

# ASSESSMENTS OF WATER & SANITARY SERVICES

## Appendix V of LTCCP

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### 1. **PURPOSE OF REPORT**

This report is to undertake an assessment of the provision of sanitary services in the Stratford District. It is a requirement of Section 125 of the Local Government Act 2002 (the Act) that the local authority “*from time to time*” assess its provision of community water and sanitary services.

Section 285, however, requires the first assessment to be made by 30 June 2005.

### 2. **EXECUTIVE SUMMARY**

Under the Act, water services include what is collectively known as the three waters:

- Drinking water supplies.
- Sewage collection, treatment and disposal.
- Stormwater drainage.

The remaining sanitary services which are applicable to the Stratford District are:

- Refuse collection and disposal.
- Public toilets.
- Effluent disposal points.
- Cemeteries.

Assessments of the suitability of both the quantity and quality of these services, insofar as they meet the present and forecast demands of the district, are required to be carried out by 30 June 2005 and adopted using the Special Consultative Procedure. The assessments are required on account of the public health significance of the services. They must take into account the environmental and public health impacts of either the delivery or non-delivery of the services being assessed.

In this report the ‘risk’ is assessed according to a relative priority ranking value and from this the action required can be determined. The issues arising from this report are summarised and listed according to priority in Section 6. From this an action plan can be formulated.

Any referenced documents are listed in 5.12 at the end of Section 5 below.

### 3. **BACKGROUND**

#### 3.1 **Legal Requirements of the Local Government Act 2002 (the Act)**

Section 124 of the Act defines “assessments” as relating to water services and other sanitary services available to the communities in the district, but not those services only available to individual properties. Water services in turn mean the three waters of water supply, sewage treatment/disposal and stormwater drainage. Water supply is defined as the provision of drinking water to communities by way of network reticulation.

Sanitary services are listed in the Health Act 1956. Of that list refuse disposal and collection, waste disposal points, public sanitary conveniences and cemeteries are supplied within the Stratford District.

Sections 125, 126 and 127 then require each of these services which are supplied to the identified communities within the district to be fully described and then assessed with regard to quantity and quality against the projected demand for the entire district as well as for those communities. Council must then state its intended options regarding any projected shortfalls.

Section 285 requires that the first assessment is made by 30 June 2005.

### 3.2 **Assessment Information**

With regard to the three waters, the following information is required to make the relevant health risk assessments:

- The extent to which drinking water obtained by residents and communities is potable (Section 126(1)(a)(i)(B)).
- The risks to the community relating to the absence in any area of a water supply or wastewater reticulation (Section 126(1)(b)).
- The quality and adequacy of the supply of drinking water for each community (Section 126(1)(c)(i)).
- The quality of waste water discharged from reticulated sewerage or a sewage treatment system (Section 126(1)(c)(ii)).
- The health and environmental impacts of the discharge of stormwater and sewage, whether treated or untreated (Section 126(1)(d)(ii)).

Section 127 of the Act requires that the risk assessment of sanitary services must contain the following information:

- A description of the services provide for each community within the district (Section 127(a)).
- A forecast of future demands for the district and each community within it (Section 127(b)).
- Identification and suitability assessment of options to meet the forecasted demands for the district and each community within it (Section 127(c)).
- The intended role of Council in meeting those forecasted demands, including proposals for any new or replacement infrastructure (Section 127(d) and (e)).
- A statement about the extent to which the proposals will ensure that public health is adequately protected (Section 127(f)) with the proviso that such sanitary service assessments are not required where a Waste Management Plan is in place and it supplies the required information.
- A statement as to the completeness of the assessment and how this may have been limited by the ability of the Council to obtain the information (eg. resource limitations) is required by Section 129.

### 3.3 **Assessment Integration**

The various assessments may be carried out together, for the same communities, or separately, for separately identified communities. The choice is based on balancing the need for an integrated approach regarding public health against the different nature of the various services.

The assessments can also be time separated although this could lead to inefficiencies concerning the Special Consultative Procedure.

## 4. **CONSULTATIVE PROCESS**

### 4.1 **Public Consultation**

Section 125 Assessments may either be included within the Long Term Council Community Plan (LTCCP) and therefore be subject to the consultation requirements of that document, or be reported separately, in which case the assessments are subject to the Special Consultative Procedure.

