

## 7. SURFACE WATER STRATEGY

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### PURPOSE OF REPORT

1. To seek Council adoption of the Surface Water Strategy for Christchurch.
2. A draft Surface Water Strategy was approved for consultation on 25 June 2009. Submissions were heard by a panel of Councillors on 7 September 2009. The Strategy has been amended in response to submissions and is now presented to the Council for adoption. This is separately circulated.

### EXECUTIVE SUMMARY

3. The primary purpose of the Surface Water Strategy is to guide the Council's decision-making relating to surface water management.
4. The Surface Water Strategy updates the *Natural Asset Management Strategy*, adopted by the Council in 1999. The *Natural Asset Management Strategy* represented a significant shift in Council management of surface water – from focussing solely on drainage, to a more holistic, multi-value approach that also considered landscape, culture, heritage, ecology, and recreation. Over the last ten years, however, the policy and planning framework for surface water management has changed considerably, particularly due to:
  - (a) The Proposed Natural Resources Regional Plan (PNRRP), notified by Environment Canterbury in 2004.
  - (b) The Greater Christchurch Urban Development Strategy (UDS), adopted by the Council in 2007.
5. The Surface Water Strategy builds on the 'values-based' approach to surface water management adopted by the Council in the *Natural Asset Management Strategy*. It includes a vision, plus goals and objectives, and states the Council's policy for stormwater management in different land-use areas, setting out a programme for meeting the surface water management challenges identified.
6. The vision for Christchurch surface water is that:

*The surface water resources of Christchurch support the social, cultural, economic and environmental well-being of residents, and are managed wisely for future generations.*
7. The goals are to:
  1. Improve the water quality of our surface water resources.
  2. Reduce the adverse effects of flooding.
  3. Improve the ecosystem health of surface water resources.
  4. Restore Tangata Whenua values associated with surface water resources.
  5. Support a range of recreation activities on and around waterways.
  6. Protect heritage values associated with surface water.
  7. Protect and enhance the landscape values of surface water.
  8. Support community involvement in surface water management.
  9. Manage stormwater in an efficient manner that supports Goals 1-8.

8. To work towards achieving the goals, the Strategy includes an implementation programme which focuses on areas where the Council can make the most difference and address the most pressing issues. It reflects a realistic expectation of what the Council can put into action. The programme states the Council will:
  - (a) *Minimise sources of pollutants*
  - (b) *Manage stormwater in line with policies stated in the Strategy*
  - (c) *Develop Integrated Catchment Management Plans (ICMPs)*
  - (d) *Review development standards*
  - (e) *Implement a community education programme*
  - (f) *Undertake further investigations.*
9. A summary of the current situation and issues was discussed with Councillors at a workshop on 27 May 2008. The Councillors also had an opportunity to discuss the Draft Strategy at a workshop on 23 June 2009. The Council approved the release of the Draft Surface Water Strategy for public consultation at its meeting on 25 June 2009.
10. The public consultation period began on 13 July 2009 and closed 14 August 2009. A total of 34 submissions were received during the public consultation period. Of the 34 submitters, 21 requested to speak on their submissions to a Hearings Panel.
11. A Hearings Panel comprising Councillors Williams (Chair), Buck, Corbett, Reid and Wall met on 7 September 2009 to hear submissions, and on 1 October 2009 to discuss changes to the Strategy.
12. Major themes emerged from the consultation process. These were:
  - (a) General support for the Strategy, its goals and objectives.
  - (b) A desire to progress the implementation of the Strategy as early as possible.
  - (c) Water quality being of great significance to the community.
  - (d) Support for ICMPs.
  - (e) On-going and collaborative involvement with the community needed.
  - (f) Support for multi-value stormwater management, and waterway enhancement.
  - (g) The need for better management of sewage.
  - (h) Confusion around water quality standards, their use and interpretation.
13. A report analysing submissions and summarising the consultation process is attached. The most significant changes made to the Draft Strategy subsequent to consultation and Hearings Panel discussion include:
  - (a) Strengthening references to working with neighbouring Council's and Environment Canterbury.
  - (b) Reference to public health issues.
  - (c) Reinforcement of surface water as part of the 'Garden City' image.
  - (d) Clarification of definition of surface water.
  - (e) Including direction on how flooding on private land should be managed.
  - (f) Stating Council's support of community organisations and individuals involved in surface water management.
  - (g) Adding references to Council's maintenance/operations activities and their impact on surface water.
  - (h) Signalling Council's support for 'Low-Impact Urban Design and Development'.
  - (i) Clarification of water quality objectives.

