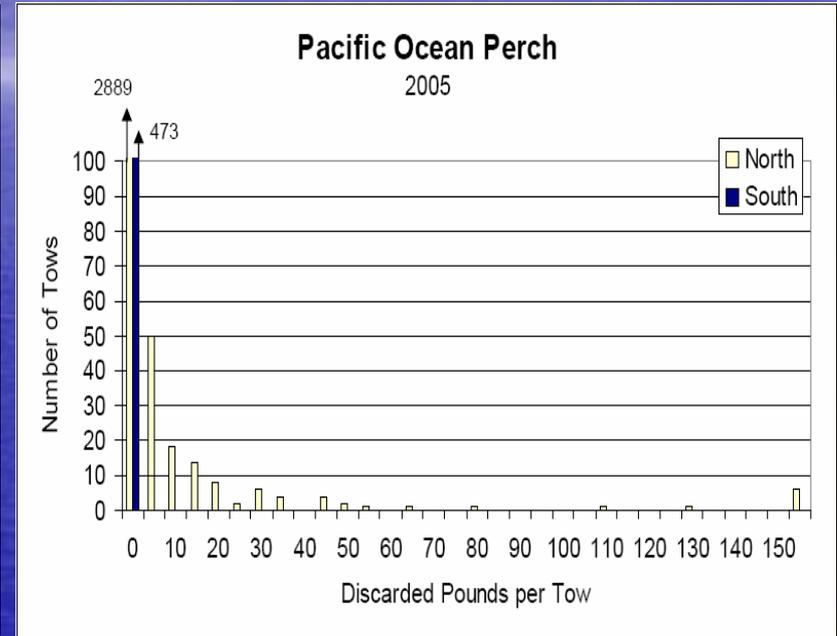
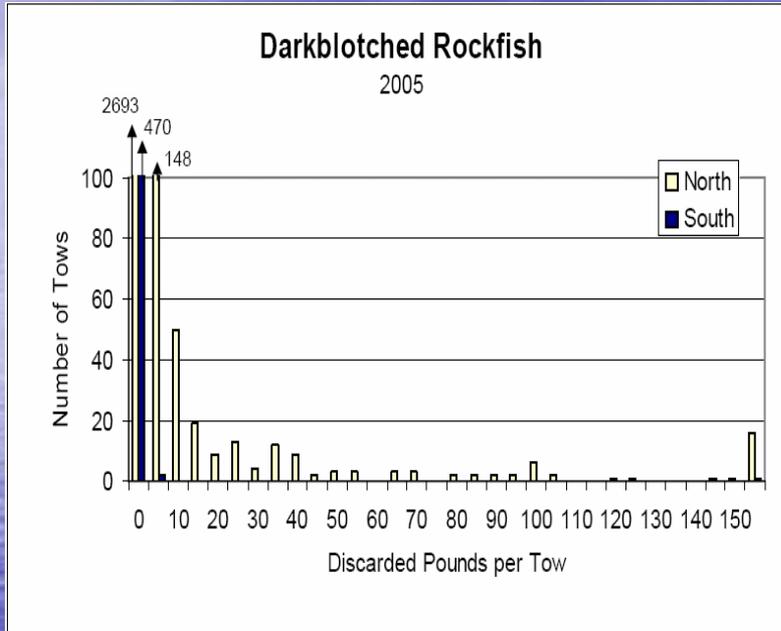
# Potential Allocation of Overfished Species to Average Permits (in lbs)

Sector	Assumed No. of Permits	Bocaccio	Canary	Cowcod	Darkblotched	POP	Widow	Yelloweye
Catcher Processor: Allocation per Permit	12	-	294	-	1,562	533	13,742	-
Mothership: Allocation per Permit	20	-	124	-	661	110	5,820	-
Shoreside Whiting: Allocation per Permit	25	-	174	-	926	159	8,148	-
Shoreside Non-whiting: Allocation per Permit	120	485	134	30	4,104	1,190	28	7

# Overfished Species Discard at the tow level



# Overfished Species Discard at the tow level (cont)



The previous few slides have shown a couple of things:

- Permits may get allocated very little of some species
- Some tows may be over 10 times the average permit allocation
- Some tows may be a substantial portion of the total sector allocation (if current catch levels are indicative of future allocation)

# Policies in addition to IQ can minimize management risks

We can segregate policies into 2 approaches– proactive and reactive

- Proactive policies reduce the risk of unexpected and uncoverable catch levels from occurring
- Reactive policies deal with unexpected catch levels if they occur

<b>Proactive</b>	<b>Reactive</b>
Area closures	Insurance pools/coops
Gear restrictions	Carry-over provisions
Minimum holding requirements	Multi-year OYs

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We currently use:

- Area closures
  - Gear restrictions
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Potential new tools include:

- Minimum holding req's

This would decrease the chance of catching uncoverable amounts

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- Carry-over provisions

Allow for quota to be exceeded without penalty

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- Multi-year OYs

Allow for flexibility to accommodate unexpected catch levels in one year

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- Insurance pools/coops

One vessel may have unexpected catch amounts, but the collective whole stays within allocation

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# Summary

The hypothesis is that permits will receive enough QP of groundfish allocated individually for a market-based mechanism to be an appropriate tool on it's own.

- In order to achieve desired social outcomes, it may be necessary to use additional tools and mechanisms to manage overfished species.