



## Coastal environment group of activities

The coastal group of activities contribute to the following community outcomes:

- Air, beaches, ocean and land are all in a healthy condition
- Business and farming activities do not harm the environment
- People feel safe at all times
- Recreational needs are met

Environment Canterbury is responsible for managing the region's coastal water quality, including discharges to the sea, and coastal hazards. In carrying out these functions, Environment Canterbury has a duty to make available information about coastal water quality and the state of the coastal environment (Resource Management Act 1991). Environment Canterbury is also responsible for marine oil spill response (Marine Oil Spill Contingency Plan, Maritime Transport Act 1994). It is the lead agency for this work.

## KEY ISSUES FOR 2009-19

### Coastal water quality

Coastal waters are highly valued for recreation, production from marine farming and as a wildlife habitat. Although the majority of the coastal marine area has high water quality, in some areas human activities have led to water quality problems arising from sewage disposal, siltation, oil spills, discharge of contaminants and other impacts of land use.

### Pressure on the coastal environment

Sensitive coastal environments are under increasing pressure from development, recreational use, climate change and cumulative effects on environmental quality. All of these can threaten the natural character of the coast and ecosystems. The main ports at Lyttelton and Timaru play a vital role in servicing the region's agricultural and manufacturing sectors. Development of aquaculture requires regional councils to work in conjunction with central government agencies.

### Coastal hazards

There is a history of coastal erosion and sea water inundation along parts of the Canterbury coast, damaging property and threatening life. This is expected to increase further due to climate change, which may increase the frequency and severity of storms. In addition, sea level rise is expected to continue at a more accelerated rate.

### Regional consistency

With nine district and city councils along the Canterbury coastline there is a need to integrate coastal management. There is also a need to manage cross regional boundary issues in conjunction with government agencies to give effect to a wider national direction.

## Effect on the four well-beings

There are benefits to environmental, social and cultural well-being as a result of preventing development within coastal hazard zones. However, the cost of complying with consent conditions for activities in coastal zones could adversely affect the economic well-being of some individuals and businesses.



SOCIAL



ECONOMIC



ENVIRONMENTAL



CULTURAL

## Involving the community

- A community steering group has developed the Northern Pegasus Bay Coastal Management Plan.
- Coastcare groups operate in Akaroa Harbour, Lyttelton Harbour/Whakaraupo, Avon-Heathcote Estuary/Ihutai, Northern Pegasus Bay and South Canterbury.
- For 15 weeks over the summer the Avon-Heathcote Estuary/Ihutai Water Sampling Group and Environment Canterbury monitor the swimming water quality at the estuary and Christchurch beaches to identify risks to public health.

# ACTIVITIES

Priority over the next 10 years

The focus for this group of activities is implementing the Regional Coastal Environment Plan. There is also an emphasis on coastal water quality and hazards monitoring and investigations.

We will undertake the following activities:

- 1 **Investigations**  
Investigating coastal environmental issues.
- 2 **Planning and consents**  
Developing policy for managing the coastal environment and monitoring policy effectiveness and efficiency.
- 3 **Monitoring**  
Monitoring the impact of human activity and natural processes on the coastal environment.
- 4 **Communicating, educating and advocating**  
Encouraging communities to protect and enhance the coastal environment.
- 5 **Regulating**  
Managing discharges into the coastal marine area and ensuring compliance with resource consent conditions and the Resource Management Act 1991.

## UNCERTAINTIES 2009-19

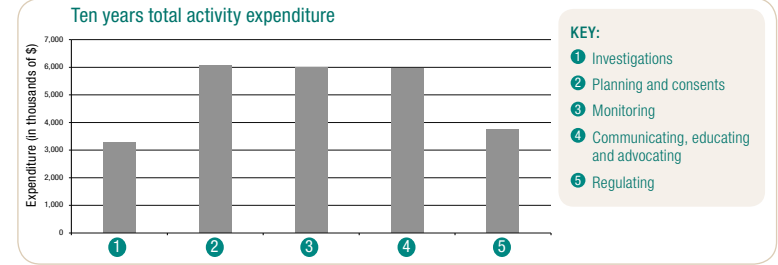
## ASSUMPTIONS 2009-19

### The following is uncertain:

- a) The impact of the final gazetted version of the New Zealand Coastal Policy Statement.
- b) The number of Tier 2 marine oil spills in any one year.

