

River Estuary Report Card 2001

Moreton Bay Report Card 2001

Ecosystem health MONITORING PROGRAM

Noosa River #A-

- extensive seagrass and mangroves
- ecological processes intact
- overall low nutrients

Maroochy River #C

- remnant seagrass beds
- elevated nutrients and phytoplankton
- sewage nitrogen in food web

Mooloolah River #B-

- riparian habitat loss/stream modification
- generally good water quality
- evidence of metal pollution

Pumicestone Passage *B

- no ecosystem health monitoring
- extensive seagrass and mangroves
- black water runoff

Caboolture River

- low sediment and nutrient impact on Deception Bay
- high level of nutrient processing by abundant phytoplankton
- persistent algal blooms in upper reaches
- seagrass loss from river mouth



Pine Rivers

- reduced sewage inputs
- large turbidity, nutrient and phytoplankton flood plume
- some biological processing of nutrients
- high phytoplankton biomass - nutrient limited
- considerable stormwater inputs



Brisbane River

- massive increase in turbidity during flood
- highest sediment and nutrient loads in region
- low phytoplankton biomass - light limited
- highly impacted riparian vegetation
- limited biological processing of nutrients
- large sewage and stormwater inputs
- highly urbanised catchment
- impacted by unhealthy tributaries



Bremer River

- extremely high nutrients and turbidity
- unknown source of organic carbon
- high phytoplankton biomass - light limited
- heterotrophic
- highly degraded riparian vegetation



Logan River

- flood flow caused large plume of nutrients, sediments and phytoplankton into southern bay
- high ammonium inputs from aquaculture
- limited biological processing of nutrients
- sewage plume into southern bay
- no seagrass recovery at river mouth
- high phytoplankton biomass - light limited



