

Friends of the Earth Brisbane

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December 10, 2010

Dear Sirs,

Friends of the Earth Brisbane appreciates the effort gone to by AECOM and the ADF to consider the environmental effects of joint military exercises in our region. We feel, however, that both the concept and process are fundamentally flawed. We believe that military exercises in general and joint exercises with the U.S. in particular, are not in Australia's national interest, as they contribute to regional insecurity and may be seen as a threat. The name Talisman Sabre alone suggests the intention of the exercise – sabre rattling – or the show of force in our region. Military exercises set Australia up as military bullies to our regional neighbours. We also believe that any kind of military activities in the Great Barrier Reef Marine Park and other environmentally sensitive areas should be disallowed; it is not compatible with sustainability or environmental protection.

Friends of the Earth believe that social, economic and environmental justice – not militarism – are fundamental to peace. Talisman Sabre is part of a legacy of Western colonialism, economic exploitation and securing the environmental wealth of other nations for the U.S. alliance. Talisman Sabre is designed to improve Australian military “interoperability” with the U.S. and prepares both countries for aggressive military and political posturing. War does not create peace; increased militarism will not increase justice in the world.

While we have a general opposition to military exercises which are in fact rehearsals for war, we also have specific opposition to the TS11 games for the risk they pose to the environment and human beings in all locations proposed for use in this exercise. This document draws on our past submissions regarding the TS games, the issues raised there have not been remediated.

Recommendations summary:

- We recommend that the TS11 joint military exercise be cancelled. In particular we would like to see the cessation of war games in the Shoalwater Bay region, Great Barrier Reef Marine Park and the Coral Sea as a priority.
- The area comprising the Shoalwater Bay Defence Training Area should be handed back without compromise to the Darumbal people. All lands and seas used for this (and other) military activity should be returned unconditionally to their Traditional Owners. This action would show the good faith of the ADF with regards to their environmental credentials.
- The precautionary principle should apply: if an activity can not be proven to be safe, it should not go ahead. We submit, therefore, that the poor environmental track record of the U.S. DoD should lead joint military activities with the U.S. (anywhere) to be cancelled.
- We call on the ADF to release the types of weapons and vehicles used as well as all tests and environmental monitoring carried out before, during and after the TS11 games as a public interest.

Sincerely,

Kim Stewart
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Friends of the Earth Brisbane

Friends of the Earth Brisbane

Response to the Public Environmental report on the proposed Exercise Talisman Sabre 2011 - Joint U.S.-Australian war games



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1.0 Introduction

This document is the Friends of the Earth (FoE) Brisbane response to the 2010 Public Environment Report prepared by AECOM for the Talisman Sabre 2011 Joint United States-Australia military exercise. For the purposes of this document we will refer to this as the AECOM PER.

The purpose of our submission is twofold: to point to the inadequacies on the PER process and indeed the assumption that war games can ever be sustainable, and to provide a document of the issue for public awareness. We believe that the basis of this PER, its processes of 'consultation' and 'approval' are fundamentally flawed. At base, we wish to see the end to military exercises in protected areas, and a de-escalation of the U.S. - Australian military alliance. We are opposed to war games in general, and Talisman Sabre in particular.

To Friends of the Earth the idea that the military can ever be 'sustainable' is an anathema. We submit that war and war games are incompatible with environmental protection and that these activities are not only unconscionable, but should never be carried out in protected areas or near any human habitation. We submit that the Australian government has an obligation to do better on these issues.

We consider the AECOM PER to be an elaborate public relations document, a paper tiger. The many reference to the risks to the military's reputation and the fact that there will be "increased emphasis on training in a variety of locations other than Shoalwater Bay Training Area" (PER p6) indicates that the military recognises the particular significance of the SWBTA with regards to environmental if not social justice issues.

2.0 What's at stake

2.1 Flora and Fauna values

The various locations of the TS11 Exercise have many environmental values recognised by the AECOM PER. Over 100 species are identified throughout the combined areas of Shoalwater Bay Training Area (SWBTA) and Townsville Field Training Area (TFTA), Delamere Range Facility (DRF), Bradshaw Field Training Area (BFTA), Mount Bunday Training Area (MBTA) and the Coral, Timor and Arafura Seas.

In November 2006 the British journal Science published a report on the state of the world's fisheries that indicates if we do not protect fish habitats and restrain fishing, fish stocks will collapse by 2048. Shoalwater Bay is home to many species of fish and its protected situation and extensive mangrove ecosystem makes it an excellent fish refugia and breeding habitat. The seagrass meadows on which dugongs totally depend, are also the breeding place for economically important species such as rock lobsters,, blue swimmer crab and 20 species of prawns. Other endangered species such as the logger head turtle also visit Shoalwater Bay. The reef and other relatively undisturbed marine habitats are already under pressure from global warming and comprise a piece of natural heritage that should be preserved at any cost.

Shoalwater Bay is the biggest and one of the most environmentally significant parts of the Great Barrier Reef Marine Park. With over 300kms of coastline, mangroves, wetlands, and seagrass meadows adjoining and in places part of the Great Barrier Reef Marine Park its environmental value can not be estimated. Over 100 are listed in Appendix C of the AECOM PER including 85 bird species, 12 species of mammal, 11

reptiles, 5 shark species, and many vulnerable or endangered plant species including the Swamp Orchid. We thanks the AECOM PER for making the public aware of the great biological diversity of the area.

We single out a few endangered species for special mention.

Dugong

Shoalwater seagrass meadows form one of the remaining food habitats for the endangered dugong – the use of sonar, turbulence and potential toxic spills put dugongs at risk. The dugong is suffering from population decline in many parts of its range. It is found in greater numbers in Australian waters than anywhere else in the world. Dugong numbers halved in the decade between 1990 and 2000. There are currently about 4000 dugongs in Australian waters, which is where they are concentrated. Shoalwater Bay is important dugong habitat in Queensland due to its large north facing aspect making it an ideal site for seagrass to grow.

The Great Barrier Reef Marine Park Authority cites "Seagrass loss was a major cause of death of dugongs in Hervey Bay in 1992 following a flood. However, in the Shoalwater Bay area where dugong numbers have declined in recent years, studies since 1995 have shown that there has not been a major loss of seagrass since the 1980s." Could military activity be the differing factor in Shoalwater dugong decline?

The UN 2002 Report on Dugong recommends that remaining dugong habitats in Australia be protected. Dugong are already under pressure, hence their endangered status, from habitat loss and accidental death by boating collisions and in fishing nets.

In 2003 the U.S. DoD were taken to court by environmentalists in Okinawa, Japan for the expansion plans for the U.S. base there onto a nearby reef which would threaten the Okinawa dugong population. The U.S. DoD wanted to landfill coral reef and build a military base with 2,600m runway, aircraft hangers, large fuel storage tanks and many other facilities. Only court action and the adverse publicity it occasioned forced them to withdraw. Is this the action of a responsible environmentally sensitive organisation?

