



6.3 d Feral Pig trapping and Baiting Report

Ella Bay Integrated Resort Proposal

SEIS Submission Response

Feral Pig Control Report

Revision 1 June 2010





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1 Introduction

Feral pigs (*Sus scrofa*) are a major pest of the Wet Tropics and of Ella Bay. Ella Bay Developments have initiated an integrated control management strategy to reduce and maintain low numbers of invasive feral pigs.

The objectives of this strategy are to

- Minimise any impacts to the cassowary population;
- Reduce the damage caused by pigs to revegetation, and future green space infrastructure; and
- Minimise the risk of disease to the workforce, visitors and resident population of Ella Bay.

The goal is to reduce the population to a minimum, then monitor through wildlife surveillance cameras and react to observations. It is estimated that the pre-control population was greater than 40 feral pigs around the immediate perimeter of Ella Bay. Control of the feral pigs has created a population sink which has drawn in pigs from Ella Bay Swamp. It is considered impossible for Ella Bay to eradicate feral pigs with the proximity of the neighbouring National Park. The target is to cull small numbers of pigs on a regular basis as the pigs move into the area.

The management methodology will be a multi faceted with

- Control through regular trapping of targeted animals through surveillance;
- Culling of larger numbers through baiting and if the pigs become trap shy; and
- Exclusion through the erection of exclusion fences for sensitive areas such as revegetation;

Hunting and the use of dogs will not be permitted under any circumstances.

Cassowary

The Southern Cassowary Recovery Plan (Latch 2007) reports that

“..... there is no evidence that feral pigs adversely affect cassowary survival (McIlroy 2001; DEH 2005). They reportedly destroy nests and eat cassowary eggs (Crome and Moore 1988; Crome and Moore 1990; Mitchell 1993; Mitchell 2000) but the significance is unknown....”

Ella Bay Developments have taken a precautionary approach and will be monitoring cassowary populations with reference to the feral pig population. Of more concern however is the threat to cassowaries from pig hunting that occurs in the Ella Bay area. Ella Bay Developments has had an ongoing problem preventing the access of illegal pig hunters onto Ella Bay property and through to the National Park.

Disease

The feral pig poses a serious threat to human health through being a potential carrier of many endemic and exotic diseases. Ella Bay as an international resort destination will be visited by many visitors who have travelled through countries infected with exotic diseases before entering Australia. Feral pigs must be prevented from contact with rubbish and human waste to ensure that other possible exotic diseases are not spread.

The diseases that pose the greatest threat are listed in Table 1.1.



ENDEMIC	EXOTIC
Brucellosis (<i>Brucella suis</i>)	Foot and Mouth Disease (FMD)
Tuberculosis (<i>Mycobacterium</i> spp.)	Classical Swine Fever
Porcine Parvovirus	Aujeszky's Disease
Leptospirosis (<i>Leptospira</i> spp)	Japanese Encephalitis
Melioidosis (<i>Pseudomonas pseudomallei</i>)	Swine Vesicular Disease
Sparganosis (<i>Spirometra erinacei</i>)	African Swine Fever
Murray Valley Encephalitis	Trichinosis
	Rabies
	Screw-worm Fly infestations

Table 1.1 Diseases of Feral pigs

Approvals

Trapping will be the preferred method of feral pig control. The trapping program must be approved by the Ella Bay Environmental Manager.

1080 baiting may be used when the trapping is ineffective due to the numbers of pigs or that the pigs have become trap shy.

The 1080 baiting program must be approved by the Chief Executive Officer of Ella Bay Developments or of the Body Corporate. The CEO will sign a permit for the use of 1080 only if it can be demonstrated that there is unlikely to be any potential for significant impact on native wildlife. The baiting program must adequately describe the need for 1080 baiting through an on-ground assessment and that the contractor is proficient and adheres to the Standard Operating Procedures.

Humane Practices

Feral pig control techniques have the potential to cause animals to suffer. To minimise this suffering the most humane technique useable in any given situation must be employed. This will be the technique that causes the least amount of pain and suffering.

2 Feral Pig Captures

The Ella Bay program has been operational since October 2008 and 80 to 85 feral pigs have been culled in that time. The majority of the pigs have been captured by trapping with two baiting programs to control larger numbers.

The program was initially set up responding to areas of reported damage to pasture by pig diggings and then extended to include hot spots once surveillance camera monitoring data had been reviewed. Trapping was often interrupted by loss of access during the wet season which allowed numbers to re-establish in as little as 2 months through migration from Ella Bay Swamp and National Park.