## FINANCIAL IMPLICATIONS

14. As with any strategy the achievement of it is dependent on balancing the goals against the ability to achieve the outcomes. The Strategy builds on established principles and practices, but continues to develop these to address emerging standards, pressures and issues. Within the Strategy we estimate that all of the short-term (0–3 years) tasks identified in the implementation programme can be financed through existing budgets. Additional funding would be needed to fully fund the medium-term (4–10 years) and long-term (10 plus years) projects. The majority of these costs would be for the preparation of ICMPs:
  - (a) \$1.175m in the medium-term (4 – 10 years)
  - (b) \$1.25m in the long-term (10 plus years).
15. Implementation beyond current resources will need to be addressed as part of the 2012 and future LTCCPs.

## LEGAL CONSIDERATIONS

16. The Strategy provides policy guidance for the Council on surface water matters pursuant to the LGA (2002) and the RMA (1991).
17. The Council's surface water management responsibilities are primarily described in the Local Government Act (LGA 2002) and Resource Management Act (RMA 1991). The LGA (2002) requires the Council to promote the social, economic, environmental and cultural well-being of current and future generations (Section 10 a and b). The Act confers specific land drainage responsibilities on territorial authorities – to assess stormwater services and maintain the capacity of existing stormwater networks (Section 125 and 130). The RMA (1991) promotes the sustainable management of natural and physical resources, and requires the Council to manage the use, development and protection of these resources, including wetlands, lakes and rivers (Section 6). The RMA also requires the Council to give effect to the Regional Policy Statement. The RPS contains two chapters directly relevant to surface water management: Chapter 9 (water) and Chapter 10 (beds of rivers and lakes and their margins). The preparation of ICMPs will enable the Council to meet the requirements of the PNRRP.

## ALIGNMENT WITH LTCCP AND ACTIVITY MANAGEMENT PLANS

18. Preparation of the Strategy is in line with the Parks, Open Spaces and Waterways Activity in the current 2009-19 LTCCP, and contributes to the City and Community Long-Term Policy and Planning Activity performance measure *“Advice is provided on key issues that affect the social, cultural, environmental and economic well-being of the City”*.

## ALIGNMENT WITH STRATEGIES

19. The Surface Water Strategy supports the implementation of the UDS – integrating land-use, infrastructure and funding. The Strategy assesses the capacity of stormwater infrastructure in current 'intensification zones' (L2 / L3 and L4 City Plan zones), and provides guidance for stormwater management in Greenfield and urban intensification areas.
20. The Draft Surface Water Strategy is also part of the suite of 'Healthy Environment' Strategies:
  - Biodiversity Strategy (adopted). The Surface Water Strategy supports the Biodiversity Strategy through improving water quality and the ecosystem health of our waterways.
  - Water Supply Strategy (adopted). The Surface Water Strategy is linked to the Water Supply Strategy, particularly in those Banks Peninsula communities that rely on surface water for drinking water supply.
  - Open Space Strategy (in preparation). The rivers, lakes, streams and multi-value stormwater management mechanisms (for example, swales and rain gardens) discussed in the Surface Water Strategy form part of the public open space network.
  - Climate Smart Strategy (in preparation). The impact of climate change on surface water resources is discussed in the Surface Water Strategy, and will inform the development of the Climate Smart Strategy.

## **CONSULTATION FULFILMENT**

21. The development of the Draft Strategy was informed by feedback from Community Boards, Te Runanga o Ngai Tahu, Mahaanui Kurataiao Limited, UDS Partners, and external stakeholders including the Avon/Heathcote Ihutai Trust, Banks Peninsula Conservation Trust, Environment Canterbury, North Canterbury Federated Farmers, Waihora Ellesmere Trust, and Travis Wetland Trust.
22. Formal public consultation commenced on 13 July 2009 and closed 14 August 2009. Copies of the Draft Strategy were sent to 207 organisations for comment. The consultation process was publicly notified in The Press and other local publications and two 'drop-in' information sessions were held during the public consultation period. Information stands, using a rolling presentation on a computer, were installed at four public libraries. A total of 34 submissions were received.
23. Of the 34 submitters, 21 requested to speak on their submissions to the Hearings Panel, which convened on 7 September 2009. The consultation summary report (attached) provides greater detail about consultation on this Strategy.

