

# **Survey and Clearance of Explosive Remnants of War (ERW) Final Evaluation (Final Report)**

**Prepared for Cleared Ground Demining on behalf of the  
Australian Department of Foreign Affairs and Trade (DFAT)**

12 May 2017

## Contact Details

---

Clear Horizon Contact	Client Contact
Stuart Raetz	Cassandra McKeown
Principal Consultant	Finance Director
Clear Horizon Consulting	Cleared Ground Demining
129 Chestnut Street, Cremorne VIC 3121	Koror, Palau
Telephone: (03) 9425 7777	P: +680 778 8042
E: stuart@clearhorizon.com.au	E: cassandra.mckeown@clearedground.org

## Document review and authorisation

---

Version	Date distributed	Issued to	Comments
1.1	15 March 2017	Cleared Ground Demining (CGD), Department of Foreign Affairs and Trade (DFAT)	First Draft
2.1	28 April 2017	CGD	Final Draft
2.2	12 May 2017	CGD, DFAT	Final Report

Lead author/evaluator	Stuart Raetz
Project Director	Stuart Raetz
Internal Contributors	Christina Bagot
External Contributors	Cleared Ground Demining (CGD)
Last Saved	12/05/2017 9:24 AM
Clear Horizon Reference No.	CH14-002

## Disclaimer

This document has been produced with information supplied to Clear Horizon by Cleared Ground Demining (CGD), the Department of Foreign Affairs and Trade (DFAT) and a range of Palau ERW/UXO stakeholders including National UXO Advisory Committee and Technical Working Group representatives. While we make every effort to ensure the accuracy of the information contained in this report, any judgements as to suitability of the information for the client's purposes are the client's responsibility. Clear Horizon extends no warranties and assumes no responsibility as to the suitability of this information or for the consequences of its use.

# Contents

---

<b>1. Executive Summary.....</b>	<b>6</b>
<b>2. Introduction.....</b>	<b>9</b>
2.1. Explosive Remnants of War (ERW) program .....	9
<b>3. Methodology.....</b>	<b>10</b>
3.1. Scope.....	10
3.2. Key Evaluation Questions (KEQs).....	10
3.3. Data Collection and Analysis.....	11
3.4. Limitations .....	11
<b>4. Results and findings .....</b>	<b>12</b>
4.1. Effectiveness.....	12
4.2. Impact .....	18
4.3. Relevance .....	24
4.4. Legacy .....	25
<b>Attachment One: Program Logic.....</b>	<b>27</b>
<b>Attachment Two: Results Chart.....</b>	<b>28</b>
<b>Attachment Three: Interview guides .....</b>	<b>37</b>
Community representatives.....	37
Developers.....	39
Tourism .....	41
<b>Attachment Four: Interviewees .....</b>	<b>43</b>
<b>Attachment Five: References.....</b>	<b>44</b>

## List of figures

---

Figure 1. Quantity and weight of ERW removed by location .....	13
Figure 2. ERW Program Logic Model (2013 – 2017) .....	27

## List of tables

---

Table 1. Quantity and weight of ERW removed by location.....	13
Table 2. Proportion of suspected US ordnance removed by CGD during grant period (2013 – 2017).....	19
Table 3. Explosive Remnants of War Survey and Clearance in the Republic of Palau Results Chart (2013 – 2017).....	28

## Acronyms

---

AXO	Abandoned Unexploded Ordnance
BAC	Battle Area Clearance
CHA	Confirmed Hazardous Area
CGD	Cleared Ground Demining
DFAT	Australian Department of Foreign Affairs and Trade
EOD	Explosive ordnance device
EOPO	End-of-program-outcome
ERW	Explosive Remnants of War
IED	Improvised Explosive Device
KEQ	Key evaluation question
M&E	Monitoring and evaluation
NEQ	Net Explosive Quantity
IMAS	International Mine Action Standard
IOD	Improvised ordnance device
INGO	International Non-Government Organisation
SHA	Suspected Hazardous Area
UXO	Unexploded Ordnance
JMAS	Japan Mine Action Service
NPA	Norwegian Peoples Aid
TWG	Working Group

# 1. Executive Summary

---

This report sets out the findings of the final evaluation of the Explosive Remnants of War (ERW) Survey and Clearance program in the Republic of Palau (the “ERW program”). Funded to a total of \$3,043,266 by the Australian Department of Foreign Affairs and Trade (DFAT) between 2013 and 2016 the ERW program is being implemented by Cleared Ground Demining (CGD), a British registered charity which has been operating in the Republic of Palau since 2009.

The main purpose of this final evaluation of the ERW program is to:

- Provide accountability to the funder (DFAT) on the performance of the investment
- Provide information to assist CGD and other program partners to plan, prioritise, manage and deliver ERW survey and clearance activities within Palau.

The focus of this report is on:

- The effectiveness of survey, clearance, communications, engagement and capacity building activities delivered by CGD
- The contribution of the program in bringing about development impacts and unanticipated consequences (positive and negative).

This report will also consider the relevance and legacy of the program as secondary considerations.

This report sets out the findings of the final evaluation (Section 4) as well as an outline of the evaluation methodology undertaken (Section 3). A summary of findings is provided below.

Overall this final evaluation has found that **CGD has delivered an effective and relevant program with multiple social, economic and environmental benefits for Palau.** Building on their previous work in the Republic since 2009 and using survey and clearance and awareness raising activities, CGD has made significant progress in the period of investment towards reducing the threat from ERW making Palau a safer and more prosperous place.

**Survey and clearance targets have been exceeded: During the grant period CGD has removed 18,376 items of ordnance weighing a total of 46,589 kgs in 14 states.** This by far represents the most significant effort to reduce of the threat from ERW in Palau since the small Pacific nation was an unfortunate battleground for US and Japanese forces during World War Two. Representing a proportion of around **30 per cent of suspected US ordnance**<sup>1</sup> left in Palau following World War Two, CGD’s survey and clearance work between 2013 and 2017 is commendable and is a valuable contribution to human security, the environment and economy. By clearing and ‘releasing’ land for development, ERW survey and clearance work has functioned as an enabler for a range of development outcomes. It has also enabled greater access to land and underwater areas for locals, developers and tourists thus enhancing community safety,

---

<sup>1</sup> US records indicate that an estimated 2,800 tonnes of ERW were deposited on Palau during World War Two. Japanese records are not available. Therefore, the figure of 30 per cent reduction is based solely on US estimates and an estimated failure rate of 6%. See Section 4.2 for detail and figures on the estimated reduction.

cultural heritage, tourism, and infrastructure development. ERW survey and clearance has for instance enabled Palauans, particularly women, to collect mud-crabs for livelihoods on Peleliu.

As documented in the Mid-Term Review, the **survey and clearance of ERW is highly relevant to Palau's development priorities**. This was confirmed by more extensive consultation at the community level for this final evaluation.

Among the **unintended impacts** and activities of the work by CGD under the Australian Aid grant are: the discovery of Japanese remains on the island of Peleliu; repatriation of US and Japanese soldiers' remains; enabling the re-settlement of Peleliu by traditional inhabitants following their mass evacuation prior to World War Two; providing critically needed emergency response resources and capacity following Typhoon Haiyan in 2014; responses to ad hoc medical emergencies on Peleliu by the CGD paramedic; initiation of health promotion activities such as sponsoring and organising Palau's first national Fun-Run; providing water from the water tanks at the Peleliu training centre during a recent drought; and raising awareness of the cultural history and legacy from World War Two on Palau. In addition, the DFAT investment in CGD has in turn spawned interest and indirectly catalysed funding and attention from USAID (via NPA) and Japanese donors (via JMAS) who were previously disengaged from clearance in the republic.

Supporting the survey and clearance of ERW, CGD has also run a **far-reaching risk awareness campaign**, which has reached over three quarters (82%) of the nation's households through a door-knock survey across 14 states. Averaging over two media stories and/or public events a month over the course of the grant, CGD have further raised the profile of the threat of ERW in Palau. Risk awareness has also been supported by targeted training provided to a broad range of stakeholders including the National Safety Officer, the Koror Rangers, relevant Ministries as well as construction and farm workers. Community members, tourism representatives and developers interviewed (n=32) uniformly praised CGD for raising awareness and for bringing attention to the threat posed by ERW. One prominent tour operator on Peleliu commented that prior to his contact with CGD he was 'ignorant' of the risks posed by ERW. Using local, trusted staff has been a key factor in the effective communication of risk awareness messages.

CGD's effort has effectively assured that **the legacy of the Australian Aid grant will continue to be felt for some time beyond the period of delivery**. The legacy of the investment in human capital will also be felt in the lives of the staff they have trained, many of whom may be required to look for other employment opportunities following the end of this grant, and who will take with them a range of 'soft' and transferable skills (i.e. in administration, data management and attention to detail) developed through CGD training and on-the-job application. CGD have expressed an intention that their staff may be absorbed into other National or State agencies such as the Police, Rangers or other International NGOs.

At the end of the program an unresolved issue concerns the ownership of the survey and clearance data gathered over the course of the grant. Presently the national ERW Working Group and CGD have been unable to reach agreement on a process for transferring data. While both parties agree in principle on the transfer of data there appears to be unsettled issues preventing progress on this matter. While CGD have undertaken a massive survey and clearance effort in this grant, ERW remains across the republic. To ensure that the benefits from this successful and effective program continue to be realised it is important that CGD and the UXO Working Group find a way to ensure that Palau can access and use the knowledge and information generated from CGD's work in the future planning and prioritisation of ERW survey and clearance. While this matter is not formally resolved between the Working Group and CGD, CGD continue to regularly

and proactively cooperate and share data with their counterparts at a national, state and district level for infrastructure and development projects.



## 2. Introduction

---

### 2.1. Explosive Remnants of War (ERW) program

Cleared Ground Demining (CGD) has been funded to a total of \$3,043,266 over a three year period between 2013 and 2016 to undertake explosive remnants of war (ERW) survey and clearance activities in the Republic of Palau. Palau was the site of one of the fiercest Pacific battles during World War Two, where some 600 tons of US bombs were dropped on Palau, with a further 2,200 US tons<sup>2</sup> of shelling being fired from US Battleships. While Japanese records are not known, CGD expects return fire of a similar magnitude. Since the end of World War Two there has been no concerted effort to remove the ERW from Palau.

ERW survey and clearance is formalised in the Partnership Priority Outcome number three in the Australia-Palau Partnership for Development to “reduce the Threat of Explosive Remnants of War to Palau”. Operating in Palau since 2009, CGD has been working to survey and remove ERW in Palau. With earlier grants provided by the Australian Government, CGD has previously cleared a World War Two tourist trail of significance (located at the ‘Bloody Nose Ridge’ site) and built an ERW school on the island of Peleliu.

As arranged under the proposal and funding agreement between CGD and the Australian Government, this program is funded to deliver on the following four objectives:

1. A reduction in the threat of ERW to communities and tourists on Peleliu Island.
2. A better understanding of ERW contamination in Palau’s other 15 States, and a reduction in the ERW threats identified.
3. A reduction in the threat to the environment and risks to Palau’s communities and visitors by ERW located in Palau’s waters
4. A capability to deal with ERW Emergency Call Outs nationwide.