### It is assumed that:

- a) Until the statement is finalised it is not known how much additional work will be required. However, some provision has been made.
- b) Some provision has been made for responding to Tier 2 oil spills. (Forecasts are based on costs being recovered from the originator of the spill or the Maritime New Zealand Oil Pollution Fund.)



## WORK PROGRAMMES FOR 2009/10 TO 2018/19:

### 1 Investigations

#### Years 2009/10 to 2018/19

- Investigate coastal erosion and inundation.
- Investigate causes of water quality issues.

### 2 Planning and consents

#### Years 2009/10 to 2018/19

- Ensure district and city plans give effect to regional policies for managing the coastal environment.
- Assess the effectiveness and efficiency of the Regional Coastal Environment Plan.
- Process any private plan changes to the Regional Coastal Environment Plan.
- Process resource consent applications.
- Develop a framework for aquaculture management.

#### Years 2010/11, 2013/14 and 2016/17

- Review Tier 2 Marine Oil Spill Contingency Plan.

### 3 Monitoring

#### Years 2009/10 to 2018/19

- Monitor ecosystem health.
- Monitor chemical and biological water quality.
- Monitor recreational water quality.
- Monitor the impact of land use on the coastal environment.
- Monitor access to and along the coastal marine area.
- Monitor coastal hazards.
- Monitor the wave climate.
- Publish results of monitoring programmes.
- Compile data for the Regional Environment Report

### 4 Communicating, educating and advocating

#### Years 2009/10 to 2018/19

- Support coastcare groups in Akaroa Harbour, Lyttelton Harbour/Whakaraupo, Avon-Heathcote Estuary/Ihutai, Northern Pegasus Bay and South Canterbury.
- Support new coastcare groups where their objectives contribute to Environment Canterbury's outcomes.
- Provide resource material for schools.
- Support the Avon-Heathcote Estuary/Ihutai Trust.

### 5 Regulating

#### Years 2009/10 to 2018/19

- Maintain a team of trained personnel who are able to respond to and clean up, regional (Tier 2) and if required, national scale (Tier 3) marine oil spills.
- Monitor prioritised resource consents, permitted activities and unauthorised activities for compliance with the Resource Management Act 1991.
- Provide a Pollution Hotline Response Service.
- Promote and enforce compliance with the Resource Management Act 1991.

# LEVELS OF SERVICE



## HOW ENVIRONMENT CANTERBURY'S LEVELS OF SERVICE RELATE TO THE COMMUNITY OUTCOMES

Levels of Service	Community Outcomes			
	Air, beaches, ocean and land are all in a healthy condition	Business and farming activities do not harm the environment	People feel safe at all times	Recreational needs are met
1 Providing information about coastal hazards			<input checked="" type="checkbox"/>	
2 Improving water quality at swimming beaches	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
3 Improving coastal water quality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
4 Working with territorial authorities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5 Maintaining a regional marine oil spill response capability, including clean-up and enforcement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
6 Authorising and monitoring the use of natural and physical resources	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Environment Canterbury's contribution will be reported on each year in our annual report.

