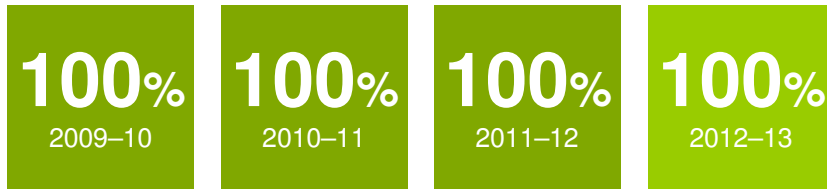


# City of Newcastle Council

## State of the Beaches 2012–2013

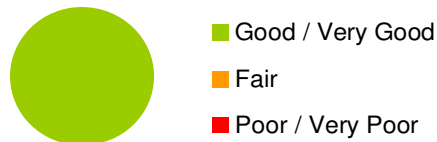
### Overall results

Percentage of sites graded as Good or Very Good:



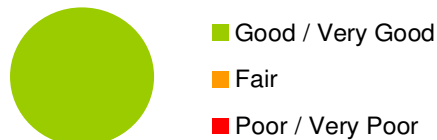
All eleven swimming sites were graded as Very Good or Good in 2012–2013. Excellent results were also recorded in previous years.

### Ocean beaches



All seven ocean beaches were graded as Very Good or Good. The water quality at South Stockton, Nobbys and Newcastle beaches has been of a very high standard for the last ten years or more, with enterococci levels rarely exceeding the safe swimming limit. Bar, Merewether, Burwood North and Burwood South beaches also performed well and water quality was safe for swimming most of the time.

### Ocean baths



Newcastle Baths, Merewether Learners Pool and Merewether Main Pool were graded as Very Good and Canoe Pool was graded as Good. The ocean baths had very good water quality with very few potential sources of contamination.

### Management

Hunter Water Corporation is required to report on any sewage overflows to the stormwater system or swimming areas. If water quality could be affected, the swimming area is closed and temporary on-site warning signs erected. A warning is also placed on the council website, and media releases are issued if appropriate.

Stormwater pollution warning signs have been permanently installed at swimming areas susceptible to stormwater pollution.

Cleaners monitor conditions at the Newcastle ocean baths daily. If contamination is evident, the baths are closed and cleaned, then the water is re-tested before the baths are opened again.

### Best beaches

South Stockton Beach, Nobbys Beach, Newcastle Beach, Newcastle Baths, Merewether Learners Pool and Merewether Main Pool.

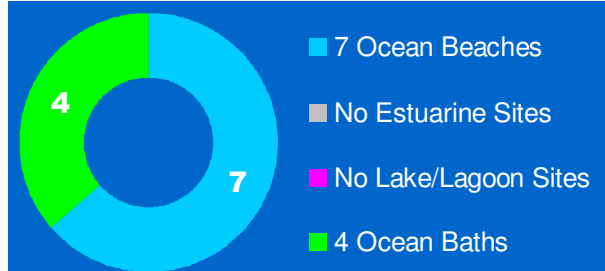
These sites had excellent water quality and were suitable for swimming almost all of the time.

11  
sites

every 6  
days\*

675  
samples

year  
round\*



\* Seven locations were monitored by Hunter Water Corporation as a requirement of Environment Protection Licences. Samples were collected every sixth day throughout the year and every third day during the swimming season at four sites.

Four locations were monitored by Newcastle Council. Samples were collected weekly between October and April and sampling and laboratory analysis was fully funded by the council.

Council is upgrading stormwater systems surrounding Merewether Baths, and working with Hunter Water to upgrade the sewer lines in the area.

Although water quality was of a high standard at Merewether, Bar, Burwood North and Burwood South beaches, a health risk assessment commissioned by Hunter Water Corporation in 2009 indicated that there was a small risk that the effluent plume from Burwood Beach Wastewater Treatment Plant (WWTP) could be driven back to the coast under certain combinations of wind and current. This risk was considered as part of the sanitary inspections for these beaches. The WWTP is currently being upgraded to improve its operational reliability and to cater for population growth. Hunter Water Corporation is also planning to disinfect the effluent to address the small health risk identified in the study, as part of future upgrade works at the plant.



Sampling sites and Beach Suitability Grades in City of Newcastle Council

# South Stockton Beach

Beach Suitability Grade: **Very Good**



See 'How to read this report' for key to map

South Stockton Beach is toward the southern end of a 32 kilometre stretch of beach that extends north to Birubi Point. Beach conditions are generally safe and lifeguards patrol the beach year round.

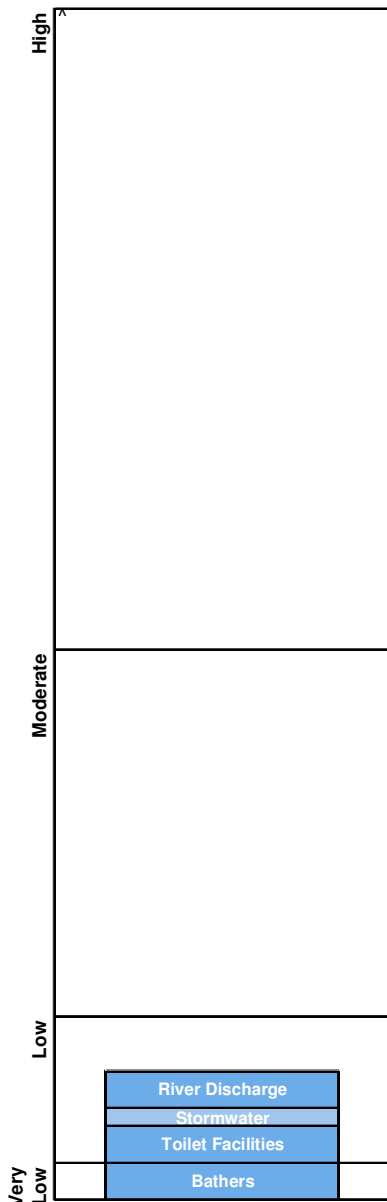
The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few potential sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels increased slightly with increasing rainfall, occasionally exceeding the safe swimming limit after 10 mm of rainfall or more.

The site has been monitored since 1996 and microbial water quality has generally been of a very high standard.

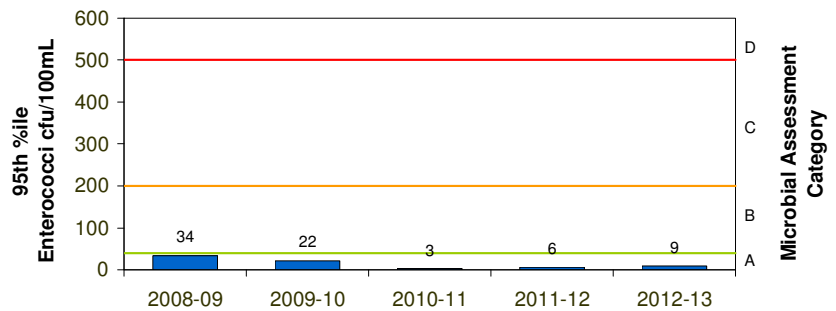
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



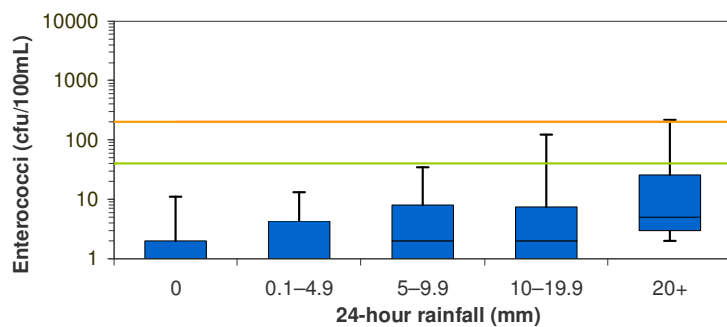
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2011 to April 2013.