Meanwhile, a cross-cutting objective is to develop gender-balanced local capacity.

---

<sup>2</sup> 1 US ton is equivalent to 907.185 metric tonnes.

## 3. Methodology

---

### 3.1. Scope

The final evaluation has covered the full **timeframe** of the DFAT funded ERW Survey and Clearance program including the period of extension from 2013 – 2017. It has been conducted **independently** by Clear Horizon Consulting primarily for **accountability** purposes in order to meet the requirements of DFAT and the Republic of Palau. The evaluation has built on the findings of the Mid-Term Review (2014) and is based on M&E planning work undertaken by the evaluation team with CGD and National ERW Working Group representatives in 2014.

### 3.2. Key Evaluation Questions (KEQs)

The evaluation was designed to focus on program impact (KEQ1) and effectiveness (KEQ2) as a priority. It also considered relevance (KEQ3) and legacy (KEQ4) as secondary considerations.

#### KEQ1. Effectiveness. How well did the ERW program achieve its objectives?

- a. To what extent did the ERW program influence the following intended outcomes:
  - i. a reduction in risks to Palau's communities and visitors
  - ii. greater safety and access for local communities, tourists and developers to cleared land
  - iii. increased national capability to undertake clearance and respond to emergency call outs?

#### KEQ2. Impact. What were the impacts of the ERW program?

- b. What overall contribution did the ERW program make towards:
  - i. enhanced human security?
  - ii. economic growth through income generation, tourism, infrastructure and land development?
  - iii. a healthy environment?
- c. What, if any, unintended consequences and effects (positive and negative) has the ERW program led to?

#### KEQ3. Relevance. How relevant is the ERW program within the development context?

- d. How relevant is the ERW program to the national development priorities of Palau?

#### KEQ4. Legacy. How sustainable is the ERW program?

- e. How enduring are the outcomes achieved by the ERW program likely to be?

### 3.3. Data Collection and Analysis

To address the KEQs outlined above (1.2) a data collection and analysis strategy was employed including secondary analysis of existing data and primary data collection via a series of face-to-face interviews with stakeholders in Palau during February 2017.

#### Interview

Between **20 and 24 February 2017** 16 semi-structured group or individual interviews were conducted in Peleliu and Koror with 32 community, tourism, government and business representatives to gather evidence of the impact and effectiveness of the program. Interviewees were selected in consultation with CGD based on their level of involvement with the program and ability to provide relevant information, taking into consideration: (i) those principally affected by CGD survey, clearance and risk awareness work, and; (ii) areas where there has been significant work undertaken (i.e. Peleliu). Interviews were recorded and transcribed and consent was gained from all participants.

#### Desktop review

A desktop review of a range of data sources was conducted to ascertain the breadth and extent of CGD outputs and activity during the period of investment. Sources included CGD monitoring and reporting, ERW data logs and other documents including the Mid-Term Review (2015). The desktop review provided information on the relevance, unintended consequences and legacy of the program where appropriate. Results were consolidated in the desktop review in the 'Results Chart' (see Attachment Two).

### 3.4. Limitations

Owing to resource and time constraints, limitations in this review include:

- The 'impact' of the investment has been approached from a very narrow and selective standpoint; by focusing on specific sites and groups/individuals involved in the grant as opposed to looking at impact more widely. Due to small sample sizes and opportunistic sampling in the qualitative methods, the evaluation will not provide generalisable results.
- The interviewees for the mid-term and final evaluation were chosen in close consultation with CGD, whose local knowledge was used extensively in identifying contacts. So there is likely to be some form of selection bias with CGD potentially being predisposed to providing contacts with favourable viewpoints.
- Mine action work is necessarily technical and the evaluation team do not have any direct sector specific knowledge or experience. However, CGD has been generous with their time in orienting the evaluation team to the particulars of their work.
- Self-reporting by CGD has been relied on to some extent and it has not been possible to fully verify the statements made in reporting.
- Interviewees do not necessarily distinguish support provided by CGD under the current Australian Grant (2013 – 2017) from support from other funding sources and timeframes (e.g. AusAID assistance to CGD prior to 2013). Where possible efforts were made to discern specific assistance under the grant period of review.
- Some lack of clarity about the scope and purpose of the evaluation among national stakeholders, particularly at the planning (2014) and mid-term stages. This was not such an issue at the final evaluation stage.

## 4. Results and findings

---

### 4.1. Effectiveness

This section considers the effectiveness of the ERW program in achieving its intended objectives of enhancing safety and reducing risks from ERW to Palau's communities and visitors, providing greater access to cleared land and increasing national capability to undertake clearance and respond to emergency call outs.

As set out in the proposal and agreement between CGD and the Australian Government, CGD's work focused on the following four objectives<sup>3</sup>:

1. A reduction in the threat of ERW to communities and tourists on Peleliu Island.
2. A better understanding of ERW contamination in Palau's other 15 States, and a reduction in the ERW threats identified.
3. A reduction in the threat to the environment and risks to Palau's communities and visitors by ERW located in Palau's waters
4. A capability to deal with ERW emergency call outs nationwide.

This section assesses the achievement of these intended outcomes under the period of investment.

Overall the ERW program has successfully achieved its expected outcomes and survey, clearance and awareness raising objectives. Training and capacity development delivered by CGD staff has made a significant contribution in equipping a localised workforce with practical ERW skills and the ability to respond to emergency call outs. All agreed targets were met or exceeded over the timeframe of delivery.

### Reduction in threat to the environment and risks to Palau's communities and visitors

#### Survey and clearance

During the period of the Australian Aid grant from July 2013 until February 2017 a total of **18,376 items** of ordnance weighing a total of **46,589 kgs** were removed from 14 states in Palau by CGD. Ordnance identified and removed by CGD in the reporting period included aircraft bombs, hand grenades, IEDs, guns, mines, mortars, projectiles, rockets, bullets and sea-mines. In addition to ERW, CGD also identified and removed both explosive and non-explosive objects (e.g. flares, pyrotechnics and buoys) thought by the public to be ERW.

---

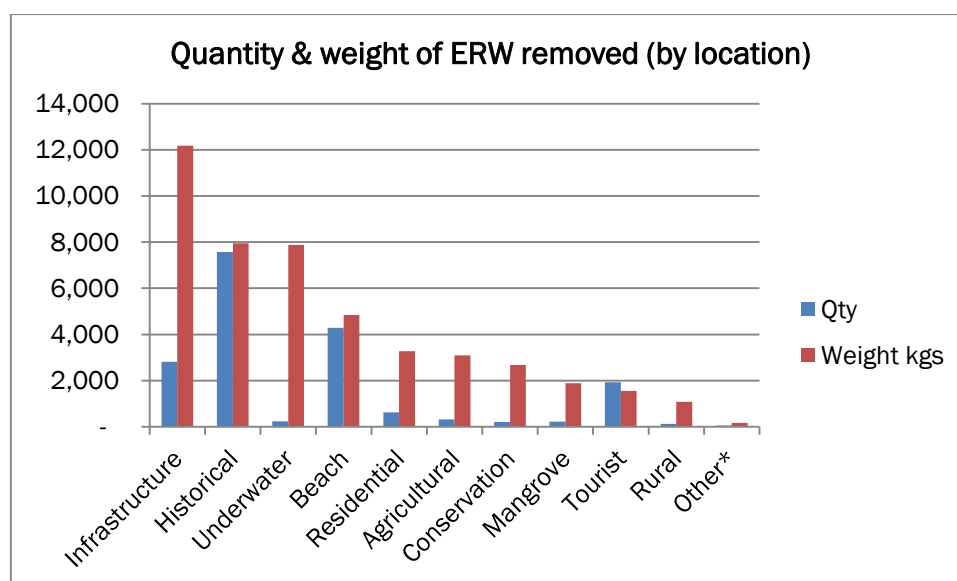
<sup>3</sup> These objectives were articulated as a series of expected outputs and outcomes for the ERW program during Monitoring and Evaluation planning in May 2014 including: a reduction in threat to the environment and risks to Palau's communities and visitors; greater safety and access for local communities, tourists and developers to cleared land, and; increased national capability to undertake clearance and manage ERW.

**Table 1. Quantity and weight of ERW removed by location**

Location Type	Quantity	Weight (kgs)	% Qty	% Weight
Infrastructure	2,821	12,183	15.4	26.1
Historical	7,574	7,954	41.2	17.1
Underwater	233	7,876	1.3	16.9
Beach	4,285	4,840	23.3	10.4
Residential	623	3,279	3.4	7.0
Agricultural	317	3,086	1.7	6.6
Conservation	207	2,679	1.1	5.8
Mangrove	213	1,890	1.2	4.1
Tourist	1,925	1,552	10.5	3.3
Rural	125	1,086	0.7	2.3
Other*	53	165	0.3	0.4
Total	18,376	46,589	100.00	100.00

As Figure 1 (below) and Table 1 (above) shows the majority of ERW removed by location has occurred in proximity to infrastructure (residential, public and commercial), sites of historical significance (including World War Two sites), in and around beach areas as well as close to residential areas.

**Figure 1. Quantity and weight of ERW removed by location**



### Coordination and engagement

Throughout the course of the grant CGD undertook coordination and engagement activities at multiple levels with the Palauan Government, with other demining INGOs working in Palau, with ERW stakeholders and with the communities in areas where they work to plan and to prioritise for ERW survey and clearance activities. As documented in the Mid-Term Review (2015) CGD overall has strong relationships with Palauan Government stakeholders as reflected in the Senate Joint Resolution, which was passed (No. 9-40) to express Palau’s “deep appreciation in Cleared Ground Demining for their continued efforts in clearing Unexploded Remnants of War” (14 October 2014). Strong relationships with the National Government and State Governors are also reflected in letters of support for CGD.

Community members, officials and business owners indicated that CGD has been responsive and proactive in meeting community needs such as following up on community sightings of ordnances, and relocating the demolition site in Peleliu to a more remote location at the request of the Governor of Peleliu.

## **Greater safety and access for local communities, tourists and developers to cleared land**

### ***Risk awareness***

CGD has implemented a very successful and proactive awareness campaign using a range of media and face to face engagement approaches, including newspaper ads, annual school presentations, tailored presentations for construction workers and government officials, and t-shirts.

Risk awareness was raised via a national door-knock survey undertaken by CGD, ERW risk awareness sessions and a media campaign. As highlighted in the Mid-Term Review, CGD reached an estimated 82% of occupied dwellings (1208 households) in 10 states via the door knock survey between 2013 and 2015. This reach is extensive when it is taken into account that the CGD team did not complete – and were not resourced to complete – a household survey of Koror’s entire population of around 10,000 inhabitants<sup>4</sup>.

Throughout the grant period CGD maintained a high national profile and presence through regular media events: a total of 86 media and communications events occurred during the grant period (2013 – 2017) where CGD actively promoted risk awareness to the wider public.