Green Sea Turtle

Shoalwater Bay is an absolutely vital breeding habitat for the endangered Green Turtle: it has the highest concentration in the world of this declining species; this is their premier breeding habitat. The population of Green Turtles is thought to be declining worldwide.

Turtles are sensitive to sonar emissions undersea and could be susceptible to naval use of sonar in the same way as cetaceans and dugong.

A former U.S. DoD military dump sites in the Pacific are listed as a threat to Green Sea Turtles there by the Recovery Plan for U.S. Pacific Populations of the Green Turtle.

Whales

Whales and other cetaceans, including many endangered species including humpbacks, frequent the Coral Sea and Shoalwater Bay where the TS11 exercises will take place. In 2007 the well-publicised presence of the rare white humpback whale Migaloo during the TS07 games indicates that whale presence is likely to occur. Both the U.S. and Australian vessels use Low Frequency Active Sonar, which are know

to cause beachings, brain haemorrhages and ear injuries in cetaceans and whales in particular. The AECOM PER says, "Australia and the US are committed to environmental stewardship and take the need to protect marine mammals from the effects of underwater sound sources very seriously" (PER p10). However, in 2007 the U.S. Navy won over a legal challenge to the use of sonar in the Pacific after the intervention of George W. Bush. Is this the action of a responsible environmentally sensitive organisation?

2.2 Regional Security

Sabre rattling in the Pacific will not bring regional security and is not in Australia's interests. Talisman Sabre 2011 will be some of the largest military exercises in history and are rehearsals for nuclear war. As the U.S.'s key allies in the Pacific, Australia and Japan serve as local faces for U.S. military might in its attempts to contain continental Asia and, in particular, posture towards nuclear weapons states China and Russia. It is our opinion that acting as a launch pad for and supporting U.S. military operations has a destabilising effect on our region and beyond. U.S. military installations in Australia, such as Pine Gap, and U.S. Sea Swaps (troop change-overs in WA) are used to target the Middle East, as are troops that have trained in past Talisman Sabres.

While many Australians have not heard of Talisman Sabre, our friends in neighbouring countries are watching. Australia could take a step towards a peaceful Pacific by getting out from the of the U.S. nuclear umbrella: closing U.S. access to Australian facilities, closing U.S. bases in Australia and stopping joint training.

2.3 Global peace and justice

"Interoperability" has been the catch-cry of those in the ADF and government who seek to justify more U.S.-Australian joint war games. This begs the question: "Do we expect to be involved in more U.S. wars?" and "Is it in our strategic interest?" Do we want to align ourselves with environmental pariahs and equip our defence forces with offensive and polluting weapons so that we might be better equipped to do their bidding?

The U.S. are involved in unpopular and unjust wars, it behoves the Australian government and military to recognise that they serve the Australian people, and that 88% of them are opposed to our further involvement in U.S. military actions.

The U.S. is in a unique position to change global dialogue to peace-making rather than increasing militarisation. As a key ally, Australia should be pushing for this rather than deepening its support for U.S. military activity.

2.4 Indigenous Rights

Talisman Sabre takes place on the lands and seas of Aboriginal and Islander First Peoples. It has long been Australian and U.S. government practice to impose nuclear and military sites on indigenous people's land, limiting their access to sites and their right to practice their culture and heritage.

The land and seas at Shoalwater contain sites important to Darumbal culture and heritage. It is our understanding that the Darumbal people, traditional owners of the land at Shoalwater, although acknowledged to be the traditional custodians, have not

been given native title to their land, which is designated a military exclusion zone, and are only allowed limited access to it.

We are concerned that the threat of losing access completely forces Traditional Owners of all sites used in Talisman Sabre to submit to military use of their land or waters, without equitable debate.

In the AECOM PER is not clear that any indigenous groups were consulted; no local people, First People's or other community organisations were mentioned in the list of Defence stakeholders.

This reflects an ongoing inadequacy or lack of priority placed on consultation with Traditional Owners. In fact, during the 2007 inquiry in the SWBTA expansion the ADF claimed Traditional Owners of the Shoalwater region were not consulted because they were not "contactable." With several easily approachable and relevant organisations to facilitate contact, the ADF's failure to make contact at that time can only serve to highlight a lack of effort or a lack of appropriate protocol.

The people of Guahan/Guam, the Marshall Islands and Hawaii are all experiencing the devastation of their ancestral lands through the US colonisation and militarisation of the Pacific. Strategically important Guahan/Guam, alone, is now 1/3 occupied by the US military.

Denial of access to and the destruction of traditional lands and seas is the destruction of culture and heritage is and infringement of the human rights of these people.

All of The lands and seas proposed for use in Talisman Sabre should be rehabilitated, returned to traditional owners, and maintained for future generations.

2.5 Local land use and social justice

The ADF have been less than responsive to the needs of the local people living near the SWBTA. These people are exposed to low flying aircraft, military convoys passing through their towns and vibrations and noise associated with live firing and bombing contributing to a stressful environment to live in. In one instance, they have been told the military have "no sympathy" for them.

In addition, local residents are concerned about potential groundwater pollution from explosives in the water catchment for Waterpark Creek, part of the water source for the town of Yeppoon. The drinking water of Yeppoon may be endangered by weapons use in the Dismal sector, as it forms part of the water catchment for the town and runs into Waterpark Creek. There are grounds for concern. Perchlorate, for example, commonly used in rocket fuel, has been detected in many groundwater sites where the U.S. forces have practices bombing in both the U.S. and worldwide.

It is claimed that the land around Shoalwater Bay would have been more severely degraded had the military not repossessed in 1965 it from the cattle farmers that have degraded the surrounding area. However, this is no justification for ongoing military use of the Shoalwater Bay. Environmental concern for Shoalwater Bay would see the land and seas rehabilitated and mechanisms put in place for its ongoing preservation and protection. The cultural and environmental value of Shoalwater Bay and, in a world increasingly under pressure from global warming, its importance as a wildlife refugia must be prioritised.

The increasing human population in the Capricorn region will lead inevitably to increased conflict of land and sea use with the military. Many local inhabitants want to see the Shoalwater region better protected and do not want increased military activities in their region; their opinions should be of great importance in decision-making.

Reported instances of conflict in recent years include: the washing ashore of phosphorus marine markers (Bangalee Beach, 2006) and naval garbage, an incident where helicopter gun ships menaced a family yachting in Shoalwater Bay (July 2006) and incidents of stress caused by increased military activity in the adjacent towns of Byfield and Yeppoon. Byfield residents have long been forced to tolerate the seismic events associated with bombing runs in the nearby Dismal sector of the SWBTA. In one of the latter instances, when a local residents complain of noise from low flying helicopters was told by a ADF spokesperson that he had "no sympathy" for people who live near military facilities. This does not represent good PR or bode well for future residents of the region, and demonstrates the increasing tension between military uses and civilian uses of the area.

