11.6 Schools & Camp Facilities

11.6.1 Description

Schools and Camp facilities have been grouped together as a community due to the variable demand made on the facilities, the peak factors and the vulnerability of groups using them.

The loadings on a system compared to any other system would be significantly different.

11.6.2 Methods Used To Dispose Of Sewage

Effluent disposal systems can be reticulated and non-reticulated. Non reticulated consists of on-site effluent disposal.

11.6.3 Risks Attributable to the Absence of a Reticulated Sewerage Network

SCHOOLS and CAMP FACILITIES - SERVICED	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between Current and future risk
Serviced	**1**	**2**	**2**	**1**	**2**	**2**	**0**

SCHOOLS and CAMP FACILITIES UNSERVICED	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between Current and future risk
Septic tank failure	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Effluent field failure	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Overloading	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Spillage	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Seepage	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Contamination of a waterway	**2**	**2**	**4**	N/A	N/A	N/A	N/A
Lack of maintenance	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Vegetation growth over effluent field	**3**	**2**	**6**	N/A	N/A	N/A	N/A
Trade waste entering the septic tank	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Public health	**2**	**3**	**6**	N/A	N/A	N/A	N/A

Total risk assessment combined:

Community – Schools and Camp Facilities	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between existing and future risk
Serviced and unserviced	**2.27**	**2.73**	**6.2**	N/A	N/A	N/A	N/A

11.6.3.1 Risk Assessment Conclusion

The community of schools and camp facilities has a reasonably high risk assessment for health and environmental impacts compared to other communities assessed. Refer to section 2.3 for overview.

11.6.4 Assessment of the Quality and Quantity of Discharged Wastewater

11.6.4.1 Collection and Treatment

As stated above, this community utilises both public sewerage reticulation and on-site effluent disposal.

11.6.4.2 Operation and Maintenance

Maintenance of septic tanks appears to be undertaken by means of having the septic tank cleaned out every 2 to 3 years. There was no indication as to maintenance of the effluent fields. One survey result indicated that there is a school within the district that only maintains (cleans) their septic tank once it has become blocked.

11.6.4.3 Treatment Process Effects

Of the surveys returned from this community, no detrimental effects from waste water disposal system were noted within the last 3 years.

11.6.4.4 Effluent Disposal Type

Public sewer reticulation and on-site effluent disposal are utilised.

11.6.4.5 Effluent Disposal Risks

No effluent disposal risks have been recorded or noted.

11.6.4.6 Resource Consents

Resource consents may be required under Environment Waikato rules, however council does not have the resources to investigate this. Council is of the opinion that Environment Waikato should be undertaking this investigation.

11.6.4.7 AS/NZS 1547:2000 Compliance

A detailed survey and investigation would need to be undertaken to ascertain any compliance variances to AS/NZS 1547:2000. However, it is estimated that a number of on-site disposal systems within the Hauraki District would not comply due to ground conditions, groundwater levels and/or proximity to waterways. Council is not intending to undertake such a survey in the near future.

11.6.4.8 System Capacity for Future Demands

Each system requires its existing capacity to be analysed so that future demands can be estimated. This analysis has not been undertaken and no plans are in place to do so within the near future. It may be better that this investigation be undertaken by Environment Waikato.

11.6.4.9 Existing System Life Expectancy

Life expectancy of on-site effluent disposal systems varies greatly from less than 10 years, to 50 years depending on ground and water level conditions as well as maintenance.

11.6.5 Current and Estimated Future Demands

Health guidelines or possible legislation may drive a decision by council to further investigate the current situation in greater detail which could identify future demands.

11.6.6 Options to Meet Demands and their Suitability

Council has not undertaken an options review at this present time.

11.6.7 Intended Role of the Hauraki District Council in Meeting the Demands

Council has not formulated any intention at this present time to undertake a role.

11.6.8 Hauraki District Council's Proposal for Meeting the Demands

No proposal has been formulated at present.

11.7 SPORTS FACILITIES, HALLS and CHURCH'S

11.7.1 Description

Sports facilities, halls and church's has been identified as a community for assessment purposes having in common low level general utilisation with high peak demands.