During the course of the grant CGD delivered risk awareness training to a broad range of stakeholders including:

- IED Recognition and Safety Measures to a range of Ministries and organisations (June 2014)
- The National Safety Officer (February 2015)
- The Koror Rangers (November 2015)
- Construction workers (November 2015)
- Bangladeshi farm workers on Peleliu (September 2015) and at the Golf Course construction (June 2016)

Other events sponsored and organised by CGD to raise risk awareness included the sponsorship of the Palau Fun Run in November 2016 and January 2017.

Almost all interviewees commented on CGD’s strong connection and integration within the local and expatriate community, particularly on Peleliu and Koror. The evaluation team observed that CGD staff are well-known, trusted and valued by the community. This observation was supported by the community interview data with many interviewees considering CGD as “part of the community.” This is considered to be a strong enabling factor for the effective implementation of the CGD’s outreach program. CGD team has a very good reputation in the community and is

---

<sup>4</sup> Proportion of occupied dwellings reached excludes Koror, the most densely populated state, which had an estimated 2,993 dwellings in the 2005 census. No census has been undertaken in Koror since 2005 and due to the population density CGD staff have developed an estimate as in other less-densely populated states.

known for being responsive, thorough, reliable and effective. While there are two other mine action organisations currently working in Palau (NPA and JMAS), many interviewees confirmed that CGD is the most trusted and well known.

*So it's been great...being able to understand the needs of the community. And to be able to work with the community is a very important part of them being successful here. And I appreciate their understanding. (Governor of Peleliu)*

Interviewees generally noted that before the work of CGD there was little to no awareness of the hazards posed by ERW. Now, awareness of the issue is widespread in Palau and 'everybody knows what to do,' including school children.

*They've had a big impact here. The people are really aware and conscious now. Like my auntie said they used to play with the bombs. The importance of their work – it's really there. The kids, the people and the government – we are all more aware. (Community member, Peleliu)*

Many interviewees commented that before the awareness work of CGD, they or their relatives were in close proximity to ERWs. They told stories of using bombs as furniture, for cracking nuts, using the explosive material for fishing or even burning ERW.

*People used to get hurt all the time. When I was younger, I knew of a kid who lost his arm. And I'm surprised that not many more got hurt. When I was a kid my Dad used to take the powder and make bombs to go fishing with. And he would store it only a few meters away from where we had a fire for cooking. He had crates and crates of that stuff. There was no education [at the time] (Community member, Peleliu)*

Interviewees often cited the CGD efforts to increase public awareness of the risks of ERW (and the removal of ordnances) with a feeling of being safer.

*For us, it gives us comfort and safety that with their help we can use land outside of the village. (Community member, Peleliu)*

CGD's work has contributed to the improved safety. For instance, several interviewees noted that children can be particularly at risk of ERW, as they tend to explore the forests more widely.

*I think there is an overall sense of gratitude that we can now go to places and that our kids won't get hurt, because kids run around climbing trees and doing who knows what. So yeah, they feel a greater sense of security because of that. (Community member, Peleliu)*

Tour operators also confirmed that CGD's awareness raising activities have been very effective and have changed community and tourist industry perceptions about the risks posed by ERW.

*To be honest I think they're doing good work. In fact, it's an honourable thing to do that, like I said, before that we were ignorant. As the saying goes, ignorance is bliss, right, until something goes wrong. I've been doing these tours for many years before CGD were here and I would go to the caves where potential dangers were there – not only for myself but for my guests. It was like Russian roulette, I was gambling. I was ignorant, I didn't know. (Tour operator, Peleliu)*

Using local staff to deliver the awareness training has been very effective. As noted in the Mid-Term Review risk awareness is supported by the positive profile of CGD in Palau, whose staff

interact regularly with community members while undertaking survey and clearance work. National staff perform a critical role as the 'face' of CGD at site or in their local communities. For instance, while on site staff often receive bomb reports in person from community members.

Awareness of risks has increased within the construction industry in Palau as a result of CGDs work.

*In construction it's all about mitigating the risk and that goes back to 'Are your materials right, or the manpower enough?' And one of the risks is unexploded ordnance. They've allowed us to have that comfort level and a bit of confidence – especially after the training I feel that my key staff know what to look for and don't take a chance. They know immediately what to do if they find something questionable. That's a key role that they've played here in the industry. (Construction sector, Koror)*

There are examples of CGD being proactive in organising awareness training with construction companies about the risks posed by UXO and how to respond if a potential UXO is found on a construction site.

*[CGD] came to us and said he wanted to do some training with my guys. So all my site engineers and operations, it was about an hour or so. He was proactive and set it up, and I provided the venue and the time. And the great thing about the training is that Steve opened it and then he let the local guys do the training and you could see that they had ownership. And for my operators who are all local to hear it from another local, that's really important. It really raised the awareness level. And everyone was clear on what to look out for. They brought in examples from the sea and the mangroves so we can see how the appearance changes over time. So the guys could see that you've got to be prepared for the different shapes - it can be covered in sort of materials. (Construction sector, Koror)*

### **Increased capability to undertake clearance and manage ERW**

Between 2013 and 2017 local CGD staff were equipped a range of technical and non-technical skills and abilities as a direct result of their involvement in CGDs survey, clearance, awareness raising, administrative and management tasks. In addition, CGD staff, their communities and their supervisors report that staff have gained considerable confidence and self-responsibility.

As noted in the Mid-Term Review (2015), during the course of the grant CGD has provided extensive training and professional development for their team of staff, which has ranged from 17 to 22 team members at various stages between 2013 and 2017. Overall, CGD has trained a total of 22 staff members including 18 males and 4 females in a range of topics including Searcher, First Aid & CPR, EMR, AED, EMT 1, Open Water, Advanced Open Water, Rescue Diver, EOD 1, EOD 2, Caves, Oil Spill, Dehydration and Archaeology.<sup>5</sup> ERW specific training was conducted to international standards (IMAS). Training has been supported and re-enforced by on-the-job practical application of ERW survey and clearance activities, including spot tasks, technical survey, and emergency call-outs, which are usually led by a local team member under the supervision of an expatriate EOD technician.

Between 2015 and 2017 CGD staff delivered a total of 21 medical training courses. Medical training courses covered a range of subjects including Mass Casualty Scenarios, Refresher training: Long Bone Splinting, C-Spine Stabilization and Backboarding, working as a team during

---

<sup>5</sup> Cardiopulmonary resuscitation (CPR), Automatic External Defibrillator (AED), Explosive Ordnance Disposal (EOD), Emergency Medical Responder (EMR).



CPR, and AED use. With a few exceptions all CGD personnel were involved in medical training. In addition, two national staff completed EMT/Paramedic training at the Palau Community College (March-December 2015), including 30 hours of work at the Accident and Emergency department at the National Hospital supervised by emergency doctors and health professionals.

Risk awareness training was delivered to the National Safety Officer (February 2015), the Koror Rangers (November 2015), construction workers (November 2015) and Bangladeshi farm workers on Peleliu. IED Recognition and Safety Measures training was delivered to a range of Ministries and organisations (June 2014).

CGD supervisors report a significant increase in the capability, responsibility and leadership of local CGD staff, demonstrated by the ability of CGD staff to respond to spot tasks at the end of the grant period.

Capacity development of local staff was also noted a significant outcome of CGD's work and contribution to the community, the economy and national capability. Interviewees noted that many local staff employed by CGD were previously unemployed and considered 'high school dropouts' with few employment prospects.

*Employing local staff – those are our kids who did nothing – they've given them an opportunity to do, learn, hands on and earn some money. We're so proud of that.  
(Community member, Peleliu)*

CGD staff are equipped with a range of practical and technical skills in ordnance clearing, first aid, rescue diving, boat handling, climbing and abseiling in addition to geographic information system (GIS) mapping and other specialist skills. CGD staff have also gained valuable experience and responsibilities for managing information and data as a result of their role and involvement in survey and clearance.

*I commend them for hiring locals, they could come here and hire international experts and then they don't have to waste the time to train people, but they didn't, they wanted to be here for the long term. And that's what CGD said – when I was still at the legislature – that's what they told me that they want to be invested here and they want to be here for the long term, they want Palauans to be part of our crew and we want to train them. And they've held their word, which is lot more than many other companies. (Tourist operator, Peleliu)*

One interviewee noted that vocational training is very limited in Palau and that the CGD is one of few organisations providing vocational training, making staff much more employable in the future.

*Cleared Ground sticks out to me as a striking example of vocational skills that are really like skills now for these guys in Palau. The school is a great thing. They've trained a lot of young Palauans who can use these skills regionally. (Tourist operator, Koror)*

This is also confirmed by interviews with eleven CGD staff, who commented on the significant personal growth and change that they had experienced since working at CGD. Some staff, who were previously unemployed, said that an empowering personal change was learning to come to work every day and take responsibility. Other staff commented on the new knowledge and skills they had gained, being physically active and strong and losing weight. A relatively new staff member commented on "big changes" that have happened since being employed by CGD.

*For me I never imagined myself working here. It has changed me a lot. I used to be really overweight. And I was afraid of heights but now I'm not. I can do it. I never imagined myself working here. When I first started working here I was lost. I didn't know the names and they have taught me. I can tell if it's a bomb, a mortar, a grenade. Now I know about high explosives and stuff. I lost the weight through the work. We go to places that I've never been before (Female CGD staff)*

Also that staff have explored new areas of their island through the work, areas that they would never otherwise go to.

*Before I don't really go the jungle, or climb the hill. But now, I'm used to it. I'm 59 years old now and it's easy for me to climb the hill and sometimes I found it really hard to breathe, so I stop, rest and I go up again. I'm really happy that I can do that. And now we do the walk or run Fun Run and invite the community too. We do it twice before. It's good for the community to join us to do some experience. We do that on the weekend. I'm really happy to work with [CGD] (Female CGD staff)*

CGD staff also commented on having a higher standing in the community as a result of working with CGD. A number of community interviewees also commented that they are “proud of our boys” and their professionalism.

*Every time we finish a job and get in the newspaper, everybody when they see us, they thank us. We get noticed. And they say -keep up the good work. Especially the big aircraft bomb in Koror. (Male CGD staff)*

*We were very proud of our boys when they found the big bomb in Koror, everybody looked at it but got scared and had to get CGD in. Make us some proud that they are our own guys who know what to do. (Governor of Peleliu)*

## **4.2. Impact**

This section will consider the impact of the program in contributing towards enhanced human security, economic growth and a healthy environment. It will also consider unintended consequences (positive and negative) which have resulted from the program.

In the period of current investment between 2012 ERW survey and clearance by CGD has made a significant contribution towards clearing and releasing land for infrastructure, residential development, tourism, cultural and historical heritage and community use. This has built on existing survey and clearance work undertaken by CGD in the republic prior to the current grant.