The incident involving a yachting family is a particularly disturbing one. Children were reported to have been made hysterical by the menacing nature of the helicopter gunship in question and the family forced to leave safe waters in bad weather. The army, although apologising to the family, has refused to provide safe harbour for boats caught in bad weather.

Sexual assaults

In addition, anecdotal reports indicate that there is a significant increase in sexual assaults, drink spiking, crime and public drunkenness in the area where troops participating in war games recreate. It is known that incidents of sexual and interpersonal violence is a problem within the troops. In 2005 there were 2,374 sexual assaults in the U.S involving military personnel. Punitive action was taken in less than a quarter of these cases. Researchers estimate as many as 67,000 women veterans, 29 percent of those who visited U.S. Veterans Affairs clinics say they experienced sexual assault in the military. The amount of assaults in the ADF is not made public. The number of sexual assaults on civilians is unknown.

It is our understanding that rapes and sexual are more often than not, unreported. The U.S. Department of Veteran Affairs says only 20% of women report; other studies have found even less report. Thus these figures could easily be ten times larger. Substantially more effort should be made to protect women and to reign in the behaviour of troops. We should not be exposing women to this kind of threat.

The AECOM PER does not acknowledge this risk and there is no other mechanism to have this risk publicly acknowledged or acted upon.

Economic importance of the SWB region

In 2005 Access Economics estimated the total economic contribution of tourism, commercial fishing, and cultural and recreational activity of the Great Barrier Reef at over \$3.5 billion per annum. They did not even attempt to estimate the ecosystem service that the Great Barrier Reef provides (mitigating pollution, providing spawning habitat for fisheries, absorbing carbon, etc) because these costs are incalculable.

The Capricorn region is of much greater economic value as a tourist destination than

as a military one. Considering the other pressures on the natural environment, non-destructive uses such as scuba diving and photography should be encouraged in preference to war games.

Unlike the military, genuine tourists are not generally associated with an increase in crime and sexual assault, nor do they generally blow things up.

3.0 The risks

3.1 Biodiversity risks

The AECOM PER lists risks to the environment at SWBTA. They rate them as 'medium' to 'high' based on the military's own assessment tool. The lack of objectivity in using a military purpose-built assessment tool calls into question its scientific validity.

Furthermore, the lack of disclosure of what weapons, aircraft, vessels and vehicles will be used makes it impossible for a member of the public reading the PER to truly assess the risks involved. Furthermore, it is not clear from the PER whether the AECOM personnel tasked with writing the PER had access to that information, making it unclear as to whether they had enough information to rate the risks accurately.

Nonetheless, they rate 'medium to high' risk activities including: "Movement of aircraft impacts on listed marine species alters the migration patterns of migratory species" protected by RAMSAR treaty, "Underwater explosions", "Vessel accident" and "Major oil spill" (PER p43), "Clearing, excavations and movement of armoured and heavy vehicles off-road" (PER p44).

Given the danger of global warming to the diverse biota of Queensland, it is important to protect places of significance, such as the heritage listed SWBTA. Habitat loss is the most significant threat to biodiversity in Queensland, making the protection of the SWB region imperative. We contend that military activities, for the many reasons listed in this document, are not compatible with biodiversity protection. They are particularly not compatible with the SWB region due to the number of significant, endangered and vulnerable species living there.

3.2 Military toxins

The AECOM PER recognises for first time that live firing can result in contamination. While this is an improvement on the honesty and disclosure of previous PERs, it trivialises this risk. They told Senator Scott Ludlam at a Senate Estimates meeting that, "quantity of ordnance used during the exercise is not disclosed", so it is not possible for us or indeed the AECOM PER to estimate the real risk that munitions damage and contamination might pose.

However, there are some knowns. Of significant concern to Friends of the Earth is the abysmal history of environmental pollution and social injustice of the U.S. military. The PER states that "U.S. Forces operating in Australia are subject to Australian military and civil environmental regulations, as well as U.S. Military environmental rules and regulations" (PER p8). This claim is disingenuous, as the not only is the U.S. military exempt from a raft of U.S. environmental rules, Australia's foremost environmental law, the *Environmental Protection and Biodiversity Conservation Act* (1999) exempts military activities from the rigorous Environmental Impact Assessments expected of other activities in protected areas and elsewhere.

The PER states that new technologies will be trialled at TS11 and that "These include communications, surveillance and transportation technologies and involve such technologies as hybrid electric vehicles, non-lethal weapons and radar sensors....However, in summary, the weapons used in TS11 will comprise conventional high explosive and non-explosive weapons, with no use of chemical, biological, radiological or nuclear weapons" (PER p5) It is our contention that high explosives ARE chemicals and that they are an environmental risk.

We contend that, contrary to the AECOM PER, *all* military action and munitions involve chemicals.

Past by joint military activities have seen the intentional introduction of toxic materials such as red phosphorus marine markers, the release of seawater ballast containing introduced species and the intentional disposal of ship-board waste at sea. These likely events, likely to occur in Talisman Sabre 2011, should not be tolerated in the Great Barrier Reef Marine Park, the Coral Sea, Shoalwater Bay or other environmentally sensitive areas.

Explosive compounds are used by the U.S. DoD pollute land, water and air in many places. They accumulate in plants and animals. Some of them include:

- **Perchlorate**, the primary ingredient in rocket fuel, is the chemical causing the most concern worldwide with regards to the U.S. DoD's operations. It has been found contaminating groundwater in 20 U.S. states as a result of its use at rocket test sites, military bases, and perchlorate-production plants. It has been linked to thyroid problems, birth defects and newborn development. A recent study has found perchlorate is even contaminating the U.S. food supply and that 'safe' level standards are inadequate.

The people of Byfield and Yeppoon are concerned that perchlorate may be leaking into their water supply because the live firing area in the Dismal sector at SWBTA is part of the catchment for the Yeppoon water supply through Waterpark Creek. They have not been successful in getting local authorities to test the water. It is incumbent on the military to take action on their concerns.

- **White Phosphorus** was found responsible for the contamination of the estuarine environment at Eagle River Flats near Fort Richardson base, Alaska, U.S.A. The fishing grounds of local Alaskans were destroyed and thousands of water birds killed, "every year for almost two decades" according to the Military Toxic Project. They also say UXO (un-exploded ordnance) "may exist in, on, and/or under up to 2 million acres of lands and waters outside the current boundaries of the base." An eyewitness account by a local fisherman indicates that white phosphorus has been used at SWBTA, which is adjacent to the RAMSAR listed Shoalwater/Corio Bay wetlands.

