Recreational Water Quality  
Annual Report

Reporting period 1 July 2015 – 30 June 2016

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### 

### 1. INTRODUCTION

Water-based recreational activities are very popular in Tasmania, particularly during summer.

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

Many people use 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 for recreational activities.

The *Recreational Water Quality Guidelines 2007* issued under the *Public Health Act 1997*, require councils to regularly monitor water quality at recognised recreational sites and 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 all public swimming pool and public spa pools.

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

Information provided in council annual reports is summarised in the *Recreational Water Quality* *Annual Report 2015-2016*, 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 individual water quality results, contact the relevant council Environmental Health Officer (EHO), whose contact details are provided in this report.

### 2. BACKGROUND

2.1 Health Risks from Swimming

Water contaminated by sewage and animal waste often contains a diverse 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.

Polluted 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, ear and eye infections and gastrointestinal diseases.

However, the potential for more serious diseases such as protozoan infections and salmonellosis also exist (NHMRC 2008).

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.

However, it is not practical for all possible recreational waters in a jurisdiction to be regularly monitored.

Therefore, it is necessary and appropriate to focus on particular areas, such as a beach, lake or river that is 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.

If there is any doubt as to 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 the 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.

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### 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 an excellent resource for the management of the quality of natural water bodies used for primary contact recreation.

They apply to all natural water bodies (coastal, estuarine and fresh) that are used by the public for recreation. They do not apply to public pool and spa water quality.

While the national guidelines are not mandatory, they provide a benchmark to ensure that the use of natural recreational waters is safe from a water quality perspective.

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 *Recreational Water Quality Guidelines 2007* have combined water quality categories A and B (as 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.

**4. COUNCIL RECREATIONAL WATER MANAGEMENT ACTIVITIES**

4.1 Break O’ Day Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Grants Lagoon
2. Wrinklers Lagoon
3. Beauty Bay, St Helens
4. Scamander River Mouth
5. Henderson Lagoon, Falmouth

Sampling details: Sampling was conducted monthly from December - March.

Results: All sites were compliant with Guideline values for primary contact.

Comments: Signs are in place to advise the public not to swim during and after rainfall events in enclosed water and river sites.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled;

1. Bayside Inn, St Helens, pool
2. Blue Seas Holiday Villas, Scamander, 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, pool

Sampling details: Sampling frequency varied between sites, from once at site 4, twice at Sites 3, three times at Site 7, Site 2 and Site 6, six times at Site 5, seven times at Site 8 and monthly at Site 1.

For more information contact Glamorgan Spring Bay Council on (03) 6376 7933.

* 1. Brighton Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites: Derwent River

1. Jetty Road, Old Beach

Sampling details: Sampling was conducted weekly from December - March.

Results: The site was compliant with Guideline values for primary contact.

Comments: Permanent signage remains in place at this site warning against primary contact. It has been classified with a water quality rating of ‘good’.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled;

1. Brighton Swim Centre, pool

Sampling details: Sampling was conducted monthly.

For more information contact Brent Basstian on (03) 6263 0332.

* 1. Burnie City Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Cooee Beach, west end
2. Cooee Beach, east end
3. West Beach, west end
4. West Beach, east end
5. South Burnie, yacht club

Sampling details: Sampling was conducted fortnightly from January - March.

Results: Sites were compliant with Guideline values for primary contact, with the exception of a single noncompliant result at South Burnie in mid-November. Resampling of this site returned compliant results.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled:

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

Sampling details: Sampling was conducted monthly.

For more information contact Amanda Richards on (03) 6430 5765.

* 1. Central Coast Council

**Natural recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

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

Sampling details: Sampling was conducted monthly from December - March.

Results: Sites were compliant with Guideline values for primary contact activities, with the exception of Bannons Park (from January till the end of the swimming season).