11.7.2 Methods Used to Dispose of Sewage

The majority of sports facilities, halls and church's are on public reticulated sewerage systems. However, there are isolated examples of sports clubs and Halls utilising on-site effluent disposal.

11.7.3 Risks Attributable to the Absence of a Reticulated Sewerage Network

SPORTS FACILITIES, HALLS and CHURCH'S - SERVICED	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between Current and future risk
Serviced	**1**	**2**	**2**	**1**	**2**	**2**	**0**

SPORTS FACILITIES, HALLS and CHURCH'S - UNSERVICED	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between Current and future risk
Septic tank failure	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Effluent field failure	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Overloading	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Spillage	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Seepage	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Contamination of a waterway	**2**	**2**	**4**	N/A	N/A	N/A	N/A
Lack of maintenance	**2**	**3**	**6**	N/A	N/A	N/A	N/A
Vegetation growth over effluent field	**3**	**4**	**12**	N/A	N/A	N/A	N/A
Trade waste entering the septic tank	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Public health	**2**	**3**	**6**	N/A	N/A	N/A	N/A

Community	Current probability of an event occurring	Current consequence of such an event occurrence	TOTAL current risk factor	Future probability of an event occurring	Future consequence of such an event occurrence	TOTAL future risk factor	Difference between existing and future risk
Serviced and Unserviced	**2.27**	**2.9**	**6.58**	N/A	N/A	N/A	N/A

11.7.3.1 Risk Assessment Conclusion

The community of sports facilities, halls and church's has a reasonably high risk assessment for health and environmental impacts compared to other communities assessed. Refer to section 10.2 for overview.

11.7.4 Assessment of the Quality and Quantity of Discharged Wastewater

11.7.4.1 Collection and Treatment

A survey undertaken of the unserviced clubs, halls and churches showed that the majority discharge effluent from their septic tanks into large effluent soakage fields.

11.7.4.2 Operation and Maintenance

50% of those surveyed clean their tanks annually to every 3 years. The other 50% only clean when the tank overflows and are unsure of any maintenance.

11.7.4.3 Treatment Process Effects

Soil soakage problems were noted in the survey, resulting in effluent disposal field failing and overflow occurring.

11.7.4.4 Effluent Disposal Type

On-site effluent disposal fields were the most common form of effluent disposal utilised by the unserviced community.

11.7.4.5 Effluent Disposal Risks

68% of those surveyed in that were unserviced had no effluent disposal problems within the last 3 years, of those that indicated some problems had been experienced, foul odour, and overflow were identified. These problems were resolved by hiring private contractors to empty tanks and/or lay new effluent disposal fields.

11.7.4.6 Resource Consents

Resource consents may be required under Environment Waikato rules; however council does not have the resources to investigate this. Council is of the opinion that Environment Waikato should be undertaking this investigation.

11.7.4.7 AS/NZS 1547:2000 Compliance

A detailed survey and investigation would need to be undertaken to ascertain any compliance variances to AS/NZS 1547:2000. However, it is estimated that a number of on-site disposal systems within the Hauraki District may not comply due to ground conditions, groundwater levels and/or proximity to waterways. The scope and timing of any future survey has not been identified.

11.7.4.8 System Capacity for Future Demands

Each system requires its existing capacity to be analysed so that future demands can be estimated. This analysis has not been undertaken and no plans are in place to do so within the near future.

11.7.4.9 Existing System Life Expectancy

Life expectancy of on-site effluent disposal systems varies greatly from less than 10 years, to 50 years depending on ground and water level conditions as well as maintenance.

11.7.5 Current and Estimated Future Demands

Health guidelines or possible legislation may influence council's further direction.

11.7.6 Options to Meet Demands and their Suitability

Council has not undertaken an options review at this present time.

11.7.7 Intended Role of the Hauraki District Council in Meeting the Demands

Council has not formulated any intention at this present time to undertake a role.

11.7.8 Hauraki District Council's Proposal for Meeting the Demands

No proposal has been formulated at present.

11.8 TRAMPING HUTS (Department Of Conservation)

11.8.1 Description

Tramping huts are owned and maintained by the Department of Conservation (DoC). The peak use feature and potential for fairly large groups have lead to identification as a community.

