Recreational Water Quality  
Annual Report

Reporting period 1 July 2016 – 30 June 2017

# Contents

[Recreational Water Quality Annual Report 1](#_Toc511639571)

[Contents 2](#_Toc511639572)

[1. INTRODUCTION 3](#_Toc511639573)

[2. BACKGROUND 4](#_Toc511639574)

[2.1 Health Risks from Swimming 4](#_Toc511639575)

[2.2 Roles and Responsibilities of Agencies 4](#_Toc511639576)

[3. AUSTRALIAN GUIDELINES FOR RECREATIONAL USE OF WATER 5](#_Toc511639577)

[4. COUNCIL RECREATIONAL WATER MANAGEMENT ACTIVITIES 6](#_Toc511639578)

[5. DISCUSSION 26](#_Toc511639581)

[6. DEFINITIONS 27](#_Toc511639582)

[7. References 29](#_Toc511639583)

Director of Public Health  
Recreational Water Quality Report 2016-2017

# 

# 1. INTRODUCTION

Recreational activities involving contact with bodies of water are very popular in Tasmania, particularly during summer.

While Tasmania has an extensive coastline and many inland water bodies, many recreational areas are relatively inaccessible.

The most widely used recreational waters are the more accessible coastal beaches, freshwater rivers and lakes, especially those close to urban areas with good road access.

Publically accessible swimming pools and spa pools are also popular.

The Recreational Water Quality Guidelines 2007 (the Guidelines) issued under the Public Health Act 1997, require councils to regularly monitor water quality at recognised recreational sites and to respond to identified risks to public health. These sites are defined as sites that are used regularly by a relatively large number of people, and include all public swimming pools and public spa pools.

Councils must provide an annual report to the Department of Health and Human Services (DHHS) on their activities relating to recreational water quality monitoring.

Information provided in council annual reports is summarised in the *Recreational Water Quality* *Annual Report 2016-2017*, issued by the Director of Public Health (the Director).

This report provides information to the community on water quality at recognised recreational sites in Tasmania.

For further information about water quality at particular sites, contact the relevant council Environmental Health Officer (EHO), whose contact details are provided in this report.

# 2. BACKGROUND

## 2.1 Health Risks from Swimming

Many natural bodies of water are at risk of contamination. Water contaminated by sewage and animal waste often contains a range of pathogenic micro-organisms such as viruses, bacteria and protozoa.

These organisms pose a risk to human health when the water is used for recreational activities like swimming and other water contact activities. This is because during these activities there is a risk that water could be swallowed, or inhaled.

Contaminated water may also come into contact with ears, nasal passages, mucous membranes and cuts in the skin, allowing disease-causing organisms to enter the body.

In most cases, any health effects from exposure to contaminated water are relatively minor and short-lived, such as skin rashes and ear, eye and gastrointestinal infections.

However there is potential for more serious illness, including invasive or complicated gastrointestinal infections, particularly among vulnerable persons (NHMRC 2008).

Public swimming and spa pools are at lower risk from significant contamination with animal-derived pathogens. Routine management of water quality in pools and spas will reduce the risk posed by human-derived contamination (such as *Cryptosporidium*, and enteric viruses) and environmental contaminants (such as *Legionella*), but regular monitoring is still required.

## 2.2 Roles and Responsibilities of Agencies

Local Tasmanian Councils, the Department of Primary Industries, Parks, Water and Environment and the Department of Health and Human Services all have responsibilities for managing recreational water and protecting human health where the public use such waters.

It is generally not practical for all potential recreational waters in a jurisdiction to be regularly monitored.

It is therefore necessary and appropriate to focus on particular areas, such as beaches, lakes or rivers that are used regularly, by a large number of people, for primary contact purposes. Primary contact refers to an activity in which the whole body or face and trunk are immersed or the face is frequently wet by spray. These areas should be monitored in line with these guidelines.

Public events involving primary contact activities have also become more popular in recent years, including school triathlons and other community based swimming events. Where these sites are not already monitored, the controlling authority should consider doing so.

The Derwent Estuary Program (DEP) and the Tamar and Estuary and Esk Rivers Program (TEER Program) work collaboratively with councils and other stakeholders to identify sources of contamination and implement strategies to improve water quality. They also facilitate community messaging consistent with these guidelines, advising of water quality at primary contact sites.

If there is any doubt about the need for monitoring, the advice of the Director of Public Health should be sought.

In accordance with Section 128 of the *Public Health Act 1997*:

*An agency, public authority or person managing or in control of water must:*

1. *manage the water in a manner that does not pose a threat to public health; and*
2. *on becoming aware that the quality of the water is, or is likely to become, a threat to public health, notify the Director in accordance with any relevant Guidelines.*

Monitoring should be undertaken in line with the following procedures:

1. Take samples of natural recreational water bodies at the beginning of the swimming season and thereafter weekly during the season. This includes December, January, February and March, unless other arrangements are approved by the Director of Public Health.
2. Take samples from all public swimming pools and public spa pools on a monthly basis or, if directed in writing by an Authorised Officer, more frequently.
3. Conduct additional sampling whenever a threat to public health is suspected.
4. Each Controlling Authority - the agency, public authority or person managing or in control of water, shall consult the Director on the proposed sampling program to be used when a threat to public health is suspected.
5. At the end of each swimming season the Controlling Authority is required to prepare a report on recreational water quality for presentation to the director by 30 September each year.

These reporting requirements are detailed in Appendix A of the Guidelines.

They include the name and location of the natural recreational water body, date and type of sampling conducted, results of sampling and interpretation of results in terms of health risks associated with the use of that water.

