



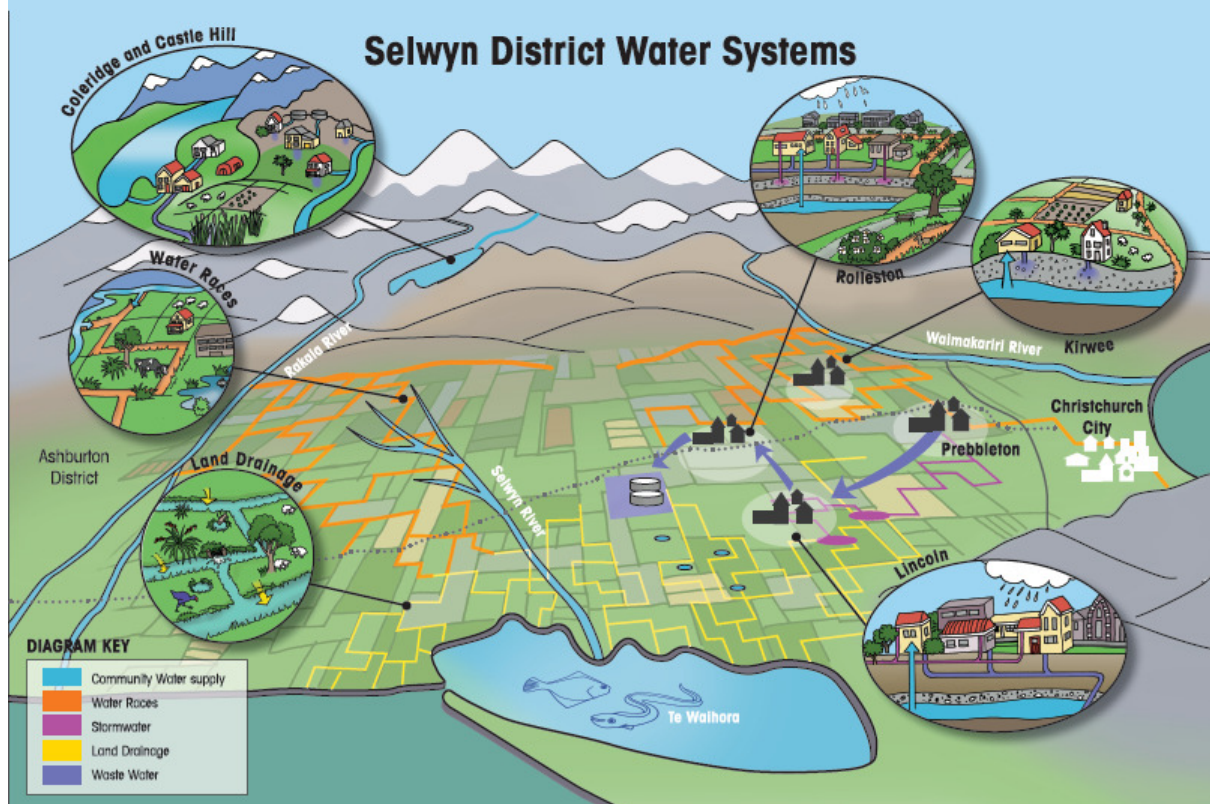
Council's Vision is  
*"To achieve excellence in the  
management of resources and the  
provision of services for the people  
of Selwyn District"*

# SELWYN DISTRICT COUNCIL

## FIVE WATERS STRATEGY

### August 2009

The Future for:  
**Community Water Supplies, Wastewater  
Waterraces, Land Drainage and Stormwater**



# **SELWYN DISTRICT COUNCIL**

## **FIVE WATERS STRATEGY**

### **August 2009**

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Approved By	Anne Greenup
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# SDC Five Waters Strategic Plan

## Future Position of Water Supplies

### BACKGROUND

Selwyn District is unique. Water from the sky, rivers and aquifers supports the urban and rural communities, providing for economic wealth, social health and cultural diversity. Use of water resources and the need to protect the environment for future generations creates tensions in some areas.

The Selwyn District Council and the community have the ability to consider all the Five Waters issues in a coordinated manner. To achieve this, over 2008-9 Council has developed a Strategy focusing on the ongoing management of the District's water.

### 1 INTRODUCTION

Water has been described as the “gold of this century”. The water footprint of societies may be more important than the carbon footprint to ensure a sustainable future. This draft document has been prepared in recognition of the importance of water to Selwyn, and how the continued use of the water resources are affected by:

- Globalisation
- A growing population
- Increasing pressure on existing services
- Rising costs
- Regional strategies
- The need to provide Management Plans

This **Strategy** outlines the strategic vision for Selwyn District Council's (SDC) **five waters**<sup>1</sup> **community** services the “Five Waters”. This Strategy also covers **private** water services to an extent identified within legislation<sup>2</sup>.