Based on historical records (CGD, 2012) showing that there were 2,800 US tons of ERW fired on Palau there is an overall estimated total of 2,540,117 Kgs of suspected US ERW deposited on Palau during World War Two. Between 2013 and 2017 it is estimated that CGD have reduced suspected US ERW by around **30%** assuming a 6% failure rate (Price and Knecht, 2012)<sup>6</sup> and the

---

<sup>6</sup> In estimating the magnitude of ERW in Palau it is necessary to consider the ERW ‘failure rate’. The ‘failure rate’ refers to the proportion of ERW that were left unexploded following combat. The precise failure rate of suspected ERW is not known however a study by historians Price and Knecht (2012) estimate a failure rate on Peleliu of around 6%.

quantity of ordnance left on Palau<sup>7</sup>. This effort builds on CGDs existing survey and clearance work in the republic, which is estimated by CGD to amount to approximately 50,000 items and 160 tonnes in total. See Table Two below.

**Table 2. Proportion of suspected US ordnance removed by CGD during grant period (2013 – 2017)**

	Measure	Total	6% failure rate
Suspected US ERW remaining	Kgs	2,540,117	152,407
ERW cleared (2013–2017) <sup>8</sup>	Kgs	46,589	46,589
<b>ERW cleared (2013–2017)</b>	%	-	<b>30.57%</b>

This represents a large proportion of ERW when the extremely large scale of ERW deposited on Palau is considered; estimated to be 2,800 US tonnes from the US forces alone. This figure does not consider the ERW left by Japanese forces. The scale of this clearance is confirmed by first-hand on-ground observation by the CGD team and national stakeholders who report that the degree of ERW contamination in Palau has vastly reduced since 2012. This massive reduction in threat is also reflected in a reported reduction in ERW reports following awareness campaigns by CGD. In summary, CGD have undertaken extensive work to reduce the threat from ERW and make Palau a safer place within the grant period representing a significant contribution to the nations development.

### Human security

Many respondents commented that they won't feel totally safe until all the ERW are completely removed from Palau. As the figures above suggest, this may be never achieved. Therefore it is significant that, given the magnitude of the problem, CGD have not only physically removed a large portion of ERW but also raised awareness within the republic of the threat from ERW. CGD have therefore made a significant contribution to human security within Palau by:

- Surveying and reaching over three quarters (82%) of the populations residences via the door knock survey; where residential properties were
- Clearing and releasing relatively large proportion (approximately 30%) of suspected US ERW
- Raising awareness across the republic through an ongoing and wide-reaching campaign to communicate the hazards and threats associated with ERW

ERW survey and clearance activities have been positively received by the community, who indicated that after CGD have cleared an area, people will immediately use this area for crabbing, farming and other hunting activities. There has been an increase in subsistence activities such as crabbing in the reefs, mangroves and forests and farming taro in Peleliu. Crabbing is largely done by the women.

*Because people were afraid to explore outside the village (Community member, Peleliu)*

<sup>7</sup> In addition, the US forces removed ERW from Palau following the end of the War in 1947 though the extent of clearance by the US is not known.

<sup>8</sup> Based on CGD clearance data for period 2013 – 2017.

*Without CGD, the people of Peleliu would still be living in risk on a daily basis, because the people like to collect food from the forests (Governor of Peleliu)*

## **Economic growth**

Through a range of survey and clearance activities, CDG has made a considerable contribution to the ability of community members and visitors to **safely access land and marine areas**. The access to new areas has enabled a range of economic activities including:

- increased tourist activities and accessible walking trails for war tourism in Peleliu
- infrastructure projects in particular water pipelines in Peleliu and Koror, solar farm in Peleliu, and a proposed dragon fruit plantation in Peleliu

*If CGD weren't here then there would be less economic growth. Our main business stays in the village here, because this land is safe. So they sure have helped us economy wise. A lot of our kids, they get their education in Koror and they don't come back, 'cos there's nothing here. So they've helped us a lot. (Community member, Peleliu)*

*Now we have potential investors from outside who are confident that they can come in and do some investment in places where it has already been cleared by CGD. (Governor of Peleliu)*

*They have cleared out a lot of areas, where before, we can't plan on building homes outside of the village because we are unsure as what's under the ground. Now with them, we have some areas where we can go and do our farming. And when there's a new place that we want to farm or build on we ask them to go there and check it for us. (Community member, Peleliu)*

**Case study: Aircraft bomb in Koror found during the construction of the water pipe**

*Just down the road, we were putting in the water pipes and we found something. My staff knew immediately to call Steve up and send him some pictures. He was in Peleliu and came over the next morning and took care of the situation. It was a 200kg aircraft bomb buried vertically and, talking to Steve, it scared the crap out of me, because he was telling me what the Japanese were doing. So before WWII, they were here but in defensive mode and they had excess aircraft bombs so they turned them into landmines. That's why they were buried vertically and in some cases, which they found in Peleliu, they would connect them in a series and there would be several of them, so if you hit one then several of them would go. Luckily this one was a standalone unit. So not only did they remove the bomb, but they swept up and down the road. Prior to him coming in and removing that, we had a training on explosive awareness with my staff about a year before. And the actual operator of the excavator was in the training, so he knew immediately that this was something that didn't look quite right. He and the safety officer knew exactly what to do. They took some pictures, evacuated the sight and called CGD. It was a combination of my staff being aware because of the training and knowing exactly what to do if you find something. Steve came totally prepared and by 4pm that afternoon the bomb was removed and taken over to the demolition site. And now, which is a bit unfortunate, we've shut down work on the site and the Governor is doing clearance with the utility company, who is the owner of the project. And with their contact, we've been told to stop work until it's been cleared. I don't know who exactly is doing the clearance work or are they qualified to do the work. It really should have been done prior to the work commencing. And I'm just wondering, if Cleared Ground wasn't here and if my staff hadn't done the training, what would the story be? And when I talk to Steve – what could have happened if this thing went off? It's pretty close to a 4 storey building and that would have probably collapsed, and possibly about 200 metres away there is a major fuel depot and some shrapnel could have hit that and it could have gone off too. So this whole island could have been affected. It could have been a totally different story.... If they weren't here. (Construction sector, Koror)*

The clearance of ordnances also enables the Palau government to access further funding for infrastructure and other development projects:

*Peleliu state government works with a bunch of grants from different governments to get things done and for infrastructure. And I know that one of the requirements is to get the land cleared for mines where people will be working. Show us that it's safe and we will give you the grant. And I know for a fact that the water piping system was like that. It's a long way and they had to work on it for over a month. And then it enabled the state of Peleliu to access grants that were available. (Former state government staff, Peleliu)*

*We can now use the trails that they have cleared. And this side here, where the phosphorus bombs were, that's now a trail. There's also the historical village. This helped us tremendously getting the building permit. They came in and did the assessment, and then he did a summary of that. And they approved the permit in one day. (Governor of Ngaremlengui, Babeldaob)*

However there remains a number of challenges within the construction sector that are beyond the scope of CGD's work. For example, many interviewees commented on the mixed compliance with national environmental assessment requirements for gaining ERW clearance before commencing new construction or development projects. Some interviewees indicated that the National Safety Officer has approved many projects without gaining clearance for ERW.

### **Tourism**

Interviewees confirmed that CGD has assisted the tourist industry by responding to, and removing, ordnances as identified by tourist operators on multiple sites in Peleliu, including in the jungle, caves and coastal areas and also a range of sites in Babeldaob such as the protected

area / bird sanctuary. There are also examples of CGD identifying and removing ordnances on existing tourist attractions.

*As far as the diving goes, we're mainly diving on the ship wreck – the most well-known impact is the Helmet Wreck, which is in the harbor. That's one where Steve did alert us in the diving community about the dangers there that we weren't really aware of... the instability of some of the ordnance there and the dangers of moving some of these things around. And he saw stuff that we didn't even see, that we have swam past a million times and didn't know what the heck it was! (Tour operator, Koror)*

Safe access to new land, in particular historical walking trails in the jungle of Peleliu, has given war tourist operators more tour options for their guests and an 'enhanced experience'.

*They have cut out a couple of trails here and that has added to the overall experience that I can give to my guests here. I've done those tours before to those areas that have now been cleared out prior to the team coming here, but it was much more difficult because of unexplored ordnances out there. Now when Steve came in and opened up the trails and made it really nice, you can see the markers really clearly on the side. When I do tours, we do go there and frequent those sites, because it's well marked, and because it's clear of unexploded ordnances and because it's a different experience for my guests, rather than a regular scenic tour of sites by vehicle, we can actually go in there and get sweaty. (Tour operator, Peleliu)*

Tourist operators commented on how the work of CGD has enriched the tourist experience through greater safety, enhanced knowledge of the war and history. Several operators have given incorporated a visit to the CGD training facilities as part of their tour.

*Our customers expect us to know more than they know and they expect us to be able to provide them a good interpretative experience to what they see and what they feel. And there's no question, the knowledge that we've gained from our interactions with Cleared Ground over the years certainly has embellished our working knowledge and adds value to our customers. And it helps us indirectly, as the more knowledgeable we are about our products the better we are able to sell it. For our American guests, this is a very important experience for them. Many of them come because they've had relatives involved in the war. And for our European guests, many of them are German, it's also significant to them, given Germany's involvement with Palau even before the war. It adds value to our product. (Tour operator, Dermot, Koror)*

All tour operators interviewed confirmed that CGD's work has had a positive impact upon the industry, however most operators were unable to quantify the impact of CGD's work on their business.

*It is very hard to correlate an increase in tourism with any one factor. You can't prove it but you can't disprove it. But I think that anything that adds value to our visitors' experience of Palau in a positive sense becomes a net benefit somewhere along the line. It certainly doesn't hurt and if I was to put myself on one side of the line, it has to have helped tourism. (Tour operator, Koror)*

One operator was able to provide annual figures showing a steady increase in tourist numbers since 2014 for the Peleliu tours, which they believe is partially the result of CGD's clearance work and opening of the walking trail.

*They are done lots of work on the Bloody Nose Ridge site (in Peleliu). The cleared sites now have lots of signs there for the tourist trails. Our customers often ask us about what is happening there, and what are the Cleared Ground staff doing. So we explain about this. Since 2014 marketing has been getting bigger and our numbers have increased significantly. We were doing day trips to Peleliu once a month, now we go 18 days in the month. This has really helped our profit. (Tourist operator, Japanese company, Koror)*

Tourist operators spoke positively about the role of CGD in terms of providing assurance that land and marine areas are safe to access, noting that the safety of tourists and their staff is their greatest liability.

*The last thing that Peleliu needs and, the last thing that tourism in Peleliu needs is for someone getting killed for something that could and should have been avoided. (Tour operator, Peleliu)*

*The first order of business for us as a tour operator is safety. People expect us to keep them safe. So if there is anything that we can do to push, add to, or enhance customer safety, we'll look into. It's an obligation we have and something that we want to do, as it's good for our business. Simply because any accident - and it doesn't matter who's responsible for it or where it is - will impact the destination. (Tour operator, Koror)*

## **A healthy environment**

Demining activities have contributed to the environmental health of Palau as ERW contaminate land and marine areas with harmful chemicals and explosive materials. Some interviewees pointed out that Palau is reliant on its natural environment for food production and for tourism – currently Palau's biggest industry.