Details of public swimming pools and public spa pools are also required, including the date and type of sampling, details of any pool and spa closures and subsequent corrective actions.

# 3. AUSTRALIAN GUIDELINES FOR RECREATIONAL USE OF WATER

The National Health and Medical Research Council (NH&MRC) have produced *Guidelines for Managing Risks in Recreational Water,* 2008.

These guidelines were developed to provide information to the public and government agencies on the suitability of natural waters for recreational use.

The guidelines are a resource for managing the quality of natural water bodies used for primary contact recreation.

While they do not apply to public swimming pool and spa water quality, the guidelines are currently under review and these sites may be included in future revisions.

The national guidelines are not mandatory, but provide a benchmark for water quality to enable the safe use of natural recreational waters.

The classification of recreational water environments into water quality categories in the national guidelines is based on combining the results of sanitary inspection and water quality assessment.

The Tasmanian *Recreational Water Quality Guidelines 2007* have combined water quality categories A and B (detailed in the national guidelines) into a single Good Water Quality indicator, category C into a Moderate Water Quality indicator and category D into a Poor Water Quality indicator.

The *Recreational Water Quality Guidelines 2007* are also currently under review. A new guideline will be in issued in 2018.

# 4. COUNCIL RECREATIONAL WATER MANAGEMENT ACTIVITIES

Table 1 – Council Recreational Water Management Activities

| **Council** | **Location** | **Site / Water Body** | **Type of Sampling** | **Sampling Frequency** | **Results** | **Comments / Corrective Action** |
| --- | --- | --- | --- | --- | --- | --- |
| **4.1 Break O'Day Council**  **Contact Council: (03) 6376 7900** | 1. Beauty Bay, St Helens 2. Grants Lagoon, Binalong Bay 3. Henderson Lagoon, Falmouth 4. Scamander River Mouth, Scamander 5. Wrinklers Lagoon, Scamander 6. Yarmouth Creek, Beaumaris | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Monthly from December to March. | All sites were compliant with Guideline values for primary contact activities. | Permanent signs are in place advising not to swim during and after rainfall events in enclosed water and river sites. |
| 1. Bayside Inn, St Helens, pool 2. Blue Seas Holiday Villas, pool 3. Pelican sands, Scamander, pool 4. Scamander Beach Hotel Motel, pool 5. St Helens District High School, pool 6. St Marys District High School, pool 7. Tidal Waters, St Helens, pool 8. White Sands Estate, Ironhouse Point, 1 pool, 1 spa | Pools and Spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  E.coli  Pseudomonas aeruginosa | Sampling frequency varied between sites but at a lower frequency than Guideline requirements. |  | No corrective actions were required. |
| **4.2 Brighton Council Contact:  Brent Bastian  (03) 6263 0332** | 1. Jetty Road, Old Beach | Natural recreational water body  sampling sites | Bacteriological Enterococci | Weekly from December to March. | The site was compliant with Guideline values for primary contact activities. The site is recognised as used for secondary contact activities. | Permanent signs are in place advising against primary contact activities.  Water quality has been graded as good at this site. |
| 1. Brighton Swim centre | Pools and Spas | Bacteriological Heterotrophic Plate Count Thermotolerant coliforms/ *E.coli Pseudomonas aeruginosa* | Monthly. |  | No corrective actions were required. |
| **4.3 Burnie Council Contact Amanda Richards eho@burnie.net** | 1. Cooee Beach, east end 2. Cooee Beach, west end 3. West Beach, east end 4. West Beach, west end 5. South Burnie, yacht club | Natural recreational water body  sampling sites | Bacteriological Enterococci | Sampling frequency varied from fortnightly to 3 weekly | Sites were compliant with Guideline values for primary contact activities, with the exception of a single occasion at South Burnie. Resampling returned compliant results. |  |
| 1. Burnie Aquatic Centre, Burnie, pool 2. Healthglo Fitness & Leisure, Burnie, pool 3. Oasis Three Mile Line, Burnie, pool 4. Private Pool Hire, Camdale, pool 5. TLC Aquatic, West Mooreville Road, Burnie, pool 6. Taswim, Burnie, pool | Pools and Spas | Bacteriological Heterotrophic Plate Count Thermotolerant coliforms/ *E.coli Pseudomonas aeruginosa* | Monthly. |  | Corrective actions were taken following a single noncompliant result. Resampling returned compliant results. |
| **4.4 Central Coast Council**  **Contact Bill Hyndes or Madeline McKinnell on (03) 6429 8936** | 1. Bannons Park, Gunns Plains 2. Johnsons Beach, Penguin Caravan Park 3. Main Beach, Penguin 4. Main Beach, Ulverstone, Surf Club 5. Midway Point, Penguin 6. Picnic Point Beach, West Ulverstone 7. Preservation Bay, Penguin, Surf Club 8. Turners Beach | Natural recreational water body  sampling sites | Bacteriological Enterococci | Sampling was conducted on three occasions. | Sites were compliant with Guideline values for primary contact activities, with the exception of Picnic Point. Results for Picnic Point were consistently noncompliant. | No corrective actions were required |
|  | 1. Dolphinius Aquatics, Turners Beach, pool 2. East Ulverstone Indoor Pool, pool 3. Mount Saint Vincent, Ulverstone, hydrotherapy pool 4. Ulverstone Water Slide, Ulverstone, pool | Pools and Spas |  |  |  |  |