Comments: Temporary warning signs advising against swimming were erected at Bannons Park in March following two consecutive noncompliant results. Signs were removed after the end of the swimming season in April.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled:

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

Sampling details: Sampling was conducted monthly when pools were open.

For more information contact Bill Hyndes or Madeline McKinnell on (03) 6429 8936.

4.5 Central Highlands Council

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Broad River, Ouse
2. Clyde River, Bothwell
3. Clyde River, Hamilton
4. Derwent River, Lake Meadowbank

Sampling details: Samples were taken from Broad River, Ouse on two occasions, Clyde River (Hamilton), on three occasions, Derwent River on three occasions and Clyde River (Bothwell) on two occasions.

Results: Sampling results of the Clyde River, Hamilton were noncompliant with Guideline values in January and February. Results for the Derwent River, Meadowbank were noncompliant in February and March.

Comments: Noncompliant results from the Derwent River, Meadowbank in February and March were investigated, were attributed to farm runoff and then addressed. Permanent signs advising against swimming have been erected at Clyde River, Hamilton, Derwent River, Lake Meadowbank and Clyde River, Bothwell.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled:

1. Bothwell Swimming Pool, Bothwell

Sampling details: Sampling was conducted during February and March. Following noncompliant results in February the pool was closed and corrective action taken. It was reopened when compliant in March.

For more information contact Bev Armstrong on (03) 6259 5503.

* 1. Circular Head Council

**Natural recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Crayfish Creek
2. Detention River
3. Godfreys Beach
4. Tatlows Beach

Sampling details: Sampling frequency varied from monthly to fortnightly between November and March.

Results: Sites were compliant with Guideline values for primary contact, with the exception of a single noncompliant result at Tatlows Beach.

Comments: Permanent warning signage was erected at Crayfish Creek and Detention River in 2005/2006 advising that water quality may not always comply with Guideline values for primary contact. Both sites have however been given a ‘moderate’ water quality rating for the 2015 - 2016 period. The single noncompliant sample result from Tatlows Beach was attributed to poor weather conditions at the time of sampling.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools:

1. Circular Head War Memorial Swimming Pool, Smithton, pool

Sampling details: Sampling of the Circular Head Pool was not undertaken as it was closed during the swimming season.

For more information contact Amanda Richards on (03) 6452 4848.

* 1. Clarence City Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Bellerive Beach
2. Howrah Beach East
3. Howrah Beach, Salacia Ave
4. Howrah Beach, Silwood Ave
5. Little Howrah Beach

Sampling details: All sites were sampled weekly from December - March. Sites 1- 4 were also sampled monthly throughout winter and Site 5 sampled intermittently to investigate stormwater quality.

Results: Results for all sites for December - March were compliant with Guideline values. Samples were also taken on a single occasion at Dorans Road, Opossum Bay Beach, Seven Mile Beach, Cremorne Beach, Roaches Beach, Rokeby Beach and Koomela Bay. These results were also compliant with Guideline limits. Lauderdale Beach was also sampled on one occasion, but in response to a noncompliant result was resampled on another four occasions. During winter, noncompliant results occurred on two occasions at Bellerive Beach. Geilston Bay, Lindisfarne Bay, Monatgu Bay and Kangaroo Bay were also sampled.

Comments: Recreational sites were graded as follows: Bellerive Beach, Howrah Beach West (Silwood Avenue) and Howrah Beach East were rated as ‘moderate’, while Little Howrah Beach received a ‘good’ rating. Howrah Beach (Salacia Avenue) was also received a ‘good’ rating, showing an improvement from a ‘poor’ rating. Overall, water quality improved from the previous season and has been attributed to the dry conditions during the 2015/2016 swimming season.

Council intends installing ‘flip down’ signage to display advisory warnings where two consecutive samples return noncompliant results.

Monitoring has been undertaken of Kangaroo Bay Rivulet and Clarence Plains Rivulet following rainfall events greater than 10mm. Most sample results were noncompliant with Guideline limits.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled:

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. Oceana 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

Sampling details: Sampling was conducted monthly. One pool was closed briefly on two separate occasions in response to noncompliance with Guideline levels. On both occasions the pool was reopened following corrective action and a return to compliant levels.

