

13 August 2018

Hauraki Gulf Forum

## **Long Bay-Okura Marine Reserve sediment issues**

### **Purpose of the report**

1. At meeting of the Hauraki Gulf Forum on 14 May 2018 Mr Peter Townend gave a presentation about the Long Bay-Okura Marine Reserve and development works on an adjacent property. He specifically drew attention to a recent mass mortality event of cockles and other shellfish in the Marine Reserve.
2. In response the Forum resolved to seek urgent reports from both the Department and Auckland Council on this matter, and requested both agencies to report more fully to the Forum's next meeting.
3. This report from the Department is in response. Much of this information was contained in our interim report sent to the Chair on 28 May 2018. In our report we focus on those areas that the Department is statutorily responsible for, and have not sought to comment on matters that are the responsibility of Auckland Council, such as development consent conditions and consent compliance monitoring.

### **Executive Summary**

4. The Department administers the Long Bay-Okura Marine Reserve. Concerns about sedimentation were first raised in mid-2017. In response the Department has investigated and clarified its responsibilities and those of Auckland Council. The Department is unable to stop discharges into a marine reserve from adjacent land if those discharges are properly consented or if there is reasonable excuse.
5. The Marine Reserve has been undergoing ecological change as a result of increased sedimentation for many years. It is not a result of development works on a single property over a relatively short time span. The Department is working with Auckland Council to identify how we can work together better, and to explore if there is an opportunity to put in place catchment-wide monitoring. The Department and Auckland Council are also exploring the development of a catchment-wide strategy to inform long-term land use changes, with the objective of minimising the effects of land use change and development on the Marine Reserve.
6. Testing to determine the causes of the recent shellfish mass mortality event in the Marine Reserve was inconclusive. Sedimentation is likely to have been one of a number of environmental stressors that played a role.

## **Recommendation**

7. That the Hauraki Gulf Forum receive the report.

## **Context**

8. The Department administers the 980ha Long Bay-Okura Marine Reserve, which was established in 1995 under the Marine Reserves Act.
9. The Department first became aware in mid-2017 of claims of high levels of sediment flowing from the Weiti Bay development site into the Marine Reserve during rainfall events, when Mr Townend raised his concerns with us and other parties. We investigated the issue to determine if there were matters of concern and what our role was, including site visits to the Weiti Bay development site.
10. Our investigations identified that the works on the Weiti Bay development site had been consented under the Resource Management Act 1991, and that Auckland Council was primarily responsible for monitoring compliance with consent conditions. The Department had submitted on the original application for consent. The consent process would have taken all relevant planning matters into consideration, including the provisions of the New Zealand Coastal Policy Statement, the identification of the location as a significant ecological area, and effects on the Marine Reserve.
11. We identified that the water channel in the development site that had been blocked, as shown during Mr Townend's presentation to the Forum, lay outside the gazetted boundaries of the Marine Reserve. Our understanding is that this waterway was likely to have been a man-made drainage channel.
12. We also identified that discharges into a marine reserve from adjacent land are lawful under the Marine Reserves Act when those discharges are properly consented. The Department only has the power to stop discharges into a marine reserve if we can prove those discharges are without lawful consent or without reasonable excuse (section 18I of the Marine Reserves Act refers).
13. In late March the Department was notified about the mass mortality event of cockles in the Marine Reserve. We supported the collection of specimens of dead shellfish from the Marine Reserve for scientific analysis.

## **Analysis and advice**

14. Since becoming aware of these issues, the Department has continued to maintain regular contact with Auckland Council to ensure that both organisations have the same understanding about our respective roles, to share information, and to identify further opportunities to work together, building on our existing working relationships.
15. We reviewed both the short-term monitoring associated with the Weiti Bay development consent and the long-term monitoring being undertaken in the Marine Reserve. We identified that ideally, a more comprehensive monitoring programme should be in place and are seeking technical advice on what such a programme might comprise. We are also discussing with Auckland Council their monitoring programme (see report to the Forum from Auckland Council for details), what additional monitoring is desirable, and what that might entail.

16. As the Council has described in its report to the Forum, the Okura Estuary has been undergoing long-term change, as have many similarly sized estuaries on the east coast of the Auckland Region. These changes are not normally related to single causes but are more often the result of catchment-wide changes. Our view is that ideally a catchment-wide monitoring programme should be initiated to track the sources of sediment and other discharges properly, and to track changes in the Marine Reserve more comprehensively. Our objective would be to encourage Council to develop a catchment-wide strategy to inform long term land use changes in the catchment, and minimise the effects of development on waterways and the estuarine environment of the Marine Reserve.
17. The Department has reviewed the report commissioned by Mr Townend from the Ministry of Primary Industries (MPI) about the mass mortality event. Our understanding is that the investigation was inconclusive. MPI could not identify a specific cause for the event, and pointed to a mix of environmental stressors which could have made the shellfish more vulnerable to particular conditions at the time, such as a high level of sediment discharge in high rainfall events or unseasonably high temperatures.
18. Since the initial mortality event we have monitored shellfish health in the Marine Reserve. There has been no further mortality on a significant scale.
19. In conclusion we are concerned about the effect of sedimentation and other environmental stressors on the environmental health of the Marine Reserve. We will continue to work with Auckland Council and other partners on these matters.



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