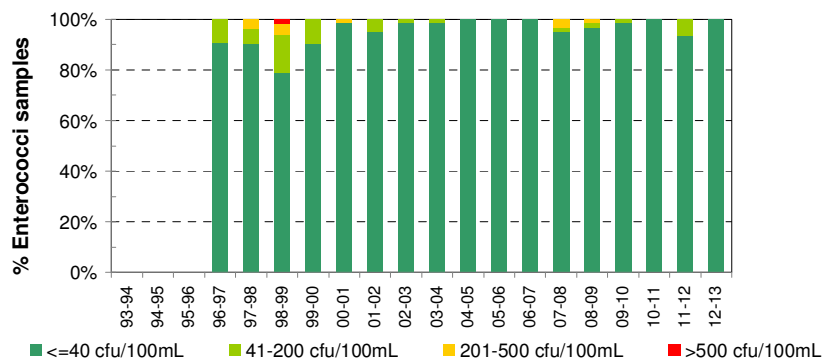


## Response to rainfall

Rainfall from Nobbys (Newcastle) rain gauge

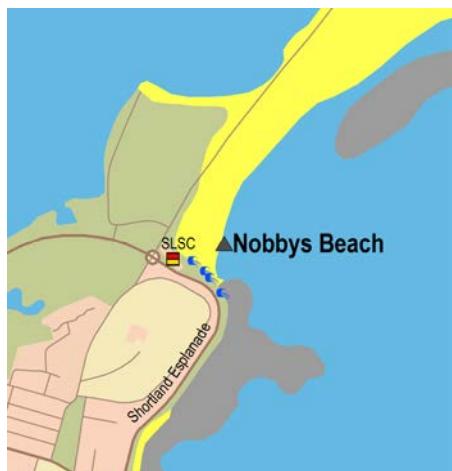


## Trends in enterococci data through time



# Nobbys Beach

Beach Suitability Grade: **Very Good**



See 'How to read this report' for key to map

Nobbys Beach is one kilometre long. Swimming conditions are safest at the southern end. Lifeguards patrol the beach all year round.

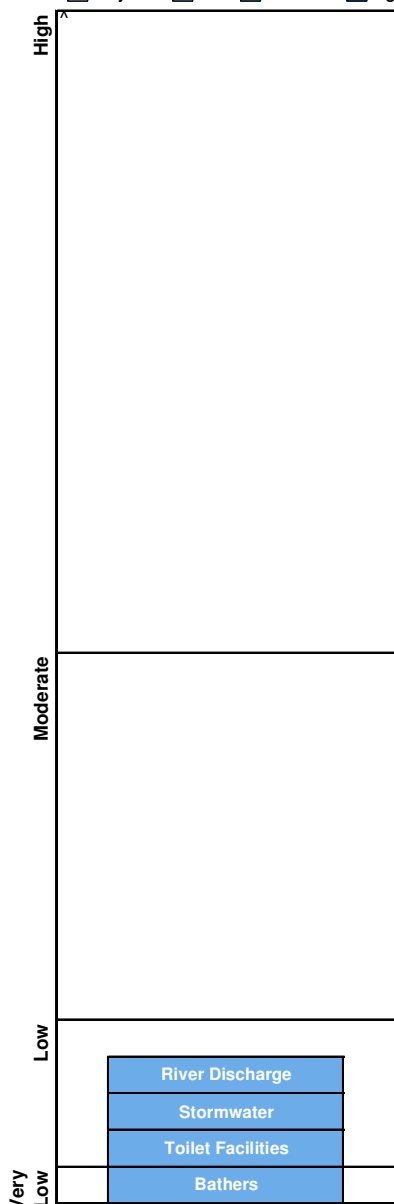
The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few potential sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels increased slightly with increasing rainfall, but generally remained below the safe swimming limit across all rainfall categories.

The site has been monitored for enterococci since 1996. Microbial water quality has been of a consistently high standard throughout this period.

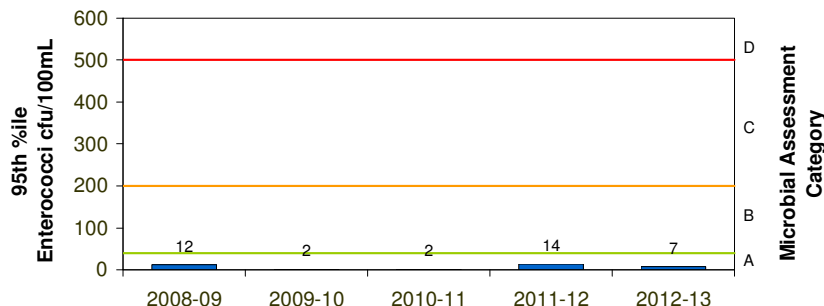
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



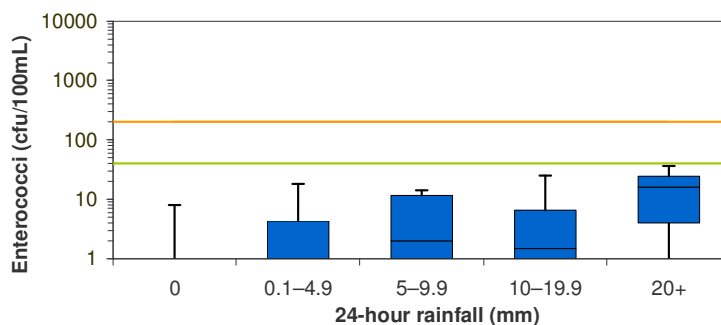
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2011 to April 2013.

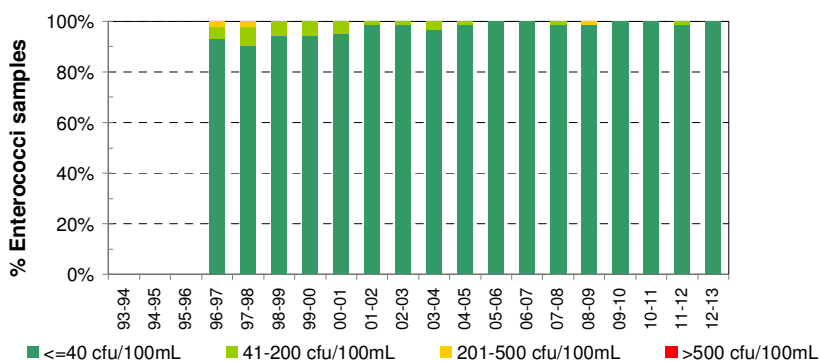


## Response to rainfall

Rainfall from Nobbys (Newcastle) rain gauge



## Trends in enterococci data through time



# Newcastle Baths

Beach Suitability Grade: **Very Good**



See 'How to read this report' for key to map

Newcastle Ocean Baths are at the northern end of Newcastle Beach, next to Canoe Pool. Council inspectors patrol the pool from October to April. The baths are emptied, cleaned and filled weekly throughout the year.