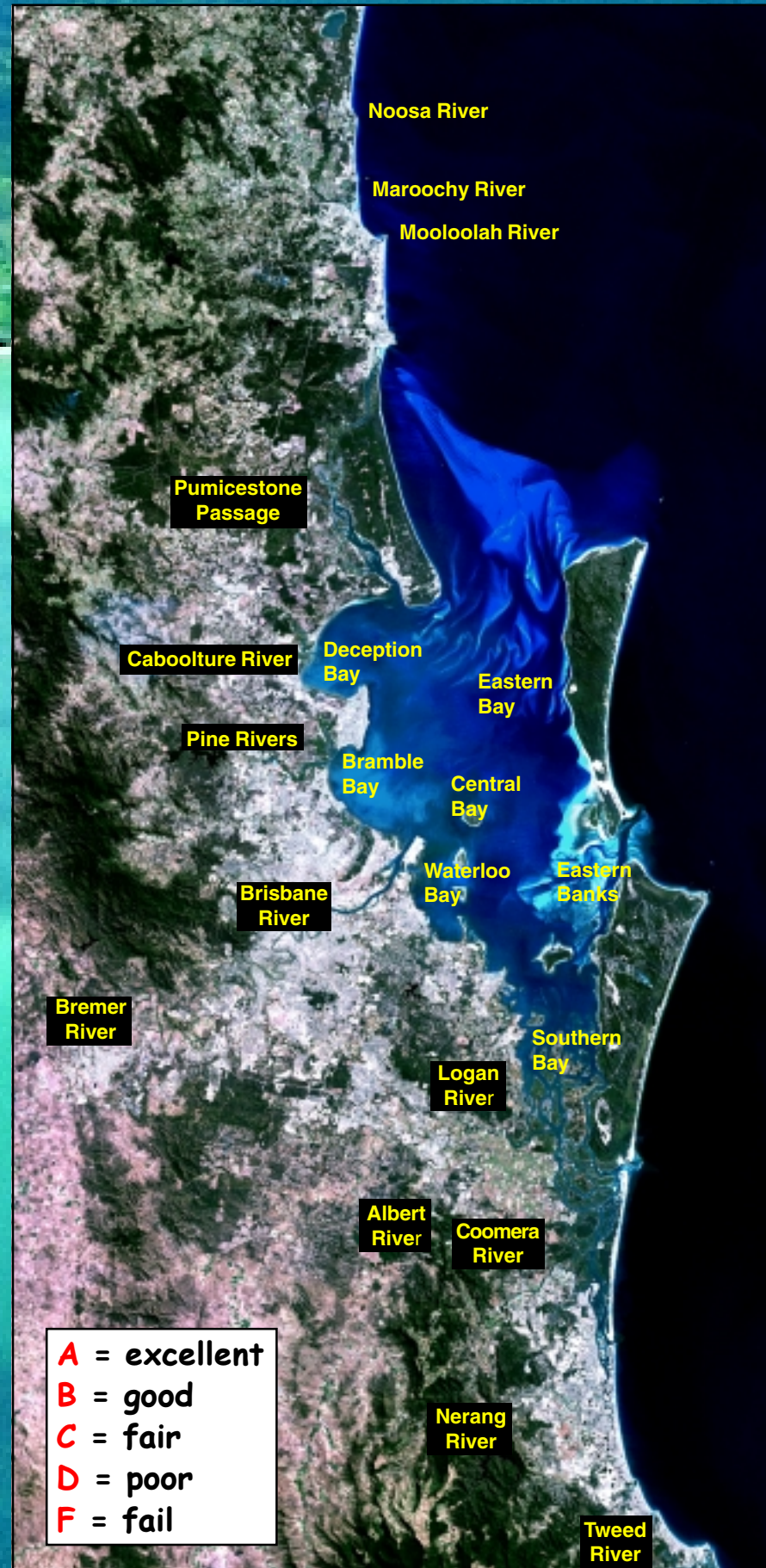
Albert River *D

Nerang River *B

Coomera River *B

Tweed River #B-

- some seagrass
- impacted riparian habitat
- localised sewage impacts
- consistently elevated phytoplankton
- well flushed river mouth



A = excellent
B = good
C = fair
D = poor
F = fail

D-

Nth Deception Bay

- summer *Lyngbya* blooms cover important seagrass meadows and mangrove roots
- nuisance macroalgae (*Caulerpa taxifolia*) present
- minimal impact from flood



D

Sth Deception Bay

- elevated turbidity, nutrients and phytoplankton
- impacted by flood runoff
- no seagrass recovery
- seagrass loss from Caboolture River mouth



F

Bramble Bay

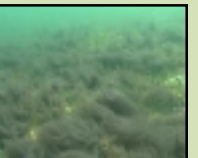
- flood caused large nutrient plume
- large phytoplankton bloom in response to flood
- high nutrients from Cabbage Tree Creek
- no seagrass recovery



C

Eastern Banks

- *Lyngbya* blooms covering important seagrasses
- high dugong mortality
- turtles have tumours and not fertile
- nuisance algae (*Caulerpa taxifolia*) present
- minimal impact from flood
- excellent water quality



A-

Eastern Bay

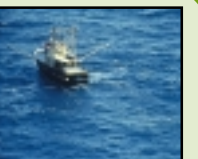
- excellent water quality
- extensive seagrass supporting dugongs
- corals at Peel Island and Myora
- nuisance algae (*Caulerpa taxifolia*) present
- tumours on turtles
- slightly elevated phytoplankton from flood



B

Central Bay

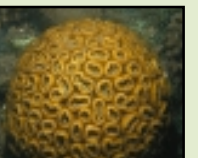
- elevated phytoplankton, turbidity and nutrients from flood
- generally good water quality
- seagrass and corals present



B-

Waterloo Bay

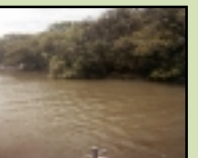
- minimal impact from flood
- stable seagrass beds
- reduced sewage inputs from Tingalpa Creek
- visited by dugongs and turtles
- corals present
- relatively clear water



C-

Southern Bay

- west to east gradient in water quality
- generally poor water quality
- large sewage plume from Logan River
- large ammonium plume from flood
- highly variable water quality
- some seagrass loss



* insufficient ecosystem health data, results based on water quality only

independent ecosystem health studies have been carried out in these waterways