11.8.2 Methods Used To Dispose Of Sewage

Two DoC tramping huts have been identified within the Hauraki District.

11.8.3 Risks Attributable to the Absence of a Reticulated Sewerage Network

TRAMPING HUTS	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between Current and future risk
Septic tank failure	**2**	**2**	**4**	N/A	N/A	N/A	N/A
Effluent field failure	**2**	**2**	**4**	N/A	N/A	N/A	N/A
Overloading	**2**	**2**	**4**	N/A	N/A	N/A	N/A
Spillage	**1**	**3**	**3**	N/A	N/A	N/A	N/A
Seepage	**1**	**3**	**3**	N/A	N/A	N/A	N/A
Contamination of a waterway	**1**	**3**	**3**	N/A	N/A	N/A	N/A
Lack of maintenance	**1**	**2**	**2**	N/A	N/A	N/A	N/A
Vegetation growth over effluent field	**2**	**2**	**4**	N/A	N/A	N/A	N/A
Trade waste entering the septic tank	**1**	**1**	**1**	N/A	N/A	N/A	N/A
Public health	**1**	**3**	**3**	N/A	N/A	N/A	N/A

Community	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between existing and future risk
	1.4	**2.3**	**3.22**	N/A	N/A	N/A	N/A

11.8.3.1 Risk Assessment Conclusion

The community of tramping huts has a low risk assessment for health and environmental impacts compared to other communities assessed. Refer to section 10.2 for overview.

11.8.4 Assessment of the Quality and Quantity of Discharged Wastewater

11.8.4.1 Collection and Treatment

The survey of the two tramping huts indicated that one utilised a Bioflow system, while the other utilised a composting toilet system.

11.8.4.2 Operation and Maintenance

The Bioflow system consists of a small tank which empties itself every ten minutes through a series of buried pipelines onto a large soakage field. Need for maintenance is minimal due to tank's frequent emptying.

11.8.4.3 Treatment Process Effects

Both tramping huts surveyed did not demonstrate any wastewater disposal problems as they were both relatively new well maintained systems.

11.8.4.4 Effluent Disposal Type

The tramping utilising the composting toilet, disposed of it effluent via a soakhole for the grey water, and effluent disposal field for the composting toilet discharge. The Bioflow system took all greywater and sewage for the second tramping hut.

11.8.4.5 Effluent Disposal Risks

No risks have been perceived for either tramping hut due to the effluent disposal systems.

11.8.4.6 Resource Consents

There is no requirement for resource consent of either system.

11.8.4.7 AS/NZS 1547:2000 Compliance

Both systems have not been assessed with regards to compliance with the standards however it is assumed that they would be in full compliance.

11.8.4.8 System Capacity for Future Demands

Assessment of future demands has not been undertaken. DoC would need to ascertain this.

11.8.4.9 Existing System Life Expectancy

System life expectancy would be in excess of 40 years.

11.8.5 Current and Estimated Future Demands

Assessment of future demands has not been undertaken. DoC would need to ascertain this.

11.8.6 Options to Meet Demands and their Suitability

Assessment of future demands has not been undertaken. This is dependent on DoC policy in expanding the use of the tramping trails.

11.8.7 Intended Role of the Hauraki District Council in Meeting the Demands

Will be guided by definition of demand size.

11.8.8 Hauraki District Council's Proposal for Meeting the Demands

No proposal formulated.

11.9 Marae

11.9.1 Description

The following marae are located in the Hauraki District:

- Tirohia Te Kotahitanga Marae, Tukaki Rd, Tirohia.
- Te Pae o Hauraki Marae, Papaturoa Ave, Paeroa.
- Taharua Marae, Rotokohu Rd, Paeroa.
- Ngahutoitoi Marae, T Moananui Flats Rd, Paeroa.
- Kerepehi Marae, McGowan Ave, Kerepehi.
- Waihi Community Marae, Cnr Victoria/Consols St's, Waihi.

The marae communities have been grouped together due to the nature of how the facilities are used for their respective communities.

The marae community is in some way similar to the schools and camp facilities community in that it can be subject to variable demand due to peak factors and the vulnerability of groups using them.