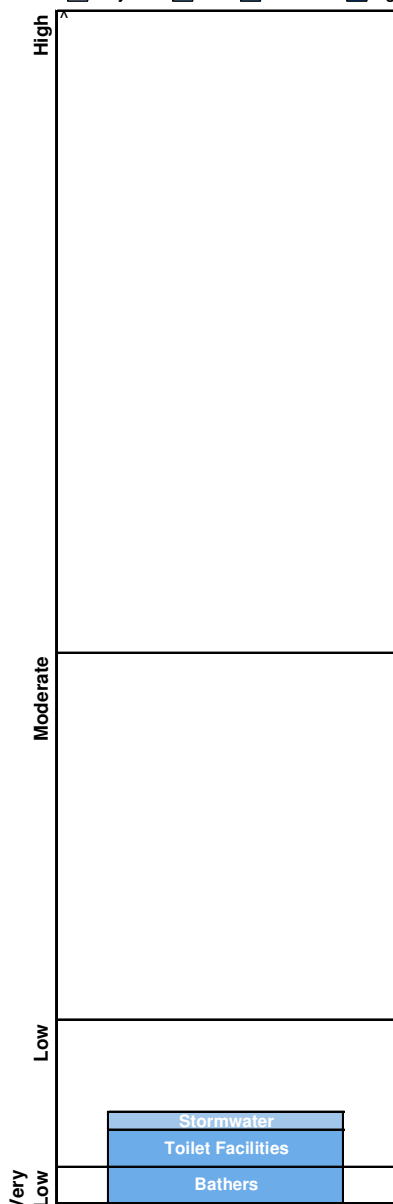
The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few potential sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels had little response to rainfall and remained below the safe swimming limit across all rainfall categories.

The site has been monitored for enterococci since 2009.

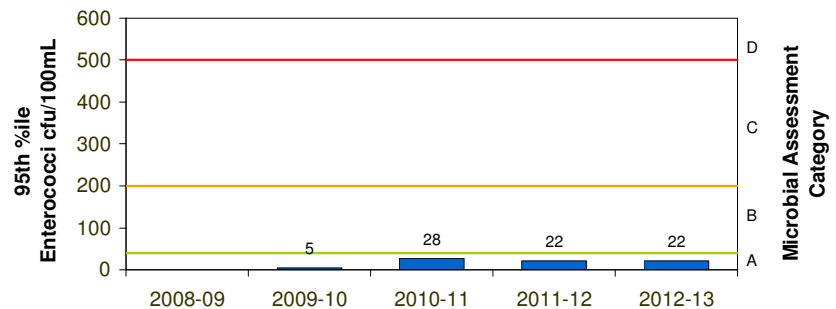
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



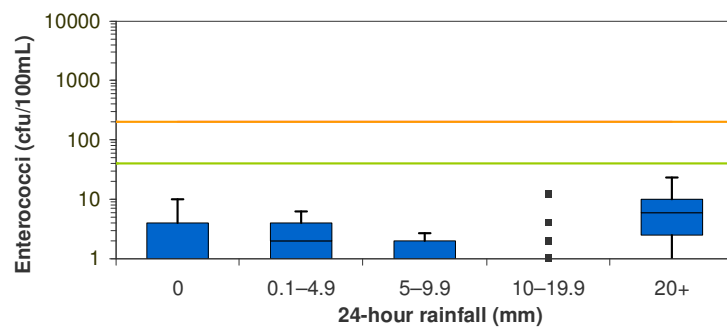
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2010 to January 2013.

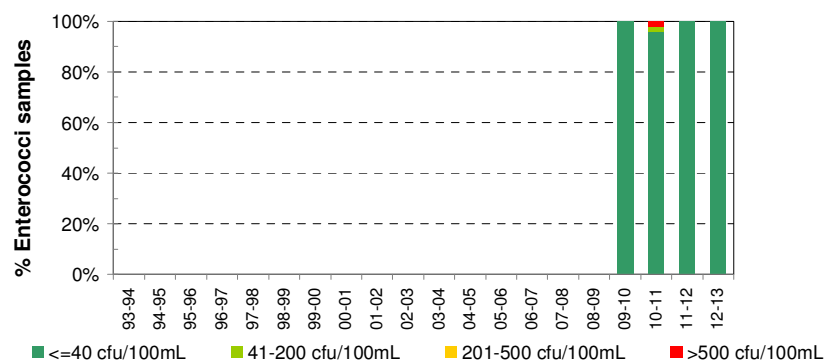


## Response to rainfall

Rainfall from Nobbys (Newcastle) rain gauge



## Trends in enterococci data through time



# Canoe Pool

Beach Suitability Grade: **Good**



See 'How to read this report' for key to map

Canoe Pool is on the rock platform at the northern end of Newcastle Beach, next to Newcastle Ocean Baths. Lifeguards patrol the pool from October until April. The pool is emptied, cleaned and refilled each week during the summer season.

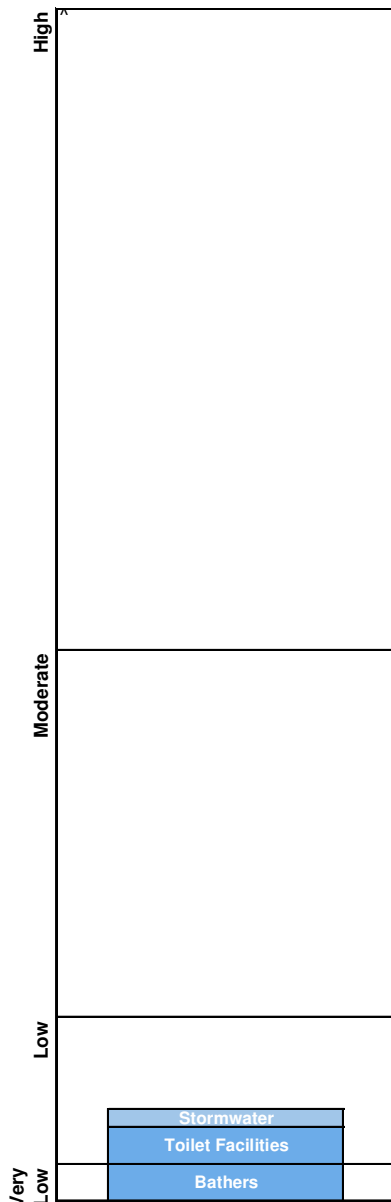
The Beach Suitability Grade of Good indicates that the microbial water quality is generally suitable for swimming but the water may be susceptible to pollution from several minor sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels increased slightly in response to rainfall and generally remained below the safe swimming limit across all rainfall categories.

The site has been monitored for enterococci since 2009. Water quality has been of a very high standard.

