

From: [Great Barrier Reef Secretariat](#)
To: "Ian Chubb"
Cc: [Great Barrier Reef Secretariat](#); s22
Subject: FW: Reef Trust IEP request for RRRR COTS reports by Dr Engelhardt [SEC=UNCLASSIFIED]
Date: Monday, 5 February 2018 8:38:41 AM
Attachments: [Reef Trust IEP Request.docx](#)
[2015 RCINT COTS Controls Efficacy DRAFT Report \(1\).pdf](#)
[2016 RCINT COTS Controls Habitats DRAFT Report.pdf](#)
[image001.png](#)

Good morning Ian

Please find attached the COTS report mentioned in the media. Would you like me to circulate to the Panel? I'll use the dot points prepared as the content of the email.

Thanks

s22
Reef 2050 Plan Section
Ph: s22

From: s22
Sent: Friday, 2 February 2018 4:42 PM
To: s22 @environment.gov.au>
Cc: s22 @environment.gov.au>; Callister, Deb <Deb.Callister@environment.gov.au>; s22 @environment.gov.au>
Subject: FW: Reef Trust IEP request for RRRR COTS reports by Dr Engelhardt [SEC=UNCLASSIFIED]

Hi s22

Here are the COTS reports requested by Ian – release to IEP has been agreed by RRRR, along with circulation of the attached covering dot-points written by RRRR. E-mail below from Sheriden Morris clarifies funding source.

Regards

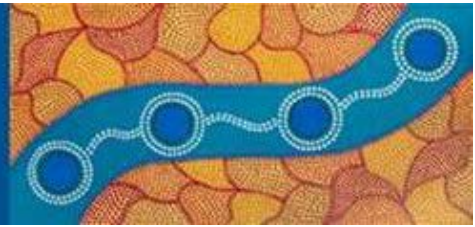
s22

s22

Reef Trust Section
Reef, Heritage and Marine Division
Department of the Environment and Energy
s22 @environment.gov.au
Location: Level 4 (North), John Gorton Building, Parkes, ACT 2600
Postal address: GPO Box 787, Canberra, ACT 2601



The Department acknowledges the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present



From: Sheriden Morris [<mailto:sheriden.morris@rrrc.org.au>]

Sent: Friday, 2 February 2018 1:11 PM

To: s22 [redacted] <s22@environment.gov.au>; s22 [redacted] <s22@gbrmpa.gov.au>

Cc: s22 [redacted] <s22@rrrc.org.au>; Russell Reichelt <russell.reichelt@gbrmpa.gov.au>

Subject: Reef Trust IEP request for RRRR COTS reports by Dr Engelhardt

Dear s22 [redacted]

Please find attached the internal RRRR draft reports by Dr Engelhardt as requested by the Reef Trust IEP. Please also find a cover page to the documents that outlines the context under which the documents were commissioned and the subsequent treatment of the documentation. Again please note that these documents were privately commissioned by RRRR – not by publicly funded program. However, we are happy to share them with the Reef Trust IEP to assist understanding of the COTS program.

Kind regards
Sheriden

Sheriden Morris
MANAGING DIRECTOR

Reef and Rainforest Research Centre Limited
PO Box 1762 Cairns Q 4870 | Sheriden.Morris@rrrc.org.au
Tel: +61 (0) 7 4050 7400 | s47F [redacted]

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Reef Trust Independent Expert Panel Request

Reef Trust Independent Expert Panel request for the RRRC Draft report Crown-of-thorns starfish, (*Acanthaster planci*; COTS) controls on the Great Barrier Reef. *An assessment of the efficacy of the GBRMPA / AMPTO COTS Controls 2013-15 5th June 2015 and A comparative assessment of available coral cover estimates and a preliminary investigation into habitat characteristics of COTS-affected reef sites.*

Context:

- Dr Engelhardt was privately commissioned by the RRRC to undertake an independent assessment of the COTS program in 2013 for the purposes of establishing the policy case for changes in approach to COTS control at key tourism sites in the GBR.

This independent assessment is seen as an important evaluation process to assist the further development and possible integration of the COTS controls project into a more comprehensive COTS management program for the GBR recently proposed by the Reef & Rainforest Research Centre (RRRC). This new program will be designed based on the established principles of Integrated Pest Management (IPM) (page 3).