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In this case the assessments have been subject to the Special Consultative Procedure.

#### 4.2 **Maori Consultation**

There are no specific Maori issues relating to this matter and therefore special Maori consultation was not considered to be appropriate in this case.

#### 4.3 **Other Consultation**

Section 128(1)(a) of the Act requires special consultation with the Medical Officer of Health in making water and wastewater assessments. The following information was provided by the Medical Officer of Health (Taranaki):

The Notifiable diseases that may be associated with water have been summarised in the table below. The table represents a five year average from 2000 to 2004:

#### **Notifications of Selected Food & Waterborne Illness Notifications 2000-2004**

| Disease           | Stratford Number | Rates (per 10 <sup>5</sup> per year) |          |     |
|-------------------|------------------|--------------------------------------|----------|-----|
|                   |                  | Stratford                            | Taranaki | NZ  |
| Campylobacter     | 107              | 241                                  | 293      | 313 |
| Cryptosporidiosis | 9                | 20                                   | 19       | 24  |
| Giardiasis        | 5                | 11                                   | 15       | 43  |
| Salmonellosis     | 36               | 81                                   | 39       | 47  |

In general the Stratford rate is less than or equal to the Taranaki rate, which in turn tends to be lower than the NZ rate. The exception for Stratford is salmonellosis because of a food-borne outbreak in 2001 which was not related to the water supply. These figures should be interpreted with caution but do not appear to indicate any evidence of spread of illness through the local water supplies.

### 5. **ISSUES AND OPTIONS**

#### 5.1 **Overview of Assessment Process**

Essentially the process requires the complete description of existing services within each community and then a risk assessment, particularly regarding public health, of those services and the lack of services elsewhere in the district. Those assessments measure both the quality and quantity of the services against the projected demands for those services. In order to assign a relative value to the risk, the concept of a risk scale is recommended in the Local Government Guide.<sup>(1)</sup> This uses a scale of relative values that can be compared for planning requirements.

#### 5.2 **Community Identification Process**

The identification of 'communities' within the Stratford District for the purpose of assessments was the subject of the previous report dated 20 January 2005. The results are summarised in the following table:

#### Summary Table of Community Identifications

| Community             | Population | Assessments    |             |            |        |              |            |
|-----------------------|------------|----------------|-------------|------------|--------|--------------|------------|
|                       |            | Drinking Water | Waste Water | Stormwater | Refuse | Conveniences | Cemeteries |
| Stratford             | 5400       | ✓              | ✓           | ✓          | ✓      | ✓            | ✓          |
| Midhirst              | 240        | ✓              | ✓           |            | ✓      |              | ✓          |
| Toko                  | 84         | ✓              | ✓           | ✓          |        |              |            |
| Whangamomona and SH43 |            | ✓              | ✓           |            | ✓      | ✓            |            |

| Community | Population | Assessments    |             |            |        |              |            |
|-----------|------------|----------------|-------------|------------|--------|--------------|------------|
|           |            | Drinking Water | Waste Water | Stormwater | Refuse | Conveniences | Cemeteries |
| Schools:  |            |                |             |            |        |              |            |
| Pembroke  | 65         | ✓              |             |            |        |              |            |
| Ngaere    | 134        | ✓              |             |            |        |              |            |
| Toko      | 95         | ✓              |             |            |        |              |            |
| Douglas   | 22         | ✓              |             |            |        |              |            |
| Makahu    | 16         | ✓              |             |            |        |              |            |
| Huiakama  | 31         | ✓              |             |            |        |              |            |
| Matau     | 10         | ✓              |             |            |        |              |            |
| Marco     | 13         | ✓              |             |            |        |              |            |
| Tahora    | 25         | ✓              |             |            |        |              |            |

### 5.3 **Population growth and future demand for services**

The current population of the Stratford District is 8,886 (2001 census) with a trend of population decline (10% from 1991 to 2001). The Stratford District Council developed a draft Strategic Plan in 2003 that proposed a vision for Stratford for its long term development, to achieve a population of “at least 12,000”.

The 2004 LTCCP was based on the status quo assumptions with regard to the provision of services, ie. a total population of no more than 10,000. The 2006 LTCCP will take into account potential growth as identified in the strategic planning exercise.