3 Feral Pig Captures vs Cassowary Numbers

Is there a positive impact on cassowary numbers due to the culling of pigs?

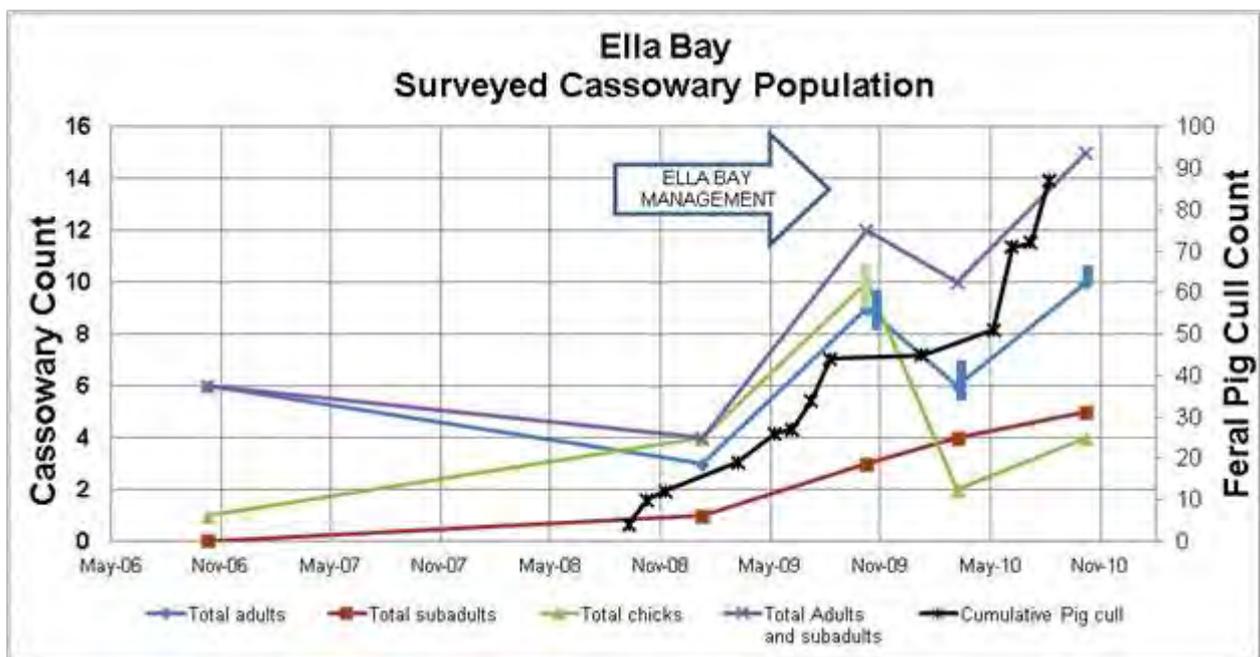
Table 3.1 presents the results of five cassowary surveys over 4 years with the feral pig cull numbers presented on the right hand axis.

There are a lot of reasons as to why the cassowary population varies; post cyclone, wet season, different survey techniques etc but it there is a steady increase with changed management practices on the site especially the sub-juveniles. All cassowary numbers are from independent surveys and have been obtained through photo ID.

The change in practices are:

- Pig cull;
- Banning wild dogs and trying hard to stop them on the property;
- Removing cattle and farm practices; and
- Removal of barb wire fences.

Of note is the relationship to pig cull numbers and the chick number increase. However It would be a difficult to prove a relationship – the culling would have to be stopped for a length of time to see if there is a direct impact on numbers. This is against the concept of the cassowary recovery program.