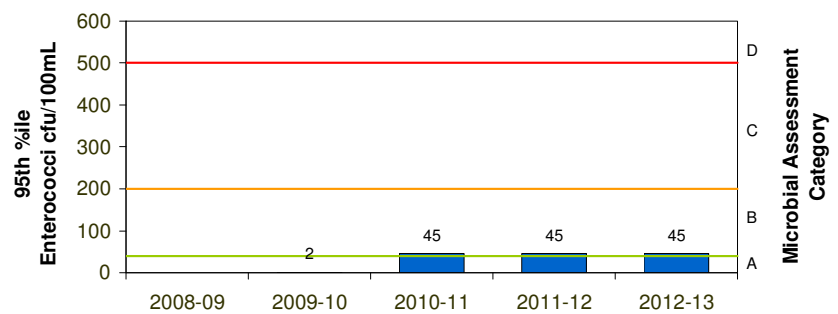
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



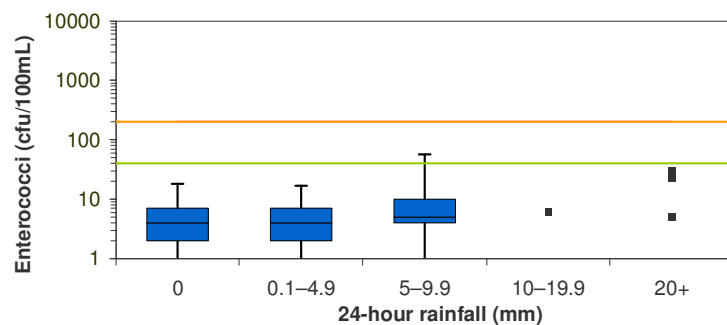
## Microbial Assessment: B

Monitoring period for 2012–13 result is December 2009 to February 2013.

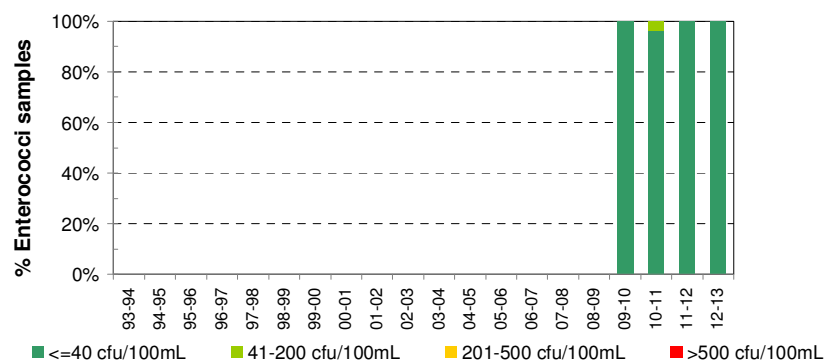


## Response to rainfall

Rainfall from Nobbys (Newcastle) rain gauge



## Trends in enterococci data through time



# Newcastle Beach

Beach Suitability Grade: **Very Good**



Newcastle Beach is approximately 650 metres long. Swimming can be dangerous as there are three permanent rips along the length of the beach. Lifeguards patrol the beach all year round.

The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few potential sources of faecal contamination.

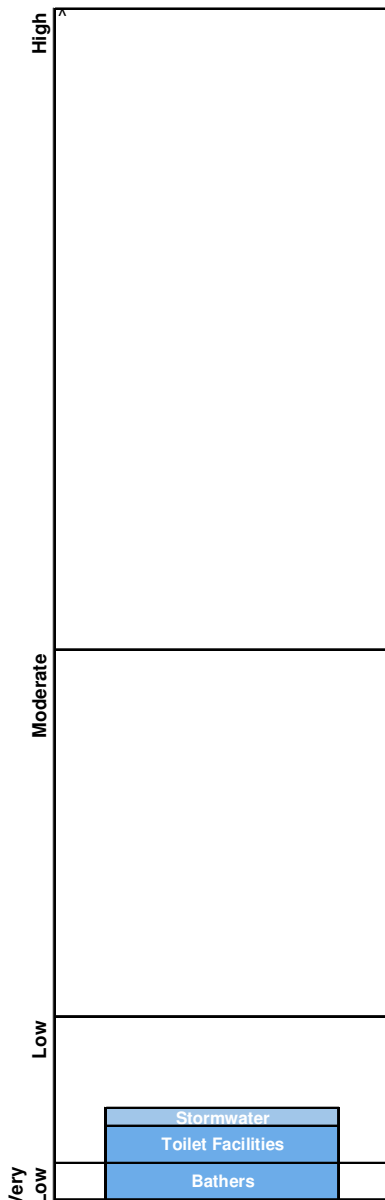
The response to rainfall graph indicates that enterococci levels increased slightly with increasing rainfall, but generally remained below the safe swimming limit across all rainfall categories.

The site has been monitored since 1996 and microbial water quality has generally been of a very high standard.

See 'How to read this report' for key to map

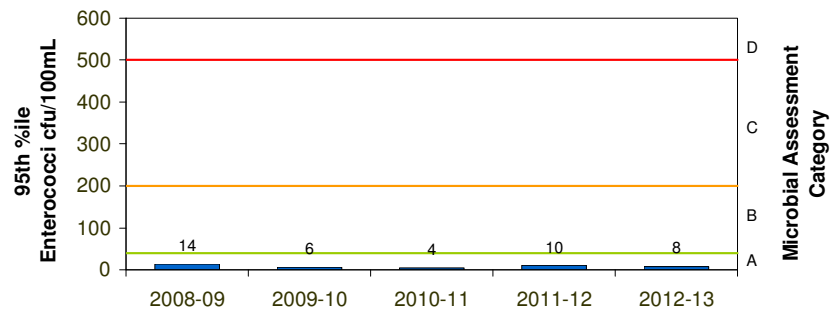
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



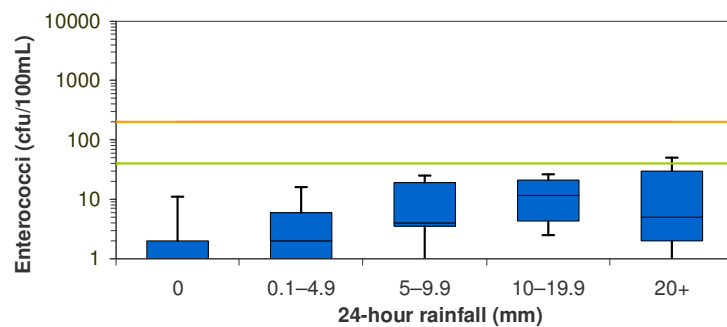
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2011 to April 2013.

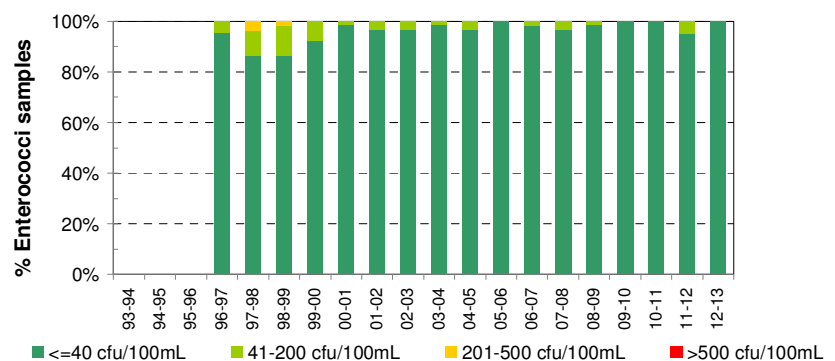


## Response to rainfall

Rainfall from Nobbys (Newcastle) rain gauge



## Trends in enterococci data through time





# Bar Beach

Beach Suitability Grade: **Very Good**



Bar Beach is approximately 500 metres long and is bordered by rock platforms. Conditions can be hazardous, as it is an open beach with numerous rips. Lifeguards patrol the beach all year round.

