Supplementary material

Survey Design
Once information gaps were identified and indicators established, a master survey, or survey template, was designed that included all the data needs in generic survey form. The template survey was then used to develop five separate surveys that targeted each of the main user groups of the Great Barrier Reef; national residents (i.e. Australians living outside of the Reef region), local residents, tourists, tourism operators and commercial fishers. The first question in the survey asked participants to list the first words that came to mind when they thought of the Great Barrier Reef. Most survey questions were presented as a statement and were based on other studies as much as possible. Respondents were asked to rate how strongly they agreed with each statement using a ten-point rating scale. A ten-point rating scale was considered appropriately sensitive to detect subtle changes through time. The lack of a midpoint meant that interpretation was easier since it is often not clear what a midpoint actually infers; undecided, unknown, depends, sometimes, not sure, neutral, cannot be bothered, etc.. If respondents were unsure of their views about a statement, they were able to leave an answer blank. An initial version of the survey was pilot-tested with 5-20 people within each user group to ensure that the questions were readable and unambiguous. The final versions of the surveys can be accessed by contacting the primary author.

Survey Administration
A mixed methods approach to survey administration meant that high response rates could be obtained within each user group since tactics most appropriate for each user group were used. National residents were surveyed as an online research panel provided by an external marketing company based in Sydney called ‘Pollinate’. This company had access to a geographically and demographically representative sample of Australians who were prepared to complete surveys in exchange for online credit points that could be converted into gifts or goods. We obtained 1,002 responses in March 2013, and 1,000 in September 2013.

Local residents and tourists were surveyed using face-to-face methods across 14 main population centres along the Great Barrier Reef. We employed and trained 35 casual staff (mostly students) and deployed them to public places such as parks, shopping centres, market places, airports, marinas, sporting areas, festivals, information centres, museums, jetties, caravan parks, lookouts, etc. We used a mix of “convenience sampling” and “quota sampling” [59] in which we attempted to produce a population representative of people across categories such as age, gender, ethnic background and occupation. A limitation of our sampling was a bias towards English speaking people.

Interviewers were equipped with an Apple mini-iPad loaded with an iSurvey application for both the residents’ survey and the tourist survey. At the completion of the sampling period (June-August 2013), we had surveyed 3,181 local residents and 2,877 tourists, obtaining a response rate of over 53%. Residents were defined as people who live within the Reef catchment (east of Great Dividing Range, from Bundaberg to Cape York), while tourists lived anywhere outside of that area, whether that be elsewhere in Australia or internationally.
Marine tourism operators and commercial fishers were interviewed by telephone. We built our own contacts databases using publicly-available data, personal contacts and unpublished data. We identified 213 tourism operators and 611 commercial fishers in possession of at least one license. A media release resulted in 44 media stories across the catchment and a targeted mail-out introducing tourism operators and fishers to the project. These strategies may have contributed to a response rate of 76% across both groups, where 119 marine tourism operators and 210 commercial fishers were surveyed.