Feral Pig Captures 2008 to 2010

Site Name : ELLA BAY	DNA ID	Weight Kg Approx	Sex	Estimated Age	Condition	Ears intact	Other comments	Date of Capture
North West (outback)		100+ kg	Male	4-older	prime	Intact		10/10/2008
North West (outback)	24	100+ kg	Male	4-older	prime	Intact	Black & White	25/10/2008
South Front in scrub		85kg	Female	4-older	prime	Intact	Rip in RHS Ear	27/10/2008
South Front in scrub	25	80kg	Male	4-older	prime	Intact	Snub Tail	28/10/2008
North West (outback)		25kg	Female	<1 year	good	Intact		5/11/2008
North West (outback)		25kg	Male	<1 year	good	Intact		5/11/2008
North West (outback)		7kg	Female	<1 year	good	Intact	Black & White, lice	6/11/2008
North West (outback)	17	7kg	Female	<1 year	good	Intact	Black & White, lice	6/11/2008
North West (outback)	16	7kg	Male	<1 year	good	Intact	Black & White, lice	6/11/2008
North West (outback)	18	25kg	Male	<1 year	Fair	Intact		11/11/2008
North West (outback)		90+kg	Male	4-older	prime	Intact	Bit of White	11/12/2008
Wallow Middle West S/Pile	26	60+kg	Male	2-3 years	prime	Intact	Black & White	18/12/2008
North West (outback)	429	90+kg	Male	4-older	prime	Intact		9/4/2009
North West (outback)	467	50kg	Female	1-2 years	good	Intact		29/4/2009
North West (outback)	470	35kg	Female	<1 year	good	Intact		29/4/2009
North West (outback)	462	10kg	Female	<1 year	good	Intact	Black & Ginger Stripes	29/4/2009
North West (outback)	465	10kg	Female	<1 year	good	Intact		29/4/2009
North West (outback)	469	10kg	Female	<1 year	good	Intact		29/4/2009
North West (outback)	468	10kg	Male	<1 year	good	Intact	Black & Ginger Stripes	29/4/2009
North West (outback)	517	65kg	Male	2-3 years	prime	Intact	Ginger Stripes	3/6/2009
North East	513	45kg	Female	1-2 years	good	Intact	Pregnant	16/6/2009
North East	514	80+kg	Female	4-older	good	Intact	B&W	16/6/2009
North East	657	100+kg	Male	4-older	good	Intact	B&W	17/6/2009
North East	660	40+kg	Female	1-2 years	prime	Intact		17/6/2009
North West (outback)	654	100+kg	Male	4-older	good	Intact	White with Black	18/6/2009
North East	660	100+kg	Female	4-older	prime	Intact	Pregnant	30/6/2009
North East	733	60+kg	Male	2-3 years	prime	Intact	B&W	7/7/2009
North East	497	50kg	Male	1-2 years	good	Intact		4/8/2009
North East	494	60+kg	Male	2-3 years	good	Intact		4/8/2009
North West (outback)	719	30kg	Male	<1 year	prime	Intact		25/8/2009
North West (outback)	717	30kg	Female	<1 year	prime	Intact		25/8/2009
North West (outback)	716	30kg	Female	<1 year	prime	Intact		25/8/2009
North West (outback)	714	30kg	Male	<1 year	prime	Intact	Red	25/8/2009



Site Name : ELLA BAY	DNA ID	Weight Kg Approx	Sex	Estimated Age	Condition	Ears intact	Other comments	Date of Capture
North East	711	70kg	Male	2-3 years	prime	Intact		25/8/2009
Wallow Sth	798	80+kg	Female	4-older	prime	missing	Ear Ripped N Bitten	1/09/2009
North West	797	60+kg	Male	2-3 years	prime	Intact		1/09/2009
North East	791	70+kg	Male	2-3 years	prime	Intact		1/09/2009
North East	795	70+kg	Female	2-3 years	prime	Intact	Pregnant	9/09/2009
North West	805	15kg	Female	<1 year	prime	Intact		9/09/2009
North West	801	15kg	Male	<1 year	prime	Intact		9/09/2009
North West	802	15kg	Male	<1 year	prime	Intact		9/09/2009
North West	800	15kg	Male	<1 year	prime	Intact		9/09/2009
North West	793	15kg	Female	<1 year	prime	Intact		9/09/2009
North West	808	80kg	Male	4-older	prime	Intact		10/09/2009
Wallow Sth	892	110kg	Male	4-older	prime	Intact		19/02/2010
North West	975	80kg	Female	4-older	Good	Intact	with Litter	9/06/2010
North West	978	50kg	Female	3-4 years	Good	Intact	with Litter	9/06/2010
North West	976	5kg	Female	<1 year	Good	Intact		9/06/2010
Middle	980	100kg	Male	4-older	prime	Intact	black n white	9/06/2010
Middle	1027	110kg	Female	4-older	prime	Intact	white socks star on head	9/06/2010
Little Cove	1084	100kg	Female	4-older	prime	missing	Pregnant	6/08/2010
Baiting								
North East							18-20 pigs	15/07/2010
Hidden paddock							12-15 pigs	9/09/2010
Total Feral Pig Count							80-85 pigs	



4 Reporting

Regular reporting will be required to establish the effectiveness of the culling program. The Feral Pig Control Contractor will be required to provide operational reports of the program.

