



### Water Quality

Exceedance of trigger values (MER, ANZECC)  
pH, DO%, Conductivity, Turbidity, Chlorophyll  
*a* and nutrients (TN, TP, NO<sub>x</sub>, SRP)

### Riparian Condition

Habitat, Native Species, Species Cover, Debris  
and Management  
Relative to reference condition

### Geomorphic Condition

Bank and Bed condition  
Relative to River Style reference condition

### Aquatic Macroinvertebrates






Abundance, Richness, EPT taxa and SIGNAL2  
Relative to catchment expected values

### Freshwater Fish

Nativeness and Expectedness  
Relative to reference condition

### Estuarine Zooplankton

Abundance, Richness  
Size-frequency distributions

| Site Name  | Example of Site Grades             |  |
|--|------------------------------------|--|
| <b>B-</b>  | Average of all grades for the Site |  |
|  A- | Water Quality grade                |  |
|  B- | Riparian Condition grade           |  |
|  C+ | Geomorphic Condition grade         |  |
|  C+ | Macroinvertebrate grade            |  |
|  B+ | Fish grade                         |  |

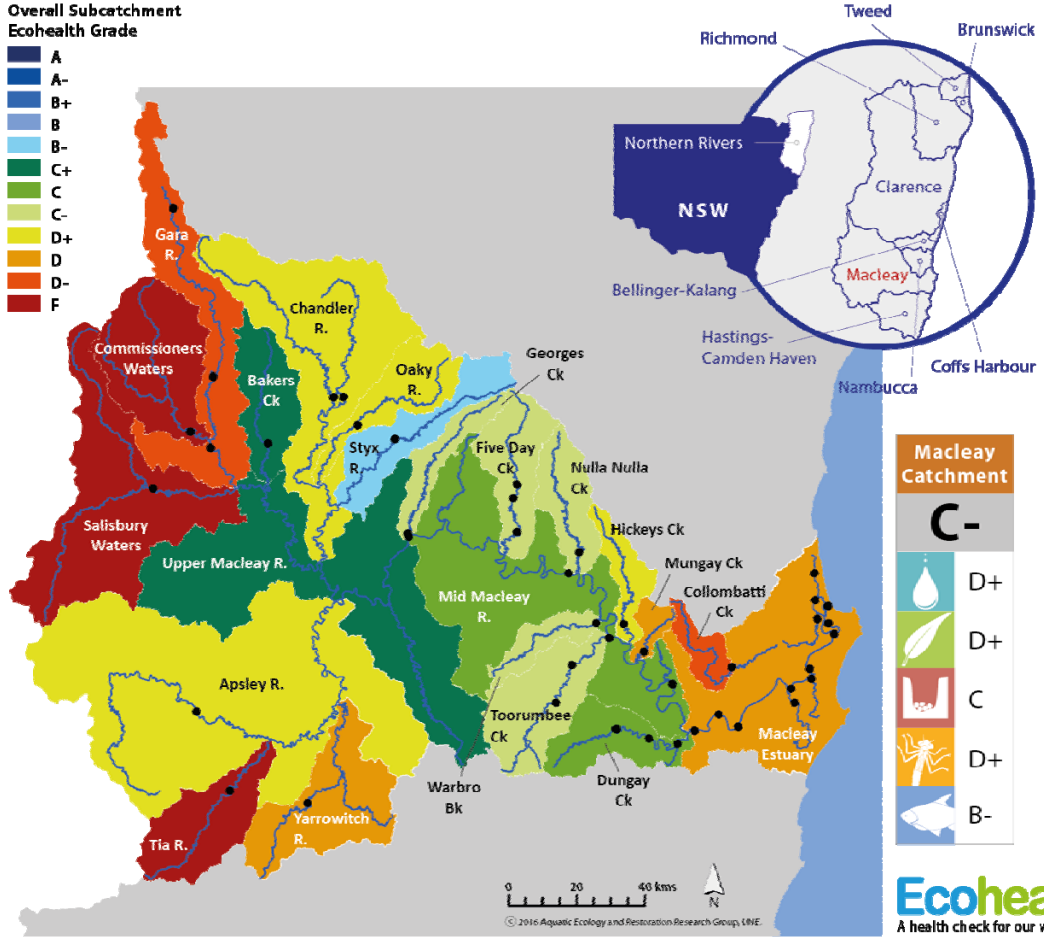
| Condition Score | Grade | Result    |
|-----------------|-------|-----------|
| 91-100          | A     | Excellent |
| 76-90           | B     | Good      |
| 61-75           | C     | Fair      |
| 46-60           | D     | Poor      |
| 0-45            | F     | Very Poor |



