Welcome to the second Newsletter for 2002. A lot has been happening over the last 3 months with new groups joining the program and several new monitoring sites being established. Reports from across the regions are coming in and most long-term sites were monitored in the last quarter, which was a great effort by all involved. Contributions to articles from volunteers are most welcome, so please keep them coming. This newsletter also updates the current status of seagrass resources in Whitsunday and Hervey Bay regions.

Whitsundays Seagrass
5,554 ha of coastal and island seagrass habitat was mapped in the Whitsunday region from surveys conducted in January 1999 and 2000 between Cape Gloucester and Midgeon. These surveys were undertaken using the expertise of free-divers from DPI and Seagrass-Watch volunteers helping to map the intertidal reaches in Pioneer Bay, Muddy Bay and Shute Harbour.

Since the first seagrass surveys in 1987, seagrass meadows have either remained stable or increased in most regions of the Whitsundays. These include Repulse Bay, Whitehaven Beach and the coast between Gloucester Island and Pioneer Bay. Higher immigration of dugong into the region has occurred over the past 8 years. Not so good news in Pioneer Bay where the seaward meadow edge has contracted by more than 1 km and seagrass meadows have reduced in area by 80% since 1987.

Copies of the report will be available in July this year and available online at the end of the year.

Great Sandy Strait & Hervey Bay Seagrass
In late February 2002, approximately 6,750 ha of seagrass was mapped in the Great Sandy Strait by MPEG and QPWS by aerial survey (helicopter). This represents a significant recovery since the Mary River flood of February 1999 decimated the intertidal and shallow subtidal seagrasses in the Great Sandy Strait and Hervey Bay that were in the path of the flood plume.

After the Mary River flood, approximately 50% of intertidal seagrass in the Great Sandy Strait disappeared. These losses were predominantly in the northern section of the Strait (including Urangan, Moon Point, down to Ungowa). In February 2002 most of these areas had recovered to distributions similar or greater than recorded in December 1998.

Shallow sub-tidal (<10m depth below MSL) seagrass resources of Hervey Bay (adjacent to the City of Hervey Bay) which declined dramatically in abundance and distribution after the flood, have been slow to recover and more information is needed to adequately assess the current state of recovery.

Deepwater seagrass resources in Hervey Bay within the path of the flood plume declined significantly in abundance after the impact and remained significantly lower than outside the impact area for some time. These meadows were also examined in early March 2002 and appear to have similarly recovered to pre-flood (December 1998) distributions and abundances.

This is good news for the Great Sandy Strait and Hervey Bay dugong, turtle and fish populations which depend on seagrass.
In Hervey Bay the seagrass meadows at Burrum Heads continue to recover but no such luck at Toogoom and Dundowran where recovery has failed to occur. At Booral wetlands, one site has remained stable while the other has declined since high cover of seagrass during spring 2001. This trend is also apparent at Urangan. A reduction in cover compared to November 2001 is typical of a seasonal downturn in growth with the winter months approaching.

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**Seagrass-Watch data contributing to GBRMPA management**

Information from Pioneer Bay on the poor condition of some seagrass meadows and the large amounts of algae smothering seagrass is now being used by the Great Barrier Reef Marine Park Authority in their assessment of sewage outfalls. Recent Council monitoring of the sewage outfall in Pioneer Bay has shown an increase in the concentration of sewage nitrogen in epiphytes. Effluent from the outfall appears to be causing the excessive growth of epiphytes. Seagrass-Watch monitoring has found an overall decline in %cover and area of seagrasses at Pioneer Bay. The Council’s monitoring has concluded that sewage is impacting seagrass ecosystems of Pioneer Bay and Boat Haven Bay - nothing new but disappointing that the situation has not improved since Council agreed to discharge effluent on the outgoing tide.

![Graph showing Epiphyte sewage N concentration and Seagrass cover over time]

Information on seagrass meadows at Laguna Quays, Shute Harbour and Boat Haven Bay are also being used to assess proposed developments.

**Seagrass hammered & corals bleached**

Jean and Joyce noticed that the Dingo Beach seagrass meadow was disturbed by sand banks covering the sites, strong south easterlies (up to 35 knots) and high algal abundance. They also found a noticeable increase in *H. ovalis* compared with *H. uninervis*. Mareen, Sunnee and Brett from Hydeaway Bay were helped out by the Whitsunday Volunteers and also noticed reduced seagrass cover and coral bleaching. Very high temperatures over summer are the possible cause. The Wenzler family also successfully completed monitoring at Midge Point, noticing a reduced seagrass cover and increasing mangrove colonisation. Carolyn (QPWS) monitored the site at Laguna Quays as John and Tracy have hung up their booties, thanks guys for your great contribution.

**Smorgasbord on offer in Pioneer Bay**

Margaret Parr reports

Whitsunday Volunteers again successfully completed the sampling of four sites in Pioneer Bay. An area near one of our sites looked as if it had been the scene of an “all you can eat” smorgasbord for the local Dugong population! There were trails going every which way. This is the most concentrated patch of trails we have observed. At the other side of the Bay, working conditions were not so pleasant. The large amounts of mud, algae and sludge which we have been finding on the seagrass meadows for the past two years continued to make monitoring challenging. Estimating or measuring anything in some quadrats involved clearing a covering of mud/algae first! However we got the job done - although only just - before darkness closed in.

**Teams unite at Midgeton**

Heather Hyde reports

On Friday afternoon 26 April 2002, I had the wonderful pleasure of receiving help to do the Seagrass-Watch, from 3 ladies from Whitsunday Volunteers. They were Margaret (our co ordinator), Helen (seed woman extraordinaire) and Aileen (bird woman and seed woman extraordinaire). Our adventure begun with a 4 wheel drive trek down a really wrecked road to arrive at our site. The weather was wonderful. It was interesting to hear about the difference that the Midgeton sites have as opposed to those at Pioneer Bay and other areas to our north. We don’t have any Mud which must be a bonus. The 3 ladies were extremely happy about that!! The readings this quarter were below average in overall coverage due to frequent southeasters that have occurred and also I feel due to the extremely hot summer that we had. The winds cause the sites to become covered in sand, but from previous experience, the grass is healthy underneath and will reappear with the right tides.

**Sailing Club Saves Seagrass-Watch Monitoring**

Elmer Ten Harken reports

Unfortunately OUCH Volunteers were unsuccessful in obtaining much needed CoastCare funding. This was needed to charter a boat to survey sites at Whitsunday Island. The Whitsunday Sailing Club came to the rescue with an offer to loan its “Rescue 1” boat to the OUCH Volunteers, which allowed the monitoring to be done on time on Sunday 21st April. Four volunteers made the trip to monitor the health of the Cid Harbour seagrass meadow. Visibility at the seagrass bed was poor - probably due to recent rains. The general impression of the seagrass was that it was less verdant than on the last visit, but this is to be expected at this time of year as the water temperature falls. Species distribution was similar to the summer status. Epiphyte levels at some sites were also quite high. Some dugong feeding trails were seen and turtles were around the boat all day.

**Next surveys in the Whitsundays**

The next monitoring event will be from 21st June 2002 onwards.

Best tides are:

- Airlie Beach: Lowest tide (0.19m) on Saturday 22nd June at 2:47pm and Sunday 23rd June 3:27 pm (0.2m).
Any comments or suggestions about the Seagrass-Watch program or contributions to the newsletters would be greatly appreciated.

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