## OUR LEVELS OF SERVICE

### 1 Providing information about coastal hazards

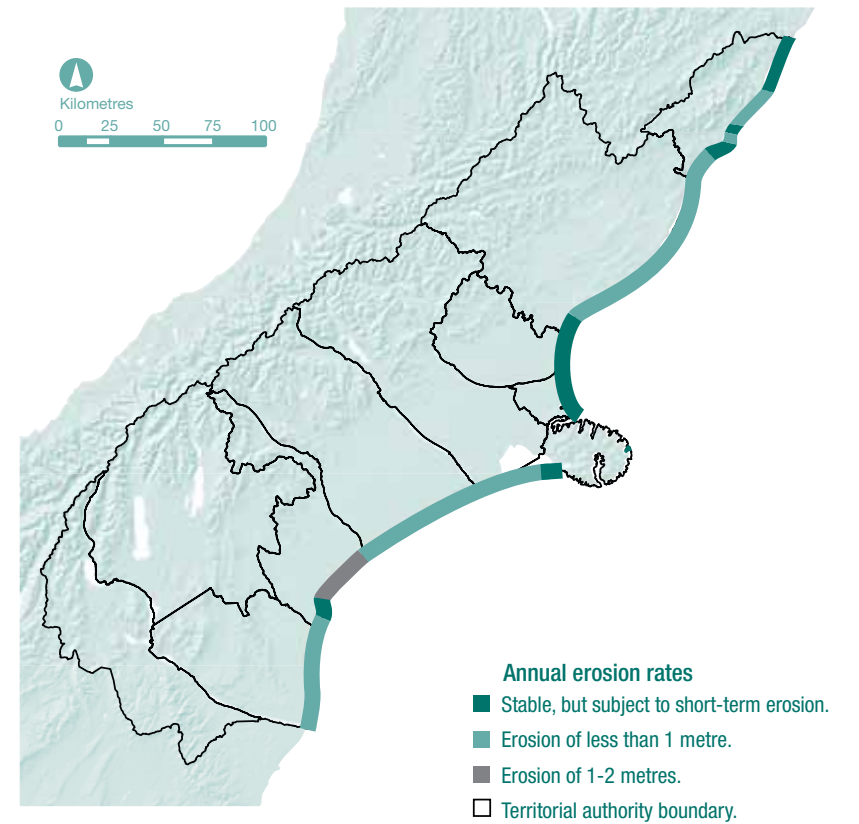
#### MEASURE

The percentage of coastal areas susceptible to coastal erosion and sea water flooding identified and mapped.<sup>1</sup>

#### TARGET

100%

#### Coastal erosion rates



<sup>1</sup> The Regional Coastal Environment Plan 2005 identifies coastal erosion hazard zones and areas of the coast that have been historically susceptible to flooding from coastal storm events.

## 2 Improving water quality at swimming beaches

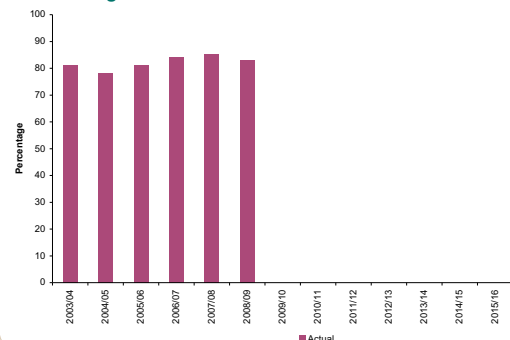
### MEASURE

The percentage of monitored swimming beaches that are suitable for contact recreation<sup>2</sup>, all or most of the time.

### TARGET

The percentage is increasing.

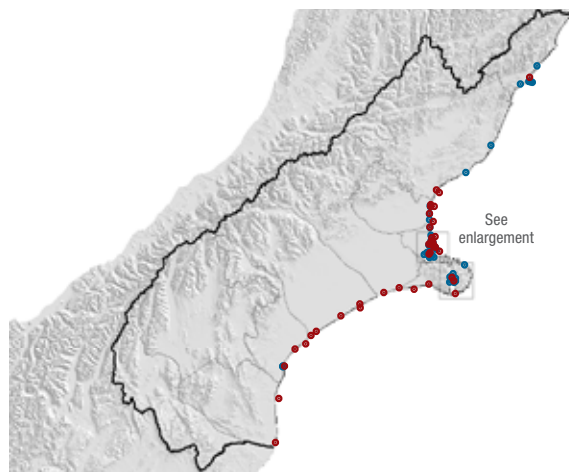
#### Swimming beaches suitable for contact recreation



Note: Estuaries, such as Avon-Heathcote/ Ihutai and Ashley are included in the above measures. River mouths that are predominantly freshwater such as the Waimakariri and Kahutara river mouths, are included in the Water quality, quantity and ecosystems group of activities.

Source: Environment Canterbury.

#### Swimming beach and coastal water quality monitoring sites (relates to Levels of Service 2 and 3)

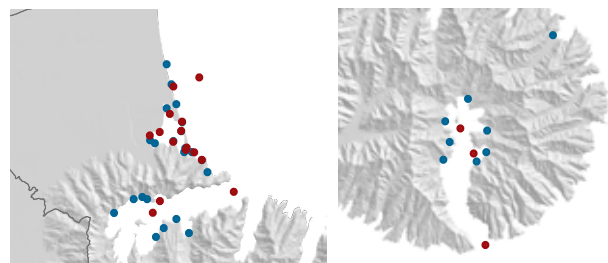


##### ● Coastal and estuarine swimming beach sites

Coastal and estuarine contact recreation sites are monitored weekly each summer for faecal indicator bacteria Enterococci, as well as *E. coli* at estuarine sites.

