

**Groundfish Forum
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New Zealand Hoki Presentation

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FISHERIES MANAGEMENT: HOKI

Mid-water and bottom trawl

Two stocks “East and West”

Industry manages catch limits within single TACC

Long term sustainable yield ~150,000 tonnes

Large recruitment fluctuations

Environmental drivers

When stocks declined, management response was to:

Reduce TACC from 250,000 to 90,000 tonnes

Reduce fishing in juvenile areas

Increase research - annual biomass surveys and stock assessments



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FISHERIES MANAGEMENT: HOKI

Management target 35-50% B_0

Eastern stock

Remained above target

Currently 53% B_0

Western stock

Dropped to ~20% B_0

Since rebuilt

Currently 41% B_0

TACC increased to 130,000 t

Western catch 25,000 – 60,000 t

Trawl grounds cover 13% habitat range

6.24% closed to trawling



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BOTTOM TRAWLING: BENTHIC PROTECTION AREAS

Key Statistics:

Habitat ranges of NZ commercial fish species mapped

1989-90 to 2008-09 – 7% EEZ and 17% habitat range trawled

In single year (2008-09) >1% EEZ and 2% habitat range trawled

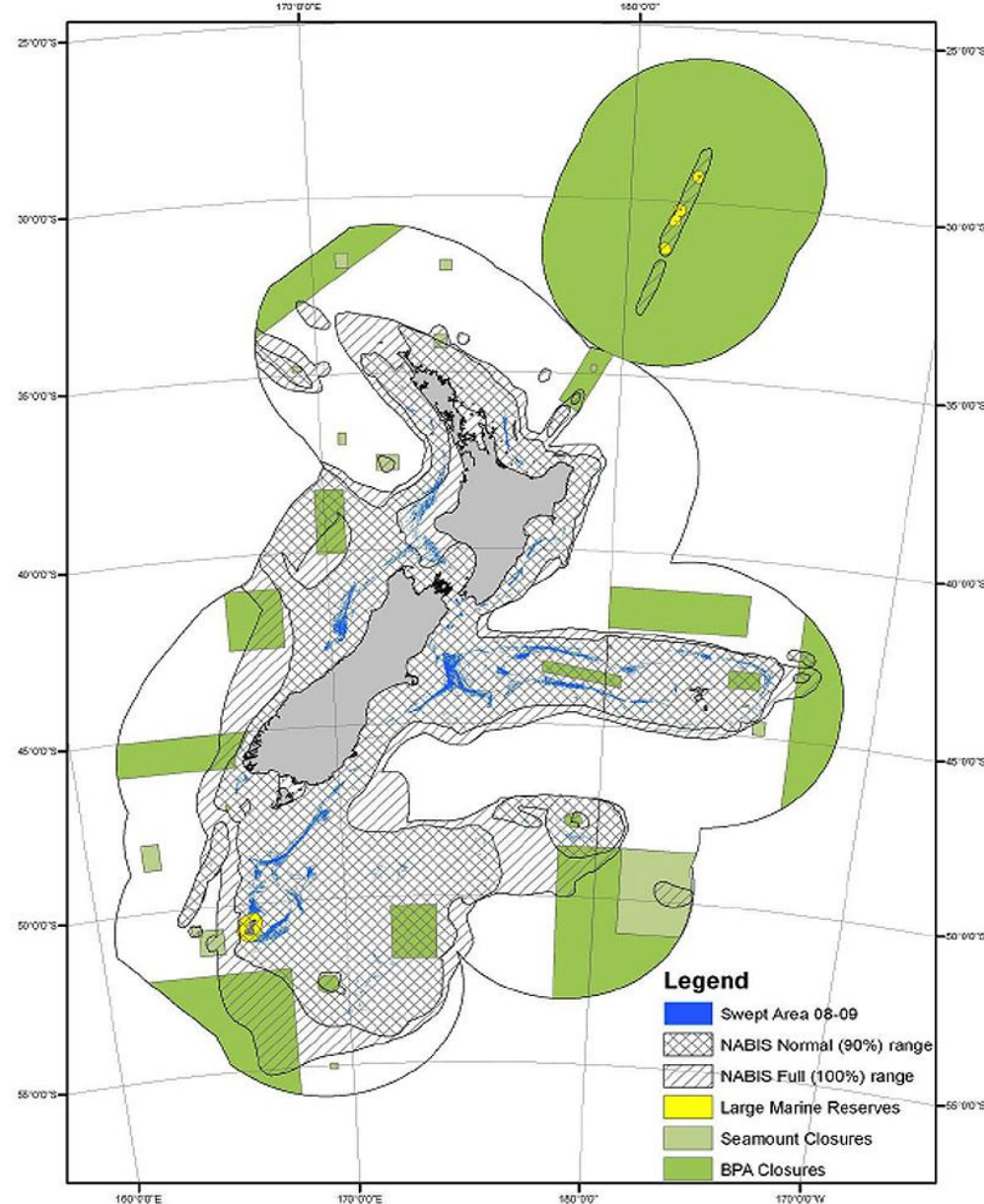
93% NZ EEZ either never trawled or closed