If this level of growth is to be achieved there are implications for water and sanitary services. Each of the services, water sewerage, stormwater, refuse, toilets and cemeteries are impacted. The costs associated with such growth generally increase incrementally. In some cases such as water supply and sewerage, however, certain threshold levels exist according to limitations of resource consent and treatment capability. These considerations are discussed under each section future demand.

### 5.4 **Risk ranking assessment**

In order to assign a relative value to the risk, the following table has been derived. The concept of a risk scale is recommended in the Local Government Guide <sup>(1)</sup>, which proposes a scale from 1 to 10, from lowest to highest risk. It is important to note that these are relative rather than calculated in order to assign a numerical value to the assessment and to highlight areas of highest need.

By comparing these values for both now and the future, planning requirements can be determined. For reticulated services the risk is separated into quality and quantity values, other sanitary services are assigned only one value, adequacy.

| Risk factor | Action                                      |
|-------------|---|
| <b>1-3</b>  | Low, action unnecessary or low priority     |
| <b>4-6</b>  | Moderate, further investigation recommended |
| <b>7-10</b> | High, action recommended                    |

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## 5.5 Water Supply

### Description – S126(1)(a)(i)

Council has undertaken to treat and distribute potable water to the urban area of Stratford (approximately 2,200 connections), Toko (16 connections) and Midhurst (74 connections).

Each supply is a separate entity having its own extraction, treatment, storage and distribution system. (There are approximately 70 km of pipework associated with the distribution systems).

The supplies are predominately for domestic use, each of the schemes has a component of rural usage which, in Midhurst, can account for up to 30% of the water produced.

Any user who is deemed to use in excess of the domestic maximum volume is classified as having an extraordinary supply and water is sold to them on the basis of meter readings. All other users have a standard charge which is fixed by Council annually.

#### STRATFORD

The Stratford supply has a water intake on the Patea River which is used as the primary source, and a secondary intake on the adjacent Konini Stream which is used during dry spells. The supply has a Regional Council consent to extract up to 6,964m<sup>3</sup> of water per day at a maximum rate of 61 l/sec and this consent is valid until June 2016. Under extreme dry weather conditions and low river flows, the consent allows the Regional Council to impose a limit to 41 l/sec. Following extended dry periods this volume is insufficient to supply existing users without the introduction of water restrictions.

The water is treated at the Cardiff Road Water Treatment Plant where it is filtered, disinfected, pH corrected, fluoridated and pumped to a 4,500m<sup>3</sup> reservoir before delivery to town.

From the reservoir the water gravitates to the users via 58 km of water mains ranging in size from a 375 mm diameter trunk main to 15 mm diameter house connections. This trunk main is a limitation on the delivery of water to Stratford and any further significant demand in flow would require an additional mains pipe.

Resource consents issued to Council restrict the Council to a maximum water extraction rate of 61 l/sec, which is sufficient to supply the township during normal times.

#### TOKO

The Toko supply extracts water from a bore at the rear of the old Dairy Factory and has a Regional Council Consent to extract up to 80 m<sup>3</sup> of water per day at a maximum rate of 5.6l/sec. This consent is currently under *renewal*.

The bore pump passes the water through the Toko Water Treatment Plant where it is filtered and chlorinated before being delivered to two 22 m<sup>3</sup> reservoirs.

As with Stratford the distribution system is gravitational and consists of 900 m of pipework ranging in size from 80 mm diameter to 15 mm house connections.

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## MIDHIRST

The Midhirst supply has a water intake on the Te Popo Stream and has a Regional Council Consent to extract up to 70,000m<sup>3</sup> of water per year. The consent has maximum summer and winter extraction rates of 254 and 432m<sup>3</sup>/day respectively.

The water is treated at the Midhirst Water Treatment Plant where it is filtered, disinfected and pumped to a 3,500 m<sup>3</sup> reservoir.

The height of the reservoir is insufficient to gravity feed the township and therefore the reticulation system is pressurised by pumping. The distribution network is 1,600 m long and consists of pipes ranging in size from 80 mm mains to 15 mm diameter house connections.