##### ● Coastal water quality and ecosystem health sites

Ecosystem health monitoring sites are routinely monitored for nutrients, including concentrations of ammonia-nitrogen (see footnote<sup>4</sup>). Suspended sediments, pH, salinity, dissolved oxygen, and temperature are also monitored.



## 3 Improving coastal water quality

### MEASURE

The percentage of coastal water quality monitoring sites recording ammonia-nitrogen levels below 0.5 milligrams per litre.<sup>3</sup>

### TARGET

The percentage is increasing.

## 4 Working with territorial authorities

### MEASURE

The percentage of reviewed district and city council plans that give effect to or are not inconsistent with regional policies<sup>4</sup> for managing the coastal environment.

### TARGET

100% of reviewed plans (see table).

Note: Second-generation plans will be developed by district and city councils by way of a plan review under section 79 of the Resource Management Act 1991. Environment Canterbury will review all second-generation plans to ensure they give effect to the Canterbury Regional Policy Statement (CRPS) or are not inconsistent with the Proposed Natural Resources Regional Plan (PNRRP).

#### District and city council plans

Council	First plan operative	Review of plan commences
Ashburton District Plan	2001	2008
Waimate District Plan	2001	2011
Hurunui District Plan	2003	2013
Waimakariri District Plan	2005	2015
Timaru District Plan	2005	2015
Waitaki District Plan	2005*	2015
Christchurch City Plan	2007*	2017
Selwyn District Plan	2007	2017
Kaikoura District Plan	2008	2018
Banks Peninsula District Plan	2009**	2019

\* operative in part  
\*\* assumed operative date

<sup>2</sup> A site is considered suitable for contact recreation when it receives a "Suitability for Contact Recreation Grade" of fair, good or very good, as defined in the Microbiological Water Quality Guidelines for Marine and Freshwater Recreational Areas (2003). Grading is reassessed at the end of each summer bathing season, based on the most recent five years' individual sample results as well as an assessment of risk factors. This gives a grade that reflects likely water quality at any time, not just when samples were collected.

<sup>3</sup> Based on the ANZECC 2000, the Australian and New Zealand Environmental and Conservation Council guidelines for fresh and marine water quality. Ammonia-nitrogen is formed during the breakdown of human and other animal excreta and can potentially be toxic to estuarine and marine life. ANZECC trigger concentrations of 0.5 mg/l ammonia-nitrogen provide protection for 99% of species.

<sup>4</sup> The Regional Coastal Environment Plan 2005 outlines how Canterbury's coastal environment is managed under the Resource Management Act (RMA). The RMA requires all regional councils to have a regional coastal plan.

## 5 Maintaining a regional marine oil spill response capability, including clean up and enforcement

### MEASURE

Availability of a regional response capability that meets Maritime New Zealand's requirements.<sup>5</sup>

### TARGET

Available at all times.

<sup>5</sup> Environment Canterbury works in collaboration with Maritime New Zealand to maintain a regional oil spill response capability. This function is required under the Maritime Protection Rules and Maritime Transport Act 1994.

<sup>6</sup> High demand for consents from water, dairy and subdivision related activities, coupled with increased numbers of notifications and hearings in water resource constrained areas, and some large individual applications, has in the past resulted in many consent applications across all portfolios not being able to be completed within statutory timeframes. Difficulties in recruiting staff have compounded the problem. Note that processing of notified consents is sometimes delayed by events outside Environment Canterbury's control. In the medium term we are aiming for 100%. Going forward, recent process improvements, coupled with expected reductions in demand of consents and improvements in recruitment, should result in significantly improved performance.

<sup>7</sup> For measures 2, 3 and 4 data collection started in 2007/08.

<sup>8</sup> Mean non-compliance assessed as Grade 3 – Significant non-compliance or repeated minor non-compliance – moderate adverse environmental effects, or Grade 4 – Major and/or persistent non-compliance – serious or persistent adverse environmental effects.

<sup>9</sup> Means re-assessed as Grade 1 – Fully complying or Grade 2 – Minor non-compliance – nil or minor short-term adverse environmental effects.