Closed

28% 'hills and knolls'

52% 'seamounts'

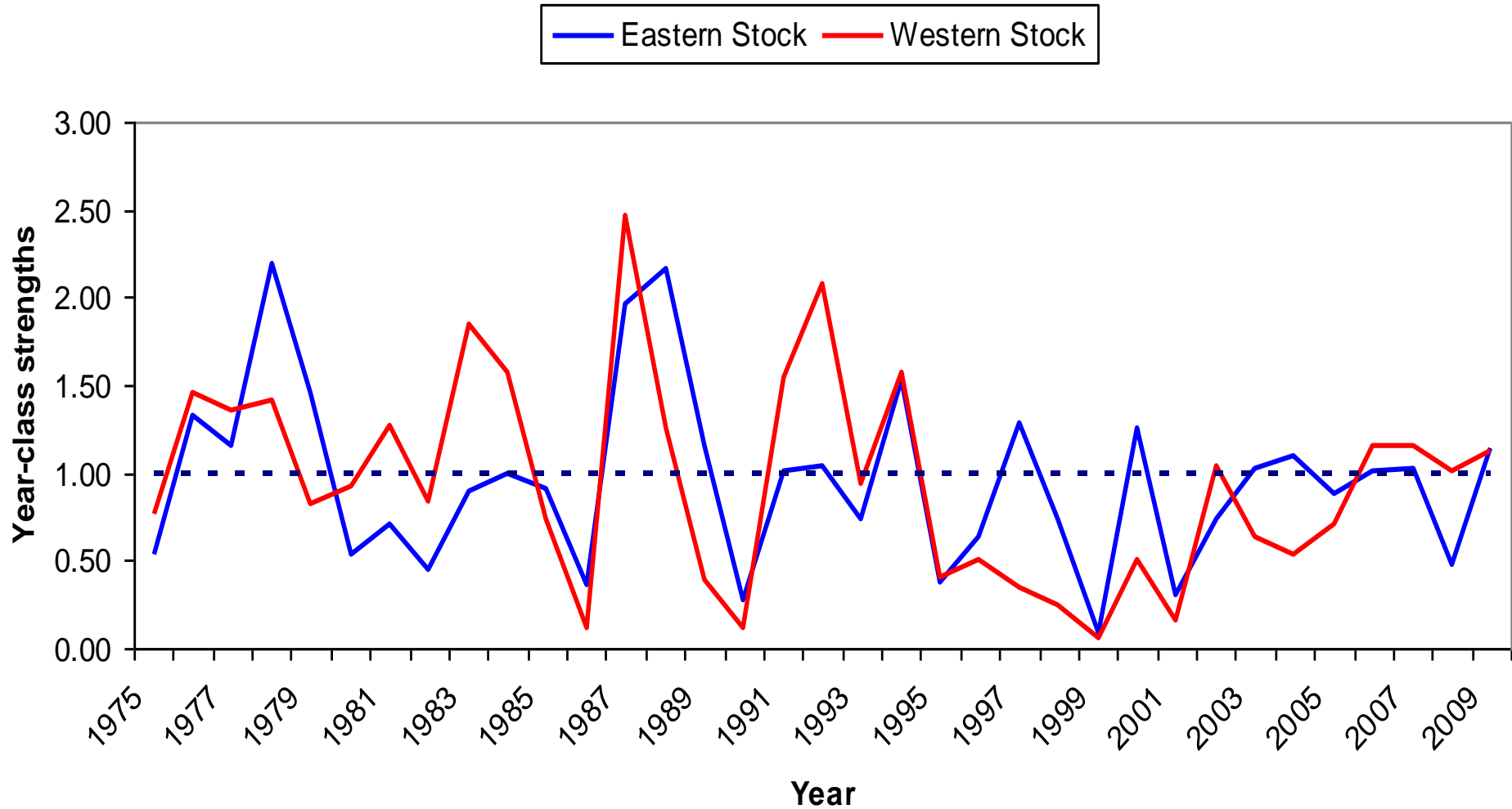
88% active hydrothermal vents



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