## WHANGAMOMONA

Whangamomona has no reticulated supply, dependence on roof tank water which occasionally needs to be supplemented by tankered water. Tourism is creating a slight increase in demand, namely from tourist buses, travellers and campervans and the annual Republic Day. Of the Hotel, café and camp ground only the Hotel is currently on the Ministry of Health Register of Drinking Water Supplies.

## SCHOOLS

Rural schools are surveyed for water quality in the Ministry of Health Annual Survey. The survey typically shows that these supplies do not comply with the Drinking Water Standards for NZ. The cost and difficulty of undertaking bacteriological sampling is an issue for the remote schools.

The following data is extracted from the 2003 Ministry of Health Annual Survey 2003, Drinking Water Standards microbiological criteria (E. coli).

| School   | Population | Compliance | Reason               |
|----------|------------|------------|----------------------|
| Pembroke | 65         | N          | Insufficient samples |
| Ngaere   | 134        | N          | Insufficient samples |
| Toko     | 95         | N          | Insufficient samples |
| Douglas  | 22         | N          | No samples taken     |
| Makahu   | 16         | N          | No samples taken     |
| Huiakama | 31         | N          | No samples taken     |
| Matau    | 10         | N          | No samples taken     |
| Marco    | 13         | N          | Insufficient samples |
| Tahora   | 25         | N          | No samples taken     |

## Risk Ranking – S126(1)(b)

| Community name | Risk factor for current quality | Risk factor for current quantity | Risk factor for future quality | Risk factor for future quantity |
|----------------|---------------------------------|----------------------------------|--------------------------------|---------------------------------|
| Stratford      | 1                               | 1                                | 8                              | 6                               |
| Midhirst       | 3                               | 1                                | 5                              | 1                               |
| Toko           | 3                               | 1                                | 5                              | 1                               |
| Whangamomona   | 3                               | 1                                | 3                              | 1                               |

## Risk Analysis – S126(1)(c)(i)

Stratford will need to improve the quality of its water supply if it is to meet revised compliance requirements. The current grading of the Stratford supply is 'A', however without upgrading of the treatment plant this is will drop to 'E' based on a preliminary assessment by the District Health Board. In addition to this, proposed legislation currently before Government will introduce a mandatory requirement to meet Drinking Water Standards in the near future.

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This legislation will also introduce a requirement for community water supplies to have a Public Health Risk Management Plan (PHRMP). Since the PHRMP is a useful tool in assessing the risk of a supply and planning improvements the development of such plans is recommended to be given high priority. The necessity to upgrade the Stratford Water Treatment Plant has been identified in the 2004 LTCCP and a sum of \$300,000 has been budgeted for funding by way of a loan in 2004/2005 for this.

Midhirst and Toko have reticulated water supplies with minimal treatment, no increase in future demand predicted. Some people are choosing to use private wells which are a higher risk due to proximity to septic tanks. As for Stratford, these small water supplies will increasingly be required to improve to meet NZ drinking water standards.

With the current requirement for drinking water in Whangamomona, roof tank supplies are likely to continue to be the best option, with point of use treatment if necessary to meet the Drinking Water Standards. It is recommended that the camp ground be included on the Ministry of Health Register of Drinking water supplies.

#### Future Demand – S126(1)(d)(i)

It is estimated by the Stratford District Council Operations Department that an increase of Stratford population of up to 10% ie. to 6,000 people could be absorbed by the existing supply. Beyond this there will be a need to find extra source water, with the summer dry extraction resource consent being the primary limiting factor. Given that the water extraction consents for all nearby catchments have been fully taken, ground water is the only option. Although surveys have shown that suitable aquifers are likely to be present, the cost of exploration, testing and commissioning is relatively high. The capacity of the trunk mains from the Water Treatment Plant into Stratford is a further limitation that will have to be addressed if significant demand increase occurs.

#### Actions required – S126(1)(f)

Stratford District Council is required to:

- Scope options for catering for population growth beyond 10%.
- Develop a PHRMP for the Stratford water supply.

## 5.6 **Wastewater**

### Description – S126(1)(a)(ii)

Council provides for the collection of waste water and sewage, from approximately 2,200 properties within the Stratford urban area through a system of some 42 km of pipes and manholes. The sewage is piped to oxidation pond *systems* located on Victoria Road where it is treated before discharge to the Patea River.

All properties outside the Stratford urban area are served by private septic tank systems. There are still a few houses in the Stratford urban area that are not connected to the sewer, due primarily to those dwellings being sited below the level of the sewer main.