The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few potential sources of faecal contamination.

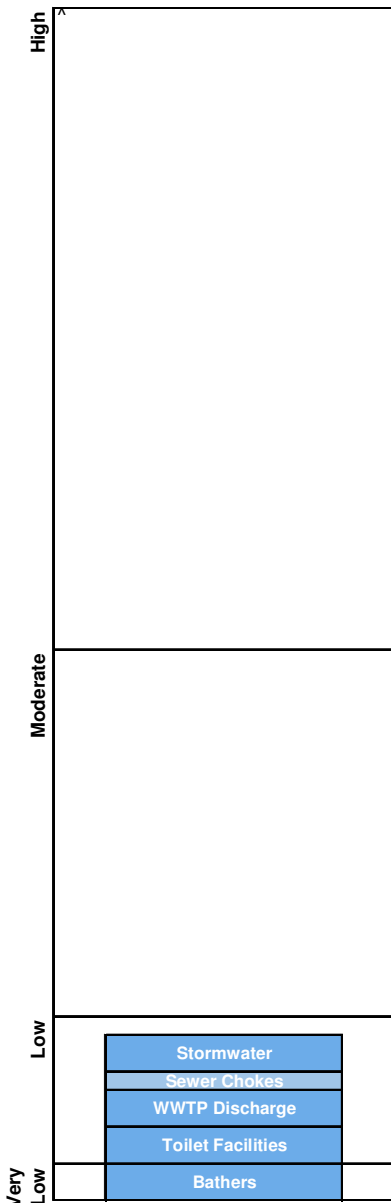
The response to rainfall graph indicates that enterococci levels increased slightly with increasing rainfall, often exceeding the safe swimming limit after 10 mm or more of rainfall.

The site has been monitored since 1996 and microbial water quality has generally been of a high standard.

See 'How to read this report' for key to map

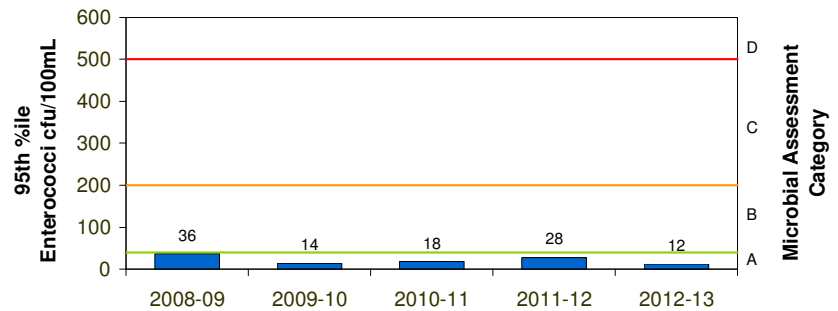
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



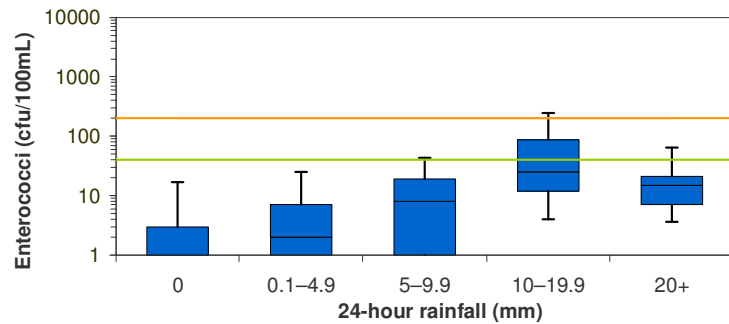
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2011 to April 2013.

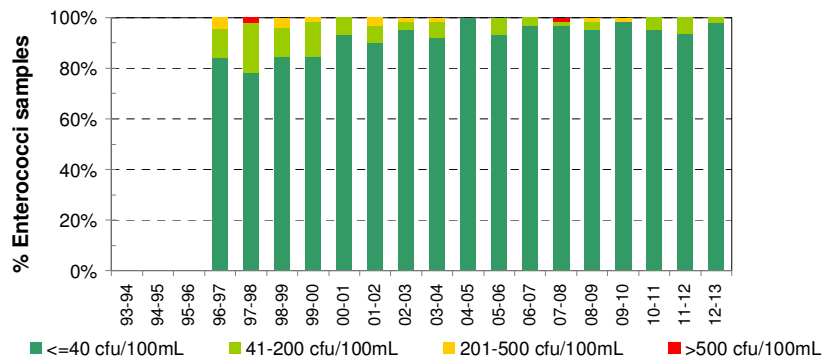


## Response to rainfall

Rainfall from Nobbys (Newcastle) rain gauge



## Trends in enterococci data through time



# Merewether Beach

Beach Suitability Grade: **Good**



Merewether Beach is at the southern end of a 900 metre stretch of beach that extends north to Dixon Park Beach. There are two ocean pools on the southern rock platform. The beach is patrolled year round.

The Beach Suitability Grade of Good indicates that the microbial water quality is considered suitable for swimming most of the time but the water may be susceptible to pollution from a number of potential sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels increased with increasing rainfall, often exceeding the safe swimming limit after 20 mm of rainfall or more.

The site has been monitored since 1996 and microbial water quality has generally been of a high standard.

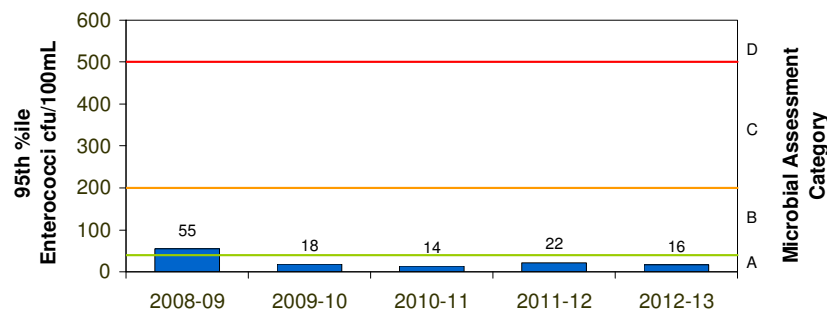
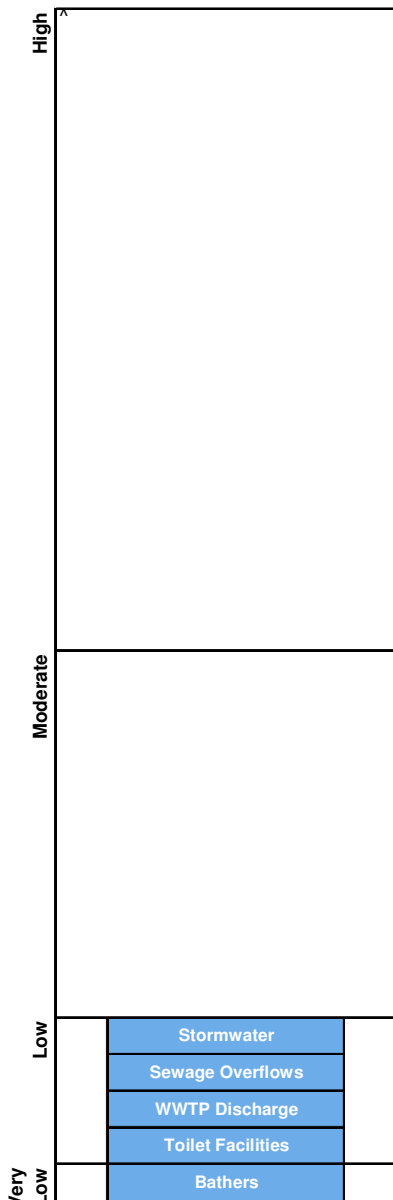
See 'How to read this report' for key to map

