


8. McCORMACKS BAY STEERING GROUP REPORT

General Manager responsible:	General Manager City Environment, DDI 941 8608
Officer responsible:	Asset and Network Planning Unit Manager,
Author:	Eric Banks, Parks and Waterways Planner

PURPOSE OF REPORT

- 
1. The purpose of this report is to seek the recommendation of the Hagley/Ferrymead Community Board to the Council to receive the McCormacks Bay Steering Group report (refer **Attachment 1**, circulated under separate cover), to thank the Group for the work and support they have provided and that the report be utilised as a reference document in a future review of the McCormacks Bay Management Plan.

EXECUTIVE SUMMARY

2. The McCormacks Bay Steering Group was formed in October 2005. The Steering Group included representation from stakeholders groups, individuals within the Community and Council staff. The aims of the Group, documented in its "Charter" were:
 - (a) To take a comprehensive planning view of McCormacks Bay, and within that view develop, research and evaluate a series of scenarios for the replacement of the Causeway culverts that identify and integrate the potential benefits for natural and recreational values.
 - (b) Provide a forum for a partnership process between the Community and the Council, and a model for future projects, as envisaged by the Local Government Act.
 - (c) Ensure the Council decision making process for the culvert replacement project is informed by the Community and that there is a two way exchange of information.

The Group Charter identified that the outcome of the Steering Group was a report based on research undertaken in collaboration with the Christchurch City Council, which makes recommendations on:

- (d) Design scenarios for the culvert replacement and associated natural and recreational values of the Bay, and;
- (e) Further required investigations.

The report will be presented to the Council with the expectation it will be used as a reference document for the design of the culverts and in a future review of the McCormacks Bay Management Plan which will in turn inform future LTCCPs.

The Steering Group report completes the original aims and outcomes of the McCormacks Bay Steering Group.

3. McCormacks Bay consists of approximately 21.5 hectares including 8.5 hectares of parkland and islands above Mean High Water Springs (MHWS). Of those, 3 hectares are sports fields and 0.6 hectare community buildings. The islands are zoned Conservation 1A and the land is Open-Space 2. The Bay is separated from the estuary of the Avon and Heathcote rivers by the McCormacks Bay causeway.
4. The central culvert of the causeway was identified as requiring replacement in 2004. Through liaison with the Avon-Heathcote Estuary Ihutai Trust, a steering group of stakeholders and staff was formed to represent the community in making recommendations in relation to the design of the replacement culvert and to aspects of the wider Bay influenced by the culvert replacement.

5. The Steering Group investigations and deliberations have culminated in a comprehensive report prepared by Professor Kevin O'Connor on behalf of the Group. The report is entitled '*How and Why Christchurch City Council and the community should clean up McCormacks Bay*' and is the subject of this report. The Steering Group report is a comprehensive record of the background to the project, the work done to date and the recommendations for the replacement culvert and the wider Bay moving forward. It is these recommendations which have provided the framework for the replacement culvert design-work which will be presented to the Board for information at later date. A schedule of the Steering Group recommendations is included (refer **Attachment 2**).

FINANCIAL IMPLICATIONS

6. The 2009-19 LTCCP includes for the following operational expenditure relating to McCormacks Bay:
 - (a) 2009/10 - \$45,000
 - (b) 2010/11 - \$11,500
 - (c) 2011/12 - \$66,500Any additional funding identified will need to be considered at the 2012-22 LTCCP.
7. Funding for the replacement of the central McCormacks Bay culvert is also included in the 2009-19 LTCCP. Any other capital funding would need to be considered at the 2012-22 LTCCP.

Do the Recommendations of this Report Align with 2009-19 LTCCP budgets?

8. There are sufficient funds held within Asset and Network Planning Operational budget, Waterways and Wetlands Environmental Monitoring - Estuary Monitoring, to cover investigations recommended by staff in the current financial year (\$45,000). A similar amount would be available in either the 2010/11 or 2011/12 financial year, depending on culvert replacement timing and budget position at the time. No other costs associated with the recommendations of the Steering Group report are budgeted for in the LTCCP.

LEGAL CONSIDERATIONS

9. Not applicable to Steering Group Report.

Have you considered the legal implications of the issue under consideration?

10. Yes, as above.

ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

11. The recommendations of this report align with the Council's Community Outcome goals of Community, Governance, Environment and Recreation. Page 120 of the LTCCP states, "Provide a network of safe, accessible and attractive multi-purpose sports parks, in order to enhance exotic and native biodiversity, and waterways".

Do the recommendations of this report support a level of service or project in the 2009-19 LTCCP?

12. There is funding identified in the Asset and Network Planning Operational budget, Waterways and Wetlands Environmental Monitoring - Estuary Monitoring.

ALIGNMENT WITH STRATEGIES

13. Biodiversity Strategy, Draft Open Space Strategy, Strengthening Communities Strategy, Draft Climate Smart Strategy.

Do the recommendations align with the Council's strategies?

14. Yes, listed above.

CONSULTATION FULFILMENT

15. The Council has considered the wider implications for McCormacks Bay of the culvert replacement and convened the McCormacks Bay Steering Group to represent the wider community in a process sanctioned by the City Environment General Manager. The level of consultation undertaken through interaction with the Steering Group as representatives of the community and public meetings exceeds that required by the Local Government Act 2002 and the City Council's consultation guidelines.