| **4.5 Central Highlands Council**  **Contact Bev Armstrong (03) 6259 5503** | 1. Derwent River, Lake Meadowbank 2. Ouse River, Ouse 3. Brady’s Lake 4. Bronte lagoon 5. Wayatinah Lagoon 6. Tungatinah Lagoon | Natural recreational water body  sampling sites | Bacteriological Enterococci | Sampling was conducted in January and February | Sites were compliant with Guideline values for primary contact activities. | Sampling was not conducted at Clyde River, Bothwell and Hamilton this season. Permanent ‘no swimming’ signs are in place at these sites. |
| 1. Bothwell Swimming Pool, Bothwell | Pools and Spas |  |  |  |  |
| **4.6 Circular Head Council**  **Contact Circular head Council (03) 6261 8525** | 1. Crayfish Creek 2. Detention River 3. Godfreys Beach 4. Tatlows Beach | Natural recreational water body  sampling sites | Bacteriological Enterococci | Monthly | Sites were compliant with Guideline values for primary contact activities. | Permanent signs are in place advising against primary contact activities at Crayfish Creek and Detention River based on noncompliant results in previous years. |
| No pools open to the public during 2016-2017 season | Pools and Spas |  |  |  |  |
| **4.7 Clarence City Council**  **Contact Ron Vanderwal (03) 6261 8525** | 1. Bellerive Beach 2. Howrah Beach East 3. Howrah Beach, Salacia Ave 4. Howrah Beach, Silwood Ave 5. Little Howrah Beach | Natural recreational water body  sampling sites | Bacteriological Enterococci | Weekly from December to March and monthly during other months. | Results for Sites 1- 4 for December - March were compliant with Guideline values for primary contact, with the exception of a single occasion in late December. This was attributed to rainfall and subsequent stormwater runoff. Results for Howrah Beach were also noncompliant in late December and on two occasions in late January. Samples were taken on a single occasion at Dorans Road, Roaches Beach and Rokeby Beach. Lauderdale Beach was sampled on three occasions and in response to a noncompliant result, resampled.  Over winter, noncompliant results occurred on two occasions at Bellerive Beach, Howrah Beach and Howrah Beach, Silwood Ave and on one occasion at Howrah Beach, Salacia Ave. Although not primary contact sites, Kangaroo Bay Rivulet and Clarence Plains River were sampled after rainfall events greater than 10mm to monitor bacterial contamination. | Water quality at recreational sites has been graded as follows: Bellerive Beach, moderate and Howrah Beach middle, Howrah Beach West, Howrah Beach East and Little Howrah Beach as good.  Significant stormwater projects were completed during 2016/17 at Simmons Park, Lindisfarne, Kangaroo Bay Parkland and Minerva Park, Howrah. Council anticipates improved stormwater quality being released into the Derwent Estuary. Further works are planned for 2017/2018.  Council intends installing ‘flip down’ signage to display advisory warnings where two consecutive samples return noncompliant results. |
|  | 1. Acton Swim Centre, 1 pool, 1 spa 2. Barilla Thermal Springs, Cambridge, 1 spa 3. Clarence Aquatic Centre, Montagu Bay, 3 pools 4. Clarence Joint Therapy, Howrah, 1 pool, 5. Oceania Health and Fitness, Mornington, 1 hydro therapy pool, 1 pool 6. Richmond Caravan Park, Richmond, 1 pool 7. Sea Horse Swim Centre, Howrah, 1 pool 8. Shellz Swim Centre, Rokeby East, 1 pool 9. Wyndham resort, Seven Mile Beach, 1 pool, 1 spa | Pools and Spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  E.coli  Pseudomonas aeruginosa. | Monthly |  | Noncompliant results occurred on one occasion at three sites. On all occasions corrective action was taken and resampling returned compliant results. |
| **4.8 Derwent Valley Council**  **Contact David Bradford (03) 6261 8525** | 1. Fitzgerald Park Jetty, Derwent River, New Norfolk. | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from December to March. | Results were compliant with Guideline values for primary contact activities. | Water quality at this site was given a rating of good. |
| 1. Bushy Park Swimming Pool, Glenora 2. New Norfolk Swimming Pool, 2 pools 3. Derwent Valley Indoor Swim Centre, New Norfolk, pool | Pools and Spas | Bacteriological Heterotrophic Plate Count Thermotolerant coliforms/ *E.coli Pseudomonas aeruginosa* | Sampling was conducted monthly at Sites 1 and 2, and weekly at Site 3. |  | No corrective actions were required. |
| **4.9 Devonport City Council**  **Contact Senior Environmental Health Officer (03) 6424 0576** | 1. Back Beach 2. Bluff Beach 3. Coles Beach 4. East Devonport Beach | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Fortnightly from December to March. | Results were compliant with Guideline values for primary contact activities, with the exception of a single occasion in January at Back Beach. | A sanitary inspection of the Back Beach was conducted in January but did not identify a source of contamination. As there have been periodic sewer overflows from a nearby manhole, council suggests that this may have occurred. |
| 1. Barclay Motor Lodge, Devonport, pool 2. Croft, Croft Ave, Devonport, pool 3. Fuchsia, Lillico, pool 4. Gordon Place, Devonport, pool 5. Lawrence, Devonport, pool 6. Nixon St Primary School, Devonport, pool 7. Splash Aquatic Centre, Devonport , 2 hydrotherapy pools, 2 pools 8. Wrenswood, Quioba, pool | Pools and Spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  *E.coli*  *Pseudomonas aeruginosa* | Monthly from December to March. |  | No corrective actions were required. |