- These internal draft reports did not involve funding from NESP, Reef Trust or GBRMPA.
- Senior COTS researchers raised serious concerns about the methodology, analyses and conclusions described in the draft reports. It was considered unlikely that they would pass peer review and their assessment was rejected by Dr Engelhardt. Nevertheless Dr Engelhardt was paid for his work in accordance with his agreement with RRRC.
- Although their methods and results were disputed, the draft reports at least highlighted potential areas for improvement in the efficiency and effectiveness of the COTS Control Program.
- Since 2015, the GBRMPA has significantly adapted the program to accommodate a more targeted approach utilising local and regional scale improvements in control efficiency, surveillance and program performance indicators.
- The NESP TWQ COTS Integrated Pest Management program has subsequently worked closely with industry to improve on-water efficiency and COTS management through advances in understanding of COTS dispersal, habitat preference, optimum control intervals, surveillance protocols etc. at local and regional scales.
- GBRMPA regularly engages and accepts recommendations from the COTS research community and on-water operators resulting in a culture of continuous improvement in targeted COTS control, monitoring and evaluation.
- Dr Engelhardt was initially involved with the NESP TWQ Integrated Pest Management program of research, (Principle Investigator Dr David Westcott, CSIRO) with a team of researchers from CSIRO, AIMS, JCU and UQ. A dispute between Dr Engelhardt and the NESP Research team over his requirements in terms of fees and provision of information resulted in a breakdown of the relationship in mid2017.

From: [Great Barrier Reef Secretariat](#)
To: s47F
Cc: s22
Subject: For IEP information: Recent media - crown-of-thorns starfish [DLM=For-Official-Use-Only]
Date: Monday, 5 February 2018 11:54:16 AM
Attachments: [2015 RCINT COTS Controls Efficacy DRAFT Report \(1\).pdf](#)
[2016 RCINT COTS Controls Habitats DRAFT Report.pdf](#)
[IEP Request - COTS report - context.docx](#)

Dear Independent Expert Panel members

To assist with discussions on recent media regarding crown-of-thorns starfish, the Reef Rainforest and Research Centre has made available the attached draft reports to the Panel.

Please see the dot points attached that provides context around the draft reports.

Thank you

s22
Reef 2050 Plan Section
Reef Branch | Heritage, Reef and Marine Division
Department of the Environment and Energy
Ph: s22 [@environment.gov.au](#)



s22 s

From: s22
Sent: Tuesday, 25 September 2018 11:23 AM
To: s22
Subject: FW: COTS report [SEC=UNCLASSIFIED]

From: s22 @gbrmpa.gov.au
Sent: Thursday, 1 February 2018 6:14 PM
To: s22
Cc: Elliott Bruce
Subject: RE: COTS report [SEC=UNCLASSIFIED]

Hi s22

I've just spoken with my General Manager, Bruce Elliot, and he tried to ring you to discuss.

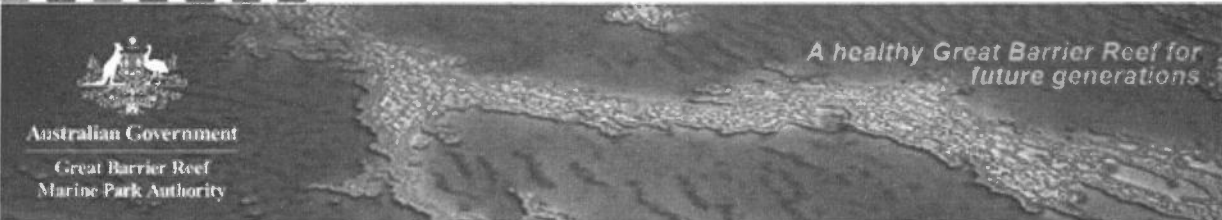
Because the Reef Care International reports were not a deliverable under RRRC's contract with GBRMPA, we do not believe that we have the authority to release them to IEP.

Best to contact RRRC directly, as they are the ones who commissioned the reports.

We'll be in office tomorrow if you'd like to discuss.

Best wishes,

s22
Project Manager, Crown-of-thorns starfish
Reef Interventions
Great Barrier Reef Marine Park Authority
2-68 Flinders Street Townsville | PO Box 1379 Townsville QLD 4810
Phone: s22
Fax s22 3
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From: s22 @environment.gov.au
Sent: Thursday, 1 February 2018 1:32 PM
To: s22 @gbrmpa.gov.au
Subject: FW: COTS report [SEC=UNCLASSIFIED]

Hi s22

Hope things are going OK.

Please see below the request from the Reef 2050 IEP re the COTS report(s) by Reef Care International. Are you able to advise?

Many thanks

s22

From: s22
Sent: Wednesday, 31 January 2018 2:45 PM
To: s22 @environment.gov.au>
Subject: COTS report [SEC=UNCLASSIFIED]

s22 – Ian Chubb has asked if the report prepared for RRRRC by Reefcare Int (referred in the media etc) can be provided to the IEP.