Phosphorus marine markers are reputed to have washed ashore in Yeppoon near the SWBTA on two occasions in the months after the TS05 games. The marine markers were reported in the media to be red phosphorus, MK58 type. Eyewitnesses say the ADF was slow to respond to the presence of the unexploded marker in a populated area. However, there was a fast response from the PR department, which led to misinformation being told the media, who reported the marker disposed of prematurely. The presence of potentially explosive and dangerous military equipment on a populated beach is intolerable to the local population and presents a clear risk, especially to vehicles that drive on that beach. The marker incidents also increase the

mental stress to people living in the area.

- **TNT** (trinitrotoluene) is another commonly used explosive that is toxic, used in bombs and gunpowder. IN one US base in Cheatham, Virginia, TNT contamination is largely responsible for the pollution of the entire food chain of the York River, and rendered local crabs, fish and oysters inedible. The US Navy, who owned that site since 1942, denied the problem for some years, although they banned military personnel from swimming there.
- **RDX** (1,3,5-hexahydro-1,3,5-trinitrotriazine) is another explosive compound, used in almost all military explosive compounds.
- **Other heavy metals** including mercury, lead. Heavy metals are bio-accumulative and can cause cancers, mental problems, birth defects, organ failure in the extreme. Importantly, their toxicity only shows up over a long period of time.
- **Practice ammunition**, sometimes called 'green' munitions, are toxic: they use the same kinds of metal casings as real ammunition and still require toxic propellants to be fired. Practice munitions can contain antimony, barium, lead, magnesium, red and white phosphorus and a number of other incendiary compounds that can contaminate.

The AECOM PER claims that, "Studies of the residues from high explosives has been found that less than 1% of the explosives used remains, with the majority of explosive compounds consumed in the explosion (Hewitt, et al., 2003)" (PER p53). In a study by the same lead author dated 2005, Hewitt, Jenkins, Walsh, Walsh & Taylor point to bias in their study in that, "the dispersion of particles of unconsumed high explosives material is heterogeneous, which makes it difficult to ensure an accurate estimate of the total residue" and that it, "cannot be considered highly accurate" (Hewitt (2005, p891). The Hewitt study also says that blow in place detonation, partial detonation and unexploded ordnance (UXO) are greater risks. The study cited only examined RDX and TNT and does not assess the other chemicals and metals used in the production of munitions. Nor does it assess the potential accumulation of 50 years of live firing residues, from year long exercises by the multiple armies that use Australian training areas, even at an minimal "1%" residue.

The Hewitt study cited in the AECOM PER is but one study that by its own admission is not definitive or accurate. It is not representative of the extent of the risk of contamination from the production, use, storage and disposal of munitions. Latham (2000), Pennington & Brannon (2002), Hewitt, Jenkins, Walsh, Walsh & Taylor (2005), Amato, Alcaro, Corsi, Della Torre, Farchi & Focardi (2006), Rosen & Lotufo (2007), Pennington, Hayes, Yost, Crutcher, Berry, Clarke & Bishop (2008a), Pennington, Silverblatt, Poe, Hayes, & Yost (2008b), Pascoe, Kroeger, Leisle & Feldspausch (2010) and Sanderson, Fauser, Thomsen, Vanninen, Soderstrom, Savin, Khalikov, Hirvonen, Niiranen, Missiaen, Gress, Borodin, Medvedeva, Polyak, Paka, Zhurbas & Feller (2010) are a few of the many studies that have found military contamination from live firing, blow in place detonation, military dumping and UXO.

Indeed a study by Clausen, Robb, Curry, and Korte (2003) found that the activities typically carried out on a military range (training area) resulted in the contamination of Camp Edwards, (Mass.) and that the same problems should be expected at other military ranges. Pennington et al (2008b) cite research that indicates in long term ranges the soil contamination of TNT could be as high as 14.3%, which "are

potentially significant distributed point sources of contamination to groundwater” (2008, p534).

Of particular interest to this critique is a study by Baver (2006) of the contamination legacy of 60 years of U.S. military exercises at Vieques, an island 13 km east of Puerto Rico in the Caribbean. Despite the end of live firing exercises at the Vieques base and the withdrawal of the U.S. military from the island, ill health and environmental contamination continue. Depleted Uranium, perchlorate, RDX, TNT and many heavy metals contaminate the site, that encompasses two thirds of the island, and affect food production, human health and environmental health. Not only did the 60 years of exercises physically destroy mangroves and waterways, and leave physical scars on the countryside, it also left behind TNT, NO₃, NO₂, RDX, Tetryl, napalm, perchlorate, mercury, lead, PCBs and DU, much of which can never be cleaned up and continue to contaminate and poison. In addition, the traditional fishing grounds have been rendered dead by “ghost nets” ripped by naval ships. Residents have disproportionately high rates of illnesses like cancer, hypertension and liver disease on the island.

The AECOM PER claims that, “Shoalwater Bay Training Area Standing Orders prohibits the use of high explosives, vehicle maintenance and refuelling in this catchment” (p53). If this is the case, we ask what is, and has been, being exploded in the Dismal Sector? Local witnesses report that high explosives are being used regularly in the Dismal Sector as their houses rattle and shake and are bombarded by noise. The claim that high explosive bombing will not occur does not address issues of UXO, the toxicity of munitions, presence of chemicals in the water catchment of Waterpark Creek.

The ADF have a fairly innocuous environmental record, however, the ADF have practised sea-dumping of war related pollutants including mustard gas and the radioactive hulls of ships used in the British nuclear tests. At sea dumping is not harmless. Szarejko & Namiesnik (2008) in a Baltic Sea study found that dumped WWII munitions corrode and release toxins into the water, most of which are water soluble. As they have been practising in the Shoalwater Bay region since 1952, it is likely that contaminants and UXO are already in the soil there, especially in the Dismal sector where live bombing occurs. The potential for UXO corroding into the environment exists.

An eyewitness account by local fisherman Ronny Toon, who has worked in the Shoalwater Bay area of over 20 years, indicates that he has seen extensive damage to mangroves which he attributes to the use of white phosphorus, used for signalling, screening, and incendiary purposes. He was told, upon inquiry, by Senator Robert Hill that the damage was due to drought, an assessment seemingly not based on the evidence at hand.

The U.S. DoD has a long record of bad environmental stewardship

The U.S. DoD has been described as the world's biggest industrial polluters, given the toxic legacy that their bases and facilities have created worldwide. *Project Censored* estimates that “the U.S. military generates 750,000 tons of toxic waste material annually, more than the five largest chemical companies in the U.S. combined. This pollution occurs globally as the U.S. maintains bases in dozens of countries.” The U.S. DoD has sought exemptions from many important environmental laws in the U.S. including the *Migratory Bird Treaties Act*, the *Wildlife Act*, the *Endangered Species Act*, the *Clean Air Act* and the *National Environmental Policy Act*. Hundreds of Superfund

contaminated sites in the U.S. are military.