SDC has adopted seven sustainability principles for the purposes of strategic planning over the Five Waters. Sustainability should be regarded as a continuous journey to seek a balance between meeting local and global perspectives, along with economic, cultural, environmental and social well-beings. While we personally may view this with different values, we all seek to achieve a sustainable place where we, and future generations can use and thrive in.

The sustainability principles help by providing a foundation for a long term strategy for which community feedback is sought. We will also use them to gauge how successful we are on this journey.

In this document, these guiding principles will be consulted on and is intended to:

- Describe the long-term desired position of SDC with respect to the Five Waters in the next 60 years – to the period when others require the environment to live
- Describe opportunities to improve integration of water services
- Identify what we need to do to achieve long term goals
- Support Councils' vision

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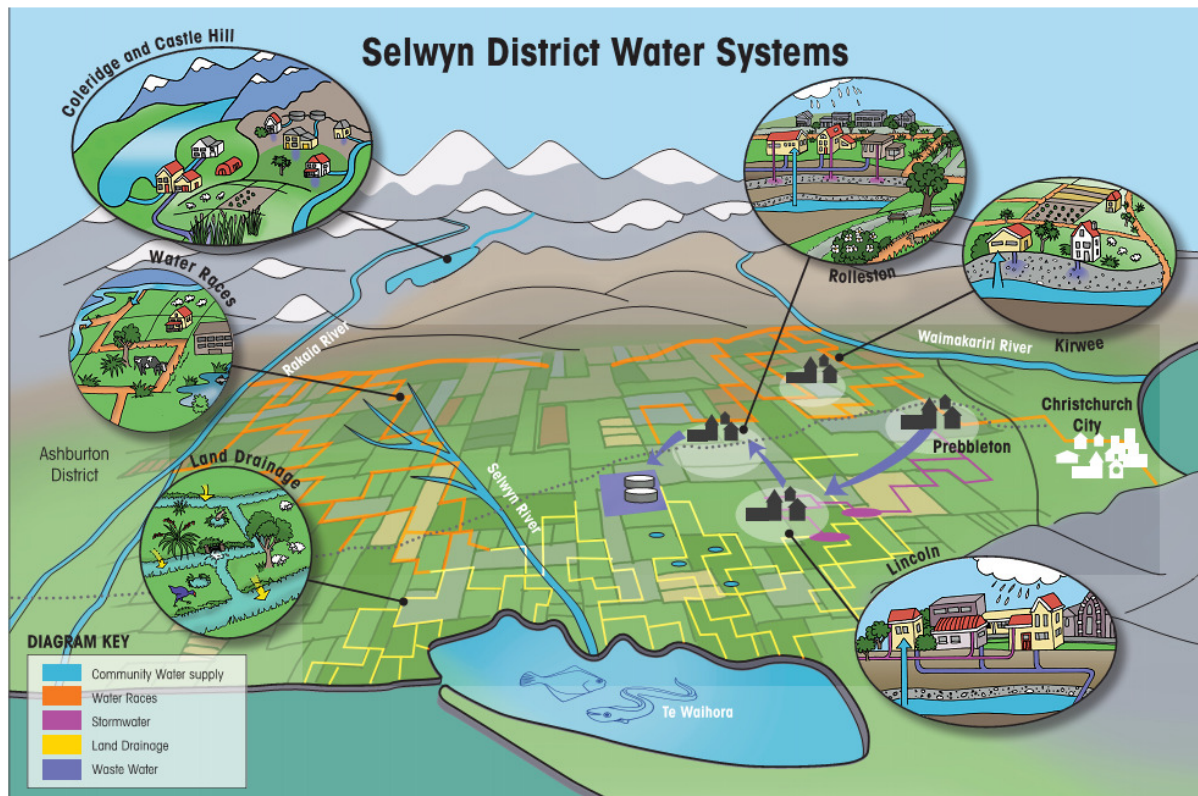
<sup>1</sup> Water Supplies (Urban and Rural), Wastewater Schemes, Waterraces, Land Drainage and Stormwater

<sup>2</sup> Local Government Act 2002 – Part 7

This Strategy does not:

- Contain financial assessments - these will be developed and delivered via the Five Waters Activity Management Plans (AcMP)
- Discuss governance issues such as who manages water resources and what role SDC has

Strategic direction is being developed across the Five Waters in a consistent way. The generic water inter-relationship in townships is shown in **Figure 1** and where possible, across the district's rural and urban areas.



**Figure 1 - Five Waters Generic Interrelationships**

Take the "Rolleston" example, water is drawn from deep aquifers for community use, while stormwater is discharged into the gravels above. Wastewater is piped to centralised treatment and disposal areas, with proposed future inflows from other townships. Waterraces flow through, and alongside, the township.