Some interviewees noted concerns about the prevalence of thyroid cancer in Palau and raised questions as to whether this is related to the presence of ERW in the environment.

*Many people here on Peleliu, we don't have traditional jobs: a lot of the people still do traditional fishing and farming, like catching crabs and selling them on the markets. We have coconut, mud and land crabs. And they are all scattered on different regions of the island, same with UXOs [ERW]– they're scattered around the island. Not only is it a threat for people to go out there, but these animals/ crabs, eat the waste that comes from the UXOs that are still out and then in turn we consume. So that ain't no good. I know that within the last four years that they have cleared out some areas around here that were highly contaminated. So it's not just for our financial wellbeing, it's for our health and for the health of the island. And it's not only local who eat these crabs, it's our visitors. And that's the danger of it, is that we do not know. It's a big question mark. (Tourist operator, Peleliu)*

A state government environmental officer pointed out that the ordnance are mobile and can travel downstream in rivers on currents or during storms. ERW in marine areas are a particular risk of contaminated large areas

## **Unintended consequences**

A number of unintended consequences have arisen from the ERW program in the timeframe of delivery including:

- Archaeology and cultural history: the discovery and repatriation of Japanese remains in the caves on Peleliu. CGD officially opened the first caves, which have held Japanese remains since World War Two. This was of national significance to Japan as illustrated by the visit from the Japanese Emperor to Peleliu in 2015. In addition, the CGD team have unearthed and found several US and Palauan remains through survey and clearance activities.
- Re-settlement of southern Peleliu: the recently finished water pipeline in Peleliu is particularly significant as it enables community members to move back to the traditional family-owned lands in southern Peleliu, which have been inhabitable since WWII.

*They have cleared out a lot of areas, where before, we can't plan on building homes outside of the village because we are unsure as to what's under the ground. Now with them, we have some areas where we can go and do our farming. And when there's a new place that we want to farm or build on we ask them to go there and check it for us. One of my friends is moving back to the traditional lands (further south) and CDG checked it out for them. They found some stuff and it's now safe for the contractor to come in and start the building. And that's a lot of help, because it helps us to move back home. (Community member, Peleliu)*

- Typhoon of 2014. During the Typhoon CGD undertook awareness raising activities and complementary activities providing urgently needed resources and assistance in a timely manner including medical support and water. In addition the typhoon unearthed a lot of ordnance on the beach and on land, which were responded to by CGD.
- Medical capacity with the CGD team has been useful for local communities in Peleliu with local medical emergencies.
- Health promotion has been encouraged by the CGD team who have organised the national Fun-Run in 2016 and 2017. Meanwhile, as noted by staff, the physical labour involved in survey and clearance work has led to health benefits for staff.
- Water tanks at the Peleliu training centre were used as the only water source during a recent drought. State government workers access this water source daily.
- CGD have raised awareness of the war (WWII) and Palau's cultural history and role in the war.
- The involvement of CGD and DFAT investment in Palau has stimulated interest in mine action within the republic from US (via NPA) and Japanese donors (via JMAS) who were previously disengaged from mine action work within the republic.

### **4.3. Relevance**

The ERW program being delivered by CGD under this grant from the Australian Government between 2013 and 2017 is highly relevant to the development priorities of Palau, who explicitly recognise ERW as a critical problem to be addressed for the nation's social, economic and environmental sustainability. This relevance is illustrated by a surge of interest in mine action work in the republic from other donors including the US (USAID) and Japan (JMAS). Recently Palau have committed to undertaking ongoing mine action work through the development of a national ERW Policy, a National Plan and set of Standards for ERW survey and clearance. At the community level in Palau all interviewees in this final evaluation (n=32) commented on the importance of CGD's work and expressed strong views on the need for ongoing awareness raising and demining services in Palau. Palauans see ERW as an issue of ongoing relevance (see Section 4.4 'Legacy' below).



## 4.4. Legacy

The legacy of CGD's work under this period of review (2013-2017) will continue to be felt beyond the timeframe of delivery. The outcomes achieved by survey and clearance alone will continue to function as critical development enablers for some time. In other words, the absence of the threat from ERW removed by CGD is in itself a legacy from this grant.

By building risk awareness across the republic CGD have enhanced the safety of Palau's communities and visitors. The wide-reaching campaign and high visibility and profile of CGD have contributed to a growth in awareness of the threat posed by ERW, which will endure for some time. Due to the widespread reach of the campaign and the focus on youth in awareness raising activities it is not likely that this awareness will diminish among Palauan nationals. What may be a risk is the transient workforce that Palau relies on. With a high turnover of workers it is possible that awareness may subside among expatriates. Similarly, a high rotation of tourists may present awareness risks for new visitors.

CGD have increased the capability of their local workforce of 22 employees to not only undertake survey and clearance activities but in a wider sense. These staff have also been equipped with a wide range of transferable skills and abilities such as administrative and management, diving, climbing, mapping and first aid capabilities. From the point of view of the local staff and their fellow community members, being part of the CGD team has provided a valuable sense of self worth and direction, which cannot be understated as a positive outcome in a country with high levels of local unemployment. As it is likely that CGD will not be operating in the republic in the long-term, it is intended that CGD staff will have gained the necessary skills and abilities to be absorbed into the National or State agencies such as the Police, Rangers or International NGOs.

During this grant CGD have effectively built a solid knowledge base on the location and extent of ERW contamination within the republic. As has been demonstrated in this report, CGD's effort to clear ERW in Palau is widely appreciated and deeply valued by national stakeholders. Several national stakeholders<sup>9</sup> however also expressed concern during the mid-term (2015) and final evaluation (2017) that the full catalogue of survey and clearance data gathered by CGD during the grant has not been shared with the national UXO Working Group. Conversely CGD contend that the Government has not been forthcoming with available information and records on suspected ERW.

Data sharing is of significance given the original proposal made by CGD to the Australian Government explicitly committed to transparently sharing information generated through the grant with the Palauan Government<sup>10</sup>. Moreover, one of the main intentions of the grant proposal was "gathering further ERW information" to "allow the Palau Government to better understand the extent of the ERW problem nationwide, thus it will allow planning and prioritisation for immediate and future clearance by CGD in all States. Palau only has limited resources for clearance, hence the importance of fully understanding where clearance is most needed between and within States, and to have a systematic approach" (CGD, 2013).

---

<sup>9</sup> Stakeholders who identified this issue included elected representatives, observers and officials interviewed by the evaluation team during 2015 and 2017.

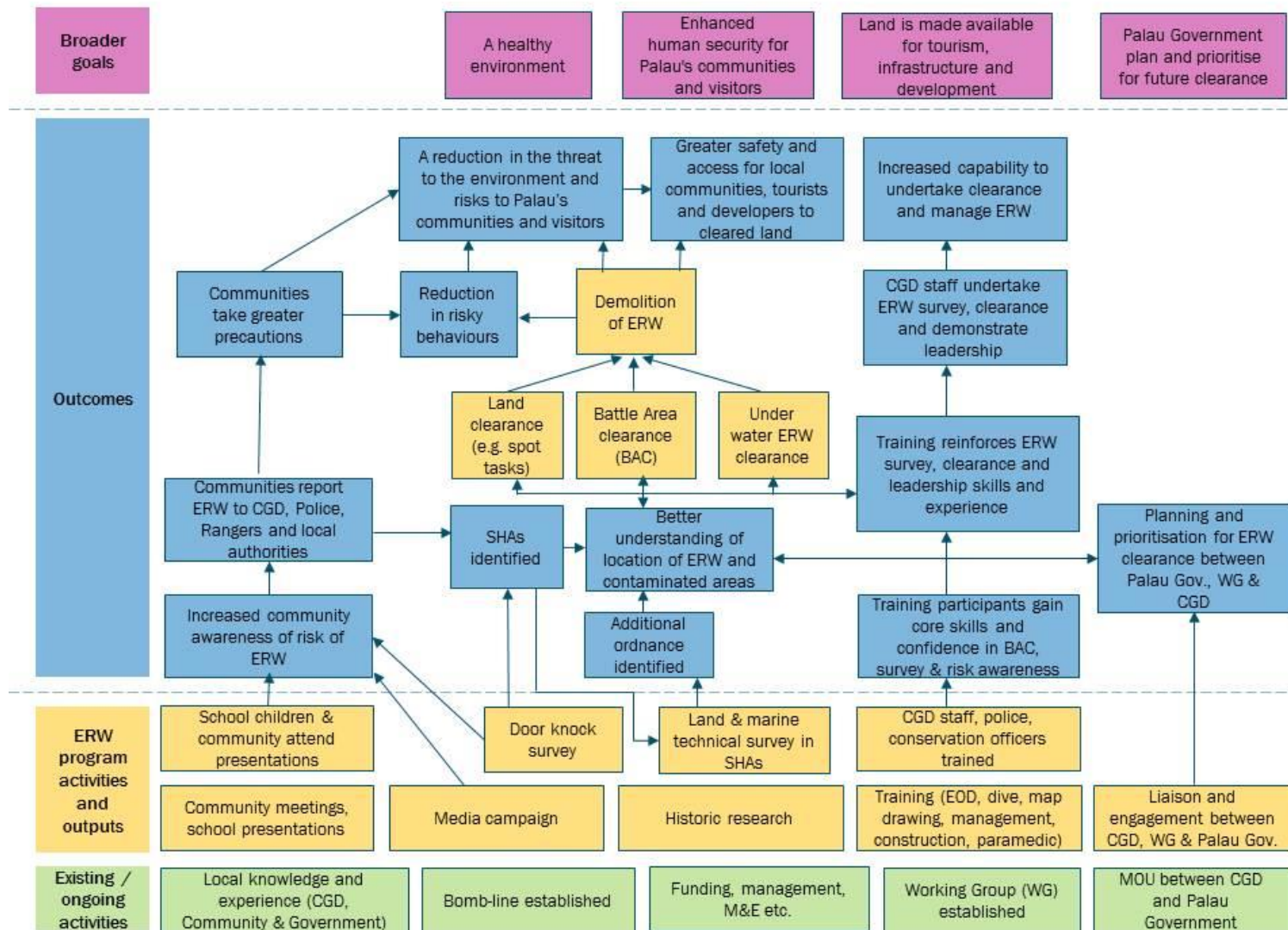
<sup>10</sup> The proposal made by CGD to the Australian Government in 2013 stated that: "...ordnance information gathered through all activities will continue to be recorded in IMSMA Spot Task format, and a copy of the data base sent to relevant stakeholders such as President's Office, Ministry of State, Historical Preservation Office etc." (2013, page 9).

At the time of the final evaluation in early 2017, the UXO Working Group and CGD have not reached agreement on a process for transferring data gathered by CGD on the location of survey and clearance activities. The UXO Working Group intends to use this data to inform planning and infrastructure developments. CGD note a range of constraints in sharing data including: the capacity of the national Government to use the data, risks with the data being not used properly or misunderstood, the time and resources associated with data collation and a lack of coordination of the national ERW approach.