For more information contact Ron Vanderwal on (03) 6261 8525

4.8 Derwent Valley Council

Type of sampling conducted: Bacteriological (Enterococci).

**Natural Recreational Water Bodies**

Location of sampling site:

1. Fitzgerald Park Jetty, Derwent River, New Norfolk.

Sampling details: Sampling was undertaken weekly from December - March.

Results: Results were compliant with Guideline levels for primary contact activities and water quality given a rating of ‘good’.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled:

1. Bushy Park Swimming Pool, Glenora
2. Maydena Swimming Pool, Maydena
3. New Norfolk Swimming Pool, 2 pools
4. Derwent Valley Indoor Swim Centre

Sampling details: Sampling was conducted weekly at Site 3, fortnightly at Sites 1 and 2 and monthly at Site 4.

For more information contact David Bradford on (03) 6261 8525.

4.9 Devonport City Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Back Beach
2. Bluff Beach
3. Coles Beach
4. East Devonport Beach

Sampling details: Sampling was conducted fortnightly from November - March.

Results: Sample sites were compliant with Guideline values with the exception of a single noncompliant results at both Black Beach and East Devonport Beach in mid-February. This was attributed to storm flooding and minor sewage spills into the Mersey River. Resampling at both sites returned compliant results.

While not recognised as a primary contact site nor sampled as part of this routine program, the Don River was closed for primary and secondary contact activities from 4 - 10 February. This was due to contamination from a damaged sewage main that crosses a nearby tributary. Confirmation of contamination of the site was based on noncompliant sample results from the site.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location and name of pools sampled:

1. Barclay Motor Lodge, Devonport, pool
2. Croft, Croft Ave, Devonport, pool
3. Fuschia, 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

Sampling details: Sampling was conducted monthly throughout the year, with the exception of seasonal closures.

For more information contact Andrew Choveaux on (03) 6424 0545.

4.10 Dorset Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Granite Point
2. Old Pier Beach
3. Trent Water (estuary)

Sampling details: Sampling was conducted weekly from December - March.

Results: All sample sites were compliant with Guideline values for primary contact activities with the exception of a single noncompliant result for Trent Water.

Comments: While the cause of the elevated sample results from Trent Water was not determined, results of resampling were within Guideline limits.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Branxholm Pool, Branxholm
2. Lost Farm Wellness Centre Spa, Bridport, spa
3. Ringarooma Pool, Ringarooma
4. Scottsdale Pool, Scottsdale

Sampling details: Sampling was conducted monthly throughout the year, with the exception of seasonal closures.

For more information contact James Clark on (03) 6352 6500.

4.11 Flinders Island Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Allports Beach
2. Killicrankie Bay
3. Lady Barron
4. Whitemark

Sampling details: Sampling was conducted monthly from December - March.

Results: All sample sites were compliant with Guideline values for primary contact activities with the exception of a single noncompliant result at Killiecrankie. Results of resampling were within Guideline limits.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools sampled:

1. Flinders Island District High School Pool, Whitemark, pool

Sampling details: Sampling was conducted in February and March when the pool was open to the public.

For more information contact Ms Jacci Viney on (03) 6359 5005.

* 1. George Town Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Beechford
2. Hillwood
3. Lagoon Beach
4. Pilots Bay
5. Pipe Clay Bay
6. York Cove

Sampling details: Sampling was conducted monthly from December - March.

Results: Sample sites were compliant with Guideline values for primary contact activities, with the exception of Lagoon Beach on one occasion during March.

Comments: While the cause of the noncompliant sample result for Lagoon Beach was unclear, resampling returned compliant results.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, *Pseudomonas aeruginosa*)

Location of pools and spas:

1. George Town Swimming Pool
2. George Town Swimming Pool, paddling pool

Sampling details: Sampling was conducted monthly from December - March.