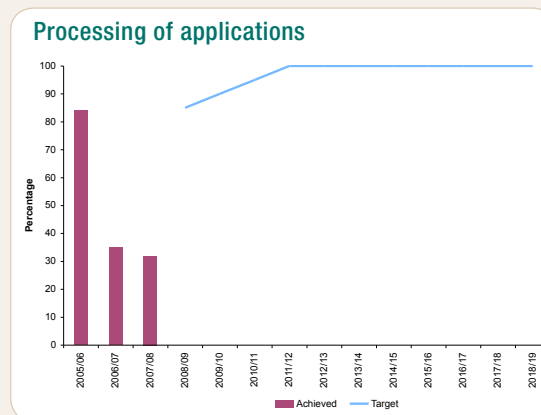
## 6 Authorising and monitoring the use of natural and physical resources

### MEASURE 1

The percentage of coastal resource consent applications processed in compliance with the statutory time frame set down in the Resource Management Act 1991.

### TARGET

85%, increasing to 100% by 2011/12<sup>6</sup>



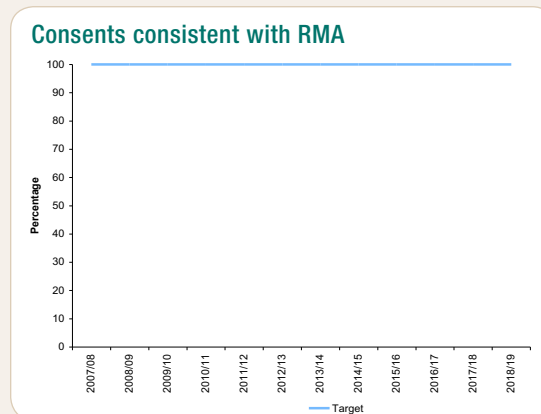
Source: Environment Canterbury.

### MEASURE 2

The percentage of coastal resource consents consistent with Resource Management Act 1991 requirements, including proposed and operative regional plan requirements.

### TARGET

100%<sup>7</sup>



Note: No historical data is available as due to the small sample size of resource consents audited, the data collected was not adequate to determine a result. Source: Environment Canterbury.

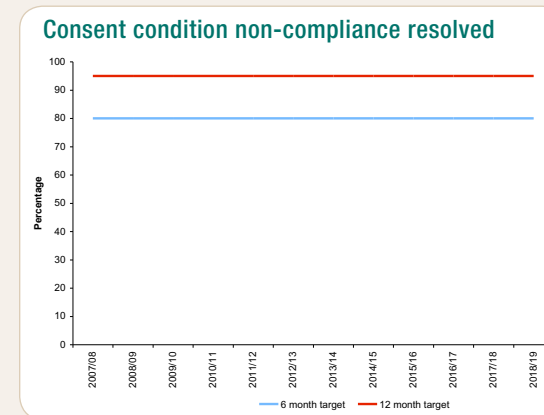
### MEASURE 3

The percentage of significant or major non-compliance<sup>8</sup> with coastal resource consent conditions resolved<sup>9</sup> (no further action is required).

### TARGET

80% are resolved in six months<sup>7</sup>

95% are resolved in 12 months.<sup>7</sup>



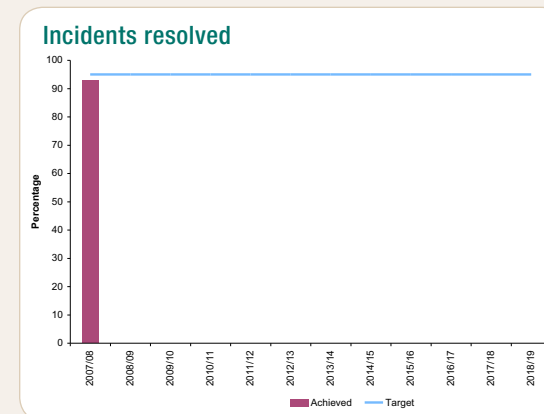
Note: No historical data is available as no non-compliances were able to be resolved due to all instances relating to off-site marine farms where a legislative change is required before resolution is possible. Source: Environment Canterbury.

### MEASURE 4

The percentage of environmental incidents resolved (no further action is required) for the coastal environment.

### TARGET

95%<sup>7</sup>



Source: Environment Canterbury.

