

Gladstone Healthy Harbour Partnership (GHHP) Independent Science Panel (ISP)

Chair's report from ISP meeting #19 held on 19 April 2016

The objectives of the ISP meeting were to provide ISP members with an update on GHHP science activities, and to review progress against the GHHP Science Program milestones. In addition the ISP: discussed how to progress the mangrove project; selection of contractors for fish health literature reviews; ISP013-2015 fish recruitment sampling; the presentation of the Connectivity indicators in future Report Cards; options for developing mud crab indicators; the presentation of the 'Sense of place' indicator in future Report; ratification of the ISP007-2015 Statistics report for release on the GHHP website; updates to the Data Policy including the future of the GHHP ePortal; the proposal to consolidate Stewardship reporting for Queensland report cards; the scopes of works for ISP019 - coral coring project in Gladstone Harbour and - ISP020 develop R-script for ISP005 SCE Bayesian Belief Network; and, ISP membership post June 2016.

The Science Program is on track to deliver the required science inputs into the 2016 Pilot Report Card and overall the milestones are on track. Although in consultation with the GHHP Management Committee there have been some revisions of deadlines for data agreements and contracting of projects. The ISP identified a number of issues to be progressed by the Science Team including: the provision of statistical support for future Report Cards; resolving concerns raised regarding the PCIMP water quality data e.g. the 2015 ammonia data issue; and, access to the Ecosystem Research and Monitoring Program (ERMP) mangrove data through GPC. The ISP approved the Scope of works for coral coring project and a process to finalise the selection of contractors to undertake the fish health literature reviews. The ISP supported the publication of ISP008-2015 Statistics report by Dr Murray Logan on the GHHP website (subject to the approval of the MC).

The ISP continued their discussion about the presentation of the Connectivity indicators in future Report Cards including reporting it as an environmental driver in 2016. The ISP re-affirmed its previous advice that the connectivity indicators should be omitted from the report card connectivity and be reported as an environmental driver in the Report Card. The ISP also supported the implementation of CONNIE3 (connectivity visualization and modeling tool) for the Gladstone Harbour region to aid in the understanding of connectivity as an environmental driver.

The ISP discussed whether the 'sense of place' indicator group should remain within the Cultural component to the report card or be moved to the Social component. The ISP noted the issue of where sense of place should sit was not a scientific question, and that it needed to be resolved in discussion with the Management Committee (MC). The ISP recommended it remain in the Cultural component for 2016, but flag this as an issue to be considered under the external review of GHHP proposed for 2017. The ISP also discussed the use and application of the CATI survey to generate some of the Social and Economic indicators. The ISP identified a number of potential improvements and these will be included in the tendering process for the Social, Cultural and Economic project for 2016.

The ISP continued their discussions about developing Mud Crab Indicators for the Report Card. The ISP agreed to investigate the possibility of developing a research logbook. There was some subsequent discussion on how best to implement this logbook, with the ISP favouring a staged approach. The Science Team will consult with Queensland Department of Agriculture and Fisheries about the feasibility of developing a research logbook for mud crab fishers in Gladstone Harbour and if there are successful develop a project scope of works.

The ISP noted that ISP005 - Social, Cultural and Economic indicator project team (CSIRO) had not been able to deliver the R-scripts for the BBN as was required in the contract. This was a significant omission as the R-script from this project was required to enable the Data and Information Management System (DIMS) to calculate social, cultural and economic scores, and to integrate the ISP005 and ISP012 Indigenous Cultural Heritage projects. The Chair will discuss this issue with CSIRO including resource implications and propose that a suitable statistician be contracted by CSIRO to complete this element of the project.

The ISP discussed the Queensland Department of Environment and Heritage Protection (DEHP) Stewardship discussion paper and the associated Ecologica proposal. The ISP identified a number of issues of concern regarding the quality of stewardship reporting including progressing the Ecologica proposal for consideration by the Management Committee. The ISP supported the proposal that stewardship reporting should become the responsibility of the GHHP Science Program as recommended in the DEHP report.

The ISP supported the proposed updates to the GHHP Data Policy and noted the e-Portal should be updated annually and incorporated into the DIMS.

The ISP identified two technical issues that will require discussion at the next ISP meeting.

1. The use of zone-based water quality guidelines and the impact of using zone-specific guidelines on the report card scores.
2. The sensitive (or insensitive) of report indicators to change noting that the timescale of changes varied amongst indicators e.g. water quality may change on a tidal basis, seagrass may change on a seasonal basis, mangroves and corals may change on a decadal basis. The ISP will discuss the appropriate balance between indicators of varying sensitivities, and appropriate time-scales for measuring variation.

The ISP noted the resignation of Professor Bronwyn Harch from the ISP and that Dr Ian Poiner and Mr. Frans Hoogerwerf intended to leave their current roles on the ISP on 30 June. The ISP also noted the Science Convenor Dr John Kirkwood would be leaving his position at the end of June. The ISP acknowledged their significant contribution to the Panel.

Gladstone Region Environmental Advisory Network (GREAN) representatives joined the ISP for lunch. Dr Susan Rockloff delivered a presentation on the ISP012 Cultural Heritage project. She explained the design of the project, how the project team collected data in the field and how the data had been aggregated to produce the scores. Dr Rob Coles discussed the status of seagrasses in Gladstone Harbour. He explained that seagrasses are quite variable in space and time, so that large changes could occur from one year to the next.

The ISP acknowledged the significant amount of work the science team had completed since our last meeting, thanked them for their dedication and noted the ongoing high quality of their work.