Meanwhile, CGD continue to proactively coordinate and share information with national, state and district stakeholders on a range of site and project specific matters to facilitate clearance activities. Given the significant amount of work that CDG has undertaken in Palau and the importance of this data to Palau's current and future infrastructure and development planning, the evaluation has concluded that legacy of CGD's work under this grant is somewhat clouded by this issue, which remains unresolved.

# Attachment One: Program Logic

Figure 2. ERW Program Logic Model (2013 – 2017)



## Attachment Two: Results Chart

Table 3. Explosive Remnants of War Survey and Clearance in the Republic of Palau Results Chart (2013 – 2017)

Activity/outcome	Target	Results 2013 – 2017
<b>Engagement and coordination to plan and prioritise for ERW survey and clearance</b>		
Liaison and engagement between CGD, WG and Palau Government	n/a	<ul style="list-style-type: none"> <li>• Ongoing liaison with Ministers, Governors and Senior Officials. Routine visits to the State prior to operations to inform officials of work plans</li> <li>• Updates provided to Governors in all Palauan states</li> <li>• Engagements undertaken by CGD in 2016-17 included meetings with the Peleliu Governor, Minister Infra &amp; CEO PPUC Safety Officer, UN Directors Meeting and DFAT as part of the Final Evaluation</li> <li>• CGD have strong relationships with state Governors in key states where they work including Peleliu and Aimeliik supported by regular updates and an ongoing presence in these states</li> <li>• Attendance and participation in the Technical Working Group (TWG) and National UXO Policy and Plan Workshops held in 2015</li> <li>• Contribution and input by CGD into the National UXO Policy 2015 and National UXO Action Plan 2015-17; CGD are contributing to the development of the National UXO Policy and Action Plan through review; however they were unable to participate in the national workshops for these documents</li> <li>• Liaison with the Ministry of Natural Resources, Environment and Tourism (MNRET) to prioritise conservation and PAN sites for clearance</li> <li>• Senate Joint Resolution passed (No. 9-40) to express Palau's "deep appreciation in Cleared Ground Demining for their continued efforts in clearing Unexploded Remnants of War" (14 October 2014)</li> <li>• Engagement with the Government by CGD has been strained by difficulties in sharing information for the National UXO database relating to compatibility and ownership of the CGD survey and clearance data (2015)</li> </ul>
Planning and prioritisation for ERW clearance between Palau Government, WG & CGD	n/a	<ul style="list-style-type: none"> <li>• Ongoing planning and prioritisation by CGD in partnership with state governors for survey, clearance and awareness raising activities at a state level</li> <li>• Attendance by CGD at Brisbane National UXO Plan Workshop for Pacific Nations as facilitator (<i>date unknown</i>)</li> <li>• M&amp;E planning workshop for the Survey and Clearance program with CGD and TWG members to clarify expected goals of survey and clearance work (May 2015)</li> </ul>
<b>Training to develop capability</b>		

CGD staff, police, conservations officers trained	n/a	<ul style="list-style-type: none"> <li>• Trained a total of 22 CGD staff members including 18 males and 4 females between 2013 – 2017</li> <li>• Staff &amp; community representatives express great pride in their abilities and skills developed through CGD operations</li> <li>• Courses covered Searcher, First Aid &amp; CPR, EMR, AED, EMT 1, Open Water, Advanced Open Water, Rescue Diver, EOD 1, EOD 2, Caves, Oil Spill, Dehydration and Archaeology</li> <li>• Refreshers were delivered covering BAC, BAC2, BAC3, BAC4, BAC5, BAC6, BAC7, BAC8, BAC9, ERW Recognition, BAC 1st Aid, BAC 1st Aid2, BAC 1st Aid3, ERW recognition 2</li> <li>• 7 staff members were trained to IMAS EOD1 standard (2013 – 2014)</li> <li>• 17 staff undertook Medical Continuation Training covering Spine Immobilisation, Dehydration, Kendrick Device, Mass Casualty, EMR Refresher, Fractures, Shock and CPR/AED</li> <li>• ERW Awareness Training and Recognition delivered to the National Safety Officer (February 2015), the Koror Rangers (November 2015) and Construction Workers (November 2015)</li> <li>• Customised training was delivered in IED Recognition and Security Measures to a range of Ministries and organisations including Ministry of Justice, Bureau Public Safety, Airport Police, Social Security Administration, Office of the Attorney General, Immigration Department, Ministry of Health, Ministry of Education, Division of Customs, Koror Rangers, Kayangel Rangers, Palau High School, Department of Maritime Law Enforcement and the Palau Community College (24-25 June 2014)</li> <li>• Palauan national Team Leaders undertook emergency call outs under supervision of expatriate Bomb Technicians</li> <li>• 2 local CGD staff undertook a GIS mapping course held at the PCC over 3 months</li> <li>• 2 national staff currently completing EMT/Paramedic training at the Palau Community College (March – December 2015); expert mentoring of 2 national staff by expatriate paramedic (2015)</li> </ul>
Training participants gain core skills and confidence in BAC, survey & risk awareness	n/a	<ul style="list-style-type: none"> <li>• CGD staff have increased skills, ability and capacity to undertake BAC, survey and risk awareness activities as a result of training and on-the-job application of skills and knowledge</li> <li>• Completion of Red Cross, PADI, IMAS, PCC certification by 22 staff members; 17 of which are currently employed</li> </ul>
CGD staff undertake ERW survey, clearance and demonstrate leadership	n/a	<ul style="list-style-type: none"> <li>• Range of transferable skills in information management and technology, time management and self-responsibility and initiative has been developed by local staff</li> <li>• CGD staff now regularly lead spot tasks and emergency call outs with minimal supervision and direction from expatriate staff</li> </ul>
<b>Awareness raising</b>		
Community meetings and events	n/a	<ul style="list-style-type: none"> <li>• Reached a total of 281 participants including 135 males and 146 females at 8 events in 6 states (Peleliu, Ngaraard, Ngardmau, Aimeliik, Ngchesar, Ngemlenglui) between February 2014 and September 2015</li> <li>• Sessions ran on Risk Awareness, at an EQPB meeting, from a booth at Liberation Day and to a group of Bangladeshi labourers (2015)</li> <li>• Information booths held at 2 department stores (date unknown)</li> </ul>

School presentations	n/a	<ul style="list-style-type: none"> <li>Reached a total of 156 students including 73 males and 83 females at 5 sessions in 3 states (Peleliu, Airai &amp; Ngatpang) (2015)</li> <li>Fun runs organised by CGD in 2016 and 2017 used to promote risk awareness more widely</li> </ul>
Door knock survey	n/a	<ul style="list-style-type: none"> <li>Survey reached a total of 1208 occupied dwellings; representing around 82% of all occupied dwellings in the 10 states surveyed (Aimeliik, Ngatpang, Koror, Ngaremlengui, Ngarchelong, Ngaraard, Ngiwal, Melekeok, Ngchesar, Airai and Ngardmau)<sup>11</sup></li> <li>Excluding Koror reach of household survey was significantly greater than 82%</li> <li>Information was provided to households verbally and via handouts and flyers</li> </ul>
Media	n/a	<ul style="list-style-type: none"> <li>Total of 86 media and communications events including newspaper articles, magazine articles, TV ads, event flyers, event sponsorship, billboards, internet promotion, radio ads and TV documentaries between 2013 – 2017</li> <li>Release of T-Shirts ('Don't touch') for risk awareness</li> <li>Newspaper articles featured in the Island Times and The Guardian (UK), television coverage by Australian Broadcasting Corporation (ABC), Japan Broadcasting Corporation (NHK) and Oceania Television Network</li> <li>Stories and coverage mainly targeted towards local residents, while some were aimed at visitors</li> <li>An average of 2 local and/or international media stories per month</li> </ul>
Communities report ERW to CGD, Police, Rangers and local authorities	n/a	<ul style="list-style-type: none"> <li>16 incidents reported directly to CGD (July 2013 – September 2015) in Koror (5), Peleliu (8), Airai (1) and Ngatpang (1). Reported to Bomblin and direct to CGD</li> <li>In addition, hundreds of spot tasks (number unspecified) were reported to CGD during grant period by community members and authorities.</li> <li>In addition CGD regularly receive reports in Peleliu from state workers and tourists (not documented)</li> </ul>
<p>Increased community awareness of ERW risk</p> <p>Communities take greater precautions</p> <p>Reduction in risky behaviours</p>	n/a	<ul style="list-style-type: none"> <li>Community members (n=32) report higher levels of risk awareness demonstrated by many examples of the safe removal of ordnances and their knowledge of how to response to UXO in the local environment.</li> <li>Reported reduction in people bringing ordnance to the CGD office. Otherwise unknown.</li> <li>Incident log 16-17 includes five incidents: use of ERW to support a BBQ (March 2016), fire initiated ordnance (April 2016), donation of an ordnance by a tourist (November 2016), use of ERW as a boat mooring (November 2016), discovery of a 555lb bomb in the pipeline construction (January 2017)</li> </ul>

<sup>11</sup> The State Office estimates that there are around 1431 dwellings in the 9 states. However, the CGD survey found that there around 62% (887 dwellings) of the 1431 dwellings are occupied at the time of the survey. CGD actually visited every occupied dwelling for the survey (887 in total).

Survey and clearance to reduce the threat from ERW <sup>12</sup>		
Historic research	n/a	<ul style="list-style-type: none"> <li>• Desktop review of battle reports, mission logs, autobiographies and other literature written about WWII in the Pacific and Palau.</li> <li>• Interviews with archaeologists such as Aberdeen University researchers, US and Japanese MIA Archaeologists, Palau's HPO archaeologists, Peleliu Historic Commission members and visiting historians</li> <li>• Formal requests made by CGD to the Palauan Government to officially request location information from the US and Japanese governments</li> </ul>
Door knock survey	n/a	<ul style="list-style-type: none"> <li>• 1208 dwellings reached via door knock survey in 10 states; though 100% of estimated occupied dwellings were visited during the survey; A total of 60 ERW reports were generated via the door knock survey representing potential contamination at 8.3% of occupied dwellings; reports were then followed up via spot tasks, non-technical survey and technical survey</li> </ul>
Land technical survey	Peleliu 100,000 sqm (13-14); 100,000 sqm (14-15) 25,000 sqm (15-16)  Babeldaob 10,000 sqm (13-14); 75,000 sqm (14-15) 60,000 sqm (15-16)	<ul style="list-style-type: none"> <li>• 2013-14 and 2014-15 targets partially met with a total of 168,340 sqm surveyed between 2013 and 2015 on Peleliu, Babeldaob and other states</li> <li>• Including 92,000 sqm surveyed on Peleliu including; Banana plantation, Hill 80, adjacent to Solar Water Pumping Plant</li> <li>• Peleliu 191,145sqm of land surveyed through both Technical and Non Technical methods; 4 Survey tasks conducted with a total of 31,480sqm of land surveyed in Aimeliik, Melekeok and Ngeremlengui States in the main island of Babeldaob (Jul – Dec 2015)</li> </ul>
Marine technical survey	n/a	<ul style="list-style-type: none"> <li>• A total of 17 technical surveys undertaken covering 851,150 sqm between 2013 and 2015 in 4 states identifying 142 items weighing 3,743 kgs</li> </ul>
Spot tasks	Peleliu  24 spot tasks (14-15); 24 (15-16)	<ul style="list-style-type: none"> <li>• Spot task targets were exceeded with a total of 237 spot tasks undertaken in 12 states between 2013 and 2015 resulting in identification of 5325 items, of which 5125 were cleared; with total weight 11,621.5 kgs (NEQ 2,490.3 kgs)</li> <li>• Including a total of 38 spot tasks (Babeldaob, 13-14), 59 spot tasks weighing; 2,455 items (707.98 kgs) (Peleliu, 14-15 and 44 spot tasks; 170 items (502 kgs) (other 15 states, 14-15)</li> <li>• 59 Spot tasks, 214 items removed weighing 969 kgs (Jul – Dec 2015)</li> </ul>

<sup>12</sup> Survey and clearance data is disaggregated for the period 2013 – 2015 for Spot Tasks, BAC and Emergency call outs but not for the period 2015 – 2017.

