

# your guide to our creek and estuary water quality

Water quality report card 2012



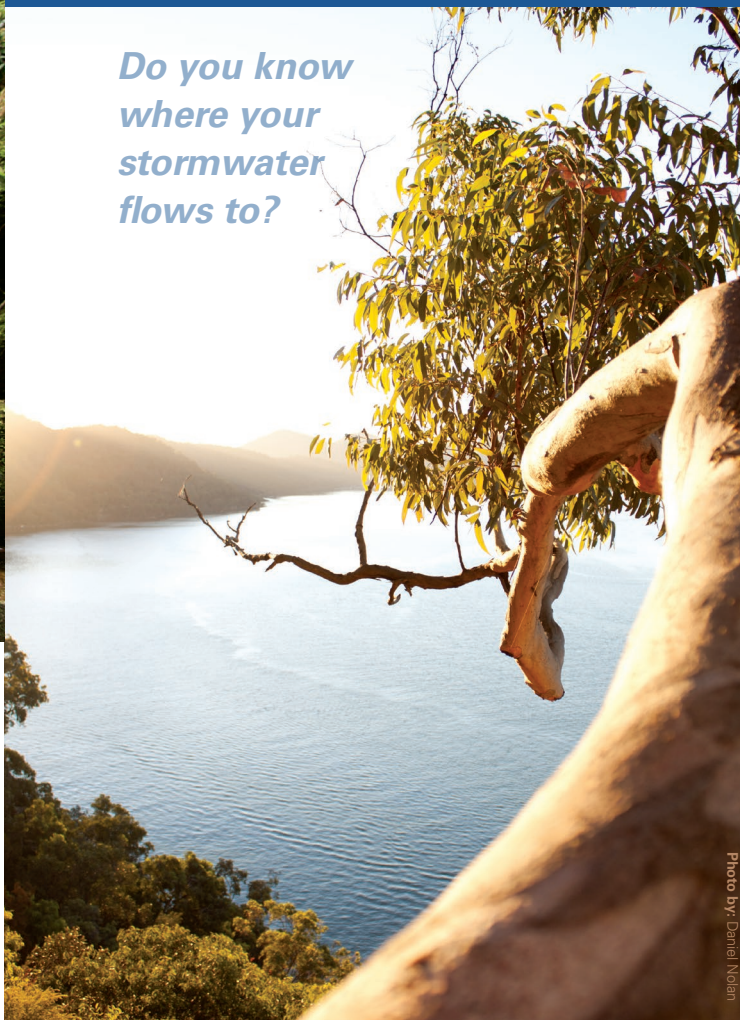
## What is a Catchment?

A catchment is the area of land from which stormwater drains into a creek, estuary or river system. Whatever happens in that catchment affects the waterways within it.

There are four main catchment areas within Hornsby Shire:

- Cowan Creek
- Berowra Creek
- Hawkesbury River
- Upper Lane Cove River

*Do you know  
where your  
stormwater  
flows to?*



## Is it safe to go swimming?

Monitoring has shown that wet weather, and resultant contaminated stormwater, can adversely affect local water quality for both swimming and boating.

Council has developed a 'real time' swimming risk indicator system based on water salinity data collected from five water quality monitoring buoys.

Check out the swimming risk indicator at [hornsby.nsw.gov.au/waterquality](http://hornsby.nsw.gov.au/waterquality)



## Help prevent stormwater pollution!

Do your bit ... STOP car wash detergent, paint, excess garden fertilisers and pesticides, grass clippings, cigarette butts and any other litter from ending up in our gutters, stormwater drains and local creeks.

**Remember... the drain is just for rain**

**Hawkesbury**  
estuary  
program

**Catchments**  
remediation  
program

Natural Resources Branch  
Hornsby Shire Council  
296 Pacific Highway, Hornsby  
PO Box 37, Hornsby NSW 1630

Telephone 9847 6874  
8.30am-5pm Monday to Friday

[hornsby.nsw.gov.au/water](http://hornsby.nsw.gov.au/water)

Photo by: Daniel Nolan

## Why is water quality important?

Water is the lifeblood of our planet.