| **4.10 Dorset Council**  **Contact Dorset Council (03) 6352 6500** | 1. Old Pier Beach | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from December to March. | All sample sites were compliant with Guideline values for primary contact activities, with the exception of a single noncompliant result in late March. | While the cause of the noncompliant result was not identified, further investigation of possible sources will be undertaken. Results of resampling were complaint with Guideline values. |
| 1. Branxholm Pool, Branxholm 2. Lost Farm Wellness Centre Spa, Bridport, spa 3. Ringarooma Pool, Ringarooma 4. Scottsdale Pool, Scottsdale | Pools and Spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  *E.coli*  *Pseudomonas aeruginosa* | Monthly from December to March and when open. |  | No corrective actions were required. |
| **4.11 Flinders Island Council**  **Contact Jacci Viney (03) 6359 5005** | 1. Allports Beach 2. Killicrankie Bay 3. Lady Barron 4. Whitemark | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Monthly from December to March. | All sample sites were compliant with Guideline values for primary contact activities. |  |
| 1. Flinders Island District High School Pool, Whitemark, pool | Pools and Spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  *E.coli*  *Pseudomonas aeruginosa* | Monthly from December to March. |  | A single noncompliant result occurred on one occasion, prior to the pool reopening after school holidays. Corrective action was taken and resampling returned compliant results. |
| **4.12 George Town Council**  **Contact Chris Wicks (03) 6382 8845** | 1. Beechford 2. Hillwood 3. Lagoon Beach 4. Pilots Bay 5. Pipe Clay Bay 6. York Cove | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Monthly from December to March. | Sites were compliant with Guideline values for primary contact activities, with the exception of two occasions at both Lagoon Beach and Pipe Clay Bay. | Results of resampling on both occasions at Lagoon Beach in March were compliant with Guideline values.  Pipe Clay Bay is not used for primary contact activities and is sampled to monitor possible effluent contamination. Resampling at this site on one occasion in December returned compliant results. While resampling was not conducted in March following the noncompliant result, Council is continuing to investigate and monitor the site to identify sources of contamination. |
| 1. George Town Swimming Pool 2. George Town Swimming Pool, paddling pool | Pools and spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  E.coli  Pseudomonas aeruginosa | Monthly from December to March**.** |  | No corrective actions were required. |
| **4.13 Glamorgan/Spring Bay Council**  **Contact Glamorgan Spring Bay Council (03) 6256 5050** | 1. East Shelly Beach, Orford 2. Jubilee Beach, Swansea 3. Muirs Beach, Coles Bay 4. Spring Beach, Orford 5. Waubs Beach, Bicheno | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Monthly from December to March. | Sites were compliant with Guideline values for primary contact activities. |  |
| 1. Beachfront at Bicheno, pool 2. Eastcoaster Resort, 2 pools, 1 spa 3. Saffire Freycinet, 4 pools 4. Wintersun Gardens Motel, pool | Pools and spas | Bacteriological Heterotrophic Plate Count Thermotolerant coliforms/ *E.coli Pseudomonas aeruginosa* | Varied from monthly at one site to once per swimming season at other sites. |  | Noncompliant results occurred on four occasions at one site. Corrective action was taken and on all occasions resampling returned compliant results. |
| **4.14 Glenorchy City Council**  **Contact Alex Woodward (03) 6216 6790** | 1. Elwick Bay 2. Windermere Beach 3. Mona Berriedale Bay 4. Mona Cameron Bay 5. Mona Jetty | Natural recreational water body  sampling sites | Bacteriological Enterococci | Bacteriological Enterococci | Samples from Windermere Beach complied with Guideline values for primary contact activities, with the exception of a single occasion in December. Samples were noncompliant from Elwick Bay and Berridale Bay on three occasions, from Cameron Bay on one occasion and Mona Jetty on one occasion. | Sites 1 and 2 have been routinely monitored for a number of years. Sites 3 and 5 have been monitored since the 2014-2015 and Site 4 was also sampled this season.  Water quality at Windermere was graded as good, which is an improvement from a poor grading in previous years. Elwick Bay maintained a grading of poor, with permanent signs in place advising that water quality is not suitable for swimming. The remaining sites are not used for primary contact activities but monitoring provides an insight into water quality in the area. |
| 1. Glenorchy War Memorial Pool, 50 m pool 2. Glenorchy War memorial Pool, wading pool 3. Glenorchy War Memorial Slide Pool 4. KGV Hydrotherapy Pool, pool 5. Mona Pool, Berriedale 6. One Care Barossa Park, Glenorchy 7. Waterfront Lodge, Lutana, pool 8. Riverfront Motel & Villas, pool 9. Undine Pool, Rosetta | Pools and spas | Bacteriological  Heterotrophic Plate Count  Thermotolerant coliforms/  E.coli  Pseudomonas aeruginosa | Monthly from December to March. |  | Noncompliant results occurred on one occasion at one pool and on two occasions at another. On all occasions resampling returned compliant results. |