## 2 RELATIONSHIP WITH THE ACMP

The AcMP views the Five Waters as inter-dependant activities for the community of interest.

The AcMP:

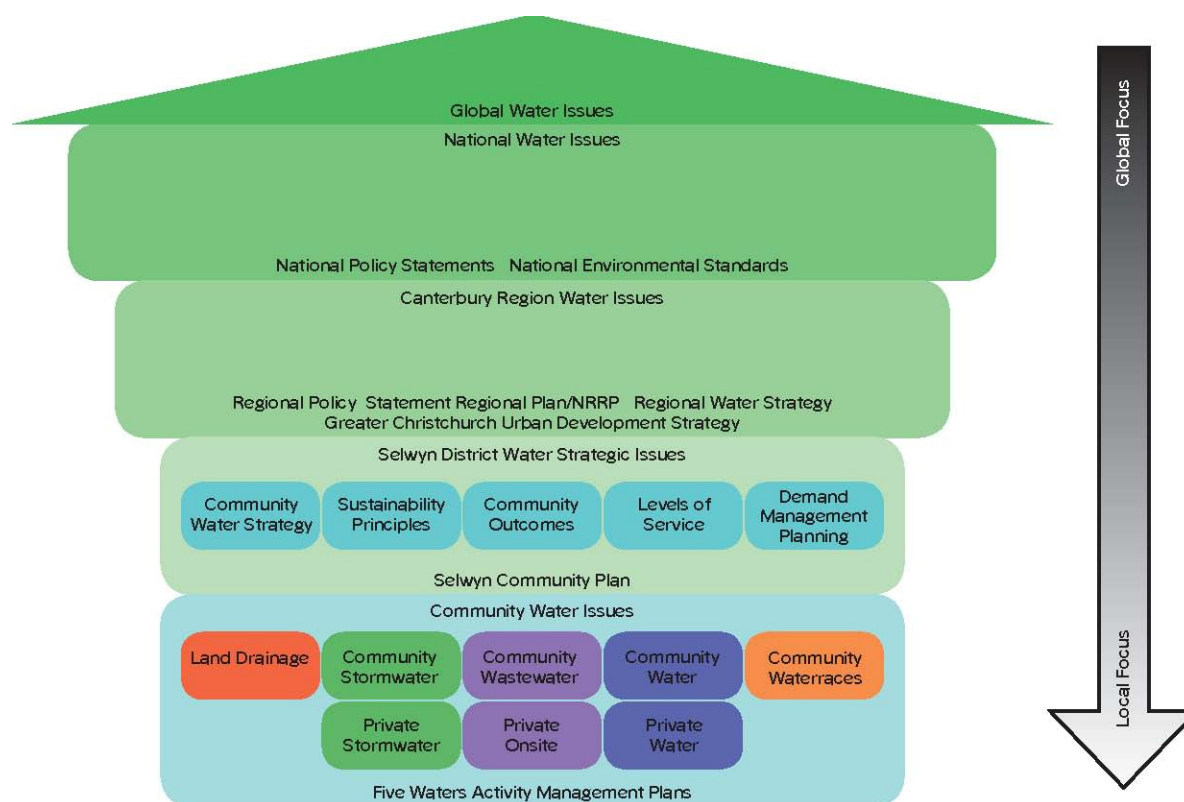
- Outlines how SDC will undertake the management, delivery and operation for the Five Water services for the communities in Selwyn over the next 10 years
- Outlines the approach to achieve “Levels of Service”
- Contains expenditure programmes, determined by prioritising works and activities that must, and could be funded by ratepayers, e.g. meeting mandatory standards, promoting water saving devices

The AcMP is a living document and is revised at least every three years in time to support the Selwyn Community Plan - the LTCCP.

Before any AcMP review can be completed, the strategic direction should be determined. This Strategy will in effect, create the **vision** and **boundaries** for the AcMP implementation and will be reviewed at least every six (6) years in line with the review of Selwyn’s Community Outcomes. Community input strengthens the process by clarifying and prioritising issues, hence consultation is a key part of its validation.

### 3 INPUTS INTO THE STRATEGY

Strategic planning for the use of Five Water resources is undertaken at a number of levels. **Figure 2** demonstrates the potential sources of influence on the Strategy.



**Figure 2 - Potential sources of influence on the Strategy**

While the Strategy targets district issues, it must do so in a way that accounts for the relevant issues at all other levels.

The Strategy seeks to direct and support the district in a consistent, cohesive and cooperative way. However, it is recognised that in the real world there are tensions between the desires of global, national, regional and inter-district water allocation, use and management. For example, our urban communities' well-being relies on a strong rural economy, but could suffer from long term environmental impacts of that rural land use.

The Strategy is also challenged at a district level by the need to take into account diverse and sometimes, opposing social, economic, cultural and environmental values for different communities in the District. Other challenges arise from the impacts of any one of the Five Waters on the others.