During periods of prolonged heavy rain the sewerage reticulation system can become overloaded resulting in the discharge of untreated sewage through some manhole lids. The overloading is caused by the illegal discharge of stormwater into the sewerage pipes and failure of some joints and pipes within the reticulation system. Council has an ongoing inspection programme of all properties to identify illegal connections. When illegal connections are identified the property owner has been asked to remedy the fault and a follow up inspection undertaken to ensure the work has been satisfactorily completed.

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A condition rating of sewerage pipes is also in progress and when this is completed a programme of work to repair the worst sections of pipe will be implemented. This will be funded from targeted rates.

The Stratford Sewage Treatment Plant is located on Victoria Road and comprises an inlet structure with metering equipment, two oxidation ponds (primary and secondary) and *two* outlet structures that discharges directly to the Patea River. The oxidation ponds are progressively being upgraded, including work on the solid screen inlet, desludging and trials of a suspended media *Aquamat*. The Stratford wastewater treatment oxidation pond is *generally* operating satisfactorily, within the requirements of the discharge consent which was granted on 9 January 2004 and expires on 1 June 2007<sup>(8)</sup>, *with the occasional exception of heavy rainfall resulting in overflow situations.*

*The ponds receive, in addition to reticulated waste, tankered domestic septic tank waste and a very limited amount of industrial tinkered waste. The latter is under the supervision of the Taranaki Regional Council and is sourced only from Taranaki Galvanisers.*

Stratford District Council currently provides only one campervan effluent dump point at the Stratford Motor Camp and one stock truck effluent dump point on East Road near to the saleyards.

Risk Ranking – S126(1)(b)

| Community name | Risk factor for current quality | Risk factor for current quantity | Risk factor for future quality | Risk factor for future quantity |
|----------------|---------------------------------|----------------------------------|--------------------------------|---------------------------------|
| Stratford      | 4                               | 1                                | 4                              | 6                               |
| Midhirst       | 6                               | 1                                | 6                              | 1                               |
| Toko           | 6                               | 1                                | 6                              | 1                               |
| Whangamomona   | 6                               | 1                                | 6                              | 1                               |

Risk Analysis – S126(1)(c)(ii)

Stratford has problems with stormwater infiltration and localised reticulation overload, which has the effect of lifting manholes during heavy rain events *and the overflow of the treatment pond system when the hydraulic capacity is exceeded.* The discharge of raw sewage onto the streets *and into natural waters* has public health *and environmental* implications. Maintenance programmes are currently underway to address the stormwater infiltration problems.

Whangamomona, Midhirst and Toko have had isolated reports of problems with septic tank discharges. A full survey of septic tanks was undertaken by the Environmental Health Officer in Midhirst in 2000<sup>(3)</sup>. Since the data on this is out of date, a survey of compliance with the New Zealand Standard<sup>(6)</sup> is recommended. Houses in the Stratford urban area that are not connected to the sewer are a potential risk and should be included in the survey of septic tanks.

There is, anecdotally, a substantial increase in campervan traffic through State Highway 43 which is placing pressure on Whangamomona due to the lack of suitable effluent dump points.

Provision of stock truck effluent disposal is in accordance with the North Island stock truck effluent disposal policy, Transit NZ and one point is provided at the Stratford saleyards<sup>(2)</sup>.

### Future Demand – S126(1)(d)(ii)

The existing Stratford treatment ponds could accommodate an increased population 10% without major changes to the existing ponds. A moderate population increase would not increase the critical loading and impact on the effluent quality.

The limits of the ponds are driven by the stormwater infiltration and the general performance of the pond system compliance with the resource consent. Likewise to water supply, an increase in population would add incremental costs to the reticulation at the development stage.

### Actions required – S126(1)(f)

Stratford District Council is required to:

- Continue to monitor stormwater infiltration and the effectiveness of the present enforcement actions and maintenance programme.
- Investigate the need for campervan effluent dump point(s) along SH43, such as at the Whangamomona motor camp.
- Scope options for catering for population growth beyond 10%.
- Undertake a survey of compliance with the New Zealand Standard <sup>(6)</sup> concerning septic tanks within the district.