Perhaps the worst cases of U.S. military pollution offshore would be the cases of Vieques, Puerto Rico and Clarkson Air Base in Philippines. In Vieques, Depleted Uranium was used extensively, leading to birth defects and high rates of leukaemia. Perchlorate contaminated the water table and ghost nets set adrift by massive naval vessels continue to devastate the fisheries. At Clarkson Air Base, the Philippines government used the contaminated land to house victims of the Pinatapu eruptions because they did not know the extent of the contamination, resulting in illness and birth defects affecting hundreds of people.

The Military Toxics Project says of Vieques:

Since 1940, the U.S. Navy has used three-quarters of the island of Vieques, Puerto Rico for bombardment, munitions disposal, and other activities. There is strong evidence that heavy metals and other munitions toxins move in the air from the bombing range to the civilian areas. The toxic explosive compound RDX was found in drinking water supplies in civilian areas in the late 1970s. In 2000, excessive levels of mercury were found in the hair and fingernails of 45% of Vieques residents tested. Vegetables and plants growing in civilian areas are highly contaminated with lead, cadmium, and other heavy metals. From 1985-1989, Vieques children aged 0-9 were 117% more likely to contract cancer than children of the same age on the main island of Puerto Rico. Children aged 10-19 were 256% more likely to contract cancer. A 2001 study found that Vieques residents are 73% more likely to suffer from heart disease than residents of the main island, 64% more likely to develop hypertension, 58% more likely to have diabetes, and 18% more likely to be diagnosed with asthma.

Both Vieques and Clarkson Air Base are now closed down and the full effects of their contamination can only be assessed after the military has vacated the premises. No compensation has been offered to these communities devastated by U.S. DoD toxins. Moreover, the U.S. DoD is reluctant to compensate even U.S. citizens for environmental pollution. One study has found that the U.S. DoD is even polluting the national food supply. There are about 140 superfund listed U.S. military sites. The Military Toxics Project estimates contaminated sites number in the several thousands in the U.S. The U.S. Navy has estimated it would cost them U.S. \$33b just to clean up the contaminated navy sites.

Contaminants on those sites include buried munitions, unexploded ordnances, spilled oil, fuel and solvents, toxic explosives compounds including TNT and perchlorate and heavy metals including lead and tungsten. In a stunning double standard, depleted uranium is not permitted to be used on U.S. testing ranges. These kinds of actions call into question the role of the Department of Defence, who exist to protect citizens, not harm them. ADF collusion with the U.S., and a push for "interoperability" which sees Australia purchasing and using the same weapons and machinery as the U.S. does not reflect well on the reputation of Australia's defence forces. Much of the pollution left globally by the U.S. military is the result of day to day maintenance and training such as that which will occur in Exercise Talisman Sabre.

3.3 Nuclear risks

The AECOM PER says that, "Nuclear powered submarines and an aircraft carrier will be participating and these may or may not have nuclear weapons on board. For security reasons, it has been the long-standing policy of the United States Government to never confirm or deny the presence of nuclear weapons on board their ships" (PER p35) It is common knowledge that the US has a significant nuclear arsenal at sea;

Australia can refuse to allow entry to nuclear-capable vessels and to train with them. Training with a nuclear-capable military, using its nuclear-capable systems, is training for nuclear war, whether or not the existence of the warheads is confirmed.

The AECOM PER recognises for the first time high risk of contamination in event of nuclear powered vessel related accident.

The AECOM PER says that, "a total of two US nuclear powered naval vessels have sunk, namely the submarines USS Thresher in 1963 and the USS Scorpion in 1968 due to incidents unrelated to their nuclear reactors." While this may be technically true, there have been numerous accidents and sinkings of nuclear submarines worldwide, including non-destructive accidents with U.S. nuclear submarines.

The AECOM PER claims that, "Nuclear powered warships do not generate any radioactive waste while they are operating" (PER p32). The fact that emergency plans exist and that "Radiation monitoring will be undertaken during all visits of nuclear powered warships to Australian ports" (PER p35) suggests that there the hazard of potential radioactive contamination is real.

In addition, we consider that the issue of Depleted Uranium weapons (now also referred to as Enriched Uranium weapons) remains contentious. While the PER says that, "No depleted uranium munitions will be used during TS11. Depleted uranium munitions are not in the ADF inventory and their use is not permitted by foreign forces in Australia" (PER p35), the issue of Australia's past purchase and probable use of DU in the SWBTA has not been resolved and probably will never be disclosed by the ADF. Hansard shows that the ADF did purchase DU during the 1980s and that it no longer appears in the ADF inventory. This raises questions about whether the SWBTA is already contaminated by DU. Despite their questioning, the community in the Shoalwater region has, of yet, received a denial that depleted uranium weapons were used in the region in the past.

A larger nuclear-based accident could be catastrophic for humans and wildlife alike – it is our understanding that no nuclear preparedness has been considered specifically for Talisman Sabre, nor is Talisman Sabre deemed a "nuclear action" by the *Environmental Protection and Biodiversity Conservation Act (1999)*. While agreements and regulations for nuclear ship visits are in place, the fact that these visits and activities do not trigger required assessment under the EPBC means that the EPBC is fundamentally flawed.

In Tokyo, Japan 2006 radiation was detected in the waters around nuclear powered submarine, the U.S. Honolulu. The U.S. navy continues to deny this and maintains they have a good record. Some Japanese ports see the risk of nuclear accident from visiting U.S. warships so great that they hold nuclear leak drills to test their preparedness.

In 1989, the Senate Standing committee on Foreign Affairs Defence and Trade inquiry into nuclear powered ships visiting Australia found that risk assessment based on past record of accidents could not be used as a predictor of future accidents. This calls for the precautionary principle to be applied: the risk is real - the lack of past accidents does not rule out a future accident.

In fact, there have been at least 10 serious peacetime accidents involving U.S. nuclear submarines on the public record. As recently as March 2005 a U.S. nuclear submarine was involved in an undersea crash that killed crew members. A witness to the 1989

Senate inquiry found that the paucity of reported accidents involving nuclear submarines was probably due to, "tight secrecy surrounding sensitive military information" and "it would take blind faith to believe that disaster and near disasters as yet undisclosed, had not occurred in NPW reactors". In fact, media outlets site incidents in the many hundreds.

3.4 Sonar risks

Active and passive sonar will be used during the TS11 war games. Mid to Low Frequency Sonar is associated with whale breachings, brain haemorrhaging in cetaceans and disruption to the breeding cycle of many species.

The AECOM PER claims that, "Australia and the U.S. are committed to environmental stewardship and take the need to protect marine mammals from the effects of underwater sound sources very seriously" (PER p10). This is simply untrue: the U.S. Navy has exemptions from acts that protect endangered species, including whales, to allow their use of sonar.