## 4 PROPOSED FIVE WATERS STRATEGY INITIATIVES

Council recognises that rapid improvements (0-3 years) can be made in some areas, while longer term gains (3+ years) can only be brought about after investigation and review – the “possible future”. Initiatives for the possible future are identified for the urban areas serviced by community schemes and other areas that are not serviced by community schemes.

The initiatives are identified and graded to indicate priority. It is possible that an initiative may sit at several levels, e.g. global or national, and a decision has been made on the “best fit”. Where any of the Five Waters may be affected, they are noted by abbreviation.

### COMMUNITY SCHEMES

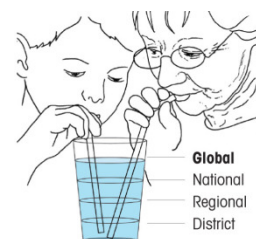
### PRIVATE SCHEMES

<i>W</i>	Water	<i>WP</i>	Private Water
<i>WW</i>	Wastewater	<i>WWP</i>	Onsite Wastewater
<i>WR</i>	Waterraces		
<i>LD</i>	Land Drainage	<i>LDP</i>	Onsite Drainage
<i>SW</i>	Stormwater	<i>SWP</i>	Onsite Stormwater
<i>ALL</i>	All Community Schemes	<i>ALLP</i>	All Private Schemes

All initiatives are indicated below as “Our... .. Strategy Initiative(s) and presented in total on the impact summary sheet. The proposed priority and how they will be addressed will be developed through the Activity Management Plan and Long Term Council Community Plan.

## 5 GLOBAL INITIATIVES

Global events may move faster than national and regional policy and legislation can currently adapt to. Legislative mechanisms in their current form are regarded as inflexible.



### 5.1 SUSTAINABILITY

The decision by SDC on 27th February 2008 to formally adopt seven sustainability principles was made after consideration of a number of factors including international concerns around climate fluctuations.



#### **Principle 1:**

Make decisions based on the four aspects of well-being



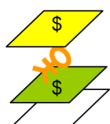
#### **Principle 2:**

Observe the Precautionary Principle to provide contingency and enable adaptability of our community



#### **Principle 3:**

Seek “intra-generational” and “inter-generational” equity



#### **Principle 4:**

Internalise environmental and social costs



#### **Principle 5:**

Foster community welfare



#### **Principle 6:**

Act to halt the decline of our indigenous biodiversity, and maintain and restore remaining ecosystems



#### **Principle 7:**

Consider, and promote the sustainability of our neighbouring communities and work with governing bodies for sustainable outcomes

The principles encompass the NZ Government's current commitment to the Kyoto Protocol, and Council's continuing advances in meeting Local Government legislation.

## OUR SUSTAINABILITY STRATEGY INITIATIVE(S):

<b>ALL ALLP</b>	<b>SDC will</b> have regard to these principles when making any significant decision that affects changes to the installation, renewal, management and operation of the water infrastructure
<b>ALL</b>	<b>SDC will</b> monitor current and forecast fossil fuels prices and associate effects on its asset management and operation annually. It will identify effective and efficient opportunities to reduce usage and reliance on this energy source, and seek reliable and sustainable alternatives as they arise

## 5.2 CLIMATE CHANGE

There is international concern regarding the impact of climate fluctuations/effects. SDC sees the effects as:

- Local changes to climate that impact the availability of the water used for supply
- Changes to international demand for food products that are produced in Selwyn District that use water for production, and change the availability of the resource for community use

## OUR CLIMATE CHANGE STRATEGY INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> proactively undertake studies to better quantify the potential impacts of climate change on demand and availability as it affects its District
<b>ALL ALLP</b>	<b>SDC will</b> minimise use of, and conserve energy, as far as practicable, while still meeting agreed Levels of Service. This will extend to all private services in time where a need is recognised
<b>ALL</b>	<b>SDC will</b> undertake to identify and reduce carbon emissions where a benefit is shown, through more efficient use of materials and services
<b>W WW WR</b>	<b>SDC will</b> establish, and where appropriate, implement demand strategies and water loss reduction programmes

## 5.3 DRINKING WATER STANDARDS

Drinking water quality standards in New Zealand have been adopted in line with World Health Organisation guidelines. The Standards acknowledge the mobility of waterborne diseases, and the potential impact of organisms that are “imported” into New Zealand.

### OUR DRINKING WATER STRATEGY INITIATIVE(S):

<b>W</b>	<b>SDC will</b> regard with importance, the protection of groundwater and surface water quality that is delivered to its urban communities
<b>WP</b>	<b>SDC will</b> , with support from Regional and Ministry of Health officials, maintain and advise private users regarding drinking water health issues

## 6 NATIONAL INITIATIVES

National initiatives are generally developed and promoted by central Government. They can result from global issues which have been applied to the New Zealand environment, or ones which have been developed to meet the countries unique demands.