## 5.7 **Stormwater**

### Description – S126(1)(iii)

This activity relates to drainage in the Stratford, Midhirst and Toko urban areas but excludes waterways with a cross-sectional area equivalent to or greater than a 1,200 mm diameter pipe.

Council is responsible for ensuring that the drainage system remains free of obstructions. Council clears public drains and requires private drains to be cleared by the property owner. Blockages in drains and piped systems can have significant negative effects particularly when adjacent properties are below road level. Council makes every endeavour to prevent blockages by installing grates at entrances to enclosed drainage systems and replacing sections of pipes and tunnels which are prone to blocking.

Within the Stratford urban area, current ‘wasteland’ provides buffering capacity for stormwater. If housing development causes an in-filling of these areas, there is likely to be flooding problems, due to overload of the stormwater system. These areas have various zoning statuses including commercial and residential zoning as well as council owned parks.

Stormwater may be an influencing factor in septic tank problems, such as reported in Toko. For the purpose of this report these are dealt with under the section 5.6 Wastewater.

### Risk Ranking – S126(1)(b)

| Community name | Risk factor for current quality | Risk factor for current quantity | Risk factor for future quality | Risk factor for future quantity |
|----------------|---------------------------------|----------------------------------|--------------------------------|---------------------------------|
| Stratford      | 1                               | 1                                | 1                              | 6                               |
| Midhirst       | 2                               | 2                                | 2                              | 1                               |
| Toko           | 2                               | 2                                | 2                              | 1                               |
| Whangamomona   | 2                               | 2                                | 2                              | 1                               |

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### Risk Analysis/ Future Demand – S126(1)(d)(ii)

If Council wanted to, a considerable upgrade could be implemented, however this would be at a major cost and the current system is providing a reasonable level of service.

### Actions required – S126(1)(f)

The extra capacity needed if 'buffer areas' are developed needs to be noted for future growth.

## 5.8 **Refuse**

### Description – S127(a)

Council's weekly refuse collection services approximately 2,400 households in the urban areas of Stratford and Midhirst. For this service Council provides a 120 litre Mobile Garbage Bin (MGB) to each property. These bins are emptied by a private contract or under a contract which is due to expire on 30 June 2006.

The Council provided refuse collection service does not extend to either the rural area or to those urban areas beyond Stratford and Midhirst. At present there are no changes proposed to the current level of service for refuse collection.

Council currently provides a monthly recycling collection utilising 240 litre MGBs. This system, while having the advantage of offering a storage receptacle to the user, has the disadvantage of being liable to misuse (general rubbish placed in the bins). Recent moves to kerbside 'monitoring' have successfully reduced this problem. The general public may also use the facilities provided at the Cordelia Street Transfer Station where recyclables can be taken free of charge. No recycling collections are available beyond Stratford and Midhirst.

### Risk Ranking

| Community name        | Risk factor for current adequacy | Risk factor for future adequacy |
|-----------------------|----------------------------------|---------------------------------|
| Stratford             | 1                                | 1                               |
| Midhirst              | 1                                | 1                               |
| Toko                  | 5                                | 5                               |
| Whangamomona and SH43 | 5                                | 5                               |

### Risk Analysis/ Future Demand – S127(b)

The responses to the Stratford District Council 2004 LTCCP public consultation <sup>(7)</sup>, several people raised the lack of a Council provided refuse service to Whangamomona, SH43 and rural areas, as a public health or environmental concern. The public comments related to issues such as road side dumping and on farm disposal/incineration. Some Whangamomona residents would like to see provision of at least a recycling facility at Whangamomona and Stratford District Council has successfully done this previously using the local schools. This could be an option.

The Whangamomona republic day is a one off event that generates a large amount of rubbish (and demand for services in general), which is currently catered for by the community group.

This concern was somewhat supported by a representative from Transit NZ, who commented (2) that they get a lot of excess refuse dumped at rest areas along SH43.

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### Actions required – S127(d)

Council is currently investigating its role in the provision of refuse and recycling services at Whangamomona. This requires direct consultation and negotiation with the Whangamomona community in order to assess the best option to meet the identified need.