Can we follow up with GBRMPA and see who the report belongs to? Did we or GBRMPA pay for it or did RRRRC?

Cheers

s22
Director
Reef Trust Section
Department of the Environment and Energy
GPO Box 787 CANBERRA, ACT 2601
T 02s22
s22 @environment.gov.au



Australian Government

REEF TRUST



s22 s

From: s22
Sent: Tuesday, 25 September 2018 11:22 AM
To: s22
Subject: FW: COTS report [SEC=UNCLASSIFIED]

From: s22 @gbrmpa.gov.au
Sent: Thursday, 1 February 2018 4:02 PM
To: s22
Subject: RE: COTS report [SEC=UNCLASSIFIED]

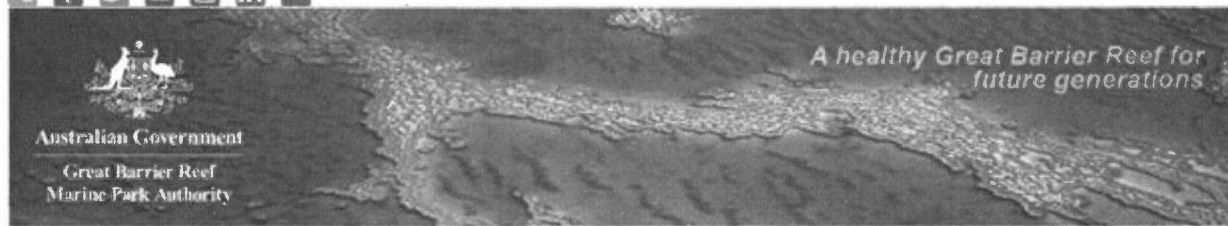
Hi s22

Yes there should be no problem in providing these reports to IEP, I will just touch base with my GM first to ensure he is aware. Okay if its early next week or is this urgent?

s22
[Redacted]

Best wishes,

s22
Project Manager, Crown-of-thorns starfish
Reef Interventions
Great Barrier Reef Marine Park Authority
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Phone: s22
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s22

s22 s

From: s22
Sent: Tuesday, 25 September 2018 11:21 AM
To: s22 /
Subject: FW: Udo's reports [SEC=UNCLASSIFIED]
Attachments: 2016 RCINT COTS Controls Habitats DRAFT Report.pdf; 2015 RCINT COTS Controls Efficacy DRAFT Report (1).pdf

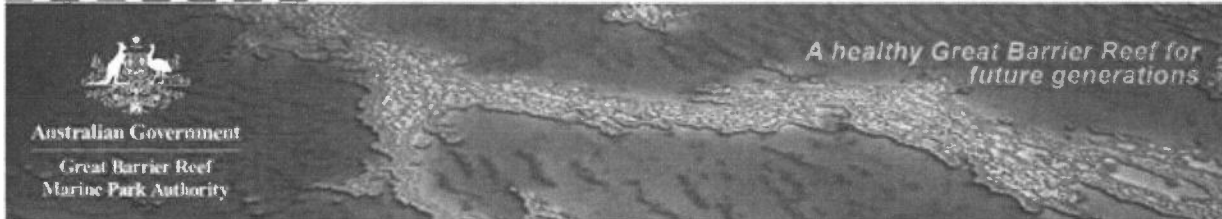
From: s22 @gbrmpa.gov.au]
Sent: Thursday, 18 January 2018 6:02 PM
To: s22
Subject: FW: Udo's reports [SEC=UNCLASSIFIED]

Hi s22,

As requested here are the RCINT reports we received this afternoon from RRRC.

Cheers

s22
Project Manager, Crown-of-thorns starfish
Reef Interventions
Great Barrier Reef Marine Park Authority
2-68 Flinders Street Townsville | PO Box 1379 Townsville QLD 4810
Phone: s22
Fax: s22
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From: Simon Banks
Sent: Thursday, 18 January 2018 4:19 PM
To: s22 @gbrmpa.gov.au>; s22 @gbrmpa.gov.au>; s22 @gbrmpa.gov.au>
Subject: FW: Udo's reports [SEC=UNCLASSIFIED]

Sent with BlackBerry Work
(www.blackberry.com)

From: Sheriden Morris <sheriden.morris@rrrc.org.au>
Date: Thursday, 18 Jan 2018, 4:08 pm
To: Simon Banks <Simon.Banks@gbrmpa.gov.au>, s47F [REDACTED]@me.com>
Cc: s47F [REDACTED]@rrrc.org.au>
Subject: Udo's reports