## **STAFF RECOMMENDATION**

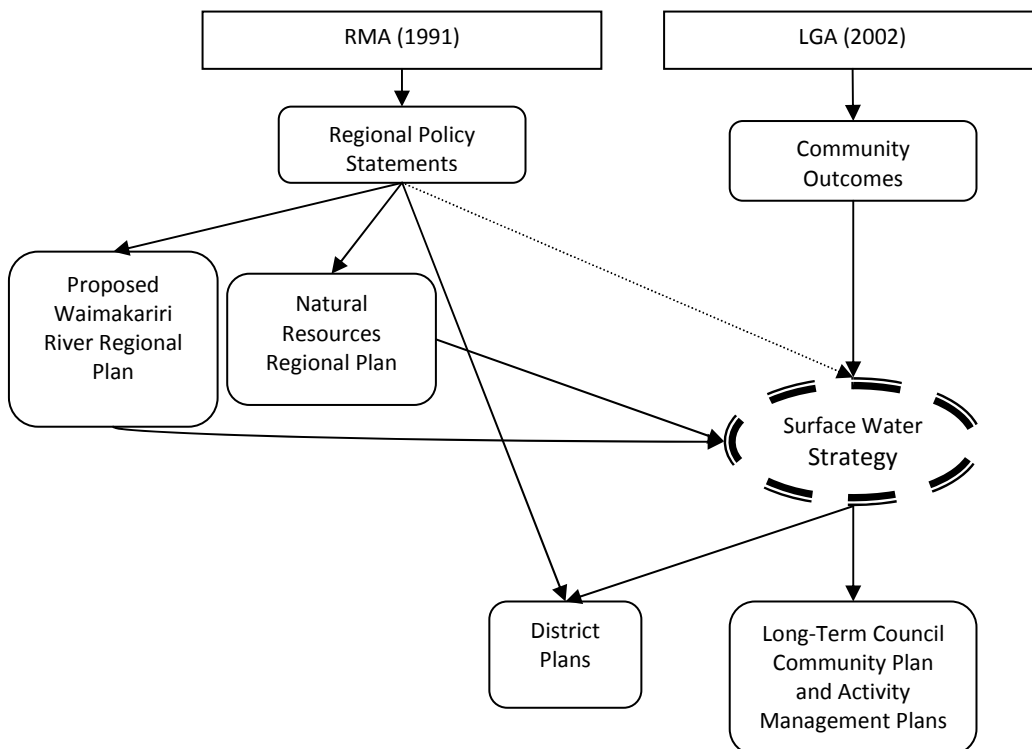
It is recommended that the Council adopt the Christchurch City Council Surface Water Strategy 2009.

## BACKGROUND

### THE POLICY AND PLANNING CONTEXT

24. The Council's planning and management of surface water sits within a complex national and regional policy framework, set out in both statutory and non-statutory documents. At a national level the RMA (1991) and the LGA (2002) describe the Council's responsibilities in relation to surface water.
25. The LGA (2002) requires the Council to promote the social, economic, environmental and cultural well-being of current and future generations (Section 10 a and b). The Act confers specific land drainage responsibilities on territorial authorities – to assess stormwater services and maintain the capacity of existing stormwater networks ( Sections 125 and 130).
26. The RMA (1991) promotes the sustainable management of natural and physical resources, and requires the Council to manage the use, development, and protection of these resources, including wetlands, lakes and rivers (Section 6). This is achieved through a hierarchy of policy statements and plans.
27. The Regional Policy Statement (RPS) contains objectives for enabling the use of freshwater while safeguarding the life supporting capacity of the resource, preserving natural character, protecting habitats, and maintaining and enhancing amenity values. The Council is required to give effect to the RPS, and must comply with the regional objectives, policies and rules established in the Proposed Natural Resources Regional Plan (PNRRP). The PNRRP contains objectives, policies and rules, governing water quality, quantity, beds and margins of lakes and rivers, and wetlands. It sets water quality standards and minimum flow levels for freshwater resources, including surface water.
28. The Surface Water Strategy establishes the Council's strategic framework for meeting policy and planning requirements (for example, the proposed ICMP programme is included in response to PNRRP requirements). It also identifies other challenges, such as providing infrastructure to support the UDS, and managing the impact of climate change. The proposed implementation programme identifies changes needed to current development standards (set in the District Plans, the Infrastructure Design Standards, and the Waterways, Wetlands and Drainage Guide). It also recommends the preparation of ICMPs and development of community education programmes.

