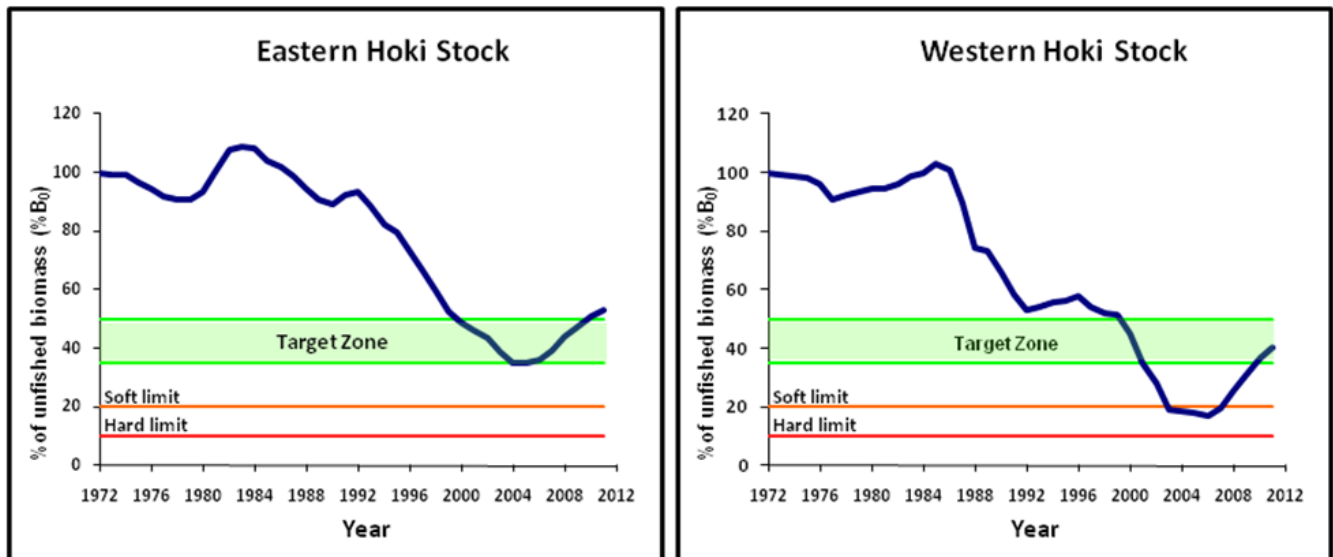


2011 Hoki Stock Assessment Results

(Source: Ministry of Fisheries Assessment Plenary, May 2011: stock assessments and yield estimates)



Estimated biomass as a proportion of the unfished level (%B₀) from the 2011 hoki stock assessment.

Unlike most fisheries, the stock assessment traces the history of stock size (biomass) since the inception of the fishery. International best practice suggests that stocks like hoki should be fished down to a level of about 35–40% B₀. New Zealand uses a target of 35–50% B₀ for hoki. The left hand panel shows that the eastern stock of hoki has never been below the target zone and has remained far above biomass limits that would signify an overfished, depleted, or collapsed stock.¹

The right hand panel shows that the western hoki stock began to decline below target levels around the year 2001. As a result, the hoki Total Allowable Commercial Catch (TACC) was reduced from 250,000 tonnes in 2000 to 200,000 tonnes in 2001, then to 180,000 tonnes in 2003. Nevertheless, hoki fell below the soft limit around 2003 and a further TACC reduction to 100,000 tonnes was enacted in 2004. When stock size did not improve substantially – at least in part due to several successive years of poor numbers of new recruits – the TACC was further reduced to 90,000 tonnes in 2007.

These substantial quota cuts subsequently began to turn the situation around and the stock is now assessed to have been within the target range for the last 2 years. TACC increases have accordingly been enacted for the 2009/10 and 2010/11 fishing years. This history of TACC changes is indicative of sound and responsive management.

In May 2011, the Fishery Assessment Plenary meeting declared the western stock to be fully rebuilt based on the criteria set out in the Harvest Strategy Standard for New Zealand Fisheries.

¹ Note that the definition of “overfished” or “depleted” is that the stock is below the soft limit of ½ of the biomass associated with maximum sustainable yield, or 20% of the unfished level, whichever is higher. This is analogous to the definition used in most U.S. fisheries.