**Background**

Marine park outer boundaries were proclaimed in November 2012 and fully implemented on 1 October 2014 when fishing restrictions inside sanctuary zones commenced, including the prohibition of commercial fishing. In order to minimise potential impacts on commercial fishers, the South Australian marine parks network zoning aimed to avoid key fishing grounds, and displaced fishing effort or catch was removed through the Commercial Fisheries Voluntary Catch/Effort Reduction Program (CFVCERP, refer Assessment 2b). Nonetheless, there have been ongoing concerns from the fishing industry that sanctuary zones would result in decreased availability of fish, and in turn increased fish prices for consumers (see article insert from The Sunday Mail, 30 August 2015).

For locally-caught and locally-sold marine scalefish, such as King George whiting which are available to local consumers, it was expected that total catches would be maintained, despite the loss of some fishing grounds through sanctuary zones, and the reduction in the number of fishing licences through the CFVCERP (Bryars et al. 2017b). For southern rock lobster and abalone there will be a small loss of product due to the CFVCERP and reduced quotas, however most of this product is exported overseas. The catches and prices of other species such as prawns, blue crabs and sardines are not expected to be affected by marine parks, as those fisheries did not require any adjustment through the CFVCERP (Bryars et al. 2017b).

To test whether the price of locally-caught and locally-sold marine scalefish might have increased since implementation of sanctuary zones on 1 October 2014, a monitoring study was initiated in June 2014 prior to implementation and continued for three years after that time.

This case study highlights the key findings of the fish price monitoring study, the links with the marine park management plan strategies, and the socio-economic outcomes as a result of the marine park management plans.

**Fish price monitoring**

Retail prices of six popular species of locally-caught fish have been recorded at three major fish processor outlets in the Adelaide Central Market since June 2014. Prices have been recorded approximately weekly, generally on a Friday or before major dates (e.g. Christmas) when product is readily available. Both whole and fillet prices (when available) were recorded for King George whiting (KGW), snapper, garfish, yellowfin whiting (YFW), snook, and calamary (whole price only). Data were not collected during the autumn of 2016. Data were adjusted for the effect of the Consumer Price Index as per recommendation from the South Australian Centre for Economic Studies. Six datasets were analysed because they had good data coverage across the time series and across the three stores; KGW fillet, garfish fillet, YFW fillet, snapper whole, snook whole and calamary whole.

As the long-term trend of fish prices shows seasonal patterns of variation (see graph page 414), it is most appropriate to compare the winter 2014 pre-sanctuary zone baseline mean value with subsequent winter mean values; these data show no indication that fish prices have increased since full implementation of sanctuary zones, with the average price across the six species being the same in winter 2016 and winter 2017 as it was in winter 2014 (see graph below). Based upon the ABS fish and other seafood price index, a gradual increase in the price of fish over time might be expected by consumers (see Bryars et al. 2017b) but this has not been observed in the retail outlets of the Adelaide Central Markets. The long-term trends in prices varied between individual species but overall there has been no increase in price (refer socio-economic assessment in the Report page 374).
Management plan strategies

The fish price monitoring study has addressed two strategies that apply across the 19 management plans:

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<th>Strategies addressed</th>
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Strategies 10 and 12: The fish price monitoring study was undertaken as part of the marine parks MER Program as identified in the MER Plan. The results support the predictions of change for the 19 management plans, i.e. that there would be no change. The outcomes of the study are being made publically available in the current Status Report and will be used to inform whether it is necessary to continue monitoring fish prices as part of the MER Program beyond 2017.

Socio-economic outcomes

Specific evaluation questions addressed:

☑ Have local businesses and communities changed due to marine park management plans?

Prices of locally-caught and sold marine scalefish species can be influenced by several external factors including product supply and demand, weather conditions, and interstate imports. Sanctuary zones prevent commercial fishing and therefore fishers would naturally have needed to adjust their spatial fishing patterns to some degree. However, the total catch of marine scalefish in the two years since sanctuary zones were implemented (2014/15, 2015/16) is comparable to the previous two years (2012/13, 2013/14) (see Fowler et al. 2016), and overall there is no evidence from the fish price monitoring study that local consumers are paying more for locally caught fish in 2017 than they were prior to the full implementation of marine parks on 1 October 2014.

References