11.9.2 Methods Used to Dispose of Sewage

Half of the local marae utilise public wastewater reticulation and treatment, the rest utilise on-site effluent disposal.

11.9.3 Risks Attributable to the Absence of a Reticulated Sewerage Network

MARAE NON-SERVICED	Current probability of an event occurring	Current consequence of such an event occurrence	**TOTAL current risk factor**	Future probability of an event occurring	Future consequence of such an event occurrence	**TOTAL future risk factor**	Difference between Current and future risk
Septic tank failure	**4**	**3**	**12**	N/A	N/A	N/A	N/A
Effluent field failure	**4**	**3**	**12**	N/A	N/A	N/A	N/A
Overloading	**4**	**3**	**12**	N/A	N/A	N/A	N/A
Spillage	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Seepage	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Contamination of a waterway	**3**	**3**	**9**	N/A	N/A	N/A	N/A
Lack of maintenance	**3**	**2**	**6**	N/A	N/A	N/A	N/A

MARAE NON-SERVICED	Current probability of an event occurring	Current consequence of such an event occurrence	TOTAL current risk factor	Future probability of an event occurring	Future consequence of such an event occurrence	TOTAL future risk factor	Difference between Current and future risk
Vegetation growth over effluent field	**3**	**2**	**6**	N/A	N/A	N/A	N/A
Trade waste entering the septic tank	**3**	**2**	**6**	N/A	N/A	N/A	N/A
Public health	**3**	**3**	**9**	N/A	N/A	N/A	N/A

Community	Current probability of an event occurring	Current consequence of such an event occurrence	TOTAL current risk factor	Future probability of an event occurring	Future consequence of such an event occurrence	TOTAL future risk factor	Difference between existing and future risk
Marae non-serviced	**3.3**	**2.7**	**8.91**	N/A	N/A	N/A	N/A

11.9.3.1 Risk Assessment Conclusion

The community of marae (non-serviced) has a very high risk assessment for health and environmental impacts compared to other communities assessed. Refer to section 10.2 for overview.

11.9.4 Assessment of the Quality and Quantity of Discharged Wastewater

11.9.4.1 Collection and Treatment

As stated above, this community utilises both public sewerage reticulation and on-site effluent disposal.

11.9.4.2 Operation and Maintenance

Maintenance of septic tanks appears to be undertaken by means of having the septic tank cleaned out every 2 to 3 years. There has been no indication as to maintenance of the effluent fields.

11.9.4.3 Treatment Process Effects

No detrimental effects from waste water disposal system have been noted within the last 3 years.

11.9.4.4 Effluent Disposal Type

Public sewer reticulation and on-site effluent disposal are utilised.

11.9.4.5 Effluent Disposal Risks

No effluent disposal risks have been recorded or noted.

11.9.4.6 Resource Consents

Resource consents may be required under Environment Waikato rules; however council does not have the resources to investigate this. Council is of the opinion that Environment Waikato should be undertaking this investigation.

11.9.4.7 AS/NZS 1547:2000 Compliance

A detailed survey and investigation would need to be undertaken to ascertain any compliance variances to AS/NZS 1547:2000. However, it is estimated that a number of on-site disposal systems within the Hauraki District would not comply due to ground conditions, groundwater levels and/or proximity to waterways. Council is not intending to undertake such a survey in the near future.

11.9.4.8 System Capacity for Future Demands

Each system requires its existing capacity to be analysed so that future demands can be estimated. This analysis has not been undertaken and no plans are in place to do so within the near future. It may be better that this investigation be undertaken by Environment Waikato.

11.9.4.9 Existing System Life Expectancy

Life expectancy of on-site effluent disposal systems varies greatly from less than 10 years, to 50 years depending on ground and water level conditions as well as maintenance.

11.9.5 Current and Estimated Future Demands

Health guidelines or possible legislation may drive a decision by council to further investigate the current situation in greater detail which could identify future demands.

11.9.6 Options to Meet Demands and their Suitability

Council has not undertaken an options review at this present time.

11.9.7 Intended Role of the Hauraki District Council in Meeting the Demands

Council has not formulated any intention at this present time to undertake a role.

11.9.8 Hauraki District Council's Proposal for Meeting the Demands

No proposal has been formulated at present.