### 6.1 THE HEALTH (DRINKING WATER) AMENDMENT ACT 2007

The Act assigns obligations to SDC as a community water supplier to:

- Take all practicable steps to comply with the Drinking Water Standards
- Introduce and implement Public Health Risk Management Plans (PHRMPs) for the water supply

Specific obligations and timelines vary according to the population served by the supply.

### OUR HEALTH (DRINKING WATER) ACT 2007 STRATEGY INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> work to achieve compliance through the implementation of PHRMPs and the planning of upgrades to water abstraction and treatment facilities
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### 6.2 SUSTAINABLE WATER PROGRAMME OF ACTION (SWPOA) AND RESOURCE MANAGEMENT REFORMS

The Government has initiated a strategy to improve the management of fresh water, protect our freshwater resources into the future, and acknowledge the fundamental importance of water to all New Zealanders. The strategy focuses on three national outcomes for fresh water:

- Improve the quality and efficient use of fresh water by building and enhancing partnerships and providers e.g. SDC and rural and urban communities
- Improve the management of the undesirable effects of land use on water quality through increased national direction and partnerships with communities and resource users
- Provide for growing demands on water resources and encourage efficient water management through increased national direction, working with local government to identify options for supporting and enhancing local decision making, and developing best practice

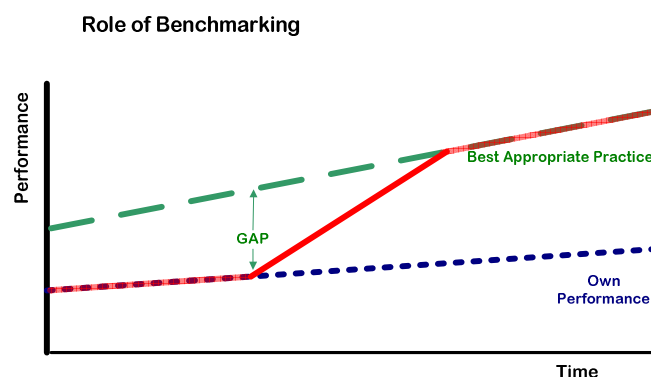
## OUR SWPoA STRATEGY INITIATIVE(S)

<b>ALL</b>	<b>SDC will</b> engage with those parties undertaking the SWPoA to understand, apply and sustainably protect the interests of the urban community. This will include submission and representation by Council from time to time
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## 6.3 BENCHMARKING PERFORMANCE

Benchmarking refers to the methodology and tools required to identify, measure and respond to key performance indicators of any particular water asset. Benchmarking can be undertaken to allow comparison with neighbours or other utility providers within New Zealand or overseas.

For example, how efficiently SDC is providing or using water could be compared with areas in Australia with a similar climate. Adaptable benchmarking is a key aid in identifying opportunities for improvement, learning “best practices”, maintaining stimulus for continuous improvement, and measuring success in closing the gap.



## OUR BENCHMARKING STRATEGY INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> proactively collect and analyse performance data to establish better comparable performance
<b>W</b>	<b>SDC will</b> collect water quality and water quantity data and present the data in a way that allows assessment of changes to upstream activities on its water supplies

## 6.4 SUPPLY SECURITY AND EMERGENCY PREPAREDNESS

Water supply is an essential service. The consequences of losing a water supply to a community can have catastrophic consequences. There are legislative requirements such as the Civil Defence Emergency Management (CDEM) Act 2002 that place obligations on SDC to protect the water quality and the continuity of supply to its customers. As well as water supply the effectiveness and resilience of the Wastewater, Waterraces, Land Drainage and Stormwater schemes contribute to the communities ability to manage through emergency events.

The CDEM was provided to:

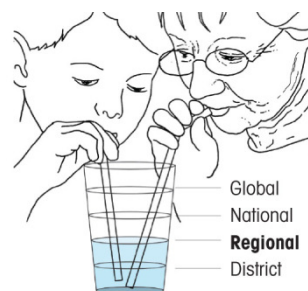
- Improve and promote the sustainable management of hazards to contribute to the well-being, the safety of the public and the protection of property
- Encourage and enable communities to achieve acceptable levels of risk by applying risk management
- Provide for planning and preparation for emergencies, and response and recovery in the event of an emergency
- Require local authorities to coordinate CDEM through regional groups
- Encourage the coordination of emergency management across emergency sectors