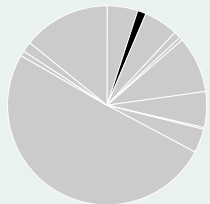
# FINANCIAL SUMMARY

## Asset management and capital expenditure

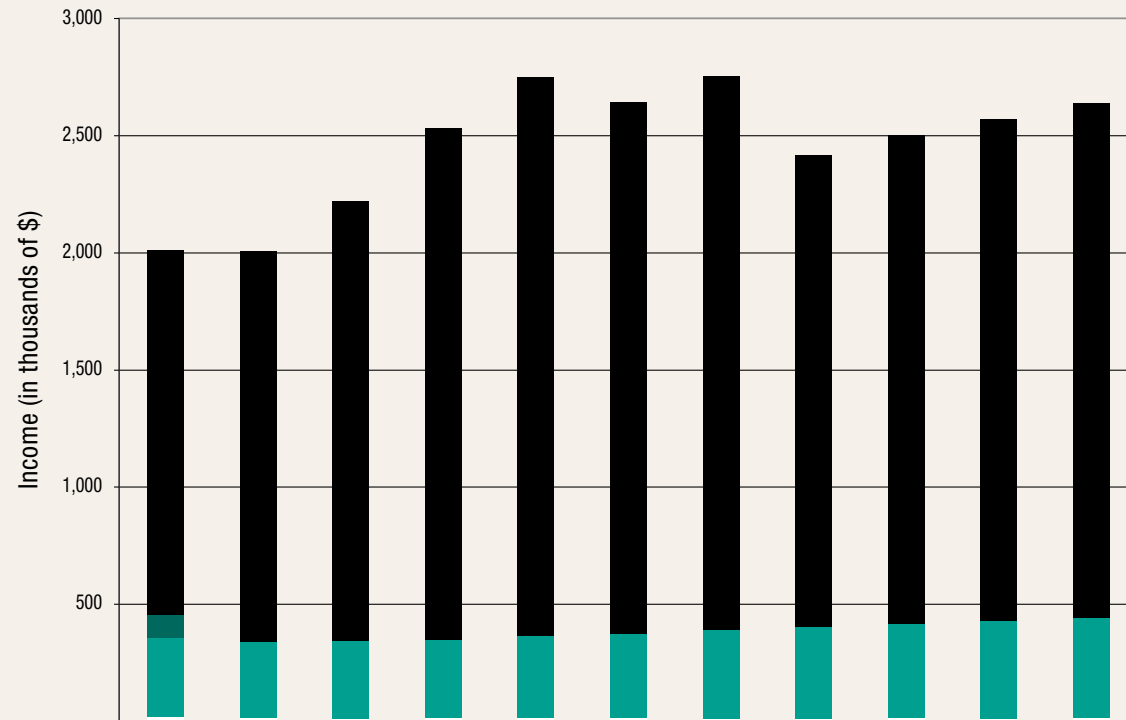
There are no assets involved in this group of activities.

## How this work is funded

For more information on source of funds and rationale for selection, see: 2009 Funding and Financial Policies, Long Term Council Community Plan Part B.



Ten years total expenditure, all 13 groups of activities  
KEY: ■ This group of activities



(\$000)	2008/09 Annual Plan	2009/10 LTCCP	2010/11 LTCCP	2011/12 LTCCP	2012/13 LTCCP	2013/14 LTCCP	2014/15 LTCCP	2015/16 LTCCP	2016/17 LTCCP	2017/18 LTCCP	2018/19 LTCCP
Interest	19	14	15	15	15	15	15	15	15	15	15
User Pays/Other	338	326	330	337	349	362	376	388	401	415	429
Grants	99	-	-	-	-	-	-	-	-	-	-
Targeted Rates	-	-	-	-	-	-	-	-	-	-	-
General Rates	1,556	1,667	1,873	2,182	2,383	2,267	2,364	2,011	2,086	2,142	2,194
<b>Total Income</b>	<b>2,012</b>	<b>2,007</b>	<b>2,218</b>	<b>2,534</b>	<b>2,747</b>	<b>2,644</b>	<b>2,755</b>	<b>2,414</b>	<b>2,502</b>	<b>2,572</b>	<b>2,638</b>
Operating Expenditure	2,051	2,007	2,218	2,534	2,747	2,644	2,755	2,414	2,502	2,572	2,638
Operating Surplus/(Deficit)	(39)	-	-	-	-	-	-	-	-	-	-
Reserves	39	-	-	-	-	-	-	-	-	-	-