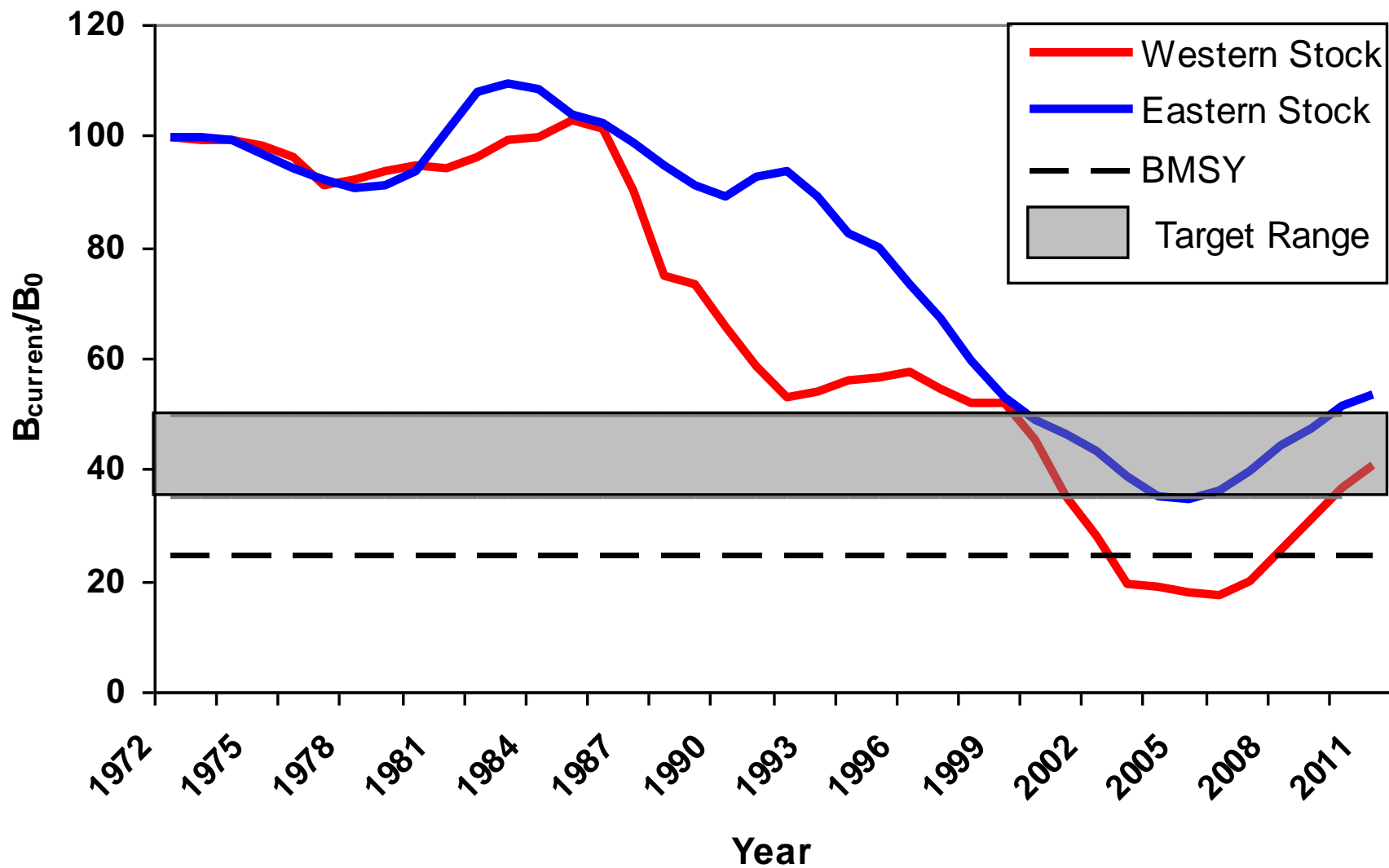


Recruitment variations in the eastern and western hoki stocks, based on the index of 1+ year-class strengths between 1975 and 2009 (Model run 1.1) ¹