| **4.15 Hobart (City of Hobart)**  **Contact Felicity Edwards (03) 6238 2842** | 1. Nutgrove Beach (2 sites) 2. Little Sandy Bay Beach (2 sites) 3. Marieville Esplanade 4. Cornelian Bay | Natural recreational water body  sampling sites | Bacteriological Enterococci | Weekly from December to March. | Primary contact sites, Sites 1 and 2 were compliant with Guideline values with the exception of two occasions at Little Sandy Bay Beach North and two occasions at Nutgrove East. A single noncompliant result was reported for Nutgrove West.  Although not primary contact sites, Marieville Esplanade and Cornelian Bay are sampled to monitor bacterial contamination as they are adjacent to popular recreational sites. | Sanitary inspections were conducted following noncompliant results at Sites 1 and 2 in December and February, but did not identify a source of contamination. Council, TasWater and the Derwent Estuary Program are working together to identify and rectify sources of contamination in the urban catchment that impact on Nutgrove Beach West.  Permanent signs are in place at Nutgrove West, Marieville Esplanade and Cornelian Bay warning of poor water quality. Signs are also in place at Nutgrove Beach East and Little Sandy Bay beach advising of good water quality. |
| 1. Bay View Villas, Poets Road, 1 pool George Town Swimming Pool 2. Club Salamanca, Gladstone Street, 1pool, 1 spa 3. Doone Kennedy Hobart Aquatic Centre, Davies Avenue, 3 pools, 1 spa 4. Friends Health & Fitness, Elizabeth St, 1 pool, 1 spa 5. Hotel Grand Chancellor, Hobart, pool 6. Jodi Harrison Swim Centre, New Town Road, 2 pools, 1 spa 7. Rydges Hotel, Argyle St, 1 pool 8. Salamanca Inn, Gladstone St, 1 pool, 1 spa 9. Savoy Baths, Elizabeth St, 1 pool, 2 spas 10. St Giles Southern Service, Lenah Valley, hydrotherapy pool 11. Star Fish Swim Centre, Stratton Ave, 1 pool 12. St Michaels Collegiate, Macquarie St, 1 pool 13. Wrest point, Sandy Bay Road, 1 pool, 1 spa | Pools and Spas | Bacteriological Heterotrophic Plate Count Thermotolerant coliforms/ *E.coli Pseudomonas aeruginosa* | Monthly |  | Results were noncompliant with Guideline values on two occasions at one site and on one occasion at another. In all cases corrective action was taken and compliance achieved.  Infringement notices were served at three sites for failing to sample in accordance with the Guidelines. |
| **4.16 Huon Valley Council**  **Contact Scott Edwards (03) 6264 0355** |  | Natural recreational water body  sampling sites |  |  |  | Sampling is no longer conducted as approval to cease sampling was obtained in 2012 from the Director of Public Health. Council continues to respond to complaints, issues or concerns the public may have regarding water quality.  Permanent swimming advisory signs are in place at Dover Beach, Randalls Bay and Verona Sands advising the public of potential contamination, due to outfalls from nearby lagoons, following rainfall events. |
| 1. Hastings Caves Pool 2. Huonville Swimming Pool 3. Port Huon Swimming Pool | Pools and Spas | Bacteriological  (Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, Pseudomonas aeruginosa) | Monthly. |  | Noncompliant results occurred on one occasion at two pools. Corrective action was taken and resampling returned compliant results. |
| **4.17 Kentish Council**  **Contact Kentish Council (03) 6491 2500** | 1. Lake Barrington - Kentish Park 2. Lake Barrington - Rowing Course | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Monthly from November to March. | Sites were compliant with guideline values for primary contact activities. |  |
| 1. Cradle Mountain Hotel, Cradle Mountain,1spa 2. Sheffield School Railton Campus, pool 3. Silver Ridge Retreat, pool 4. Waldheim Spa, Peppers Lodge, Cradle Mountain – 1pool, 1 spa | Pools and Spas | Bacteriological  (Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*). | Monthly when open. |  | No corrective actions were required. |
| **4.18 Kingborough Council**  **Contact Abyilene McGuire (03) 6211 8255** | 1. Blackmans Bay Beach 2. Blackmans Bay Beach South 3. Kingston Beach (North) 4. Kingston Beach (Middle) 5. Kingston Beach (South) 6. Browns River 7. Taroona Beach 8. Hinsby Beach 9. Howden – Wingara Road 10. Snug Beach 11. Margate – Dru Point 12. Woodbridge-Silverwater Park 13. Conningham Beach 14. Tinderbox Beach 15. Middleton Beach 16. Nebraska Beach 17. Alonnah Beach 18. Quiet Corner 19. Adventure Bay Beach 20. Simmonds Beach | Natural recreational water body  sampling sites | Bacteriological Enterococci | Weekly from December to March. | A number of samples were noncompliant with Guideline values for primary contact activities. Four of these results for Blackmans Bay, Blackmans Bay South, Kingston Beach North and Kingston Beach South were attributed to significant rainfall in late December. Results of resampling at these sites were compliant with Guideline values. Blackmans Bay Beach South was closed in March following two consecutive noncompliant results. Temporary signage was put in place warning against swimming. The beach was reopened following compliant results in late March.  All samples from south of the Derwent estuary complied with guideline values. | Permanent signs are in place at Browns River advising that water quality may not be suitable for primary contact. Signs indicating a water quality grading of good, fair or poor remain in place at: Taroona beach (good), Kingston Beach North (moderate), Kingston Beach Middle (good), Kingston Beach South (moderate) and Blackmans Bay Beach (good).  Council is conducting further investigations at Blackmans Bay South to identify sources of contamination. |
| 1. Beach Orchard Health & Recreation Centre, Margate, 1 pool,1 spa 2. Kingston Pool, Kingston, pool 3. Woodbridge Pool, Woodbridge Hill Road, pool | Pools and Spas | Bacteriological  (Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, Pseudomonas aeruginosa) | Monthly. |  | No corrective actions were required. |
| **4.19 King Island Council**  **Contact King Island Council (03) 6462 1177** |  | Natural recreational water body |  |  |  | King Island Council did not conduct sampling during the 2016-2017 season. |