Udo reports

Kind regards
Sheriden

Sheriden Morris
MANAGING DIRECTOR

Reef and Rainforest Research Centre Limited
PO Box 1762 Cairns Q 4870 | Sheriden.Morris@rrrc.org.au

Tel: +61 (0) 7 4050 7400 | [REDACTED] 7 || [REDACTED])

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From: s22
Sent: Tuesday, 25 September 2018 11:22 AM
To: s22
Subject: FW: Udo's reports [SEC=UNCLASSIFIED]

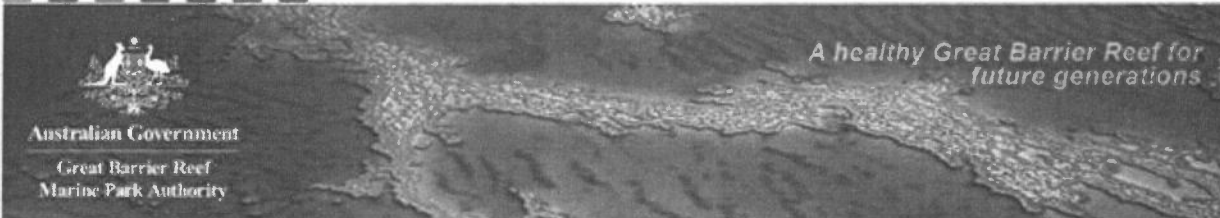
From: s22 [mailto:s22@gbrmpa.gov.au]
Sent: Friday, 19 January 2018 5:56 PM
To: s22
Subject: RE: Udo's reports [SEC=UNCLASSIFIED]

No worries s22

Talk next week sounds good. I'm pretty flexible, so just send through a day and time that suits you.

Have a nice weekend.

s22
Project Manager, Crown-of-thorns starfish
Reef Interventions
Great Barrier Reef Marine Park Authority
2-68 Flinders Street Townsville | PO Box 1379 Townsville QLD 4810
Phone: s22
Fax: s22
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From: s22 [mailto:s22@environment.gov.au]
Sent: Friday, 19 January 2018 1:14 PM
To: s22 [mailto:s22@gbrmpa.gov.au]
Subject: RE: Udo's reports [SEC=UNCLASSIFIED]

Thanks s22 and thanks for the web update content.

Maybe we could have a talk early next week if you have time?

Regards

s22

From: Udo Engelhardt [mailto:udo.engelhardt@outlook.com]

Sent: Wednesday, 17 January 2018 3:05 AM

To: s47F

s47F

Subject: FYI - MEDIA RELEASE: Serious concerns about failing crown-of-thorns starfish controls on the Great Barrier Reef.

Reefcare International Pty Ltd (RCINT)

Media Release

Crown-of-thorns starfish (COTS) controls on the Great Barrier Reef (GBR) - Organisations responsible for starfish control program hide key scientific findings, ignore serious ecological risks to the reef, and continue to waste public funds on ineffective control measures.

Since the beginnings of the latest COTS outbreak episode on the GBR some eight or so years ago, the Federal Government has provided millions of dollars to tackle this thorny problem via targeted control measures. Government-funding for controlling COTS on the GBR is provided through the Great Barrier Reef Marine Park Authority (GBRMPA), which, to date, has exclusively contracted the Association of Marine Park Tourism Operators (AMPTO) to conduct the actual controls on the reef. The management structure of the COTS control program also includes the Reef and Rainforest Research Centre (RRRC), with all three organisations (GBRMPA, RRRC and AMPTO) jointly responsible for the implementation and management of the program.

Publicly, recent COTS controls on the GBR have been presented as highly effective measures for preserving corals from damage by this well-known coral-feeding starfish. However, an analysis of the actual COTS controls data for the period 2013-15, which were only recently published on a Government-funded web site, leads to a markedly different conclusion. Interestingly, the starfish controls data have only been published in a 'raw' format, with no analyses provided that would enable members of the general public to judge the effectiveness of the program for themselves. This is all the more remarkable as exactly this kind of in-depth analysis was provided to the RRRC as part of a consultancy undertaken by RCINT in 2015. RCINT's analyses demonstrated the widespread and consistent failure of AMPTO's COTS control measures to effectively protect coral cover. In many cases, coral mortality rates on severely-affected reefs with control measures in place were similar to those previously recorded on reefs without any such controls. The report also highlighted issues of poor data quality, inadequate allocation of control effort, and a startling ignorance of existing knowledge. Furthermore, the organisations responsible for the management and implementation of the controls program have been

ignoring the inherent ecological risks associated with a clearly ineffective program. More than two years after the submission of RCINT's report to the RRRC, the report and its analyses have still not been published. A follow-up report, again funded by RRRC was submitted to the Centre and AMPTO in early 2016. This related study analysed more than 10,000 underwater photographs documenting the state of coral communities at actual COTS control sites, and provided unequivocal, and independently verifiable, evidence that the control measures had indeed failed to protect significant amounts of coral cover. Almost two years after the completion of this second study, both the technical report and the images of the photographic survey still have not been published by the RRRC, despite the fact that both components were paid for using Government funds.