In 2008, U.S. environment groups took the U.S. Navy to the Supreme Court to stop them using sonar during the TS07 games in Hawaii, saying, "intense sound waves can harm or even kill 37 species of marine mammals, including sea lions and endangered blue whales, by interfering with their ability to navigate and communicate" (New Scientist, Nov 12, 2008). The Navy won, although two high court judges made statements of opposition to the decision: "In her written dissent, Justice Ginsburg cited the substantial and irreparable harm to marine mammals, saying sonar has been linked to mass strandings and haemorrhaging around the brain and ears" (New Scientist Nov 12, 2008).

The AECOM PER says, "The risk of marine mammals (particularly whales) being adversely affected by sonar transmissions is considered low" (PER p33). We contend that even if this were true, the precautionary principle should apply. The impact of even a small risk would be great if it affected even one member of an endangered species totalling in the hundreds, such as Right Whales and Grey Whales (IWC 2010) In reality, unless an affected animal washes up on shore somewhere, it is unlikely that the military can guarantee that they have not killed cetaceans, or that their use of sonar has not non-lethally injured the many creatures that live in the Coral Sea and the Great Barrier Reef Marine Park.

The AECOM PERs assessment of risk reduction measures regarding sonar are inadequate given the nature of active sonar and its ability to travel great distances undersea. In recent years the U.S. Navy has developed LFS that operates at lower frequencies and travels further (SURTASS-LFS). The proposal regarding active sonar is to, "Suspend sonar transmissions if whale is sighted within 4000 yards from ship" (PER p33) is inadequate given the extensive distances that sonar can travel undersea.

Importantly for the SWBTA and TS11 is the use of active sonar in the oceans near the bay. Sonar is known to effect cetaceans, and dugongs also respond to sonar. Sonar is believed to be responsible for the deaths of whales and dolphins worldwide, the loud noises frightening the animals, causing brain haemorrhages and 'the bends'.

The American Cetacean Society (ACS) says, "The U.S. Navy, in developing and testing its SURTASS-LFA (Surveillance Towed-Array Sensor System - Low-Frequency Active, called "LFA" for short) sonar system, was caught bypassing domestic environmental laws and taken to court by environmental groups". ACS says the U.S. Navy has the

capacity to ensonify 80% of the world's oceans. Dr Marsha Green, for the Ocean Mammal Institute says that, "low-frequency (LFAS) and mid-frequency can have a source level of 240 dB, which is one trillion times louder than the sounds whales have been shown to avoid" (Green 2001).

The Great Barrier Reef Marine Park Authority cite, "detonations of explosives, the use of live munitions and the use of active sonar and other acoustic devices" as threats to marine life in the area.

Sonar and ocean noise has also been found to affect fish, injuring or killing them by vibrating their swim bladders, reducing catches and affecting the viability of eggs.

The risk sonar poses is acknowledged. Once again, the precautionary principle should apply and the use of sonar should be ceased. The proposal to suspend sonar use if a whale is sited within 1,000-4000 yards from a ship is, therefore, inadequate for the protection of the animals and these environments.

3.5 Other risks

Fire

The AECOM PER cites fire hazard from live firing. The Dismal sector, as the designated live firing range, is proximal to the community of Byfield. In the event of dry weather, fire hazard in the thick forest area could threaten human habitation.

Noise

The local communities can draw some comfort from the claim that "*Shoalwater Bay Training Area* Standing Orders specify that flying directly over the Byfield, Stockyard Point and Marlborough communities be avoided and restrictions from flying over sensitive fauna areas noted as Pelicans Rock, Kenss Island and Bay Island" However, during past TS games this edict has not been followed and military representatives have been less than understanding of the needs of the local community regarding noise, telling them that, "they should live near a base" and that there is "no sympathy" for them (Bishopric, 2007, personal communication).

Underwater detonations

The AECOM PER claims that the risk of "psychological harm to marine fauna" (PER p61) is of concern to them. This disingenuous claim is contradicted by the fact that the TS11 games will destroy 2 hectares undersea in Shoalwater Bay creating substantial undersea noise and toxic residues. The PER admits that marine animals will have to be moved away. Shoalwater Bay is home to the east coast of Australia's biggest endangered dugong population.

In 2010 Senator Scott Ludlam asked military personnel and The Great Barrier Reef Marine Park Authority in parliament to explain how dugong and other species would be protected from this activity. GBRMPA representative Dr Reichelt told him that "The military are required to do an extensive clearing operation of wildlife", literally ushering or scaring them out of the area. The GBRMA representative had no idea whether or how smaller species could be protected from underwater detonations, but he considered the 2 hectare area "a small area" (Senate Estimates Transcripts, Tuesday 19th October 2010).

Crashes and accidents

The AECOM PER states that "Aircraft Crashes...The likelihood of aircraft crashes occurring during TS11 is very low." However, accidents do happen.

In January 2006 the USS Ronald Reagan, visited the port of Brisbane. On their return journey from participation in manoeuvres in Australian waters a U.S. FA-18 Hornet strike fighter plane crashed in the ocean 200km SE of Brisbane. No attempt was made to retrieve the \$37m aircraft and the public was not made aware of the potential environmental contaminants contained within that ship.

Ballast Water

The AECOM PER says it is likely that ballast water will be expelled at non-defence ports. Ballast water is a known mechanism for the transfer of exotic species into Australian waters. This risk is not peculiar to military vessels however, but it compounds the number of risks being introduced by the presence of U.S. vessels in environmentally sensitive areas.

Sea dumping of shipboard waste

After TS05 games, shipboard generated domestic waste was found washed ashore on the Sunshine coast at Mudjimba and on the Sunshine Coast. Apparently it is the policy of the U.S. navy to dispose of their waste in this manner, and the bag was accompanied by a letter that said as much. The waste included plastic debris and paper. In January 2006, a US nuclear powered aircraft carrier, the USS Ronald Reagan, was found to have left a trail of rubbish in Moreton Bay during a short visit to the port of Brisbane.

Entanglement in marine debris can restrict an animal's movement, causing starvation, bodily infections, the amputation of limbs and drowning. The Australian Department of Environment and Heritage lists the Green Turtle as one species particularly vulnerable to the dangers of marine debris. Harmful marine debris has been listed as a key threatening process under the *Environmental Protection and Biodiversity Conservation Act 1999*. Disposing of plastics at sea is totally prohibited by the International Convention. Despite this, the EPBCA excludes "marine debris resulting from the legal disposal of garbage at sea", which we presume includes the U.S Navy.

Friends of the Earth fails to see how legally disposed of garbage could be any less threatening to sea creatures than non-legally disposed of garbage and, therefore, condemns yet another flaw in the legislation. Due to the failure of legislation, it is incumbent on the military to act upon their claim of environmental sensitivity and to end this threatening process.

4.0 The Public Environment Report and its limitations

4.1 Lack of appropriate scope

The PER addresses limited potential environmental impacts within Australian territory and is, therefore, an incomplete assessment of the environmental and social impacts of Talisman Sabre as a whole. Not assessed, or in most cases mentioned, are the potential impacts on sites used that are not within the designated military training facilities, such as the civilian airport and ports of Brisbane, and support facilities outside of Australia, which are also impacted upon, such as Guahan/Guam and Hawaii.