For more information contact Chris Wicks on 0431 481429. Branxholm Pool, Branxholm

* 1. Glamorgan/Spring Bay Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. East Shelly Beach, Orford
2. Jubilee Beach, Swansea
3. Muirs Beach, Coles Bay
4. Spring Beach, Orford
5. Waubs Beach, Bicheno

Sampling details: Sampling was conducted monthly from December - March.

Results: All sample sites were compliant with Guideline values for primary contact activities, with the exception of Muirs Beach on one occasion during February.

Comments: Resampling of Muirs Beach was conducted in response to elevated results in February and returned compliant results.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Beachfront at Bicheno, pool
2. Bicheno by the Bay, pool
3. Eastcoaster Resort, 2 pools, 1 spa
4. Piermont Retreat, pool
5. Saffire Freycinet, 4 pools
6. Swansea Beach Chalets, pool
7. Wintersun Gardens Motel, pool

Sampling details: Sampling frequency varied from: none at Site 4, twice at Site 7, three times at Sites 1, 3 and 6 to monthly at Sites 2 and 5. George Town Swimming Pool

For more information contact Glamorgan Spring Bay Council on (03) 6256 5050.

* 1. Glenorchy City Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Windermere Beach
2. Elwick Bay
3. Faulkners Rivulet
4. GASP Orange Pavilion
5. Mona Jetty
6. Mona Berriedale Bay

Sites 1 and 2 have been routinely monitored for a number of years while Sites 4, 5 and 6 have been monitored since the 2014-2015 swimming season. Site 3 was also sampled during the current season.

Sampling details: Sampling was conducted monthly from December – March.

Results: While results of sampling of Windermere Beach generally complied with Guideline values, noncompliant results occurred on 12 January and 23 February. All results from Elwick Bay were compliant with Guideline values.

Comments: While the cause of the two noncompliant results at Windermere Beach remain unknown, results of resampling were compliant . Both sites continue to have a water quality rating of poor. Permanent signs have been erected at Windermere Beach and Elwick Bay advising that water quality is not suitable for swimming. The sites are generally used for boating and fishing only.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Glenorchy War Memorial Pool, 50 m pool
2. Glenorchy War memorial Pool, wading pool
3. Glenorchy War Memorial Slide Pool
4. Mona Pool, Berriedale
5. One Care Barossa Park, Glenorchy
6. Waterfront Lodge, Lutana, pool
7. Riverfront Motel & Villas, pool
8. Undine Pool, Rosetta

Sampling details: Sampling was undertaken monthly from December - March.

For more information visit the council’s website ([www.gcc.tas.gov.au](http://www.gcc.tas.gov.au)) or contact Alex Woodward on (03) 6216 6790.

* 1. Hobart City Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Nutgrove Beach (2 sites)
2. Little Sandy Bay Beach (2 sites)
3. Marieville Esplanade
4. Cornelian Bay

Sampling details: Little Sandy Bay (two sites) was sampled weekly from December - March. Nutgrove Beach (two sites), Marieville Esplanade and Cornelian Bay were also sampled weekly though not recognised as primary contact sites.

Results: Sites 1 and 2 were compliant with Guideline values for primary contact, with the exception of one occasion at Little Sandy Bay Beach, one occasion at Nutgrove Beach East and two occasions at Nutgrove West. Resampling of the sites returned compliant results.

Comments: Sites deemed not suitable for primary contact activities including Nutgrove Beach, Marieville Esplanade and Cornelian Bay have permanent signs in place warning against primary contact activities. The beach catchment area of Nutgrove is the focus of ongoing investigations to assist in identifying possible sources of contamination.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

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. Jodi Harrison Swim Centre, New Town Road, 2 pools, 1 spa
6. Lambert Avenue Pool, Lambert Avenue, 1 pool
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. Star Fish Swim Centre, Stratton Ave, 1 pool
11. St Michaels Collegiate, Macquarie St, 1 pool
12. Wrest point, Sandy Bay Road, 1 pool, 1 spa

Sampling details: Sampling was conducted monthly from December - March.