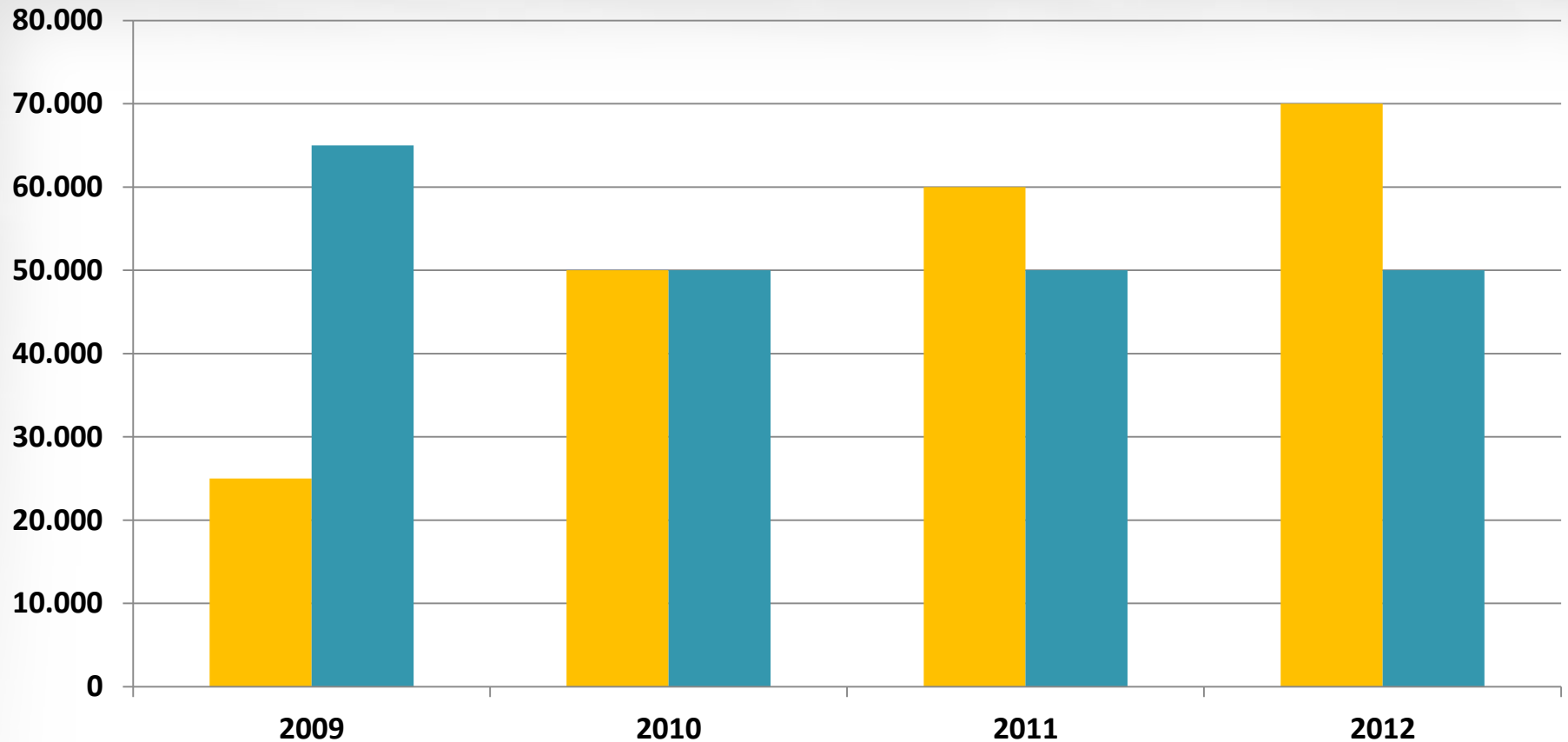
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NEW ZEALAND HOKI QUOTA

■ Western Stock ■ Eastern Stock



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“It is important to distinguish between the credibility of the assessment for stock status or as a basis for projections. The assessed stock status is credible. Projections, however, while encouraging, need to be treated carefully.”

Dr Kevin Stokes



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FISHERIES MANAGEMENT: ORANGE ROUGHY

Bottom trawl

Technically and scientifically
measure/assess

Need more information

Industry undertakes biomass surveys

Management objectives

harvest 4.5% B_{current}

i.e. catch 1 in 22 fish

Proactive TACC adjustments

Rest, rebuild, reopen...



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