All refuse is currently transported to a landfill outside the district. Council is a member of a joint working party with the other councils in the region with the purpose of finding a regional solution to the collection and disposal of solid waste. It is probable that in the future all refuse generated in Taranaki will go to the New Plymouth District Council's landfill at Colson Road until the landfill reaches the end of its life. The proposal thereafter involves a regional landfill in South Taranaki. Council also owns and operates a transfer station located at the southern end of Cordelia Street where members of the public are able to deposit refuse. The transfer station is operated on a user pay basis and the charges for the use of the facility depend on the volumes and types of material being deposited.

## 5.9 Public Toilets

### Description – S127(a)

Five public toilets are provided within Stratford. There is one toilet at the Whangamomona camp ground, which provides for not only for the campers but also for travellers including tour buses. The Whangamomona toilets are maintained by community board.

| Toilet                | Location                                     | Access times         | Usage data                        | Signage   | Parking   |
|-----------------------|--|----------------------|-----------------------------------|---|---|
| Broadway              | Roadside, adjacent to Broadway               | 24 hours/7 days      | 66 per day<br>37 per hr<br>(peak) | One small sign adjacent to the toilets on north side. | Parking shared with shoppers, no 10 minute parks nearby |
| Victoria Park         | Roadside short distance from Broadway        | Daylight             | Nil                               | Large sign on SH43                                    | Ample available   |
| Centennial Rest Rooms | Roadside short distance from Broadway        | Daylight             | Nil                               | None  | 5 minute park   |
| Information Centre    | Within premise                               | During opening hours | Nil                               | None  |   |
| TET Stadium           | Within premise                               | During opening hours | Nil                               | None  |   |
| Whangamomona          | At the camp ground, short distance from SH43 | Daylight             | Nil                               | On approach on SH43                                   | Ample available   |

### Risk Ranking

| Community name     | Risk factor for current quality | Risk factor for future quality |
|--------------------|---------------------------------|--------------------------------|
| Stratford          | 4                               | 4                              |
| Whangamomona, SH43 | 4                               | 4                              |

### Risk Analysis/ Future Demand – S127(b)

While the Stratford central area is well catered for with public toilets they are not well signposted. Both the Victoria Park and Centennial Rest Room toilets have ample parking and would be suitable as comfort stops for main road traffic. Directions to the provided parking for the central Broadway toilets could be improved due to those parks being situated behind the building.

There is no usage data available for any of the public toilets, except for those in central Broadway. Such data is required before a meaningful assessment can be made of the future demand, especially given the growing tourist activity within Central Taranaki.

Actions required – S127(d)

Council should ensure that:

- Improved signage be located at the central Broadway toilets, plus signs at the Broadway roundabouts indicating toilets and rest areas at the Victoria Park and Centennial Rest Rooms.
- With regard to the demand for public toilets along the ‘Lost World Highway’, State Highway 43, as there are no documented reports of public health issues arising, further planning be based on the outcomes of any Transit NZ study. Transit NZ is currently undertaking a survey of vehicle numbers and facilities on SH43, but this data was not available at the time of preparing this report.<sup>(2)</sup>
- The toilets at Whangamomona are providing an essential public facility which the Stratford District Council needs to ensure continues.
- Usage data is required for all of the toilets to facilitate future planning.

5.10 **Cemeteries**

Description – S127(a)

The main Stratford District Council cemetery is Kopuatama, situated at East Road. It contains areas for general and Returned Services burials and ashes interments. Another operational cemetery for general burials is located at Midhirst. Council also provides a full sexton's service as part of its cemeteries operation.

There are four closed cemeteries within the district - Stratford, Midhirst, Whangamomona, Waipuku and Tahora. Morgan's Grave in the Tangarakau Gorge is included in the cemeteries activity.

Risk Ranking

| Community name | Risk factor for current quality | Risk factor for future quality |
|----------------|---------------------------------|--------------------------------|
| Stratford      | 1                               | 1                              |
| Midhirst       | 1                               | 1                              |

Risk Analysis/ Future Demand – S127(b)

The Kopuatama cemetery has sufficient land available for interments for 40-50 years, based on the Operations Department report to the Council on 25 March 1999<sup>(5)</sup>.

Actions required – S127(d)

The cemeteries have adequate land available for future requirements and no further action is required at this stage.