Results: One spa was closed briefly following two successive failed sample results. It was reopened following corrective action and two successive compliant results of resampling.

For more information contact Felicity Edwards on (03) 6238 2842.

* 1. Huon Valley Council

**Natural Recreational Water Bodies**

Comments: Sampling is no longer undertaken as approval to cease sampling was obtained in 2012 from the Director of Public Health. However, council continues to monitor its beaches and 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.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Hastings Caves Pool
2. Huonville Swimming Pool
3. Pot Huon Swimming Pool

Sampling details: Sampling was conducted monthly from December - March and all other months when pools were open.

For more information contact Scott Edwards on (03) 6264 0355.

* 1. Kentish Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Lake Barrington - Kentish Park
2. Lake Barrington - Rowing Course

Sampling details: Sampling was conducted monthly from November - April.

Results: All sample sites were compliant with Guideline values for primary contact.

Comments: Council monitors Lake Barrington at Kentish Park (which is a popular site for water skiing) and the International Rowing Course.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools and spas:

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

Sampling details: Sampling was conducted monthly from December - March or when open. One pool closed briefly on one occasion in response to noncompliance with Guideline values. The pool was reopened following corrective action and a return to compliant levels.

For more information contact Kentish Council on (03) 6491 2500.

* 1. Kingborough Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

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

Sampling details: Sites 1- 8 were sampled weekly from December - March, Sites 9 -15 monthly and Sites 16 - 20 in December and March.

Results: Sample sites were generally compliant with Guideline values. Exceptions were: Browns River that failed on a number of occasions, Blackmans Bay Beach that failed once in March, Blackmans Bay Beach South that failed once in December and Kingston Beach South that failed once in January. At all sites that failed once, resampling returned compliant results.

Comments: Permanent warning signs are in place Browns River to advise the public that the water may not be suitable for primary contact. Recreational water quality 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).

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Beach Orchard Health & Recreation Centre, Margate, 1 pool,1 spa
2. Kingston Pool, Kingston, pool
3. Woodbridge Pool, Woodbridge Hill Road, pool

Sampling details: Sampling was conducted monthly throughout the year.

For more information contact Abyilene McGuire on (03) 6211 8255.

* 1. King Island Council

**Natural Recreational Water Bodies**

The recreational water sampling program is conducted on a risk assessment basis. Based on this assessment King Island Council did not conduct sampling during the 2015 - 2016 season.

**Pools and Spas**

Council did not advise of any publically accessible pools or spas in the municipality.

For more information contact King Island Council on (03) 6462 1177.

* 1. Latrobe Council

**Natural Recreational Water bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

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

Sampling details: Sampling was conducted weekly from December – March.

Results: The Mersey River at Bells Parade was closed for primary contact on two occasions, once in January and once in February, as samples were noncompliant with Guideline values. Samples from the end of Shale Road were noncompliant on one occasion and was closed for primary contact. Sample results from sites in the Rubicon Estuary were generally compliant.

All sample sites were affected by heavy rainfall in early February, with noncompliant results results at all sites. Resampling within a week of the rain event returned compliant results.

Comments: Permanent adjustable signage has been erected at the Mersey River at Bells Parade to advise the public of water quality.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

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

Sampling details: Sampling was conducted monthly when pools were open.

Results: On two occasions a pool or spa was closed following two consecutive noncompliant results. In both instances corrective action was taken and the spa reopened following receipt of two consecutive compliant results.

For more information contact Ms Glenys Nichols on (03) 6421 4650.

1. 21 Launceston City Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Corra Linn
2. First Basin, South Esk River Catchment
3. St Leonards Picnic Ground, North Esk River Catchment
4. Waverley Lake

Sampling details: Sampling was conducted weekly from December - March.