|  | Pools and Spas |  |  |  | Council did not advise of any publically accessible pools or spas in the municipality. |
| **4.20 Latrobe Council**  **Contact Glenys Nichols (03) 6421 4650** | 1. Freer Beach - Shearwater 2. Hawley Beach 3. Mersey River - end of Shale Road 4. Mersey River - Bells Parade 5. Panatana Rivulet 6. Port Sorell Pontoon 7. Squeaking Point | Natural recreational water body  sampling sites | Bacteriological Enterococci | Weekly from December to March. | Results from the Mersey River at both Bells Parade and Shale Road were noncompliant with Guideline values for primary contact activities on four occasions. Temporary signs warning against swimming were erected at Shale Road in January following two consecutive noncompliant results.  Three samples were noncompliant with Guideline values at Panatana Rivulet. Results of resampling on all three occasions returned compliant results. | The Mersey River was affected by the June 2016 floods, with minimal flow noted on a number of occasions. Some remedial works have been undertaken to assist increase river flow.  Permanent signage indicating a water quality grading of fair is in place at Mersey River, Bells Parade. |
| 1. Latrobe Swimming Pool, Latrobe, 1pool 2. Lotus Waters Wellness Centre Spa, Shearwater, 1 spa 3. Rubicon Swim School, Latrobe, 1 pool 4. Shearwater Resort, Shearwater, 2 pools, 1 spa 5. Strathdevon Aged Care, Latrobe, 1 hydrotherapy pool, 6. Tudor Cabins, Northdown, 1 pool | Pools and Spas | Bacteriological (Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*) | Monthly. |  | Noncompliant results occurred on seven occasions at one spa and on one occasion at one pool. Corrective action was taken and resampling returned compliant results, with the exception of one occasion where resampling of the spa returned noncompliant results and the spa closed. The spa was reopened following further corrective action and two compliant results. |
| **4.21 Launceston (City of Launceston)**  **Contact Debbie Fortuin (03) 6323 3261** | 1. Corra Linn 2. First Basin, South Esk River Catchment 3. St Leonards Picnic Ground, North Esk River Catchment 4. Waverley Lake | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from December to March. | Results were generally compliant with Guideline values for primary contact activities. Exceptions were one occasion at First Basin in late January and four occasions at Corra Linn. Results of resampling at First Basin were compliant with Guideline values. Results of resampling at Corra Linn were noncompliant on three occasions and the site subsequently closed for primary contact activities. | Signs were erected at Corra Linn warning against swimming in December and late February, when the site was closed for primary contact activities. |
| 1. Australian Maritime College, Newnham Pool, pool 2. Brent Wrankmore Swim School, Launceston, pool 3. Glen Dhu Pool, South Launceston, pool 4. Glenara Lakes Pool and Spa, Youngtown, 1 pool, 1 spa 5. Just Swim, Kings Meadows, pool 6. Launceston Aquatic Centre, Launceston, 6 pools, 1 spa 7. Launceston Church Grammar, East Launceston, pool 8. Launceston College Pool and Spa, Launceston, 1 pool, 1 spa 9. Launceston Swim School, South Launceston, pool 10. Lilydale Pool, Lilydale, 1 pool, 1 spa 11. Newstead Heights Pool, Newstead, pool 12. Olde Tudor pool and Spa, Launceston, pool 13. Sacred Heart Pool, Launceston, pool 14. St Patricks College Pool, Launceston 15. Village family Motor Inn, South Launceston, 1 pool, 1 spa | Pools and Spas | Bacteriological  (Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, Pseudomonas aeruginosa) | Monthly. |  | Noncompliant results occurred on one occasion at one pool, on two occasions at one pool, on four occasions at one pool and six occasions at one spa. Corrective action was taken and on all occasions resampling returned compliant results. |
| **4.22 Meander Valley Council**  **Contact Katie Proctor (03) 6393 5339** | 1. Blackstone Heights - Lake Trevallyn 2. Bracknell Picnic Area - Liffey River 3. Egmont Bridge - Meander River 4. Hadspen Picnic Area - South Esk River | Natural recreational water body  sampling sites | Bacteriological Enterococci | Weekly from December to March. | Results were compliant with Guideline values for primary contact at Blackstone Heights, with the exception of one occasion that coincided with rain. Results were noncompliant on seven occasions at Bracknell and on three occasions at Egmont. Results of resampling at these sites were compliant with Guideline values. Results for Hadspen were noncompliant on half of the sampling occasions and the site closed for primary contact activities from mid-January to mid-February. Warning signs were erected at this site advising of poor water quality. | Water quality at Blackstone Heights has been graded as good, at Bracknell as moderate to poor, at Egmont as good and as poor at Hadspen. |
| 1. Caveside Pool, pool 2. Country Club Casino, Prospect vale, 1 pool, 1 spa 3. Country Club Villas, 1 pool, 1 spa 4. Deloraine Pool, pool 5. Deloraine Primary School, pool 6. Mole Creek Pool, pool | Pools and spas | Bacteriological  (Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, Pseudomonas aeruginosa) | Monthly when open. |  | Noncompliant results occurred on one occasion at one site, on two occasions at two sites and on six occasions at one site. On all occasions corrective action was taken and resampling returned compliant results. |
