

Chair Report on ISP Meeting 25

1st of November 2017

Projects

Projects are on track, and most are completed or in the final stages of completion for the year.

	Project ID	Status	Notes
1	Water and Sediment Quality	Completed	PCIMP data has been supplied. As normal there are some minor exclusions, largely because of Limits of Reporting (LOR). Mercury in Sediment will be included this year for the first time. ISP recommends that Ammonia is not included in the Water Quality assessment (see below)
2	ISP005-2017: Social, Cultural, Economic	Completed	A parallel internet panel was used as a data collection trial, but low response rates mean the existing telephone survey is better.
3	ISP006: Gladstone Harbour Model	Completed	Final Report now available on the GHHP website
4	ISP006-2017: Gladstone Harbour Model maintenance	In progress	An additional five scenarios to be added in the current year. The ISP recommends that these be aligned with the Draft Master Plan for the Gladstone Harbour
5	ISP007–2017: Connectivity	Completed	No issues
6	ISP009-2017: DIMS maintenance	Completed	Scores for Fish Recruitment and Mudcrabs has now been added into the DIMS system
7	ISP011–2017: Seagrass Indicators	Completed	No issues
8	ISP012-2017: Cultural Heritage Indicators	Completed	Project completed, but Terra Rosa recommending changes in methodology for future years. ISP is organising reviews of methodology to confirm confidence in approach and measures before recommending changes
9	ISP013-2016: Fish Recruitment	Completed	Results modelled this year by site and grouped up to zone – becoming a more robust measure
10	ISP014–2017: Coral Indicators	Completed	No issues – A fourth sub-indicator has been added ‘Coral change cover’ for the first time
11	ISP015: Development of Mud Crab Indicators	Completed	Project performed well, and the indicator (comprised of 3 of the 4 sub-indicators) will be included in report card.
12	ISP016c: Fish Health Case Study	In Progress	Tender issued with FRDC, proposals have been assessed, and final recommendations are progressing to GHHP and FRCD
13	ISP018: Development of Mangrove Indicators	In development	Additional ERMP report has been released through GPC. Next steps are to confirm if baseline data are available and then draft a scope of works for competitive tender
14	ISP019: Coral coring	In progress	Final report due in December
15	ISP020-2017: Scripts for cultural heritage	Completed	Draft report and results have been provided
16	Stewardship 2017	Completed	Project replicated approach taken in previous year – methodology likely to be upgraded next year following review being conducted for Qld Government

Exclusion of Ammonia from Water Quality measures

Background:

- Ammonia has been excluded from previous report cards because of issues with laboratory analysis (limits of detection were higher than guideline values), but PCIMP has now organised more robust analysis.
- Field blanks and laboratory blanks (dummy water samples) collected in March and June 2017 are giving non-zero readings for Ammonia, leading to concerns that there may be some level of contamination in all readings. We do not know what analytical error to assume for Ammonia as this has not been supplied in the QA/QC report.
- The key issue is that the readings are very close to the guideline values, so if there is any contamination it has a large effect on scores and grades.
- A further issue is that the guideline value, set by the Queensland Government through the Water Quality Objectives, seems to be too low. It appears to be set at a median level of historic data rather than the more appropriate 80th percentile.

The ISP recommends:

- That Ammonia is excluded from the water quality assessment in the 2017 Report Card.
- That the ISP work with PCIMP to improve QA/QC and sampling and analysis procedures for Ammonia.
- That the ISP request that the Queensland Government review the setting of the relevant water quality objectives for the Port Curtis region.

Scores and Grades for the Environmental Component

The ISP reviewed the scores and grades for the Environmental Component of the 2017 Report Card, noting:

- The inclusion of Mud crabs as a new indicator
- The inclusion of Coral Change Cover (in Corals) and Mercury (in Sediments) as new measures
- The exclusion of Ammonia (from Water Quality) because of contamination issues
- The overall grade for Environment remains unchanged from the previous year, although there has been an improvement in the underlying score
- Grades for Water and Sediment Quality remain very high
- There has been an improvement in the grade for Coral (from E to D), but grades for both Corals and Seagrass remain Poor,
- The grade for Fish Recruitment has improved from D to B, noting that this is still an indicator in early stages of development
- The Mud crab indicator includes assessment of the population dynamics as well as the physical health of the mud crabs.

