

# **Fitzroy Partnership for River Health**

## **Water Forum and Launch Report Card 2014-15**

**24 June 2016**

### **Refined WQ Objectives for Fitzroy/Keppel Bay**

***Environmental Protection (Water) Policy 2009***

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## Key drivers

### Scope

- Local WQ datasets
- Analysis
- Updated mapping

### Next steps

# Key drivers

QG commitment to undertake additional monitoring, seek to access local datasets, update EPP Water

- previously based on limited local data (mainly EC)

## Reef 2050 LTSP-Water Quality actions (2015-20)

- WQA 9—Review and update WQ objectives...
- WQA 12 and 13 —Implement best practice stormwater management - new development coastal catchments.

Capacity Building -LGs and industry

- EHA 22 — Protect Fitzroy Delta including North Curtis Island and Keppel Bay



**Water quality improvement plans (Fitzroy, M-W, Burdekin et al)**

**BMPs: cane, grazing, horticulture**

**WQ Report cards**

**Non-legislative**

**Legislative**

**Env. Values, WQ Objectives  
Management Intent**

**Environmental Protection Act / EP Reg**

*EP Policy (Water)*

*Environmental management decisions*

**Sustainable Planning Act**

*State Planning Policy (WQ State Interest)—urban S/W*

**Water Act**

*Water resource plans*

# Scope—local datasets

## QG

- DNRM Surface Water and Hydstra databases
- DSITI Reef Catchment Loads Monitoring
- DSITI targeted monitoring data

**In total—78 sample sites approx. 10 500 data points across 10 indicators**

## FPRH database (2009-2013)

- 437 sample sites
- approx. 33 000 data points across 10 indicators

**GBRMPA data—Fitzroy delta / Keppel Bay**

# Scope—analysis

- Surface water primarily—groundwater under review
- Review water datasets--data screening/QA – errors, duplicates, impacted data etc.
- Flow split – above or below 90<sup>th</sup> percentile of daily mean flow
- Derive percentiles by indicator by flow (low, high)
- Phys/chem indicators—local, non-reference site data → derive 20<sup>th</sup>, 50<sup>th</sup>, 80<sup>th</sup> percentiles and 50<sup>th</sup> and 75<sup>th</sup> for EC
- Indicators :
  - Nutrients: TN, NO<sub>x</sub>, Amm N (NH<sub>4</sub>), TP, FRP
  - Physico-chemical: Electrical conductivity, Sulfate, pH
  - Clarity/sediments: turbidity, TSS, secchi (marine, estuarine waters)
  - Metals, toxicants, DO, biological (macroinvertebrates, seagrass)



# Scope—analysis

- EC data at sub catchment level for all 30 gauging stations (previously 15 catchment WQOs for EC)
- Derived sub-catchment level EC 50<sup>th</sup> and 75<sup>th</sup> %-iles



# Scope—analysis—Lower estuary / Keppel Bay

- **Reef 2050 plan (EHA 22): Protect the Fitzroy Delta including North Curtis Island and Keppel Bay**
  - extension and strengthened conservation zoning in the Great Barrier Reef Coast marine park Marine Park
  - extension of the existing Fish Habitat area
  - establishment of a new net-free zone under fisheries legislation
  - additional protections in associated intertidal and terrestrial areas
- Review WQOs for lower Fitzroy/Keppel Bay (GBRMPA data)
- Updated mapping (FHAs, zoning etc)



## Next Steps

- Prepare consultation draft WQ reports and mapping
- Consultation / submissions / additional data analysis—Sept/Oct
- Review with key stakeholders
- Finalise consultation late 16 / early 17.