5.11 **Limitations of Survey – S129(2)**

While every attempt has been made to substantiate the assessments in this report, it is noted that this is the first Sanitary Survey Assessment to be produced by the Stratford District Council. This is intended to be a ‘living document’ to be continually challenged and reviewed as situations and priorities change.

With regard to the concept of 'risk rankings', it is important to note that these are relative rather than calculated in order to assign a numerical value to the assessment and to highlight areas of highest need.

The major limitations, in terms of Section 129(1)(b) and (c) relate to the stage of development of the various Asset Management Plans (AMPs) at the time of producing this report. The AMPs are being redeveloped and updated for inclusion with the 2006 LTCCP and hence much of the information pertaining to future demand is incomplete. The resources for making a full assessment of possible options are not available at this stage. This assessment has therefore focused on the investigation and planning work that is required to meet future demands on water and sanitary services rather than identifying specific options.

Review of this survey is required from 'time to time' by the Act. It is recommended that a Sanitary Survey Assessment Sanitary Survey Assessment review be undertaken on a regular basis and that this be simultaneous to the LTCCP and Asset Management Plan major review, ie. three yearly. It is anticipated that the requirements of Section 126(1) (e), (f) and (g), which relate to the identification of options for meeting future demand and the role of the Stratford District Council in those options, will be more fully addressed in the review.

The requirements of Section 127 (c), (e) and (f) have similarly not been met as the required data in respect of public toilets is not yet available and options with regard to refuse remain subject to regional considerations at this stage. Again, it is anticipated that the options available and the public health implications of any options will be clarified in the first review of the assessments.

#### 5.12 **References**

1. The Knowhow Guide to Assessing Water and Sanitary Services, LGNZ 2000.
2. State Highway 43 Facilities, Transit NZ, telephone conversation with Ross Mc Coy, 22 December 2004.
3. Midhirst Septic Tank Survey, 21 January 2000, Mike Avery, Environmental Health Officer, Stratford District Council, File Reference 08035.
4. Toko and Midhirst Property Services Survey, Mike Avery Environmental Health Officer, Stratford District Council, File Reference 08031.
5. Future Development of Kopuatama Cemetery, Operations Department Stratford District Council 25 March 1999, File Reference 03025.
6. AS/NZS 1547: 2000 Onsite Domestic Wastewater Management.
7. LTCCP public consultation, April 2004, Stratford District Council, File Reference 01060/01057
8. Stratford District Council Municipal Oxidation Ponds System Monitoring Programme Annual Report 2004-2005 Taranaki Regional Council Technical Report 2004-56

## 6. CONCLUSION

### 6.1 Priority of issues

| Priority | Risk ranking value | Assessment Issue  | Action  |
|----------|--------------------|---|---|
| 1        | 8                  | Stratford water supply future quality.  | Requirement to upgrade Stratford water treatment plant to meet NZ Drinking Water Standards. Already included in the 2004 LTCCP and budgeted for. PHRMP to be developed.                 |
| 2        | 6                  | Future demand for all Stratford urban services, in particular water, stormwater and sewerage, future planning for additional service with respect to population increase. | Scoping necessary. Most services able to develop incrementally with population demand. Water and sewage treatment plants able to extend to 10% extra demand without major implications. |
| 3        | 6                  | Septic tank discharge in Midhirst, Toko and Whangamomona (and Stratford)  | Undertake survey  |
| 4        | 5                  | Toilets, access and signage in Stratford  | Implement the recommended changes   |
| 5        | 5                  | Refuse and recycling collection in Toko, Whangamomona area  | Further needs analysis and public consultation  |
| 6        | 5                  | Midhirst water supply quality   | Future requirement to meet NZ Drinking Water Standards  |
| 7        | 4                  | Sewerage reticulation overload and stormwater infiltration in Stratford   | Ongoing maintenance and improvement (already underway).   |
| 8        | 4                  | Whangamomona camp ground water supply   | Recommend that the Ministry of Health include this on the register of Drinking Water Supplies   |
| 9        | 4                  | Toilets provision along SH43, and in Whangamomona (including caravan dump points)   | Monitor needs and ensure that the existing service continues  |

The risk factors in the above table prioritise as follows:

| Risk factor | Action                                      |
|-------------|---|
| 1-3         | Low, action unnecessary or low priority     |
| 4-6         | Moderate, further investigation recommended |
| 7-10        | High, action recommended                    |

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