Results: Sites were generally compliant with Guideline values., Site 3 exceeded Guideline values on three occasions and Site 4 on four occasions.

Comments: Permanent signs are in place at all sites with lockable ‘flip down’ warnings. These were adjusted when results of sampling were noncompliant and then when samples return compliant results.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools and spas:

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

Sampling details: Sampling was conducted monthly, when sites were open.

For more information contact Debbie Fortuin on (03) 6323 3261.

4.22 Meander Valley Council

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites

1. Blackstone Heights - Lake Trevallyn
2. Bracknell Picnic Area - Liffey River
3. Egmont Bridge - Meander River
4. Hadspen Picnic Area - South Esk River

Sampling details: Sampling was conducted weekly from December - March.

Results: Results were noncompliant with guideline values on one occasion at Blackstone Heights, on two occasions at Egmont, on three occasions at Hadspen and on a number of occasions at Bracknell.

Comments: Water quality was rated as good at Blackstone Heights, moderate-poor at Bracknell, good at Egmont and good at Hadspen. Temporary signs warning against primary contact were erected at Bracknell in mid-February and remained in place till the end of the swimming season. Non-compliant results at this site coincided with a notable rain event.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

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

Sampling details: Sampling was conducted monthly throughout the year, or when open.

Results: Results of public spa sampling were noncompliant on a number of occasions at Site 3 and the spa was closed on one occasion. The site was re-opened following corrective action and a return to compliant levels.

For more information contact Katie Proctor (03) 6393 5339.

4.23 Northern Midlands Council

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

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

Sampling details: Sampling was conducted weekly from December - March.

Results: Sites were compliant with Guideline values for primary contact throughout the sampling period, with the exception of early February. Results of sampling were noncompliant at all sites at this time.

Comments: Noncompliant sample results were associated with rain. Temporary signs warning against primary contact were erected at this time at Longford and removed following two consecutive compliant sampling results.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Campbell Town Pool, Campbell Town, pool
2. Cressy Pool, Cressy, pool
3. Ross Pool, Ross, pool

Sampling details: Sampling was conducted weekly, when open.

For more information contact Chris Wicks on (03) 6397 7313.

* 1. Sorell Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Park Beach
2. Primrose Beach
3. Red Ochre Beach North
4. Red Ochre Beach South
5. Tigerhead Beach, boat ramp
6. Tigerhead Beach, Seventh Ave
7. Marion Bay Beach

Sampling details: Sampling was conducted weekly from December - March.

Results: Sampling sites were compliant with Guideline values with the exception of Red Orche Beach (South) on a single occasion in mid-February.

Comments: Water quality at Sites 1- 4 was rated as ‘good’ and Red Orche Beach (South) as ‘moderate’.

Comments: 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, it did not identify a cause.

Marion Bay Beach was also sampled this season from December - January to verify water quality, as several thousand patrons of the Falls Festival use the area between 29 December and 1 January each year. As all results were compliant with Guideline values and there is an absence of potential pollution sources, further monitoring is not considered necessary by council.

Permanent signage is in place at all routine sample sites to warn the public against swimming after heavy rain.

**Pools and Spas**

Council did not advise of any publically accessible pools or spas that were open during this period.

For more information contact Greg Robertson on (03) 6269 0041.

* 1. Southern Midlands Council

**Natural Recreational Water Bodies**

Monitoring of natural recreational waters was not conducted by the Southern Midlands Council during 2015 – 2016.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli,* *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Oatlands Swimming Pool, Oatlands, pool

Sampling: Sampling was conducted in November, December and January.

For more information contact Leon McGuiness on (03) 6259 3011

* 1. Tasman Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Nubeena Foreshore
2. Sloping Main
3. Sommers Bay
4. White Beach, southern end between lagoon outlets

Sampling details: Sampling was conducted monthly from January - March. Sloping Main and Sommers Bay have been included this season as they have been recognised as popular swimming sites.