| Gara River | Commissioners Waters | Salisbury Waters | Apsley River | Tia River | Yarrowitch River | Bakers Creek | Chandler River | Oaky River | Styx River | Georges Creek | Upper Macleay R. | Mid Macleay R. | Macleay Estuary |
|------------|----------------------|------------------|--------------|-----------|------------------|--------------|----------------|------------|------------|---------------|------------------|----------------|-----------------|
| <b>D-</b>  | <b>F</b>             | <b>F</b>         | <b>D+</b>    | <b>F</b>  | <b>D</b>         | <b>C+</b>    | <b>D+</b>      | <b>D+</b>  | <b>B-</b>  | <b>C-</b>     | <b>C+</b>        | <b>C</b>       | <b>D</b>        |
| F          | F                    | F                | F            | D-        | F                | D+           | F              | D+         | D          | F             | D+               | C+             | D               |
| D-         | F                    | F                | B-           | F         | D+               | B            | C              | D-         | B+         | C-            | B-               | D              | D-              |
| C          | D-                   | D-               | B-           | D         | D                | B-           | C+             | C-         | A-         | C             | B                | C+             | C-              |
| F          | F                    | F                | F            | F         | C-               | C            | D              | D+         | C+         | B+            | C                | D              |                 |
| D-         |                      |                  | C+           |           |                  | C+           | B-             | C          |            |               | B-               | B              |                 |

**Overall Subcatchment Ecohealth Grade**

- A
- A-
- B+
- B
- B-
- C+
- C
- D+
- D
- D-
- F



| Five Day Creek | Nulla Nulla Creek | Toorumbee Creek | Dungay Creek |
|----------------|-------------------|-----------------|--------------|
| <b>C-</b>      | <b>C-</b>         | <b>C-</b>       | <b>C</b>     |
| C-             | B-                | C-              | C+           |
| C-             | D+                | C-              | C            |
| D+             | D                 | D+              | C+           |
| B              | D                 | C+              | D+           |
| A-             | A-                | B               | B+           |

| Warbro Brook | Hickeys Creek | Deep Creek | Collombatti Creek |
|--------------|---------------|------------|-------------------|
| <b>C-</b>    | <b>D+</b>     | <b>D</b>   | <b>D-</b>         |
| F            | D+            | D          | D-                |
| D+           | C-            | B          | C                 |
| C+           | C+            | C-         | C-                |
| C-           | D-            | F          | F                 |

