

IMPROVING WATER QUALITY

What causes poor water quality?

The quality of the waters in our rivers is naturally influenced by inputs of salts and nutrients from the surrounding landscape and its geology including estuarine areas. However, water quality can also be degraded by a wide range of factors including point source activities: - such as sewage discharge, chemicals, acid sulfate discharge, stormwater discharge and black water following floods. Diffuse source activities such as land clearing and cultivation, urban and agricultural development also impact water quality. The exotic fish species Carp are increasing in numbers within our waterways, they increase levels of soil particles in the water due to their feeding methods.

Why should I be concerned about water quality?

How landholders manage their waterways impacts: stock and irrigation water for downstream users; fish stocks; wildlife (e.g. waterbirds); and the recreational and aesthetic values of waterways throughout the catchments.

What are some of the signs of poor water quality?

Significant areas of bare soil visible with only pastures on top or sides of banks. Muddy water even without rain. Algal growth along water edges. The presence of cattle erosion, hoof pugging and manure along banks from unfenced stock contaminating water. The presence of Carp in the water, Lack of vegetation along riverbanks.



Riparian areas are places where land adjoins rivers and streams. They support a wide range of plants and animals that contribute to water quality in the Richmond River.



Best Management Practice for improving water quality

| Checklist | Yes | No | Solution |
|--|-----|----|---|
| Can stock access the riparian area? | ✓ | | Observe the patterns of stock movement around your waterways. Look at ways to prevent access, providing them with water at another location. Refer to "Managing stock in and around waterways", for ideas on a solution that will prevent further erosion. |
| Can farm runoff flow into the creeks and rivers | ✓ | | Native vegetation will filter and disperse runoff into waterways. Look at planting a buffer of native grasses to assist with this problem. |
| Is there native vegetation growing in the riparian area? | | ✓ | Plant local native species within the riparian area. Refer to "Revegetating streams in the Richmond catchment" for advice. Contact Landcare for advice on funding. |
| Can chemicals and fertilisers from the farm enter the riparian area? | ✓ | | Chemical and fertiliser application close to any waterway requires care. Read MSDS sheets before applying as some chemicals and fertilisers can be harmful to aquatic life. Store away from riparian areas. Apply when weather conditions are suitable eg. Low chance of adverse wind, predicted storms, or rainfall. |

Where to find help.

Local Contacts:

Richmond River County Council

Floodplain Project Officer

P: 0266 218 314 E: floodplain@rrcc.nsw.gov.au

Lismore City Council

Environmental Strategies Team

P: 1300 878 387

Office of Environment and Heritage

Coast and Estuaries Officer

P: 0266 270 200

North Coast Local Land Services

P: 1300 795 299 E: admin.northcoast@lls.nsw.gov.au

For advice on weed management:

Far North Coast Weeds

P: 0266 233 833 E: fncw@fncw.nsw.gov.au

For advice on funding options:

Richmond Landcare inc.

P: 0266 191 582 E: info@richmondlandcare.org

Northern Landcare Support Services

P: 02 6632 3722 E: info@nlss.com.au

Further reading:

"Revegetating Streams in the Richmond Catchment",
Provides detailed information on species selection and
planting.

"Stock and Waterways—a managers guide"

Note: The information and best practice approaches provided in the enclosed publications are current, however some of the contact details may have changed.

For further information refer to the contact list provided