Scores and Grades for the Social Component

The ISP reviewed the scores and grades for the Environmental Component of the 2017 Report Card, noting:

- The overall score and grade for Social remains unchanged from the previous year
- Data is largely sourced from an annual telephone survey of 401 residents in May and June
- This year Gladstone residents were randomly sampled from mobile telephone numbers as well as the standard landline telephone database
- Perceptions of harbour safety for human use declined, driven by an increase in reported oil spills and marine safety incidents from recreational vessels.

Reporting the Environmental Indicator:

The ISP noted the previous decision and endorsement from the Management Committee that an overall Environmental Score would not be reported at the Zone level, but instead be reported at the indicator group level (Water & Sediment quality, Habitats, Fish & Crabs).

The ISP also noted that the Management Committee had endorsed that the same approach be taken for the overall reporting of the Environmental indicator at the whole-of-harbour level, noting that the ISP did not have a clear preference at this aggregated level.

For the 2016-17 Report Card, the ISP recommends that:

- The emphasis of the Environmental reporting should be on the Sub-component level.
- An overall Environmental Score at the whole-of-harbour still be available in the report card.
- The figure be amended to emphasise the sub-components as well as the overall score.

The recommendation to include some information about the overall score was based on the following points:

- It provides more consistency with previous report cards
- It will meet community expectations for an overall environmental assessment
- The key problems are at the zone level, not at the whole-of-harbour level
- The summary is becoming more robust as the indicators are better developed

Names for the Environmental indicator groups

The ISP recommends that the existing names for Environmental indicator groups be maintained for

- Habitats
- Fish and Crabs

The ISP recommended against change the names to 'Ecosystems' and 'Biodiversity', noting that:

- The change may be premature, as the Reef 2050 Long Term Sustainability Plan is still to come into effect, and is currently being reviewed
- The names used in the Reef 2050 Long Term Sustainability Plan are not very appropriate
 - 'Ecosystems' is not an appropriate term to represent 'Habitats' (Corals, Seagrass and Mangroves), as ecosystems are usually taken to mean a broader system that includes a cross section of living organisms'
 - 'Biodiversity' is not an appropriate term to represent Fish and Crabs because Biodiversity is about the variety and variability of all life forms, and only 2 fish

species in 'Fish recruitment' and one crab species in 'Mud crabs' are used in the report card

- It is important to maintain stability and consistency in the Report Card

Mud crabs

The ISP noted that the development of the mud crabs indicator has been very successful, with data successfully collected in up to eight zones in June and July 2017. The CQU project team have developed four indicators to represent mud crab health in the harbour:

- Total abundance (catch per unit effort)
- Prevalence of rust lesions
- Sex ratio
- Biomass (only to be included in the future when sufficient baseline data is available).

The ISP recommends that the mud crab indicators be added to the 2016-17 Report Card, with the normal explanations that this is still an indicator in development phase.

Indigenous Cultural Health

The ISP noted that the contractor, Terra Rosa, has largely completed the assessment of Cultural Heritage for 2016-17, and submitted a draft final report, despite some problems in relations with the Gidarjil group. The consultant has also recommended some changes in the methodology for future years.

The ISP recommended that at least one external review be conducted, with the expectation that the total cost of reviews would be less than \$5,000. Appropriate reviewers have been identified by the ISP.

Internal review of the GHHP Report Card

The internal review has been conducted by Nathan Johnston (FPRH), Nicole Flint (CQU) and Luke Ukkola (FPRH), and a draft report provided. The review team were asked to conduct:

- review the ways in which the Report Card has met the original GHHP Vision
- Compare the GHHP report card to new advancements and emerging report cards, including the Reef 2050 Long-Term Sustainability Plan and other report cards for Queensland catchments.
- Assess the internal consistency in methods used to score and grade the components, indicator groups and indicators within the Report Card.

The report finds that the GHHP Report Card *'provides a comprehensive and robust assessment of the condition of Gladstone Harbour. While some observations are offered to assist with streamlining aspects of the Report Card, overall the report card largely meets the original GHHP Vision and early recommendations. The Report Card compares positively to emerging literature, demonstrating its continuing relevance in a global setting. The Report Card also performs well when compared to the Outcomes Framework and 2020 Targets of the Reef 2050 Long Term Sustainability Plan. In particular,*

the development and implementation of Indigenous cultural heritage indicators should be recognised and commended, as a first in Queensland.

The ISP is making some requests for more detail and analysis to be added to the report in some areas so that it can be finalised for the Management Committee.

Harbour Tour at next meeting

The ISP are planning a harbour tour at the next meeting, potentially in conjunction with the Management Committee.