Battle area clearance (BAC)	<p>Peleliu (13-14); 30,000 sqm; 3 sites; 500 items</p> <p>Peleliu (14-15); 25,000 sqm; 3 sites;</p> <p>Peleliu (15-16) 40,000 sqm</p> <p>Babeldaob (14-15); 10,000 sqm; 2 sites 12,500 sqm (15-16)</p>	<ul style="list-style-type: none"> <li>• BAC targets for 2013 – 2015 were exceeded overall with a total of 4,830 items removed weighing 10, 894 kgs (NEQ 1572 kgs) between 2013 – 2015</li> <li>• BAC conducted in 6 states (Aimeliik, Airai, Koror, Peleliu, Ngardmau, Ngatpang)</li> <li>• BAC concentrated on Peleliu where 3417 items removed weighing 4,467.48 kgs representing around 71% of all items and 41% of kgs cleared via BAC</li> <li>• Including 31,500 sqm BAC over 5 sites identifying 79 items (Peleliu, 13-14, 55,839 sqm; 9 sites; 2,331 items removed (1,880 kgs) (Peleliu, 14-15) and 7,545 sqm; 824 items; 4,750 kgs (other 15 states, 14-15)</li> <li>• BAC Peleliu (14-15) included sub-surface Bloody Nose Ridge: 2500 sqm; 105 items (202 kgs), West of the Tourist Jungle Trail BAC; 85 items (200 kgs), Bloody Nose Ridge; 10,000 sqm; 103 items (89 kgs) and sub-surface BAC Hill B Peleliu; 384 items (169 kgs)</li> <li>• BAC Peleliu 33,153 sqm of land over 6 sites (873 items removed weighing 2,465kgs) (Jul – Dec 2015)</li> <li>• BAC Ngatpang and Angaur of 4,620 sqm of land with 207 items of ERW weighing 1,104kgs being removed and destroyed (Jul – Dec 2015)</li> </ul>
Emergency call outs	<p>12 call outs per year</p> <p>36 total</p>	<ul style="list-style-type: none"> <li>• Emergency call out targets were exceeded for the program with a total of 98 emergency call outs conducted; identifying 352 ERW items, of which 342 were removed weighing 2131.86 kgs (NEQ 757.5 kgs)</li> <li>• 21 Emergency tasks, removing 479 items of ERW weighing 868kgs (Jul – Dec 2015)</li> </ul>
Underwater clearance	<p>(13-14); 5 sites; 8 items</p> <p>(14-15); 6 wrecks; 10 items; 2 PAN sites</p> <p>(15-16); 10 items</p>	<ul style="list-style-type: none"> <li>• Underwater clearance targets have been exceeded overall between 2013 – 2015 with a total of 44 tasks conducted including 27 spot tasks and 17 technical surveys undertaken</li> <li>• A total of 230 items identified, of which 152 were cleared weighing 4148 kgs (NEQ 1579.2 kgs)</li> <li>• 11 dive wrecks surveyed; 154 items located; 3 high impact sites surveyed; 4 dive sites cleared in the year 2014 – 2015</li> <li>• Underwater clearance ceased and re-negotiated with the funder following coordination with JMAS who will take responsibility for underwater survey and clearance (2015)</li> </ul>
Demolition of ERW	n/a	<ul style="list-style-type: none"> <li>• Total of 13 demolitions were undertaken between August 2013 and November 2015 at the Aimeliik and Peleliu ranges</li> <li>• 3 demolition site inspections carried out by EQPB (July 2014, November 2014 &amp; October 2015) at Aimeliik state demolition range and on site in Peleliu. Inspections found no metallic fragmentation, residual explosive, detrimental effects to surrounding flora, fauna, and wildlife.</li> </ul>



End-of-program outcomes		
Greater safety and access for local communities, tourists and developers to cleared land	n/a	<p><b>Development / infrastructure</b></p> <ul style="list-style-type: none"> <li>• Removal of 1,521 items weighing 6,856 kgs with NEQ of 940 kgs from existing infrastructure and new development sites</li> <li>• Specific survey and clearance activities to enable infrastructure development include: <ul style="list-style-type: none"> <li>○ Water Pipeline site survey and clearance (South Peleliu); 10 items removed (10 kgs)</li> <li>○ Technical survey of site adjacent to Solar Powered Water Pumping Plan lead to land being handed over to Peleliu State for 'release'</li> <li>○ Sub-surface technical survey of site earmarked for Solar Power (800 sqm) (Anguar)</li> <li>○ The Peleliu State Government requested that CGD investigate the areas using sub-surface BAC for the development of residential homes being constructed by Palau nationals. The total area measured 1,750sqm and with 14 items of ERW weighing 26kgs subsequently being removed.(2016)</li> <li>○ BAC sub-surface search at was the site of the new Solar Panel electricity generating plant, close-by the existing water treatment plant and the Peleliu runway previously cleared by CGD. This site measured a total of 1,747sqm, and although zero ERW was located (2016)</li> <li>○ Technical Survey (TS) task on Peleliu, where test lanes are systematically cut through the designated area, with a total of 12,500sqm of land being surveyed, which located and removed a total of 126 items weighing 510kgs (2016).</li> <li>○ An additional area of land underwent BAC activities in Angaur, for the construction of a water purification plant, a total of 637sqm was cleared with the location and removal of one USA Aircraft bomb weighing 100lb. (2016)</li> <li>○ In Aimeliik state, 3x88mm projectiles were removed from a golf course development. (2016)</li> <li>○ Teams responded to an Emergency task in Aimeliik state after state workers found a large cache when digging an irrigation ditch. CGD removed 13 x 100 kg aircraft bombs and 1 sea mine. (2106)</li> <li>○ In Koror, a large Japanese aircraft bomb 550lb was found when construction workers were digging the new water pipeline. The CGD team defused the bomb over 6 hours which was a significant risk due to it's close proximity to Palau's fuel tanks, port and hotels. (2017)</li> </ul> </li> </ul>

### Community safety

- Removal of 378 items weighing 4,495 kgs with NEQ 281 kgs from residential areas; Removal of 299 items weighing 2,552 kgs with NEQ 92 kgs from agricultural land.
- See also awareness raising activities above
- Specific survey and clearance activities to enhance community safety include:
  - BAC 20 metres adjacent to East Road Peleliu. The communities route to the rubbish dump; 608 items removed (594 kgs) over 935 sqm (1 item every 1.5 sqm)
  - Sub-surface BAC at 'Sledge', close to Honeymoon beach; an area used for subsistence food gathering (land crabs); 653 items over 1,600 sqm (407 kgs)
  - BAC in a Banana plantation adjacent to the road between Peleliu and the power plant
  - Demolitions have become a local event and spectacle with "some [community members] bringing picnics and music, as everyone celebrates the destruction of these threats to their island and population"
  - Clearance of 2 Japanese Sea Mines from Ngerias dock (Koror); an area proximate to a residential area, tapioca plantation and a commonly used play area
  - Clearance of a Japanese Sea Mine from the Papago Hotel (Airai) found by hotel gardeners on the hotel grounds
  - Removal of a hand grenade from a residence during an emergency callout (state unknown)
  - Removal of an aircraft bomb (45.45 kgs) from an area near a Koror fuel station with NEQ 18.18 kgs (2013)
  - Removal of 3 items (56 kgs) from the grounds of Ngermid Head Start Kindergarten (Koror) including one item being used as support in a retaining wall (2014)
  - Survey (5,000 sqm) and clearance (53 items) at Scarlet Beach Koror, a popular picnic and recreation destination (2013)
  - Removal of 2 grenades from the slipway at South Dock, Peleliu and a 10lb rocket warhead found next to Storyboard Hotel (Peleliu)
  - BAC of 12,500sqm was cleared, resulting in 427 items of ERW weighing 740kgs being removed at the so-called 'Sledge Area', which is important to the community of Peleliu for the collection of the traditional food source of land crabs, as well it is adjacent to major taro plantations. (2016)
  - ERW removed from the South Dock of Peleliu during a dock upgrade, several of the beaches used by the community, the local swimming hole, the Ngesebus coconut plantations and of particular note the resort of Carp Island. Of interest from the perspective of the items found, two large aircraft bombs laid with nose cone upward as landmines were located on Honeymoon beach, raw and still functional blocks of TNT were located in a taro field, and on the Ridge a failed molotov cocktail was located. (2016)
  - The CGD team was called out as a result of the explosion and a sub-surface search of the surrounding area uncovered a further two aircraft bombs within a 7 metre radius of the original explosion. The householder's children had been playing nearby at the time of the explosion worrying members of the public. (Ngardmau, 2016)
  - Clearance of 600sqm in Koror State at the National Hospital which removed 169 items weighing 914kgs (2016).
  - In Airai state, the team inspected mangroves where the community have vegetation and removed 6 full sea mines and 6 employ 50kg aircraft bombs. (2016)

		<ul style="list-style-type: none"> <li>○ In Ngaremlengui State, the CGD team removed 9 large aircraft bombs from a private property. (2016)</li> <li>○ The CGD team located and removed 43 items weighing 100kgs in the mangroves of an upcoming crab farming development in Peleliu. (2016)</li> <li>○ In Ngaremlengui State, CGD responded to reports of bombs in an area only accessible by boat, where 8x100kg aircraft bombs were removed. (2016)</li> </ul> <p><b>Cultural heritage</b></p> <ul style="list-style-type: none"> <li>● Removal of 5,456 items weighing 5,065 kgs with NEQ 1443 kgs from historical sites between 2013 – 2015</li> <li>● Specific survey and clearance activities to enhance cultural heritage include: <ul style="list-style-type: none"> <li>○ Sub-surface clearance to allow the first sealed cave (out of 298 caves) to be opened since 1944; allowing access for the Emperor of Japan, Peleliu State workers, archaeologists and anthropologists from Japan and USA. Repatriation of 4 human bodies</li> <li>○ BAC in Ngatpang proximate to a site, featuring in local legends as an important water source</li> <li>○ CGD local EOD Technician does a couple of days work with the US MIA Team archaeologists who are looking for human remains on demolitions range in Aimeliik. (2016)</li> <li>○ At Wattie Ridge in Peleliu, 352 items were located and removed from this historically significant site. (2016)</li> <li>○ Spot tasks in Peleliu after a tourist brought in a live hand grenade into the Peleliu Museum. (2016)</li> </ul> </li> </ul>
--	--	--