Also ignored are social, economic and political impacts and an exploration of the rationale for Talisman Sabre.

Concerns:

- Tacit acceptance of increased militarism and involvement in US wars as the status quo – no discussion as to the option to not engage in Talisman Sabre
- Failure to assess entire exercise – its impacts on support regions, civilian facilities, and support facilities outside Australia, such as Guam.
- Fundamental incompatibility of war games and environmental protection
- Inappropriate entanglement of GBRMPA with military – objectivity compromised
- Inadequacy of Defence Major Exercises Risk Assessment Tool (Appendix B)
- Recognising risks is not the same as eliminating them
- Issues of chemical toxicity of munitions not addressed
- Even with its limited scope the AECOM PER did not provide timely or adequate opportunity for public consultation

4.2 Consultation issues

The AECOM PER Community Consultation plan (PER pvi) details the effort that AECOM will go to engage the local community. However, important and very active members of the community, including Friends of the Earth Brisbane, who has consistently commented on Talisman Sabre and Shoalwater military matters, were not notified of the existence of this PER or of the information sessions until after they had occurred. It is our understanding that local community contacts in the Byfield, Rockhampton and Yeppoon regions were similarly overlooked by this process. We note that the list of stakeholders is made up of almost entirely government-related or military bodies. It appears that no indigenous, local community, arts, non-governmental political, social justice, women's health (rape and crisis), student, academic, or non-government aligned scientific or environmental organisations or external organisations actively involved in the protection of the Coral Sea were consulted. We contend that this exclusion was not accidental.

4.3 Disclosure issues

We submit that war games are incompatible with environmental protection and the military scrutiny of military activity will be necessarily biased. The tendency of the military to less than full disclosure of their activities for security reasons, such as refusal to confirm the existence of nuclear weapons or the type of weapons used, means that we cannot make an informed assessment of Talisman Sabre.

Nonetheless the AECOM PER mentions several environmental tests and reports that will go ahead as a result of TS11. Namely: Radiation monitoring at all ports (PER p35), photo monitoring (PER p18), post activity checks (PER p21). We ask the military to make full disclosure of these reports.

In addition, the AECOM PER says that, "Defence is required to comply with various state and Commonwealth laws" including the *Environmental Protection and Biodiversity Conservation Act* and

- Aboriginal and Torres Strait Islander Heritage Protection Act 1984
- Australian Heritage Council Act 2003
- Australian Maritime Transport Safety Authority Act 1990
- Defence Act 1903 and Defence Regulations 1952

- Environment Protection (Sea Dumping) Act 1981
- Great Barrier Reef Marine Park Act 1975
- Hazardous (Regulation of Exports and Imports) Waste Act 1989
- Native Title Act 1993
- Protection of the Sea (Civil Liability) Act 1981
- Protection of the Sea (Powers of Intervention) Act 1981
- Protection of the Sea (Prevention of Pollution from Ships) Act 1983
- Quarantine Act 1908
- Wet Tropics of Queensland World Heritage Area Conservation Act 1994 (p29)

This is a misleading claim. While the military can claim that they are adhering legal requirements, they fail to mention that due to inter-governmental and inter-departmental agreements, Talisman Sabre does not require the preparation of ongoing bona fide Environmental Impact Statements or Assessments one would expect from actions that are covered under the EPBC. Indeed, it does not even require the preparation of a Public Environment Report. "The PER is produced to satisfy Defence's own requirements for environmental impact assessment, community and stakeholder engagement and there is no requirement for additional formal assessment by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC)" (PER pi).

Without outside scrutiny, it is questionable how rigorously any local legislation could be applied on military exercises, in particular those with the U.S., and how prosecution or remediation would take place if a breach occurred.

4.4 TS11 in context of the U.S. alliance

Talisman Sabre publicly demonstrates Australia's ongoing commitment to the U.S. alliance and is a show of combined military force in our region. However, Australians have not mandated a deepening of these ties. In fact, opposition to continued U.S. lead military operations is increasing. The Australian people as a whole are stakeholders in Talisman Sabre and the U.S. Alliance – their voices should be heard.

Occupations with no public support

Australia continues to be involved in war and military occupation in Iraq and Afghanistan. There is little support in either the U.S. or Australia for these occupations. Hundreds of thousands of citizens have rallied over recent years in opposition to these occupations. A 2009 poll found that 88% of Australians are opposed to our involvement in Iraq, and in November 2010, 50% of Americans are opposed.

Soldiers being killed, killing themselves

While politicians are determining what is "best" for the country with a strategic eye to keeping on the good side of the U.S., Australian and U.S. soldiers are suffering, being killed or killing themselves. 4429 U.S. soldiers and 20 Australian soldiers have died, thousands more have been injured in these unpopular wars. Iraq Body Count estimates over 100,000 civilians have been killed, while the Iraq War logs show that the U.S. military lied about not keeping logs of civilian deaths, and as a result of these Wikileaks documents, the civilian toll is now about 150,000. Both citizens and soldiers alike are opposed to Australia's continued intervention in wars that the U.S. has admitted are unwinnable.

In the U.S Army's 2007 report on the mental health of soldiers says that half of soldiers report feeling stressed and having alcohol, family and /or emotional problems. More U.S. troops have committed suicide since the beginning of the Iraq war than have died in the war. In the 2007 study it was found that with declining mental health, soldiers were more likely to endorse ill treatment of non-combatants, including torture (44% strongly agreed) (2007, p25). Less than half of troops in the same survey were likely to report colleagues killing, mistreating or stealing from non-combatants, despite ethics training.

As many as 6000 U.S. soldiers killed themselves in 2010, while an estimated 10,000 more attempted or were talked out of it by counsellors. Many are suffering Post Traumatic Stress Disorder and Traumatic Brain Injury, which often leads to reckless behaviours including drugs and drinking, the breakdown of their families and more interpersonal violence in society in general. It is estimated by the Veterans Administration that fully 35 percent of US military personnel deployed to Afghanistan and Iraq since 2001 are suffering from PTSD.

4.5 Doctrine of War

Friends of the Earth Brisbane opposes joint military training and operations with the U.S. We oppose the use of violence as a solution to global problems. We reject the continuing U.S. lead "war on terror" believing, war itself to be terror.

We believe that practising warfare, with the world's largest nuclear – armed superpower, sends an aggressive signal to our neighbours and potential allies throughout the world. We question the benefits of "improving interoperability" with the U.S.