*Figure 1. The relationship of the Surface Water Strategy to the RMA (1999) and LGA (2002)*



**DEVELOPMENT OF THE STRATEGY**

29. The Strategy development began with an analysis of the present situation. A series of background reports were prepared by Council staff:

- (a) *Community involvement in surface water*
- (b) *Climate change effects on surface water*
- (c) *Minimum development standards*
- (d) *Policy and planning framework*
- (e) *Proposed community education programme for surface water*
- (f) *Proposed ICMP programme*
- (g) *Proposed monitoring programme for waterways Summary of key issues and drivers*
- (h) *Stormwater management outcomes and mechanisms*
- (i) *The ecology of Christchurch's surface water*
- (j) *The heritage values of Christchurch's surface water*
- (k) *The recreation value of Christchurch's surface water*
- (l) *The Tangata Whenua values associated with Christchurch's surface water*
- (m) *The urban growth of the Christchurch and its impact on surface water*
- (n) *The water quality and quantity of Christchurch's surface water*

These reports were supplemented by consultant work:

- (a) *Landscape values of Christchurch's surface water (Di Lucas Associates)*
- (b) *Market research: public perceptions for the Healthy Environment Programme (Opinions Research)*
- (c) *Change in impervious surfaces (Landcare Research)*

30. From these reports the current surface water issues and their drivers were identified and presented to Councillors and Community Boards. Key external stakeholders were also invited to comment on the draft reports and the issues identified.

31. Draft goals and objectives were then prepared, based on the holistic, values-based approach to surface water management established in the *Natural Asset Management Strategy*. These goals and objectives were discussed with Community Boards, Ngai Tahu, and the Greater Christchurch Urban Development Strategy partners and committee (which includes Waimakariri District Council, Selwyn District Council, and the New Zealand Transport Agency).

32. The vision for Christchurch surface water is that:

*The surface water resources of Christchurch support the social, cultural, economic and environmental well-being of residents, and are managed wisely for future generations.*

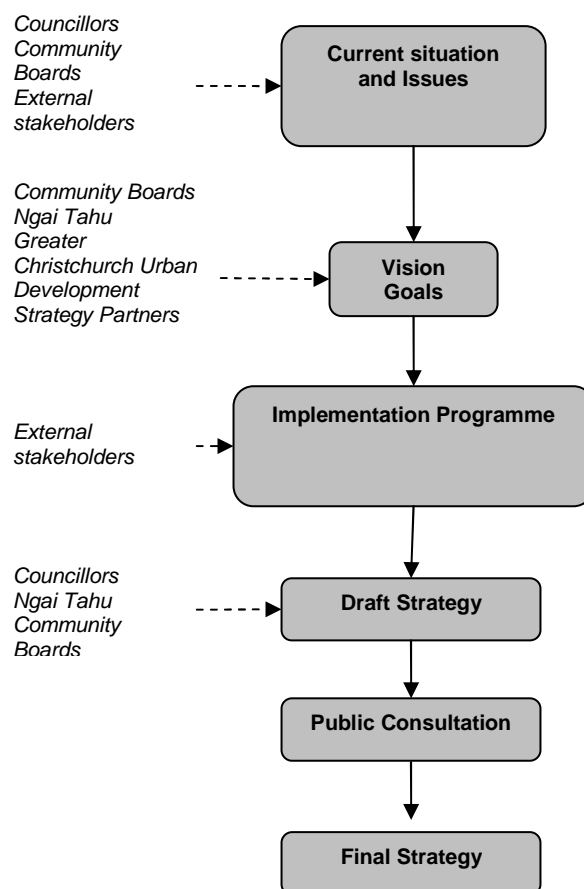
33. The goals are to:

- 1. *Improve the water quality of our surface water resources.*
- 2. *Reduce the adverse effects of flooding.*
- 3. *Improve the ecosystem health of surface water resources.*
- 4. *Restore Tangata Whenua values associated with surface water resources.*
- 5. *Support a range of recreation activities on and around waterways.*
- 6. *Protect heritage values associated with surface water.*
- 7. *Protect and enhance the landscape values of surface water.*
- 8. *Support community involvement in surface water management.*
- 9. *Manage stormwater in an efficient manner that supports Goals 1 to 8.*

34. These goals are aspirational, long term, and reflect the direction Council is committed to head in, for example, stating the Council's commitment to improving water quality, rather than maintaining or allowing a reduction in water quality. The goals and objectives are intended to guide the Council's decision-making at various levels, from the Long-Term Council Community Plan (LTCCP) to individual street renewals. They are long-term goals, reflecting that the Council has a range of strategic objectives that must be balanced and prioritised. Over time, the Council will work towards achieving the goals and objectives, improving surface water management in the City.