## OUR EMERGENCY PREPAREDNESS INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> regularly participate in Lifelines processes
<b>ALL</b>	<b>SDC will</b> assess the consequences to the community if key components of water supply infrastructure were taken out of service
<b>ALL</b>	<b>SDC will</b> implement design standards and operational practices to minimise the risk of failing to deliver a safe continuous supply of water to communities
<b>ALL</b>	<b>SDC will</b> undertake risk management processes that comply with statutory requirements and in accordance with the Council's Asset Management Policy
<b>ALL</b> <b>ALLP</b>	<b>SDC will</b> develop and implement an emergency response plan that outlines inter-dependencies with other service providers, and responsibilities for restoration of supplies following hazard events
<b>W</b> <b>WW</b> <b>WR</b>	<b>SDC will</b> plan and provide new and upgraded water supply infrastructure to reduce the risks of interrupted or contaminated supply during hazard events

## 7 REGIONAL INITIATIVES

Regional initiatives are those which may have been developed as a result of global or national processes. Generally they focus on particular issues which affect the environmental quality in the particular geographic area.



### 7.1 NATIONAL ENVIRONMENTAL STANDARD FOR SOURCES OF HUMAN DRINKING WATER

The National Environmental Standard (NES) requires Regional Councils to ensure that effects on drinking water sources are considered in decisions on resource consents and regional plans. Specifically, Councils will be required to:

- Decline discharge or water permits that are likely to result in community drinking water becoming unsafe for human consumption following existing treatment
- Be satisfied that permitted activities in regional plans will not result in community drinking water supplies being unsafe for human consumption following existing treatment
- Place conditions on relevant resource consents requiring notification of drinking water suppliers if significant unintended events occur (e.g. spills) that may adversely affect sources of human drinking water

#### OUR NES STRATEGY INITIATIVE(S):

<b>W</b>	<b>SDC will</b> seek to ensure that ECan protects the interests of SDC when consenting water abstractions or discharges that can impact on its supplies
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### 7.2 CANTERBURY REGIONAL POLICY STATEMENT (RPS) AND NATURAL RESOURCES REGIONAL PLAN (PNRRP)

The draft RPS and the proposed NRRP signal many changes to the way in which Council and the community will manage their activities and the environmental effects of those activities. The pNRRP recognised the significance of Te Waihora and other lowland ecosystems. Some pNRRP rules such as requiring sewage network utilities operator's licences and land drainage/stormwater discharge consents already have an effect, others require the plan to be operative.

#### OUR pNRRP STRATEGY INITIATIVE(S):

<b>ALL ALLP</b>	<b>SDC will</b> engage with the Regional Council at a political and technical level, to continue promotion of the issues brought by this document as they affect primarily, the Five Waters and secondly, private services
<b>ALL</b>	<b>SDC will</b> seek to deliver 100% compliance with all existing consents

### 7.3 REGIONAL WATER MANAGEMENT STRATEGY

The Canterbury Mayoral Forum has recognised the need for the development of a Regional Water Management Strategy and a greater degree of collaboration across the water management sector. Environment Canterbury are supporting of the Regional Water Management Strategy which will cover all water resources in the region and it is expected the outcomes of the Regional Water Management Strategy will be incorporated into Environment Canterbury's planning and regulatory regime.

#### OUR REGIONAL WATER MANAGEMENT STRATEGY INITIATIVE(S):

<b>ALL ALLP</b>	<b>SDC will</b> proactively give input into the preparation of this strategy to protect existing and future water abstraction requirements for its community schemes and private systems
<b>ALL ALLP</b>	<b>SDC will</b> demonstrate that future actions to develop and manage water supply consents and systems are consistent with its adopted sustainability principles

### 7.4 IRRIGATION SCHEMES

Current irrigation scheme proposals are indicative of the continued demand by farmers to extend irrigation within Selwyn District. The proposed schemes are likely to come from river sources – noting that groundwater is fully allocated. The schemes will involve river abstraction and storage.

#### OUR IRRIGATION SCHEME STRATEGY INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> be vigilant in the early planning phases of irrigation schemes and seek to ensure there is adequate protection of its water supplies from adverse effects, including declining water quality, significant changes to groundwater levels and adequate reservation of water allocation to provide for future community and private domestic use growth
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### 7.5 URBAN DEVELOPMENT STRATEGY

The Greater Christchurch Urban Development Strategy (UDS) provides the basis for a collaborative approach to managing the pressures arising from growth. SDC is a partner to this strategy and has responsibilities to implement the Strategy.

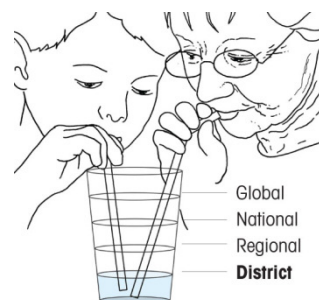
The responsibilities include provision of water, wastewater and stormwater infrastructure to the communities within Selwyn District and covered by the study area.