STAFF RECOMMENDATION

It is recommended that the Hagley/Ferrymead Community Board recommends to the Council that:

- (a) The Steering Group report be received and its members be thanked for their report and time spent engaging with the Council leading to its preparation.
- (b) The Steering Group's report be utilised as a reference document in a future review of the McCormacks Bay Management Plan, which will in turn inform future LTCCPs.

CHAIRPERSON'S RECOMMENDATION

That the staff recommendation be adopted.

BACKGROUND (THE ISSUES)

16. McCormack's Bay, which was originally contiguous with the Avon/Heathcote estuary, was modified by the Tramway Board in 1907 when the causeway was built across the tidal mudflats. This greatly reduced the flushing potential and altered the hydrodynamics of the Bay. Skylark Island on the estuary side started to erode immediately after this and by 1922 it was reduced to mudflats. In 1933 the causeway was widened for motor traffic.
17. The Bay is currently connected to the main body of the estuary by one central and two small culverts at either end of the Bay's causeway (Figure 1). The central culvert consist of a six metre span culvert with a rip-rap/rock base and an invert level 0.1 metres below mean sea level. It was constructed in 1935 with some up-grading and strengthening interventions along the years and is now near the end of its service life and therefore needs to be renewed. Previously, in 1975, the western culvert was replaced by two 450 millimetre pipes, and in 1995 the eastern culvert was replaced by one 1200 millimetre pipe.



Figure 1

18. In 2004, the then City Solutions undertook an assessment of the engineering condition of the causeway and culverts. The full report covered the whole original extent of the seawall from what is now a car park in Scott Park to the intersection of Main Road and Beachville Road (a distance of about 1700 metres). Following the report, the Council identified the need to prioritise the replacement of the central culvert. In May 2005 a joint project was established following discussions between the Ihutai Trust and the Council. The joint project aimed at taking a comprehensive planning approach to the inter-related issues of culvert replacement and the rehabilitation of McCormacks Bay. Beginning in October 2005 with a public meeting, the Council has worked with the community on the issues of McCormacks Bay as they relate to the central culvert replacement.
19. In 2006 interested parties began meeting and formalised the McCormacks Bay Steering Group. The group consists of Avon-Heathcote Estuary stakeholders, local community and staff. A charter was developed and adopted by the group in August of that year. The charter is appended to this report (refer **Attachment 3**) and sets out the group's aims and outcomes.
20. In summary the charter requires a community partnership with the Council be developed in the form of the Steering Group who will take a comprehensive planning view of the Bay taking into account natural and recreational values and culminate in a report to be presented to the Council making recommendations on a preferred design for the culvert replacement and associated natural and recreational values of the Bay and further required investigations. A goal and set of objectives were formalised by the Steering Group and are outlined in section 5.2 of the Steering Group's report.
21. The Steering Group report extensively outlines the environmental issues concerning the wider Bay. Detailed commentary is provided with regard to the Bay and estuary hydraulics, sedimentation, water quality, ecology and benthos. Chapter 6 of the Steering Group report should be read for further detail on the above. Chapter 4 and 5 of the Steering Group report outline the background to formation of the Steering Group and provide a chronology of the sessions and the work done by the group. A schedule of the Steering Group recommendations is included as **Attachment 2**.

22. As part of the project several environmental investigations have been undertaken by the Council to help inform the Steering Group and assist them to reach their recommendations as well as helping to establish the design parameters for the central culvert replacement. Although not as comprehensive as the Steering Group would have liked these studies have provided valuable baseline information for the Bay which is a starting point from which to build up further information.
23. The main environmental consideration that influenced the design parameters for the central culvert is the need to optimise the culvert design for improving hydraulic conditions within the Bay. The Steering Group believes that thorough drainage of the Bay is the most significant measure in restorative management in the Bay. Through the work done to date with regard to hydraulics, the Steering Group agreed that lowering the invert level of the central culvert by a minimum of 0.5 metres (to RL 8.55) is an essential feature of the culvert design for the good of the Bay.
24. The Steering Group also acknowledges that not all of the environmental considerations for the Bay can be addressed through the replacement of the central culvert but that lowering the sill level is one way to optimise the design given all of the other considerations. The Steering Group report outlines further works that could be undertaken to further improve the conditions within the Bay but are currently outside of the scope of the central culvert replacement project.
25. One of the key social and recreational considerations for the central culvert replacement project is the use of the water body and central culvert for kayak training purposes. Kayakers needs have been well represented within the Steering Group from the start of the project. Section 6.6 of the Steering Group report assesses and evaluates scenarios for kayakers and summarises their requirements. During the evaluation of the culvert and bridge models more attention was given to the duration of useful surface velocity (above 1 metre per second and duration of useful flow (above 5m³).
26. The kayakers agreed that lowering the sill of the central culvert by a minimum of 0.5 metres would be acceptable but that widening the existing span from the 6 metres in conjunction with lowering the sill would have a significant impact on the two above parameters. Kayakers were also keen to see that the floor of the culvert should be as smooth as possible to create faster and smoother flow as well as improving safety by removing sharp rocks.
27. The kayakers also identified a number of other requirements that may not be within the scope of the central culvert replacement project. These have been comprehensively outlined within the Steering Group report.