
WORKING GROUP REPORT ON WHITSUNDAY ISLANDS AREA
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THE NEED FOR CONCERN

There are no real data to indicate the need for concern, however, the general feeling is that inputs of nutrients, from the Whitsundays area is trivial on a Regional scale. There are, however, possible concerns for localised areas within the Whitsundays, particularly those fringing reefs subjected to heavy usage (i.e. combination of stresses as discussed by Dr Kinsey). The Whitsunday area is characterised by a high tidal range. As a result, it was suggested that nutrients may be distributed more widely and may not be pushed back onto the coast as occurs further north.

SOURCES OF NUTRIENTS

- a) Island Resorts - (8 resorts): Hook, Hayman, Hamilton, South Molle, Lindeman, Long (2), Daydream
- . point source - untreated and secondary treated sewage
 - fish feeding and dumping of garbage
 - . non point source - run-off (including effluent used for irrigation)
 - seepage from septic systems
- b) Vessels/Anchorages - (100 plus bare boats, and cruising yachts, 30 plus medium size charter vessels, ocean liners)
- . non point source - sewage
 - garbage (food scraps)
- c) Mainland
- . point source - sewage* (Airlie Beach, Shute Harbour, Proserpine)
 - . non point source - urban run off into rivers and creeks,
 - agricultural run-off adjacent to cane areas (particularly Proserpine and Pioneer Rivers)
- d) Hardy Reef Pontoons (2)/Fast Catamarans
- . point source - sewage from resident staff (3-4) at Hardy Reef pontoons considered insignificant
 - fishfeeding
 - . non point source - sewage in holding tanks and discharged on return trip to mainland

* note: extent of discharge not known to participants

GEOGRAPHIC AREAS OF CONCERN

- a) Fringing reefs used for tourism at resort islands
certain reefs were identified as having particular tourist significance; some resorts with odour problems
- b) Well developed fringing reefs throughout the area (see sites zoned MNPA 'B', Central Section Zoning Plan)

these reefs may already be stressed by use (e.g. anchor damage, damage by snorkellers and divers)
- c) Fringing reefs at heavily used anchorages where approximately 30 vessels are often anchored, but depending on wind, could be many more than this.

Butterfly Bay
Windy Bay
Nara Inlet
Shute Harbour
Gulnare Inlet
Cid Harbour
Whitehaven Beach

OBJECTIVES OF MANAGEMENT IN THE WHITSUNDAY AREA

maintenance of quality environment for conservational values and tourism, including, fringing reefs, national parks, unpopulated islands.

MANAGEMENT STRATEGIES

- a) locate discharges to obtain good dilution and transport away from areas of concern (based on studies)
- b) encourage resorts to treat sewage to achieve cost efficient nutrient removal and in particular removal of solids and carbon (secondary treatment preferred)
- c) require tertiary treatment only if shown to be necessary
- d) encourage use of sea water for flushing of cisterns and mix low salinity effluent with brine from desalination prior to discharge
- e) implement a monitoring program to investigate trends in both water quality and biota at geographic areas of concern, as above, (based on outcome of pilot study).

MONITORING

Initial Studies

Priorities are,:

- a) resort discharge and run-off (local impacts)
- b) anchorages
- c) mainland (river and creek) run-off
- d) mainland discharges
- e) fish feeding (local impacts on water quality and biota)

- a) to be investigated in a pilot study over the next 18 months at Hamilton Island, Daydream Island (to give range in size of discharges/run off and geographic locations) and then possibly expanded to all resort discharges.
- b) to be investigated at key sites beginning with a pilot study at Butterfly Bay (major anchorage, outstanding reef)
- c) add water quality to studies proposed by Dave Johnson (possible integration with work by Furnas and Mitchell)
- d) to be investigated in a similar manner to (a)
- e) a study at a selected site(s) to be incorporated in Region wide monitoring program.

Ongoing Studies

Expansion of pilot study (a) above to cover all resorts and mainland discharges.

Implementation of a key sites monitoring program to include water quality and biota and to include some control sites.