Title: **What Do Mpas Actually Cost Fishers and Are Estimates of forfeited Gross Value of Product An Adequate Proxy Measure?**

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Abstract: Establishing marine protected areas (MPAs) often results in fishers being displaced from at least some of their existing grounds. A direct consequence of this is that governments may be required to make compensatory payments to the firms that are affected. Experience has demonstrated that these payments can be significant, as was the case in the Great Barrier Reef representative areas program (RAP), and must be accounted for when planning an MPA.

Australia is currently undertaking a process of marine bioregional planning that will result in a series of MPAs being implemented throughout the whole range of their coastal zone. Within Australia, the costs imposed on fishers are generally estimated by calculating the gross value of product (GVP) lost due to exclusion from their historical grounds (based on historic catches). Yet, this assumes low adaptive capacity on the part of the fishers and as such may not be an accurate reflection of the marginal costs actually being imposed on vessels. If so, there is a danger that compensatory payments may be overvalued and are ultimately more akin to one-off subsidies or windfall payments.

In this paper we consider a number of potential MPA scenarios that relate to Australias Eastern Tuna and Billfish Fishery (ETBF). Anticipated costs to industry are first estimated in terms of GVP and then through a location choice modelling approach where effort is displaced as opposed to being removed. This allows the different approaches to be compared directly and the suitability of GVP as a measure of cost discussed.