35. The stormwater policies stated in the Strategy are the result of an assessment of stormwater mechanisms. A range of stormwater management mechanisms (for example, detention basins, pipes, swales and rain tanks) were assessed against their ability to meet the Draft Strategy's goals. Capital and operational costs of the different mechanisms were also compared. Finally, the feasibility of the mechanisms in different land-use areas was considered.
36. The development and implementation of Integrated Catchment Management Plans (ICMPs) are a key component of the implementation programme. ICMPs are required for urban catchments stipulated in the PNRRP. ICMPs establish water quality and stormwater management objectives for a given area, and set out how stormwater will be managed to meet those objectives. The South-West ICMP has already been completed, and the Styx ICMP is underway. The Strategy states the Council's commitment to developing ICMPs for all catchments in its jurisdiction, sets the ICMP boundaries, and establishes a programme for development.
37. The proposed ICMP programme was developed by assessing the ICMP areas against a set of criteria: whether the ICMP is required by the PNRRP, whether Greenfield or urban intensification development is planned, flood risk is high, or existing water quality and biodiversity values are high. This assessment allowed a 'ranking' of ICMP areas, which is reflected in the timeframes outlined in the implementation programme.
38. Due to the need for co-ordination with other organisations (particularly Environment Canterbury), the policies and programmes relating to stormwater management were reviewed by external stakeholders
39. To develop the proposed community education plan, existing community education relating to surface water was reviewed. Key target markets were identified and outlines for education plans drawn up. These are summarised in the Strategy.
40. The extent to which the draft implementation programme is actioned and funded will depend on decisions made in future Long-Term Council Community Plan processes.

**Figure 2: Development of the Surface Water Strategy**



41. The Council considered the Draft Surface Water Strategy at its 25 June 2009 meeting, and approved the release of the Draft Strategy for public consultation. The public consultation period commenced 13 July 2009 and closed 14 August 2009. Copies of the Draft Strategy were sent to 207 organisations for comment.
42. The consultation process was publicly notified in The Press and other local print publications and two 'drop-in' information sessions were held during the consultation period. Information stands, using a rolling presentation on a computer, were installed at four public libraries.
43. A summary of the consultation process is attached. A total of 34 submissions were received during the public consultation period. Of the 34 submitters, 21 requested to speak on their submissions to a Hearings Panel. Notable among the comments received were the following major themes:
  - (a) General support for the Strategy, its goals and objectives.
  - (b) A desire to progress the implementation of the Strategy as early as possible.
  - (c) Water quality being of great significance to the community.
  - (d) Support for ICMPs.
  - (e) On-going and collaborative involvement with the community needed.
  - (f) Support for multi-value stormwater management, and waterway enhancement.
  - (g) The need for better management of sewage.
  - (h) Confusion around water quality standards, their use and interpretation.
44. A Hearings Panel was convened on 7 September 2009. The Panel comprised Councillors Williams (Chair), Buck, Corbett, Reid, and Wall. The Hearings Panel directed staff to amend the Draft Strategy. On 1 October 2009 the Hearings Panel reconvened to review changes made to the Draft Strategy as a result of the public consultation.
45. Substantive changes made to the Draft Strategy as a consequence of the public consultation process, are summarised in Table 1:

**Table 1. Substantive Changes to Draft Surface Water Strategy**

<b>Change</b>	<b>Section of Draft Strategy changed</b>
Strengthening references to working with neighbouring Council's and Environment Canterbury.	<i>Section 8.4: Framework for Development, pg. 58.</i> <i>Section 13.2: Working with others, pg. 71.</i>
Reference to public health issues.	<i>Section 1: Introduction, pg.9.</i> <i>Section 3.5: Water Quality, pg.18.</i> <i>Section 3.7: Recreation, pg.23.</i> <i>Section 4.3: Climate Change,pg.25.</i>
Reinforce importance of surface water to 'Garden City' image.	<i>Section 5.3: Our Objectives, pg.33.</i>
Clarification of definition of surface water.	<i>Section 1.2: Definition of Surface Water, pg.10.</i>
Including direction on how flooding on private land should be managed.	<i>Section 5.3:Our Objectives, pg. 35.</i>
Stating Council's support for community organisations and individuals involved in surface water management.	<i>Section 5.4: Our Objectives, pg.38.</i>
Adding references to Council's maintenance/operations activities and their impact on surface water	<i>Section 10.2: Council Taking the Lead, pg.65 &amp; 66.</i>
Signalling Council's support for 'Low-Impact Urban Design and Development'.	<i>Section 5.3: Our Objectives, pg.34.</i> <i>Section 7: Stormwater Management Policies, pg. 41.</i>
Clarification of water quality objectives	<i>Section 5.3: Our Objectives, pg. 33.</i>