Water quality is therefore one of the best indicators of overall environmental health.

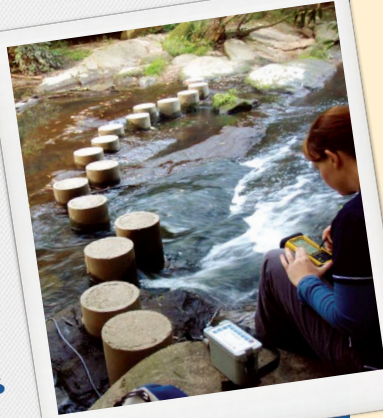
Waterway health is an issue of concern for Hornsby Shire Council, particularly following algal blooms, fish kills, muddy water and sewage contamination within Berowra Creek during the late 1980s early 1990s.

## Testing the waters

Since 1994 Council has regularly tested the Shire's waterways and compares results to clean 'reference' creeks in local National Parks.

A multi-sensor probe is used to monitor water, with collected samples sent for lab analysis.

Monitoring water quality allows us to assess, through time, the impact of land-use on waterways and to ensure that works funded by the Catchments Remediation Rate (CRR) achieve best possible environmental outcomes.



## Findings (see centrefold Water Quality Report Card)

- National Park 'reference' creeks (test sites 36 and 37) and estuarine test sites have the best water quality
- Generally fair to poor water quality is found just downstream of our developed urban and rural areas
- The most polluted water is sampled around our industrial estates (test sites 10, 12 and 13)
- During heavy rain, water quality decreases because water becomes contaminated with suspended solids, nutrients and bacteria washed off the catchment
- Wet weather can cause a higher incidence of sewer overflows
- Very few creeks within Hornsby Shire are not impacted in some way by human development

The **good news** is that episodes of algal blooms are reducing – and that's good for fish, oysters and people.

The **bad news** is that nutrients, including fertilisers, contaminate our creeks. Leaking septic tanks and sewage pipes are also contributing.

- ✦ 419 pollution traps (stormwater quality improvement devices) are installed and maintained throughout Hornsby Shire catchments.
- ✦ Since 1996, these pollution traps have captured enough waste material to fill the equivalent of 66,500 Hornsby red-lid garbage bins or almost four Olympic-sized swimming pools.
- ✦ Council manages 5 monitoring buoys in the lower Hawkesbury estuary, which deliver real-time data on water quality.



## Oyster trivia

Oysters can filter up to five litres of water each hour.

Oysters are extremely sensitive to water quality and susceptible to coastal pollution.

The gonads of the oyster are considered to be the tastiest part.

A 'spat' is the name for a baby oyster.

Oysters are considered tastier during the months that contain 'r'.

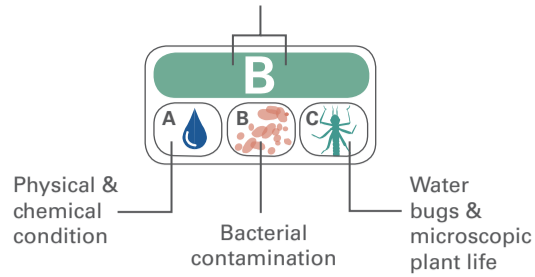
NSW oyster farmers produce more than 100 million oysters per year - a \$35 million industry

- ✦ Water running southwards off Pennant Hills Road will eventually flow under the Sydney Harbour Bridge.
- ✦ The total length of creek lines within Hornsby Shire is 1,190 kms.
- ✦ 620,000 litres of sewage effluent was collected from boats at Kangaroo Point Pumpout Facility 2008–2012.

Did you know...

# Your water quality report card

## Summary Waterway Health Grading



## What do the grades mean?

<b>A</b>	Excellent	Indicates clean water and a healthy ecosystem
<b>B</b>	Good	
<b>C</b>	Fair	
<b>D</b>	Poor	
<b>F</b>	Fail	Implies water quality is always poor and the ecosystem severely impaired