| **4.23 Northern Midlands Council**  **Contact Chris Wicks (03) 6397 7303** | 1. Mill Dam Reserve, Longford, South Esk River 2. Rotary Park, Leighlands Road, Evandale, South Esk River 3. William Street Reserve, Perth, South Esk River | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from December to March. | Sites 1 and 3 were compliant with Guideline values for primary contact activities. Site two was closed on one occasion in early December and reopened following two compliant results in mid-December. Noncompliant results occurred at Site 2 on three a further sampling occasions. Resampling returned compliant results. | Signs warning against swimming were  erected at Site 2 when closed and  removed when reopened. |
| 1. Campbell Town Pool, Campbell Town, pool 2. Cressy Pool, Cressy, pool 3. Ross Pool, Ross, pool | Pools and Spas | Bacteriological (Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*) | Monthly when open. |  | No corrective actions were required. |
| **4.24 Sorell Council**  **Contact Greg Robertson (03) 6269 0041** | 1. Connelly’s Beach 2. Park Beach 3. McKinley St, Midway Point 4. Primrose Beach 5. Red Ochre Beach North 6. Red Ochre Beach South 7. Tigerhead Beach, boat ramp 8. Tigerhead Beach, Seventh Ave | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from December to March. | Sites were compliant with Guideline values for primary contact activities, with the exception of Red Orche Beach (South) on a single occasion in mid-February.  Noncompliant results at Red Orche Beach (South) did not correlate with rainfall. In previous seasons similar unexplained results have occurred at this site and although a detailed sanitary survey was conducted, a cause was not identified. | With the exception of Red Ochre Beach South, that has been given a water quality grade of poor, water quality at all sites was graded as good.  Permanent signs are in place at all routine sample sites to advise against swimming after heavy rain.  Connelly’s Beach and McKinley St, Midway point sites were included for the first time. |
| 1. Flippers Swim Centre, Lewisham, 1 pool 2. Steeles Island Retreat, Carlton Beach, 1 spa | Pools and Spas | Nil. | Nil. |  |  |
| **4.25 Southern Midlands Council**  **Contact Leon McGuiness (03) 6259 3011** |  | Natural recreational water body  sampling sites |  |  |  | No primary contact sites have been identified in this municipality |
| 1. Oatlands Swimming Pool, Oatlands, pool | Pools and Spas | Bacteriological (Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*) | Monthly when open. |  | No corrective actions were required. |
| **4.26 Tasman Council**  **Contact Karen Loone (03) 6250 9200** | 1. Nubeena Foreshore 2. Shelley Beach 3. Sloping Main 4. Stewarts Bay 5. White Beach, southern end between lagoon outlets | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Monthly from December to March. | Sites were compliant with Guideline values for primary contact activities. | Permanent signs advising of poor water quality have been erected at Sucklings Creek/Parsons Bay and Stewarts Bay, based noncompliant results in previous years. |
| 1. Tasman District Pool, Tasman District School, 1 pool | Pools and Spas | Bacteriological (Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*) | Monthly when open. |  | No corrective actions were required. |
| **4.27 Waratah-Wynyard Council**  **Contact David Kleyweg (03) 6443 8342** | 1. Boat Harbour Beach 2. Cam River Somerset 3. East Wynyard Beach 4. Sisters Beach 5. Sisters Creek 6. Somerset Beach | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Sampling was conducted weekly at Sisters Creek and Cam River and monthly at the remaining sites, from December to March. | Sampling sites were compliant with Guideline values for primary contact activities, with the exception of Sisters Creek. Noncompliant results occurred on a number of occasions at Sisters Beach. | Permanent signs are in place at Sisters Creek advising that water is unsuitable for primary contact. |
| 1. Leisure Ville Caravan Park, East Wynyard, 1 pool, 1 spa 2. Wescombe’s Leisure and Therapy Centre, Somerset, 1 pool, 1 spa 3. Wynyard Fitness, Wynyard, 1 pool, 1 spa | Pools and Spas | Nil | Nil |  |  |
| **4.28 West Coast Council**  **Contact West Coast Council (03) 6471 4715** | 1. West Strahan Beach | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from Dec to March. | Results complied with the Guideline values for primary contact activities. |  |
| 1. Queenstown Swimming Pool 2. Rosebery Swimming pool 3. Zeehan Swimming Pool | Pools and Spas | Bacteriological (Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*) | Monthly when open. |  | No corrective actions were required. |
| **4.29 West Tamar Council**  **Contact Rick Chippindall (03) 6323 9300** | 1. Beauty Point 2. Deviot 3. Gravelly Beach 4. Greens Beach 5. Kelso 6. Paper Beach 7. Redbill Point 8. Rosevears 9. Lake Trevallyn | Natural recreational water body  sampling sites | Bacteriological  Enterococci | Weekly from December to March. | Sites were generally complaint with Guideline values for primary contact activities. Noncompliant results occurred at Kelso on one occasion, Greens Beach on four occasions, and Paper Beach/Swan Point on four occasions. | Results of resampling at Kelso and Greens Beach complied with Guideline values. Temporary signs were erected at Paper Beach/Swan Point during January following two noncompliant results. |
| 1. Beaconsfield Primary School Pool, Beaconsfield, 1 pool 2. Big4 Kelso Sands Holiday Park, 1 pool 3. Gravelly Beach Swim Centre, 1 pool 4. Riverside Swim Centre, Riverside, 2 pools 5. Tamar Cove Motel, Beauty Point, pool 6. Tamar Valley Resort, 1 pool, 1 spa | Pools and Spas | Bacteriological  (Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, Pseudomonas aeruginosa) | Monthly. |  | No corrective actions were required. |