## Sanitary Inspection: Moderate

## Microbial Assessment: A

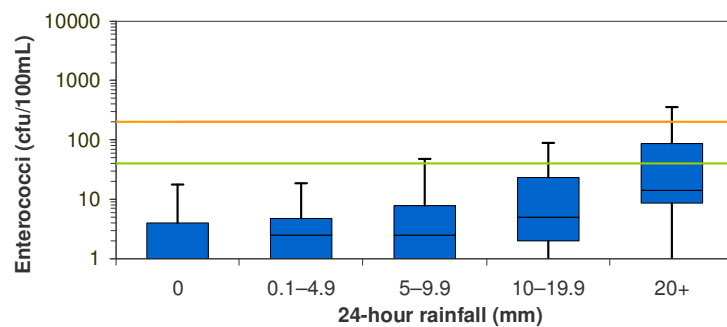
Source: ■ Very Low ■ Low ■ Moderate ■ High

Monitoring period for 2012–13 result is September 2011 to April 2013.

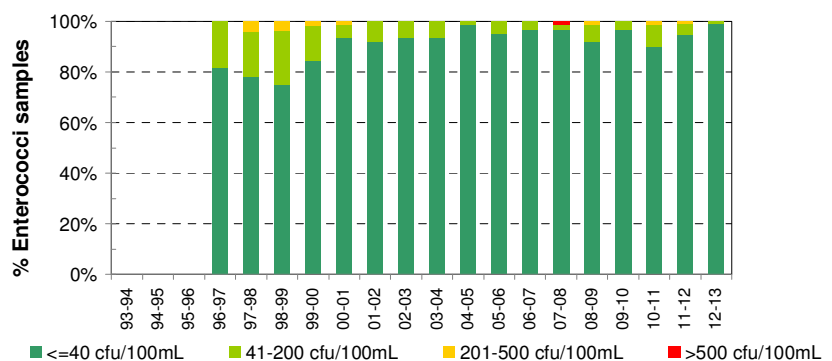


## Response to rainfall

Rainfall from Burwood Beach WWTP rain gauge



## Trends in enterococci data through time



# Merewether Pool (Learners) Beach Suitability Grade: **Very Good**



See 'How to read this report' for key to map

Merewether Learners Pool is at the southern end of Merewether Beach, adjoining Merewether Main Pool. Council inspectors patrol the pool from October to April. The baths are emptied, cleaned and refilled on a weekly basis throughout the whole year.

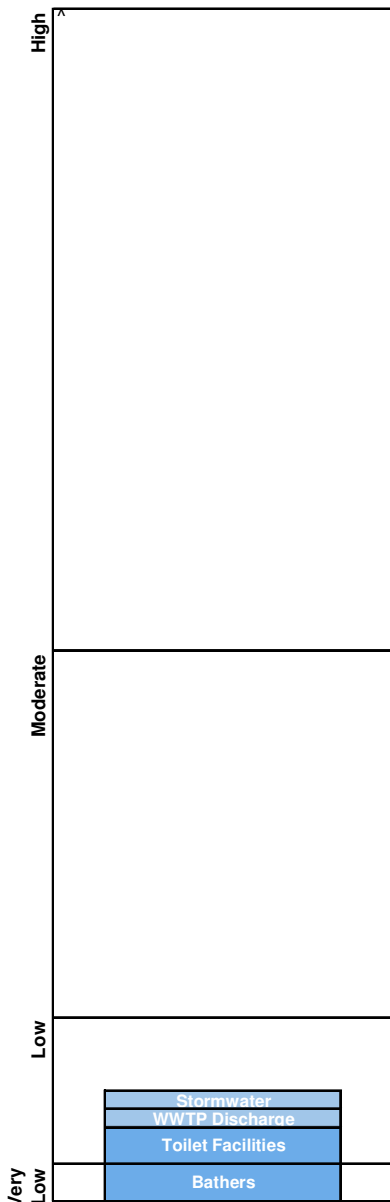
The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few significant sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels showed little response to rainfall and remained below the safe swimming limit across all rainfall categories.

The site has been monitored for enterococci since 2009 and microbial water quality has been of a high standard.

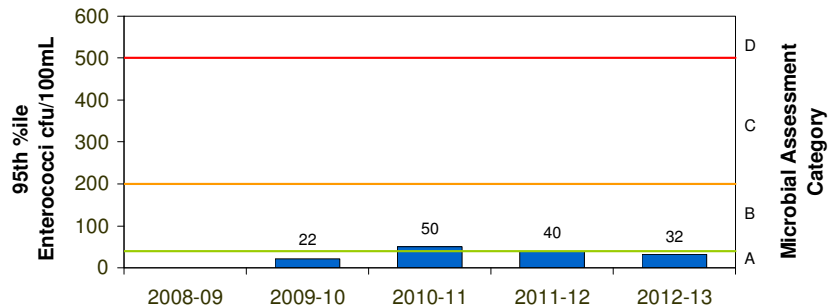
## Sanitary Inspection: **Low**

Source: ■ Very Low ■ Low ■ Moderate ■ High



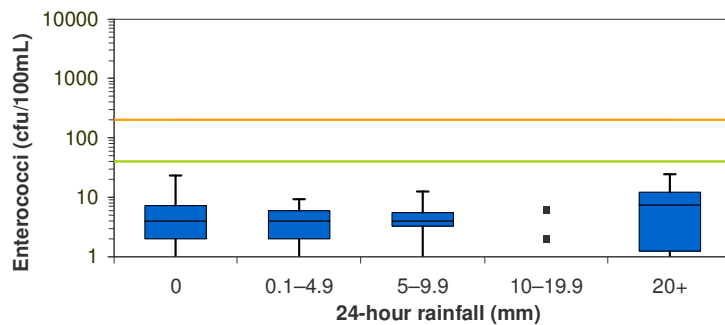
## Microbial Assessment: **A**

Monitoring period for 2012–13 result is October 2009 to April 2013.

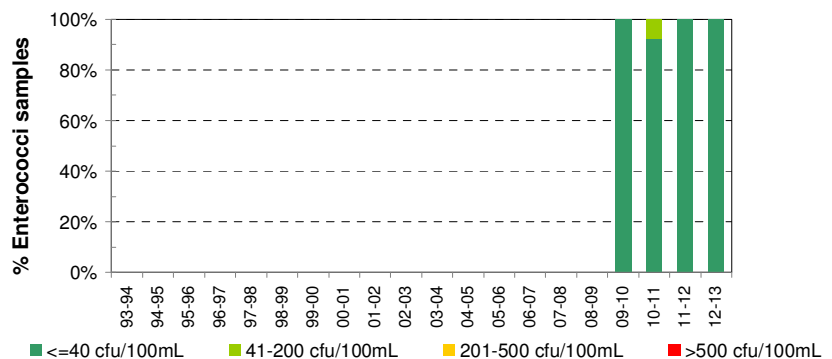


## Response to rainfall

Rainfall from Burwood Beach WWTP rain gauge



## Trends in enterococci data through time



# Merewether Pool (Main)

Beach Suitability Grade: **Very Good**



See 'How to read this report' for key to map

Merewether Main Pool is at the southern end of Merewether Beach, next to Merewether Learners Pool. Council inspectors patrol the pool from October to April. The baths are emptied, cleaned and refilled twice weekly throughout the bathing season, and on a weekly basis for the remainder of the year.