With Pine Gap, Australia is already home to one of the U.S.'s most strategic military satellite bases. Australia's agreement to allow US bombing fly-overs over NT, US Sea Swaps and bombing practice in WA, three new US joint training facilities further entrenches Australia's involvement in the US military machine, whether Australia is an open participant or not. For example, with only several hundred Australians troops deployed in Iraq and Afghanistan, it is clear that Australia's greatest contribution to U.S. military efforts is to act as a base for US military activity. Joint military exercises, such as Talisman Sabre, further entrench Australia as an ally and a lily-pad for U.S. military aggression. This is not the direction we would like to see Australia take.

We believe Australia should be seeking peaceful solutions to conflict at home and overseas. Investing time, energy and resources into infrastructure that perpetuate war, rather and promoting peace, is a detriment to our community and world.

Talisman Sabre is a rehearsal for war

Despite attempts to disassociate these military exercises from their purpose and to portray them as eco-friendly training, the purpose of Talisman Sabre is to prepare the U.S. and Australia for war.

The devastating environmental and social impacts of wars anywhere should not be overlooked.

The environmental legacy of two Gulf Wars has included air, water and land

contamination by depleted uranium, contamination from the oil well fires and oil spills, vehicle emissions, heavy metal contamination from missiles, dispersal of chemicals and other toxins from bombing of domestic buildings and disturbance of the desert areas by military activities. Not to mention and acts of violence and other traumatic events affecting the human population during invasion and occupation.

The effects have included increased cancers in humans, decline in fish and shrimp stocks in the Gulf and water contamination hampering recovery efforts. Human beings in the region still suffer post-traumatic stress syndrome from both the environmental contamination and the interpersonal violence they were exposed to. The first Gulf War is estimated to have affected the health of over 20,000 residents of nearby Saudi Arabia. While in Iran "black rain" was said to have resulted from oil fires. Iraq is reputed to have experienced a ten fold increase in birth deformities as a result of the use of Depleted Uranium. U.S. troops claim similar effects from exposures.

Project Censored cites a report on Iraq of the United Nations Environmental Program [UNEP]'s Post-Conflict Assessment Unit "noted that the heavy Pentagon bombing and the movement of large numbers of Pentagon military vehicles and troops in Iraq "further degraded natural and agricultural ecosystems."

The UNEP Post-Conflict Assessment Unit report also observed that the Pentagon's intensive use of Depleted Uranium [DU] weapons. Significant levels of radioactive contamination were found at four sites in Baghdad in May 2003, by Christian Science Monitor reporter Scott Peterson (CSM, 5/15/03). Much of this radioactive contamination was likely produced by the DU bullets fired into the centre of Baghdad at the Iraqi Ministry of Planning by the Pentagon's A-10 Warthog aircraft, Abrams tanks or Bradley fighting vehicles. According to the Monitor, Pentagon figures indicate that about 250,000 DU bullets were fired by A-10 Warthog aircraft in March and April 2003, leaving an estimated additional 75 tons of DU in Iraq, as a result of the Pentagon's attack.

Local air pollution and soil contamination in Iraq also increased, as a result of the recent war. The Pentagon's bombing of Baghdad, for instance, ignited fires which toxic, black smoke that contained dangerous chemicals, which caused harm to Iraqi children and to Iraqi adults with respiratory problems, and further polluted Iraqi ecosystems. (Project Censored 2004)

The World conservation union (IUCN) says that in the first Gulf War alone an estimated 6-8 million barrels of oil were split, 600 oil wells set on fire. Arguably any involvement in preparation for war is preparation for environmental degradation. Any pretence to environmental sustainability of war and practice for war is spurious in this light.

In addition, DU, white phosphorus and cluster munitions have been declared illegal by the United Nations and the continued use of it should not be tolerated in any of Australia's allied countries. These facts and the revelations of the Wikileaks documents indicate that the U.S. military and politics alike are prone to illegal underhanded actions that contribute to conflict, turn nations against each other and promulgate deaths.

5.0 Conclusion and Recommendations

We agree with the claim of the AECOM PER that "Risk elimination is the most effective mitigation measure" (PER p37). It is the view of Friends of the Earth Brisbane that the Talisman Sabre 2011 joint war games should not go ahead in the Shoalwater Bay region in particular, and in Australia in general. The best risk prevention is cancellation.

The framework of this Public Environment Report assumes that war games and military activity can be compatible with environmental preservation. We submit that war games are incompatible with environmental protection – and that the tendency of the military to less than full disclosure of their activities for security reasons means that we cannot make an informed assessment of what will occur.

We can, however, take into account some known quantities:

- The record of past military performance, both by the ADF and U.S.
- The known chemical toxicity in the environment of commonly used munitions
- The known effects on the environment of commonly used military vehicles and vessels both nuclear and non-nuclear
- Recent experiences in the region during and post military exercises
- The existence of treaties for the protection of the environment including the RAMSAR convention, the Japanese Australian Migratory Birds Agreement, the China Australia Migratory Birds Agreement and legal mechanisms including the *Environmental Protection and Biodiversity Conservation Act 1999*
- Flaws in the EPBCA 1999 that mean that even if the military abide by existing laws, they may still be damaging sensitive habitat due to exclusions and limitations of the so-called 'key' environmental legislation for Australia.
- The increased likelihood of Australian involvement in U.S. led wars as a result of increased "interoperability"

Our submission is based on those these considerations.

Base on assessable environmental impacts, we conclude that Talisman Sabre poses a great threat and should be cancelled. Furthermore, the broader political and social ramifications combined with the human and environmental cost of war and preparations for war demand that Talisman Sabre and all joint military activity with the U.S. be stopped.

Recommendations

Friends of the Earth calls of the government to engage in open and equitable dialogue with the community over all military issues.

In the public interest the following information regarding environmental impact of the past and proposed Talisman Sabres should be released:

- Any air, water or soil testing done by military at SWBTA for entire duration of use as a military facility and prior to use as a military facility
- Emergency plan in event of nuclear incident for all regions involved including pre-post exercise
- Reports from the Defence "internal environmental impact assessment process" (PER p2)
- Radiation monitoring reports
- Any reports by Senior Environment Managers, Regional Environment Officers and Range Control Officers
- 'Environmental awareness' training materials used to inform troops

- Reports of any accidents, incidents, and environmental remediation required

Furthermore, despite not being given priority in the PER, the social impacts are equally relevant and demand response. We call for public clarification of:

- Options regarding military exercises ie. options to not have the TS exercises or to locate them elsewhere
- The need for "interoperability" with the U.S. military
- The assessment that combined training, in particular nuclear weapons capable training, with the US sits within Australia's national interest.

We call on the Australian government to:

Prioritise the environment, the community, Australia's indigenous heritage and global security and peace over military expansion

Return Shoalwater Bay and all lands and seas proposed for use in Talisman Sabre their recognised traditional owners, unconditionally and rehabilitate them as required

To ensure that Australia's precious environment and unique cultural heritage are protected for future generations

Stop all U.S. military activity in Australia and withdraw consent for U.S. lead military operations globally

To cease being environmental managers of war and become a world leader through peace and environmental protection

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