#### OUR UDS STRATEGY INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> take account of all its UDS Five Waters obligations including those it has direct responsibility to lead, as it continues planning and implementing the sustainable development and operation of those communities within the Metropolitan Urban Limits
<b>ALL ALLP</b>	<b>SDC will</b> control growth patterns via Regional and District plans to protect its Five Waters. It will review costs and cost recovery to ensure users pay directly

## 8 DISTRICT INITIATIVES

District initiatives are those which generally provide specific local solutions to locally recognised issues. These reflect the values of the people and the environment they live in. The district has a diversity of environments but generally there are similar issues across it. These are referred to as “communities of common interest”.



### 8.1 COMMUNITY OUTCOMES

The Selwyn Community Plan 2006-2016 “LTCCP” contains the key Community Outcomes for each of the four well-beings. Many of these outcomes support or rely on management of the Five Waters:

- Air, land, water and general environment to be kept in a healthy condition
- A living environment where the rural theme of Selwyn is maintained
- Access to community and public health services
- Coordination of community/social services
- A safe living environment
- Educated Community
- Business-friendly environment
- Effective and accessible transport system
- An ability to experience cultural activities

In the revised AcMP, these outcomes have been linked directly with the four well-beings and the levels of service for each of the Five Waters. Integrated reporting against the contribution towards the achievement of the community outcomes and the four well-beings is included in the annual report.

The levels of service or service targets for each of the Five Waters are:

- 1 The community is provided with water services to a standard that protects their health and property
- 2 Customers are provided and fairly charged for water services that meet their reasonable needs
- 3 Nuisance effects of water services are minimised
- 4 Water services are provided in a cost effective manner
- 5 Problems with water services are addressed in a timely manner and prioritised according to risk and need
- 6 Service capacity is provided to accommodate growing communities, where this growth is sustainable
- 7 Adverse effects of water services on cultural and heritage values are minimised
- 8 Adverse effects of water services on the environment are minimised.
- 9 Greenhouse gas emissions from the provision of water services are minimised.

#### OUR COMMUNITY OUTCOMES INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> ensure Council's Five Waters policies and practices comply with statutory and best practice requirements
<b>ALL</b>	<b>SDC will</b> adopt a policy on the appropriate level of asset management and develop practices that deliver this policy

## 8.2 KAITIAKITANGA, TIKANGA

For Maori, linking the past, present and the future is an important concept of life. There is much value in learning from the past in planning for the future. Kaitiakitanga – safe guarding our future (guardianship) and Tikanga (protocols) are two powerful concepts embodied in Maori culture.

### OUR MAORI INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> seek to understand and exercise the principles of Kaitiakitanga so those who follow can enjoy what we enjoy today
<b>ALL</b>	<b>SDC will</b> seek to establish the right Tikanga that will enable us to deliver water services in an integrated and sustainable way

## 8.3 INTEGRATION OF COMMUNITY WATER SUPPLY SCHEMES

There are currently 30 physically separate community water supply schemes within SDC. Many of these schemes service people who are within the same **Community of Interest**. Those scheme's "level of service" expectations are likely to be the same.

Changes to water treatment and wastewater disposal standards, operational costs, as well as service requirements arising from community growth, and the need for increased security of supply can mean that water sources, treatment plants and networks need to be reconfigured. Sometimes the complete or partial integration of schemes provides an optimal long term solution.

### OUR INTEGRATION INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> regularly review the optimal provision of its community water services and provide for these changes in the Activity Management Plan and Strategy
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## 8.4 ALLOCATION LIMITS

Groundwater allocation reports prepared in 2004 for Environment Canterbury provide technical and policy information to guide decisions on applications for resource consents for groundwater in highly allocated groundwater zones – including Selwyn District. However, there is currently no allocation, particularly in "red zones" for Community Drinking Water Supplies. Environment Canterbury have indicated future consideration of appropriate allocation for community drinking water supplies/community stockwater schemes.

### OUR ALLOCATION INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> seek to secure future community water allocation
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## 8.5 WATER DEMAND AND DEMAND MANAGEMENT, INCLUDING GROWTH

Per capita water demand in Selwyn is high compared to other communities in New Zealand. Undoubtedly, climate and free draining soils are contributing factors to high water use. Fully allocated water resources, community growth and increased operating costs will provide increased incentive to understand the reasons for this high demand and then to implement techniques to reduce it.

### OUR WATER DEMAND MANAGEMENT INITIATIVE(S):

<b>W</b> <b>WW</b> <b>WR</b>	<b>SDC will</b> evaluate and implement appropriate demand management initiatives that contribute to future protection of water resources that are abstracted for supply to communities
<b>W</b> <b>WW</b> <b>WR</b>	<b>Recycling and Reuse:</b> <b>SDC will</b> undertake studies to understand the water use patterns in communities
<b>ALL</b>	<b>Conservation:</b> <b>SDC will</b> implement demand strategies and water loss reduction programmes with reference to the outcomes of these studies

## 8.6 AGEING INFRASTRUCTURE

The water supply infrastructure is comprised of above ground and below ground assets. The extent, capacity, age and condition of these assets is summarised within the Five Waters AcMP.