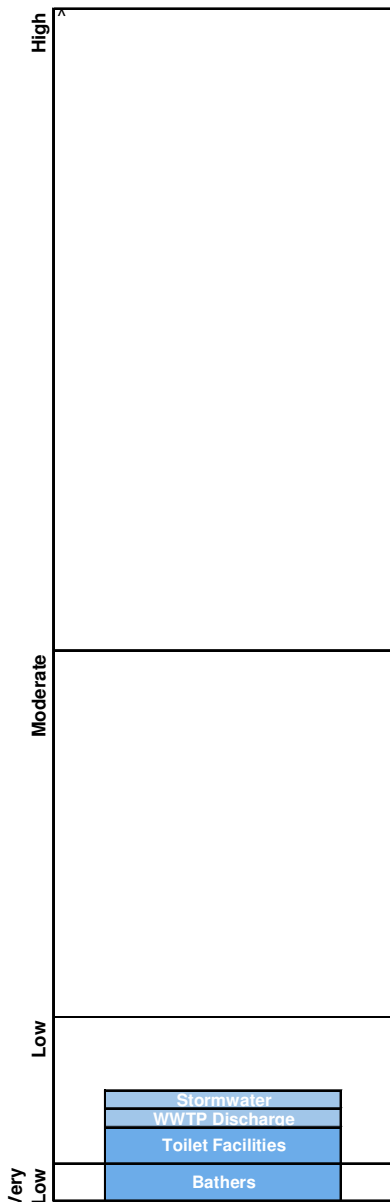
The Beach Suitability Grade of Very Good indicates that the microbial water quality is considered suitable for swimming almost all of the time, with few significant sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels had little response to rainfall and remained below the safe swimming limit across all rainfall categories.

The site has been monitored for enterococci since 2009 and microbial water quality has generally been of a very high standard.

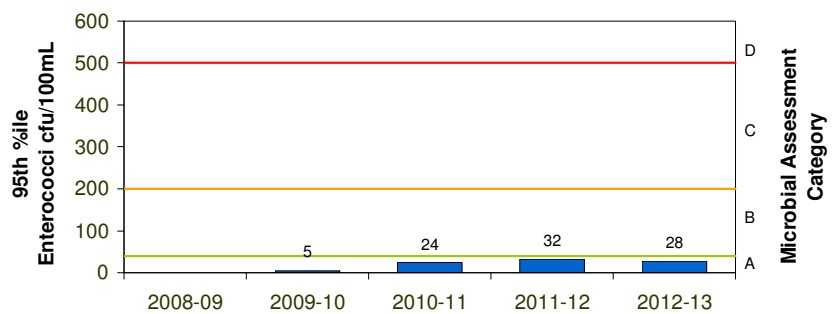
## Sanitary Inspection: Low

Source: ■ Very Low ■ Low ■ Moderate ■ High



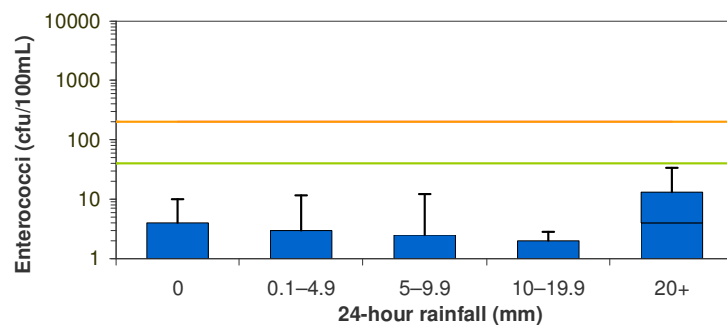
## Microbial Assessment: A

Monitoring period for 2012–13 result is November 2010 to February 2013.

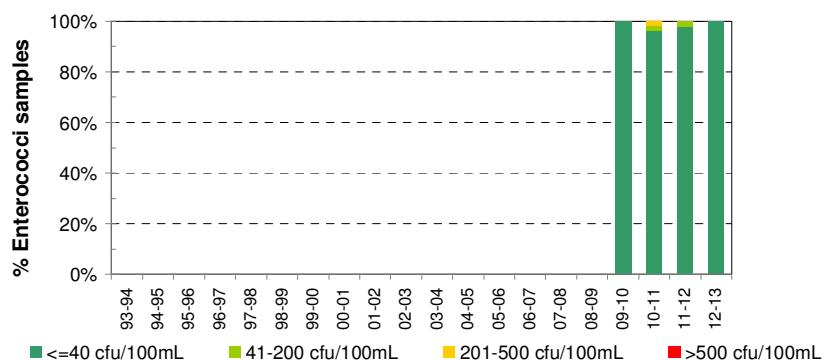


## Response to rainfall

Rainfall from Burwood Beach WWTP rain gauge



## Trends in enterococci data through time



# Burwood North Beach

Beach Suitability Grade: **Good**



See 'How to read this report' for key to map

Burwood North Beach is toward the northern end of an 800 metre stretch of beach. It is backed by Glenrock State Conservation Area and Burwood Beach Wastewater Treatment Plant.

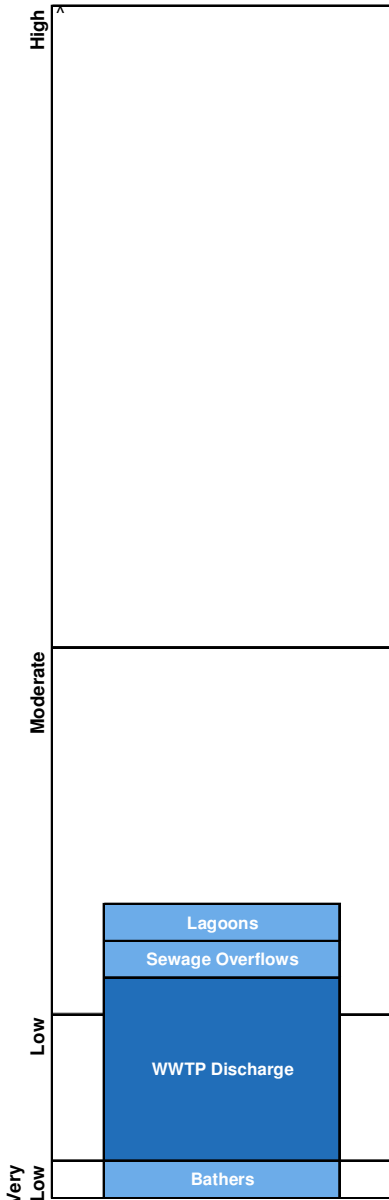
The Beach Suitability Grade of Good indicates that the microbial water quality is suitable for swimming most of the time but the water may be susceptible to pollution from a number of potential sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels increased slightly with increasing rainfall, occasionally exceeding the safe swimming limit in response to 10 mm of rainfall.