Rather than addressing the serious issues raised in RCINT's reports, the COTS control program has continued, with vessel-based, roving teams of COTS control divers visiting COTS-affected reefs at lengthy intervals which are clearly inadequate for protecting coral cover. Furthermore, the long-term ecological risks associated with inadequate COTS controls continue to be ignored, with prolonged and even chronic outbreaks potentially resulting from these measures. Chronic starfish outbreaks have resulted from similarly ill-conceived control measures conducted on Japanese reefs in the 1970's and 1980's. Current COTS controls on the GBR are operating in a similar fashion to the unsuccessful Japanese control programs of the past, with sporadic, infrequent and numbers-driven control efforts resulting in the widespread survival of remnant populations of the starfish. These survivors may, in turn, produce chronically elevated starfish populations in affected regions, an outcome that should be of particular concern to the GBR reef tourism industry. Recent surveys by RCINT have demonstrated ongoing successful settlement of starfish in the key tourism area offshore Cairns and Port Douglas, suggesting that regional starfish outbreaks may already be prolonged. Similarly, unpublished AMPTO data also show an unprecedented duration of outbreaks on some reefs with inadequate COTS control measures in place.

The current COTS controls program can, at best, be described as ineffective. In a worst case scenario, it may in fact be contributing to the development of more chronic and persistent starfish outbreaks. Essentially, the program operates as a sustainable fishery, with a potential for perpetuating itself indefinitely. Furthermore, it continues to waste public funds, and is potentially causing serious ecological damage to the GBR. Recently, the Federal Government has allocated an additional \$14.4 million to support ongoing, vessel-based, roving COTS control measures until at least 2020. The documents for this current tendering process, published by GBRMPA, lay out an operational framework that will continue the ineffective operations conducted to date. The identified shortcomings and the serious ecological risks of these measures continue to be ignored. Despite the fact that both AMPTO and the RRRC are fully aware of the failures and risks of their operations, they are again bidding for the latest tax payer-funded allocation. The Government's continued support for the control operations, suggests that the Minister for the Environment is unaware of the serious concerns raised in RCINT's reports.

RCINT calls for (i) an immediate end to all roving COTS control operations on the GBR, (ii) a stop to the current tendering process in support of additional COTS controls, (iii) the conduct of a comprehensive, independent review of the program's recent operations, and (iv.) the public release of all existing COTS controls data and related technical reports.

Contact:

Dr Udo Engelhardt
Director - Reefcare International (RCINT) Pty Ltd
Cairns, QLD 4870, AUSTRALIA

E-mail: udo.engelhardt@outlook.com

Mobile*: s47F

*(*please note that Dr Engelhardt is currently travelling overseas, and is using a German phone network card; calls from Australia will be charged at overseas rates; alternatively, he can be contacted via Skype)*

s47F

RCINT is an Australian private company, providing marine environmental consultancy services. The company specialises in scientific research and monitoring, and also provides expert advice for the sustainable management of coral reefs. 2018 marks the 20th anniversary of the company's foundation.

The company's Director, Dr Udo Engelhardt, is coral reef ecologist with 27 years research experience, specialising in the ecological effects of large-scale ecological disturbances to reefs, including outbreaks of crown-of-thorns starfish (COTS) and mass coral bleaching events.

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Dr Udo Engelhardt
Director
Reefcare International Pty Ltd
Cairns, Queensland, AUSTRALIA
udo.engelhardt@outlook.com

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[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
'Controlling crown-of-thorns starfish (COTS) on the Great Barrier Reef using an Integrated Pest Management (IPM) approach - a preliminary assessment of the efficacy of current COTS control measures.' 28 January 2015	.pdf	Stage 1
s22 [redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
Technical Report Crown-of-thorns starfish (<i>Acanthaster planci</i> ; COTS) controls on the Great Barrier Reef. An assessment of the efficacy of the GBRMPA / AMPTO COTS Controls 2013-15. Under Review	.pdf	Stage 2
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