Replacement budgets are determined from current knowledge of assets and an understanding of their performance, criticality and their ability to deliver levels of service.

### OUR AGEING INFRASTRUCTURE INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> undertake appropriate condition assessments of all services on a regular basis in accordance with Council's Asset Management Policy, and fund, via depreciation or other methods, for the services replacement
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## 8.7 AFFORDABILITY AND PRICING

Current water supply charges are based on cost recovery within those water supply schemes. Charging systems vary between schemes; some pay according to use, and others pay fixed annual charges.

### OUR AFFORDABILITY AND PRICING INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> review charging mechanisms with a view to ensuring that the charges fund the annual operating costs, and contribute to the depreciation or renewal costs of the service.
<b>ALL</b>	<b>SDC will</b> regularly review funding mechanisms (including user-pays, development contributions, metering, trade waste bylaw and charging)

## 8.8 TOURISM

Increased tourism in an area can have two significant impacts on water supply infrastructure:

- Increased demand on services without any supporting source of funding to provide the expanded services
- Elevated risk of transmitted waterborne disease into and out of the District; especially where tourists are in contact with untreated or partially treated water

### OUR TOURISM INITIATIVE(S):

<b>ALL</b>	<b>SDC will</b> seek additional funding for any water supply upgrade or new installation that has demands placed on it by tourism
<b>ALL</b>	<b>SDC will</b> provide adequately treated water to facilities that are utilised by tourists and connected to the water supply network

## 8.9 UNSERVICED AREAS

The Local Government Act 2002 requires SDC to complete a Water and Sanitary Services Assessment that is reviewed from time to time. The first assessment was completed in 2005. An integrated approach to Five Waters Management and Resource Management Planning as executed through the Selwyn District plan is essential. Improvements have resulted from that work as below.

### OUR UNSERVICED INITIATIVE(S):

<b>ALLP</b>	<b>SDC will</b> continue to investigate and deliver options for improving the knowledge and management of private supplies
<b>ALL</b>	<b>SDC will</b> participate in the Ministry of Health Technical Advisory Programme to assist private suppliers to understand and manage the risks to their systems
<b>ALLP</b>	<b>SDC will</b> instigate a drinking water monitoring programme for those settlements not currently serviced by a council scheme
<b>ALL</b>	<b>SDC will</b> ensure infrastructure planning and district planning proceed in an effective integrated manner

## 8.10 STANDARDS - STORMWATER AND LAND DRAINAGE

Stormwater and Land Drainage is managed locally in accordance with agreed LoS for flood, stream and contaminant management, potential for significant local use as outlined in the AcMP.

Regionally and locally, low impact urban design including stormwater attenuation is being implemented, as it is becoming increasingly unacceptable to discharge stormwater directly into streams and rainwater drainage services. Integrated stormwater and land drainage planning should be supported where required, with all treatment and disposal separated from Council wastewater and private wastewater services. This can be assisted by design standards.

#### OUR STORMWATER AND LAND DRAINAGE INITIATIVE(S):

<b><i>ALLP</i></b>	<b>SDC will</b> implement integrated stormwater and land drainage planning where appropriate, and in accordance with its sustainability principles
<b><i>ALL</i></b>	<b>SDC will</b> apply low impact urban design principles in accordance with the District and Regional Plan, and local community consultation

## 9 MONITORING AND REVIEWING THE STRATEGY

This Strategy has been developed and will be kept current with the objectives of the community in mind. It covers a range of issues across the Five Waters with updates occurring at least every six years to match the review of Selwyn's community outcomes. An earlier review maybe necessitated by changes in national legislation or policy, or changes in policy or planning directives at the regional level.

As community expectations and the context of the strategy change, the strategy will be reviewed in part or in its entirety. While setting framework for the future, the strategy needs to be flexible and adaptable to circumstances as they occur. Where substantial changes are required, broad consultation will be undertaken; while focused consultation is regarded as appropriate for specific changes.

A framework to monitor the achievement of the initiatives identified in this strategy. Achievement towards the success of the Strategy will be monitored annually and reported in a summary format through the Annual Report.

#### OUR MONITORING AND REVIEWING INITIATIVE(S):

<b><i>ALL ALLP</i></b>	<b>SDC will</b> review this strategy every six years or earlier if necessitated by changes in the national or regional planning or regulatory regimes
<b><i>ALL ALLP</i></b>	<b>SDC will</b> establish a framework to implement initiatives within this strategy, and monitor and report on the achievement of these initiatives annually