Results: Sampling sites were compliant with Guideline values.

Comments: Warning signs remain in place at outfall creeks at Parsons Bay and Stewarts Bay based on a history of poor results. A review of all sampling sites is planned for November 2016.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*).

Location of pools and spas:

1. Tasman District Pool, Tasman District School, 1 pool

Sampling: Sampling was conducted in January and February as the pool was open to the public during this time.

For more information contact Karen Loone on (03) 6250 9200.

* 1. Waratah/Wynyard Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Boat Harbour Beach
2. Cam River Somerset
3. East Wynyard Beach
4. Sisters Beach
5. Sisters Creek
6. Somerset Beach

Sampling details: Sampling was conducted weekly at Sisters Creek and Cam River and monthly at the remaining sites, from December - March.

Results: Sampling sites were compliant with Guideline values for primary contact activities, with the exception of Sisters Creek where noncompliant results persisted throughout the sampling period. Results were noncompliant at Cam River on a one occasion in early December.

Comments: Permanent warning signs are in place at Sisters Creek advising the public the water is unsuitable for primary contact.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli, Pseudomonas aeruginosa*).

Location of pools and spas:

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

Sampling: Bacteriological sampling was not conducted.

For more information contact David Kleyweg on (03) 6443 8342.

* 1. West Coast Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling site:

1. West Strahan Beach

Sampling details: Sampling was conducted weekly sampling from December – March.

Results: The sample site complied with the Guideline values.

Comments: A single noncompliant result in mid-January followed a rain event. Resampling returned compliant results and further action was not warranted.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/*E.coli*, *Pseudomonas aeruginosa*).

Location of pools and spas:

1. Queenstown Swimming Pool
2. Rosebery Swimming pool
3. Zeehan Swimming Pool

Sampling: Sampling was conducted monthly from January - March when pools were open.

For more information contact West Coast Council on (03) 6471 4715.

* 1. West Tamar Council

**Natural Recreational Water Bodies**

Type of sampling conducted: Bacteriological (Enterococci).

Location of sampling sites:

1. Beauty Point
2. Deviot
3. Gravelly Beach
4. Greens Beach
5. Kelso
6. Paper Beach
7. Redbill Point
8. Rosevears
9. Lake Trevallyn

Sampling details: Sampling was conducted weekly from December - March.

Results: Sites were compliant with Guideline values, with the exception of one occasion at Paper Beach and one occasion at Greens Beach.

Comments: Where results were noncompliant, resampling returned compliant results.

**Pools and Spas**

Type of sampling conducted: Bacteriological

(Heterotrophic Plate Count, Thermotolerant coliforms/E.coli, *Pseudomonas aeruginosa*).

Location of pools and spas:

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, Grindelwald, 1 pool, 1 spa

Sampling: Sampling was conducted monthly from December - March and other months when pools and spas were open.

For more information contact Rick Chippindall on (03) 6323 9300.

### 5. DISCUSSION

This is the 15th year of reporting on recreational water quality in Tasmania.

Most councils reported having active recreational water quality monitoring programs for the beaches and rivers within their respective municipalities.

In those locations throughout the state where councils’ monitoring programs have indicated swimming is not advisable, appropriate advisory signage has been erected.

The community should note that heavy rainfall affects the water quality of recreational areas, especially near storm water outfalls. This is due to contaminants on the land being washed into the water with the heavy rainfall.

People should avoid swimming near storm water outfalls (if water is flowing) and wait a few days after the rain stops before swimming in urban areas where pollution run-off is likely.

Most councils also reported having monitoring programs for publically accessible swimming pools and spas pools. Where results of sampling were noncompliant with Guideline values, corrective action and subsequent resampling was undertaken.

Dr Mark Veitch

**Director of Public Health**

**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.)

***“Psuedomonas 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.

### 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)