		<p><b>Tourism</b></p> <ul style="list-style-type: none"> <li>• Removal of 2,569 items weighing 783 kgs with NEQ of 91 kgs from beach areas; popular among tourists; Removal of 5,456 items weighing 5,065 kgs with NEQ 1443 kgs from historical sites between 2013 – 2015</li> <li>• Specific survey and clearance activities to enhance tourism include: <ul style="list-style-type: none"> <li>○ Clearance of Popes Ridge, Peleliu, a famous and popular tourist site close to the USMC Memorial and Japanese Shinto Shrine; 2,500 sqm cleared including 216 items (224.9 kgs) (2014)</li> <li>○ Clearance of the ‘Five Sisters’ site; proximate to the Battle Field Jungle Trail; including 5,000 sqm; 359 items (198.8 kgs)</li> <li>○ Removal of a 500lb aircraft bomb from the Palau Pacific Resort (PPR) (2014)</li> <li>○ BAC at the famous battle site of Bloody Nose Ridge, being the extension of a previous clearance site, PEL/BAC/752 on Hill 210 which resulted in a total of 6,533sqm being sub-surface searched. This search located and removed 174 items of ERW weighing 37 kgs. The site is near the important tourist sites of monuments to both the Japanese and US forces, as well below the start of the Battlefield Trail and the Peleliu Lookout. (2016)</li> <li>○ In Ngatpang State 15 Japanese grenades were discovered by State workers during construction of a tourist trail, whilst a dive company reported bullets located by the Ngardmau dock. (2016)</li> <li>○ 2 x100kg aircraft bombs were removed from the Ngaremlengui Bird Sanctuary (2016).</li> <li>○ Work continued on historically and culturally significant 321 Trail in Peleliu with the removal of 1,684 items weighing 390kgs were located and removed. (2016)</li> <li>○ In Peleliu, 201 items of ordnance were cleared from historic site Hill 100. (2017)</li> </ul> </li> </ul>
Reduction in threat to the environment and risks to Palau’s communities and visitors	n/a	<ul style="list-style-type: none"> <li>• Overall there was a substantial reduction in threat with the removal of 18,376 items weighing 46,589 kgs in 14 states</li> <li>• Clearance of an estimated 30% (46,589 kgs) of the total amount of US ERW including AXO and UXO (an estimated 2,800 tons) by CGD between 2013 – 2015.</li> <li>• CGD observations confirms a significant reduction in ERW; supported by community, government and private stakeholders particularly in Koror and Peleliu</li> <li>• Removal of a total of 152 items underwater weighing 4,148 kgs; with a NEQ of 1,579 kgs; Underwater survey Peleliu Protected Area Network (PAN) 51,000 sqm; 44 underwater technical survey and spot tasks undertaken in 9 states</li> </ul>
Increased capability to undertake clearance and manage ERW	n/a	<ul style="list-style-type: none"> <li>• There has been increased national capability to undertake emergency call outs and to manage ERW as a result of CGDs training and capacity building activities; though this is focused on CGD staff</li> <li>• 22 staff trained in operational ERW survey and clearance to IMAS standards; 17 of which are currently employed by CGD (see ‘Training to develop capability’ above); training is re-enforced by on-the-job work, supervision and mentoring by expatriate EOD technicians and paramedics</li> <li>• Significant increase in leadership, capability and leadership among local CGD staff reported by CGD supervisors demonstrated by ability of local staff to respond to spot tasks</li> </ul>

## Attachment Three: Interview guides

---

[PREAMBLE]

We (Clear Horizon Consulting) have been contracted by the Australian Government to undertake a Review of the Explosive Remnants of War (ERW) Survey and Clearance program being delivered by **Cleared Ground Demining (CGD) between 2013 and 2017**. This review will inform future planning and investment for ERW in Palau by the Australian Government.

This review is looking at the **achievements and impact** of the ERW program being delivered by CGD with Australian funding.

As you've been involved with the program or are affected by work undertaken with this grant, we would like to get your input into the evaluation.

Comments that you make may be used in a report that we will submit to the Australian Government on the ERW program. In this report, we won't identify you individually but we may associate your comments with your group /organisation / sector.

If there is any comments you would prefer to not be associated with just let us know

### Community representatives

#### 1. Introduction

- Location (State, District, Village)
- Name/s
- Age
- Gender
- Role / title / responsibilities
- Group / individual interview
- Number of participants
- CGD staff present

#### 2. What type of contact or involvement have you had with CGD since 2013:

- Government
- UXO Working Group
- Community meetings
- Training
- Know local staff
- Doorknock
- Survey & clearance
- Emergency call outs
- Bomb-line
- Media
- Other (specify)

Briefly describe your involvement with CGD and their work.

3. As a result of CGDs work since 2013 that you have been involved with / affected by what changes (positive and/or negative, big and/or small) have come about?

- Access to land / marine
- Safety / security
- Community behaviour / attitudes / awareness
- Livelihoods: fishing, farming, hunting
- Ability to generate income; business, tourism
- Cultural; i.e. access to sites of importance
- Other

*Identify: Location/s (place names), people or groups involved, timing, specific changes; i.e. types of activities undertaken / influenced etc.*

4. Of these changes you have identified, what is the most significant or important to you? What is it about this change that is important to you?

5. How has CGD work lead to these changes you have described? What other factors may have contributed to the changes you have described?

6. Do you have any other comments about CGDs work in Palau since 2013?

Thanks for your input. We will use your input to report to the Australian government on the ERW program.

## Developers

1. What type of business do you run? *Please tick all applicable boxes.*

- Construction: roads
- Construction: residential
- Other development or construction. Please specify \_\_\_\_\_

2. What type of involvement have you had with CGD / their work since 2013?

- Survey / Clearance
- Risk Awareness
- Meetings / briefings etc.

Briefly describe your involvement with CGD and their work.

3. What sites or locations do you access where CGD have undertaken survey / clearances since 2013?

- State: \_\_\_\_\_
- Location: \_\_\_\_\_ (area, village, district, etc.)
- Name of site/s (if relevant): \_\_\_\_\_
- Type of site:
  - Marine (dive)
  - Battleground
  - Other. Please specify: \_\_\_\_\_
  - Mangrove
  - Jungle

4. Were this site/s accessible before CGD undertook survey and/or clearance?

- Yes
- No

5. Overall, what difference has CGD's work since 2013 made to your business?

6. How has CGD's work (in survey, clearance or awareness raising) since 2013 affected your tourism business? What, if any, specific changes have come about as a result that wouldn't have otherwise? Please provide details.

Change in access

- Safety / security
- Infrastructure development
- Development approval
- Construction / infrastructure development
- Other change (Please specify)

7. Can you explain why these change/s are significant or important?

8. Do you have any other comments?

Thanks for your input. We will use your input to report to the Australian Government on the ERW program being delivered by CGD.



## Tourism

1. What type of tourist business do you run? *Please tick all applicable boxes*

- War tours / war tourism
- Diving
- Snorkelling
- Other type of tourism. Please specify\_\_\_\_\_

2. What type of involvement have you had with CGD / their work since 2013?

- Survey / Clearance
- Risk Awareness
- Meetings / briefings etc.

Briefly describe your involvement with CGD and their work

3. What sites or locations do you access where CGD have undertaken survey / clearances since 2013?

- State: \_\_\_\_\_
- Location: \_\_\_\_\_(area, village, district, etc.)
- Name of site/s (if relevant):\_\_\_\_\_
- Type of site:
  - Marine (dive)
  - Battleground
  - Other. Please specify:\_\_\_\_\_
  - Mangrove
  - Jungle

4. Were this site/s accessible before CGD undertook survey and/or clearance?

Yes

No

5. Overall, what difference has CGD's work since 2013 made to your tourism business?

6. How has CGD's work (in survey, clearance or awareness raising) since 2013 affected your tourism business? What, if any, specific changes have come about as a result that wouldn't have otherwise?  
Please provide details.

- Changes in access to land / sites
- Safety / security
- Changes in number of visitors / tourists (#)
- Changes in visitor / staff behaviour / awareness
- Profit from increased numbers of visitors (\$)
- Other changes

7. Can you explain why these change/s are significant or important?

8. Do you have any other comments?

Thanks for your input. We will use your input to report to the Australian Government on the ERW program being delivered by CGD.

## Attachment Four: Interviewees

#	Date	Location	Role	Sector
1	19-Feb	Koror	Tourist guide	Community
2	19-Feb	Koror	Hotel owner	Tourism
3	20-Feb	Pelelui	Governor of Peleliu	State government
4	21-Feb	Pelelui	Older lady	Community
5	21-Feb	Pelelui	Older lady	Community
6	21-Feb	Pelelui	Older lady	Community
7	21-Feb	Pelelui	Older lady	Community
8	21-Feb	Pelelui	School principal	Education
9	21-Feb	Pelelui	Business owner/ tourist operator	Tourism
10	21-Feb	Pelelui	Searcher	CGD staff
11	21-Feb	Pelelui	Searcher	CGD staff
12	21-Feb	Pelelui	Searcher	CGD staff
13	21-Feb	Pelelui	Team leader	CGD staff
14	22-Feb	Pelelui	Former state government worker	Community
15	22-Feb	Pelelui	Former state government worker	Community
16	22-Feb	Pelelui	Small tourist operator	Tourism
17	22-Feb	Pelelui	2 school kids, aged 10 and 12	Kids / community
18	22-Feb	Pelelui	Searcher	CGD staff
19	22-Feb	Pelelui	Technician	CGD staff
20	22-Feb	Pelelui	Searcher	CGD staff
21	22-Feb	Pelelui	Medic, 2iC	CGD staff
22	22-Feb	Pelelui	Searcher	CGD staff
23	22-Feb	Pelelui	Searcher	CGD staff
24	22-Feb	Pelelui	Technician	CGD staff
26	23-Feb	Koror	Managing Director, Sam's Tour	Tourism, development
27	23-Feb	Koror	Governor of Ngaremlengui	Government
28	23-Feb	Koror	Staff at Bird sanctuary	Environment
29	23-Feb	Koror	Director, Ministry of State	Government
30	24-Feb	Koror	COO, Surangel's Construction	Construction, Senator
31	24-Feb	Koror	Rock Island Tour company staff	Tourism
32	24-Feb	Koror	Head of the newspaper outlet	Media, ex-Governor, tourism

## Attachment Five: References

---

Price N, Knecht R (2012) 'Peleliu 1944: The Archaeology of a South Pacific D-Day' in Journal of Conflict Archaeology, Volume 7, 2012 - Issue 1.

Cleared Ground Demining (2013) 'Application for a grant for the project Explosive Remnants of War Survey and Clearance in the Republic of Palau' submitted to AusAID, February 2013.