

PERTH SEAWATER DESALINATION PLANT — DISSOLVED OXYGEN LEVEL MONITORING

**145. Hon LYNN MacLAREN to the minister representing the Minister for Water:**

I refer to the Water Corporation's desalination plant at Kwinana.

- (1) Please give dates and details of all occasions when dissolved oxygen levels in Cockburn Sound in the vicinity of the plant's outfall exceeded the levels specified in ministerial conditions that were made a requirement of the plant's approval.
- (2) When were the ministerial conditions requiring monitoring of dissolved oxygen levels in the vicinity of the plant's outfall removed?
- (3) What was the Water Corporation's chief objection to continuing to monitor dissolved oxygen levels in the vicinity of its outfall?
- (4) What research or monitoring into dissolved oxygen levels in Cockburn Sound, if any, does the Water Corporation conduct currently?
- (5) In light of the large fish kill that occurred in Cockburn Sound in late 2015, has consideration been given to increasing the amount of monitoring for dissolved oxygen levels?

**Hon KEN BASTON replied:**

On behalf of the Minister for Water, I thank the honourable member for some notice of the question.

- (1) Low dissolved oxygen events—identified by a dissolved oxygen saturation of less than 67 per cent at 0.5 metres above the seabed—were recorded by the Water Corporation. I provide the start and finish dates for each occasion: 26 February 2011 to 27 February 2011, 1 March 2011 to 7 March 2011, 25 March 2011 to 27 March 2011, 30 April 2011 to 4 May 2011, and 15 April 2013 to 29 April 2013.
- (2) Effective 1 April 2014, ministerial statement 832 ceased. Ministerial statement 655 remains in place and the Water Corporation continues to implement a program that monitors a number of parameters, including dissolved oxygen levels.
- (3) The Water Corporation invested significantly in modelling and measuring the hydrodynamics of Cockburn Sound over a number of years prior to the plant being commissioned. The continuous monitoring program that had been in place since commencement of plant operation in 2006 had consistently demonstrated that brine discharge does not cause low dissolved oxygen levels in the deeper basin of Cockburn Sound, nor does it contribute to, or exacerbate, periodic naturally-occurring, low-dissolved oxygen events.
- (4) The Water Corporation undertakes continuous real-time monitoring to measure the dissolved oxygen levels of seawater coming into the Perth seawater desalination plant and the brine prior to discharge into Cockburn Sound, plus quarterly monitoring of dissolved oxygen at five locations within Cockburn Sound.
- (5) No. Given the Department of Fisheries' draft findings into the fish kill event and the Water Corporation's current level of monitoring, it has not been considered necessary.