The site has been monitored since 1996 and microbial water quality has generally been of a high standard.

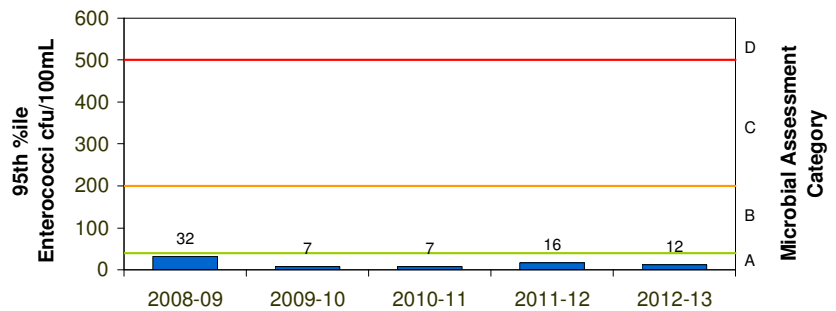
## Sanitary Inspection: Moderate

Source: ■ Very Low ■ Low ■ Moderate ■ High



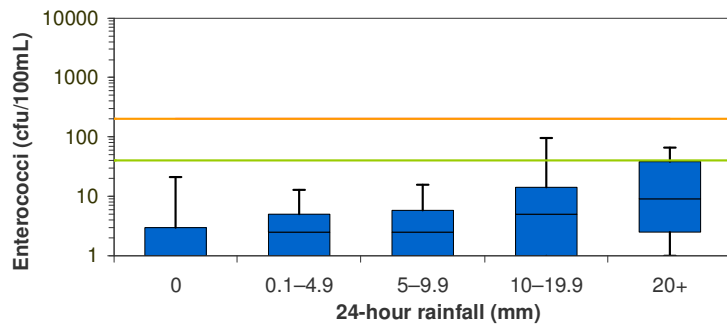
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2011 to April 2013.

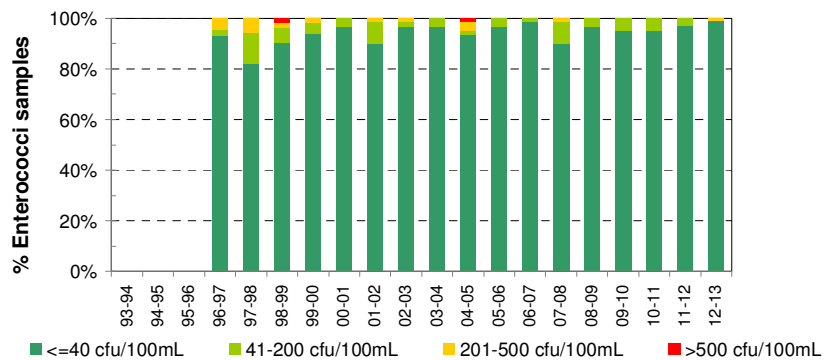


## Response to rainfall

Rainfall from Burwood Beach WWTP rain gauge



## Trends in enterococci data through time



# Burwood South Beach

Beach Suitability Grade: **Good**



See 'How to read this report' for key to map

Burwood South Beach is located towards the southern end of an 800 metre stretch of beach. It is backed by Glenrock State Conservation Area and Burwood Beach Wastewater Treatment Plant.

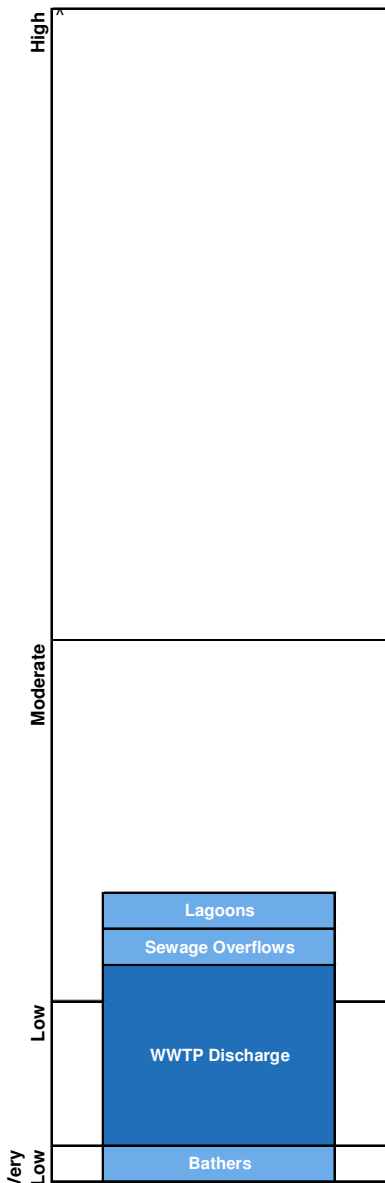
The Beach Suitability Grade of Good indicates that the microbial water quality is considered suitable for swimming most of the time but the water can be susceptible to pollution from a number of potential sources of faecal contamination.

The response to rainfall graph indicates that enterococci levels increased slightly with increasing rainfall, occasionally exceeding the safe swimming limit in response to 10 mm of rainfall.

The site has been monitored since 1996 and microbial water quality has generally been of a high standard.

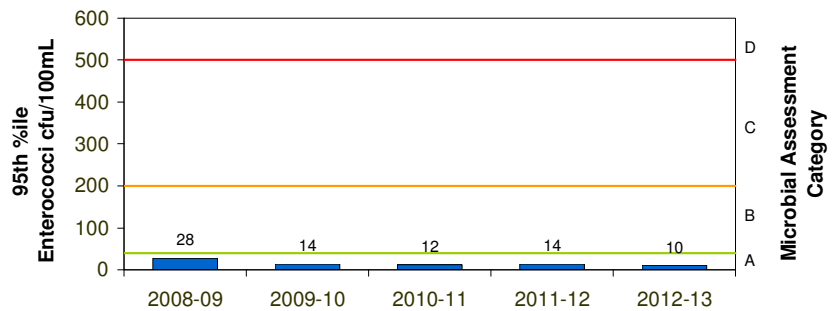
## Sanitary Inspection: Moderate

Source: ■ Very Low ■ Low ■ Moderate ■ High



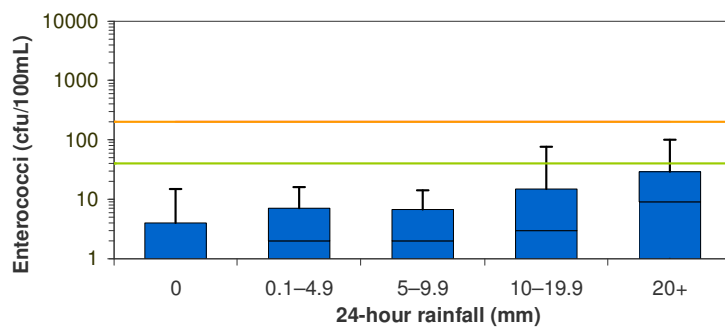
## Microbial Assessment: A

Monitoring period for 2012–13 result is September 2011 to April 2013.



## Response to rainfall

Rainfall from Burwood Beach WWTP rain gauge



## Trends in enterococci data through time

