



1 View of Bridge from Westhaven Drive Fishing Spot Alliance 2 View of Live Traffic from Overarch 3 View towards Bayswater from Bridge 4 Painter on bridge

## Auckland Harbour Bridge Adaptive Management Framework

Project Location: Auckland

Opus for NZ Transport Agency

Disciplines: Environmental, Science, and Planning



The Auckland Harbour Bridge (AHB) is nationally significant as part of the State Highway network and is strategically and economically important to the liveability of Auckland. The bridge is operated and maintained by the Auckland Harbour Bridge Alliance (AHBA), a partnership between the Transport Agency as the asset owner, Total Bridge Services (a joint venture between Opus, TBS Farnsworth and Fulton Hogan) and Beca. This award submission has been prepared in collaboration with alliance partners and sub-consultants. Letters of consent are attached in Appendix A and B.

As a steel structure in a marine environment the AHB requires maintenance which can cause discharges of contaminants to land, air and the coast. Environmental management of these discharges is critical to protect local receiving environments including Northcote Point, Westhaven Marina and the Waitemata Harbour.

After extensive research and on-site trials the AHBA were able to determine that an alternative coating system would provide several environmental benefits compared to the zinc-rich system currently in use for much of the bridge. As well as investigating the use of less toxic coatings, the AHBA evaluated their coatings methodology and moved to a technique which prevents unnecessary discharges by minimising repair works to include discreet patches of corrosion only.

A new outcomes-based consenting approach was adopted which includes an innovative Adaptive Management Framework (AMF) to ensure better environmental outcomes while maintaining operational flexibility. The new approach was estimated to save the Transport Agency \$65 million over 10 years.

The AHB Discharge Consent project was recognised as Best Practice at the 2015 New Zealand Planning Institute (NZPI) Awards in the category of Integrated Planning and Investigations and also received the inaugural Environmental Protection Award at the Transport Agency's 2015 'Going the Extra Mile' awards.

### Judging & Copyright Statement

This project is a Finalist entry in the 2016 INNOVATE NZ Awards of Excellence competition. The winners will be announced on Friday 2 September, 2016.

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