# 5. DISCUSSION

This is the sixteenth year of reporting on recreational water quality in Tasmania.

Twenty-seven of 29 councils reported having active water quality monitoring programs for natural recreational water bodies within their municipalities.

The two councils that did not do regular testing manage natural recreational waters by either permanent signage or annual reassessment of risk.

When testing identified non-compliant water quality in natural recreational water bodies, councils responded with a combination of resampling and signage, typically indicating that the water was temporarily unsuitable for swimming.

Most councils reported having monthly water quality monitoring programs in place for public swimming pools and public spa pools.

Non-compliant results were addressed by requiring operators to undertake corrective actions. Corrective actions include resampling to verify the effectiveness of the actions taken and can also include pool closure.

By undertaking regular testing of designated natural recreational water sites, and managing them in accordance with guidelines, councils help the public to make confident and informed decisions about water quality and the risk to human health when swimming or enjoying other recreational activities.

The current review of the *Tasmanian Recreational Water Quality Guidelines* will review the process for councils to seek approval for variation in the frequency of sampling of particular natural recreational water bodies.

This process should accommodate both a risk assessment that is sensitive to the hazards that may emerge in a site, and an approach that takes into account the public use of the site and the appropriate deployment of council resources.

DHHS will continue to work closely with councils to improve recreational water quality through their monitoring and management of sites.

Heavy rainfall affects the water quality of recreational areas especially near storm water outfalls, as contaminants on the land are washed into the water.

Accordingly, people should not swim near flowing storm water outfalls, and should wait a few days after rain before swimming in areas where contaminated run-off is likely to have occurred.

This general advice applies to designated natural recreational water sites and other locations in Tasmania.

Dr Mark Veitch

**Director of Public Health**

# 6. DEFINITIONS

**“Agency”** means an Agency within the meaning of the *Tasmanian State Service Act 2000*.

**“Authorised Officer”**means –

a) The Director; or

b) A medical officer of health; or

c) An environmental health officer.

**“Controlling Authority”** means an Agency, public authority or person managing or in control of water.

**“Council”** means a council with the meaning of the *Local Government Act 1993*.

**“Director of Public Health”** means the Director of Public Health appointed under section 6 of the *Public Health Act 1997*.

**“Environmental Health Officer”** means a person appointed under section 10 or 11 of the *Public Health Act 1997*.

***“E.coli (Escherichia coli)”*** refers to a group of bacteria found in the gut of warm blooded animals (including humans), used as an indicator of faecal contamination of water.

***“*Enterococci*”*** is a group of bacteria common to the faecal matter of warm-blooded animals, including humans. It is commonly used as an indicator of faecal contamination of estuarine and marine water bodies.

**“Heterotrophic Plate Count (or Standard Plate Count)”** is a measure of the overall bacteriological quality of water, used in conjunction with other bacterial indicator species.

**“Natural recreational water body”** includes any coastal and estuarine water (including tidal washed pools and marine baths that interchange with seawater), natural fresh water environs such as rivers or streams, lakes, weirs and dams but not public pools and spas.

**“Public spa pool”** means a pool or other water-retaining structure for human use that incorporates, or is connected to equipment that is capable of heating any water contained in it and injecting air bubbles or water into it under pressure so as to cause general disturbance in the water, to which the general public has access (whether for payment or fee or not), or which is for the general use of guests in tourist accommodation, other than:

a) a spa pool; or

b) a tidal pool or other similar structure where water flows in and out according to the operation of natural forces

**“Public swimming pool”** includes any swimming pool, waterslide, wave pool, hydrotherapy pool or other similar structure to which the general public has access (whether for payment of a fee or not), or which is for the general use of guests in tourist accommodation, other than:

a) A spa pool; or

b) A tidal pool or other similar structure where water flows in and out according to the operation of natural forces.

**“Primary contact activity”** means an activity in which the whole body or face and trunk are immersed or the face is frequently wet by spray. It is likely that some water will be swallowed or inhaled or come into contact with ears, nasal passages, mucus membranes or cuts in the skin. (Examples include swimming, diving, surfing or whitewater canoeing.)

***“Pseudomonas aeruginosa”*** is a bacterium common in water, soil and the environment and if inadequately disinfected, in swimming pools and spas. If present in high numbers in pool and spa water it can cause infections of the skin, ear, urinary and respiratory tracts, wounds and cornea.

**“Recreational water”** includes any coastal and estuarine water (including tidal washed pools and marine baths that interchange with seawater), natural fresh water environs such as rivers or streams, lakes, weirs and dams, and public pools and public spas.

**“Sanitary inspection”** means an inspection carried out in accordance with section 5.4.1 of the National Health and Medical Research Council’s Guidelines for Managing Risks in Recreational Water.

**“Secondary contact activity”** means an activity in which only the limbs are frequently wet and swallowing water is unusual. Examples include boating, fishing and wading, where occasional immersion may occur.

**“Swimming season”** means the months of December, January, February and March.

“Threat to public health” means any event or circumstance which is likely to –

a) Damage, injure or compromise public health; or

b) Prevent or restrict the improvement of public health.

**“Thermotolerant Coliform bacteria”** means a class of bacterium often referred to as faecal coliforms that is often used as an indicator of water quality in conjunction with other bacterial indicator species.

# 7. References

National Health and Medical Research Council 2008. *Guidelines for Managing Risks in Recreational Water.* Available at [www.nhmrc.gov.au/publications/synopses/eh38.htm](http://www.nhmrc.gov.au/publications/synopses/eh38.htm)

Department of Health & Human Services 2007. *Recreational Water Quality Guidelines.* Available at [www.dhhs.tas.gov.au/\_\_data/assets/pdf\_file/0014/53321/2007\_RWQG.pdf](http://www.dhhs.tas.gov.au/__data/assets/pdf_file/0014/53321/2007_RWQG.pdf)