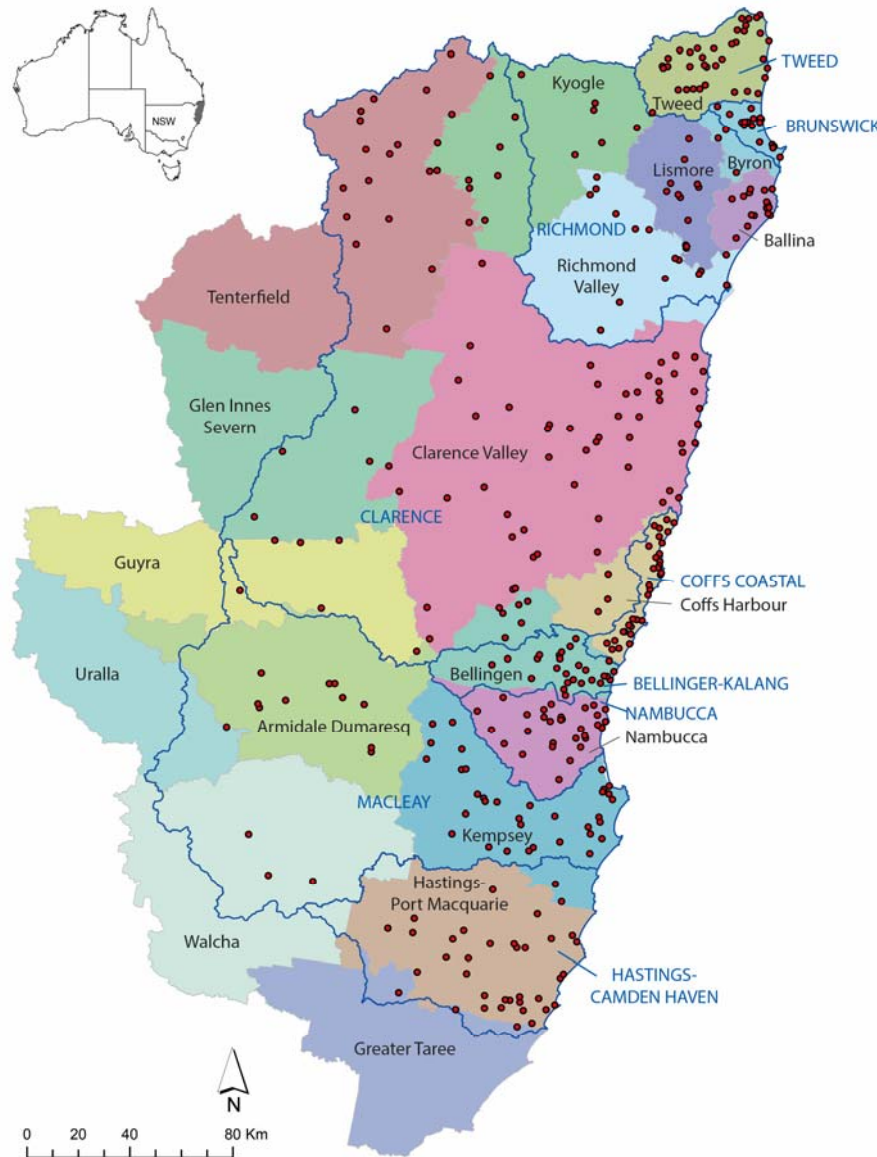
| Belmore River | Kinchela Creek | Spencers Creek | Clybucca Creek |
|---------------|----------------|----------------|----------------|
| <b>D-</b>     | <b>D-</b>      | <b>D+</b>      | <b>C</b>       |
| F             | F              | D+             | C              |
| D-            | F              | D-             | C+             |
| C             | C              | C-             | C+             |

| Macleay Catchment |
|-------------------|
| <b>C-</b>         |
| D+                |
| D+                |
| C                 |
| D+                |
| B-                |

**Ecohealth** **University of New England** Aquatic Ecology and Restoration RESEARCH GROUP

A health check for our waterways

## NSW Northern Rivers ~ 400 sites



## Collaborators

NSW Office of Environment and Heritage  
NSW National Parks and Wildlife Service  
NSW DPI - Fisheries  
North Coast Local Land Services  
Northern Tablelands Local Land Services

Ballina Shire Council  
Bellingen Shire Council  
Byron Shire Council  
Clarence Valley Council  
Coffs Harbour City Council  
Glen Innes Severn Council  
Guyra Shire Council  
Hastings – Port Macquarie Council  
Kempsey Shire Council  
Kyogle Council  
Lismore City Council  
Nambucca Shire Council  
Richmond River County Council  
Richmond Valley Council  
Rous Water  
Tenterfield Shire Council

University of New England  
University of New South Wales

