From: [redacted]
Sent: Saturday, 25 September 2021 8:17 PM
To: Committee, Public Works (REPS) <pwc@aph.gov.au>
Subject: submission: Great Barrier Reef Marine Park Authority - Transformation of Reef HQ Aquarium

to the committee,

I wish to inquire into the optical characteristics of the viewing window material. Visitors will market the aquarium themselves via social media and there is an added incentive to attend in order to take enviable selfies. It is important that the optical characteristics of the viewing windows are of a high quality and permit photography. The current material use in the aquarium is highly reflective from the viewing side making the use of flash impossible that makes photographing fast moving subjects difficult. Rubber lens hoods can be used to mitigate reflection but the shear amount of scratches on the glass is still a problem. Is there a material that can be used that can be economically resurfaced with a matched optical epoxy? Casual SLR users don't know how to use the manual focus or understand shutter speed, ISO, aperture, or polarizing filters making it difficult or impossible to photograph. Vandalism of the soft plexiglass is common and in the tunnel the plastic is heavily scratched and the light catches. This interferes with autofocus. The heavy use of curved windows further distorts images. The poor optical consistency of the windows also results in poor photos. If flash photography is of concern, very fast flash bracketing does not startle, stress or confuse wildlife and yes, HDR photography can benefit from use of a flash in an aquarium. An industry partner interested in showcasing their technology such as Nikon or Canon could be approached for consideration. Will the installed glass be suitable for photography including with the use of simple smartphone cameras?

The Museum of New and Old Art in Tasmania has a system utilizing smartphones with a custom firmware that uses beacons to identify the location of the user, presenting relevant location based information about exhibits that inform users. An app could be developed for use with beacons to provide a more informative experience for users that could be downloaded onto a visitors device or devices provided for visitors or groups. The demand for educational opportunities and facilities can be serviced by having an age bracketed interface selections so that primary school teachers can design the language and content to be appropriately engaging and intelligible to different age groups and audiences. Translations can be developed for visitors that feel more comfortable with another language including indigenous languages with the added benefit of growing the corpus of indigenous language content.

Robert Heron
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