A Recent report is attached in Appendix C

5 Risk Management

A risk assessment will be undertaken by the contractor performing the service. Refer to attached risk assessment by Boar Busters appendix D



Appendix A: Standard Operating Procedures for Trapping Feral Pigs

This document outlines the standard pig trapping operating procedures (SOP) to be used by Ella Bay Pty Ltd and its feral animal control subcontractors to control the wild pig population at and around Ella Bay property. This standard operating procedure (SOP) is a guide only, and does not replace any legislation which applies to Pig Trapping in the State of QLD.

Data Reporting

Ella Bay environmental staff will monitor and manage all pig control activities and the subcontractor will be required to provide a feral animal control monthly report. The report will summarise the activities, collate the data, results and any other relevant information regarding feral animal control. The following information will be required for each pig trapping activity:

Location Details	Animals Details
Location Name	Pig ID
Location GPS	DNA testing ID
Trap ID	Weight Approx
Vegetation	Sex
Bait Used	Age Approx
	Condition
	Ears
	Comments

Trap Location Selection

The trap locations will be chosen by:

- Conducting search of areas to identify presence of feral pigs;
- Observation and monitoring by Ella Bay staff;
- Opportunistic observations by Ella Bay staff; and
- Wildlife motion detection camera monitoring;

Traps should be set up at sites where vegetation can provide shade and shelter. Pigs have poor thermoregulation and can suffer greatly when exposed to extremes of heat.

A monitoring camera will be setup at each proposed trap location to confirm pig activity. The site should be cleared of debris, to allow easier bait access and prevent false camera triggers. Human activity should be kept to an absolute minimum to avoid leaving unnecessary human scent by urinating, smoking and waiting for pigs at the location.

Trap Cage Specification

The cage traps should be rectangular box steel mesh construction similar to the *Cassowary Safe Feral Pig Box Trap* specification set out in the document "Feral Pigs In Queensland (1998)" by the DNRM. The traps should be constructed in such a way as to not cause injury from sharp edges or wire. The trip mechanism should be pig specific to avoid the trapping of cassowaries which are residents of the area.

This is an important criteria and photographic evidence of the trigger mechanism must be provided to Ella Bay Environmental Staff for each trapping event.

Baiting and Free Feeding

Typically green bananas will be used as a bait as they are less attractive to cassowaries. The contractor should confer with Ella Bay environmental staff in the selection method of the appropriate food source to be used as bait. Initiation of free feeding should be conducted as soon as pig presence is identified and/or possible.

Free feeding should occur for as long as practical or until constant pig activity is established at the location. The location has to be checked daily. Evidence of pig activity should be identified, images on cameras viewed, and food bait checked and restocked if required. Activity of pigs



and other animals during the free feeding stage if present must be recorded in the “Pig Control Database” on an event basis.

Setting Trap

The trap should be placed at its location once the feral pigs have reached a reasonable trapping level. With the trap in place, normal free feeding can recommence until it can be re-established that pigs are returning to the area and entering the trap to eat the bait. The trap will be activated using “pig specific trip mechanism” and trap MUST be checked on a daily basis once set. Ideally traps should set each evening and checked the following morning.

All feral pigs found inside the trap must be destroyed by shooting them as quickly and humanely as possible inside the trap. Shooting must be conducted by the use of appropriate weapons by a qualified person. Carcasses are to be removed, logged as per Pig Control Database fields and disposed safely off site. Johnstone River Crocodile Farm is a preferred disposal location (prearrangement is required).

The trapping of a cassowary is a reportable incident. The Wildlife Supervisor or Environmental Manager must be contacted immediately. The cassowary if not injured must be photographed and released. The photograph must clearly show the casque and wattles for identification and any scats within the cage collected for DNA analysis. A report detailing the trap condition with photographs must be presented to the Environmental Manager within 12 hours.

If the cassowary is injured the Cassowary Emergency Management Procedure must be implemented immediately - refer to Appendix B of the Southern Cassowary Management Sub-Plan.

For other non-target animals found inside the trap; assess for injuries, photograph and log. Animals which are not injured or only received minor cuts or abrasions must be released immediately. Animals found to be in a more serious condition or dead should be reported immediately by contacting the wildlife supervisor or environmental manager who will take over responsibility. In the case of a second trapping of a non-target animal, consultation with the Environmental Manager must be conducted to resolve the cause.

The trap should be cleaned of any unwanted food and faecal matter. The trap must be cleaned before resetting or relocation.

In the event that no feral pigs are found inside the traps; cameras, trap and location should be checked to identify cause of failure. If trip mechanism failure, it will be reset and adjusted. If pig activity evidence are not found further monitoring and location assessment will be required.

Health and Safety

- During positioning or relocation of cages personnel should take care in lifting and manoeuvring the cage into place and vehicles should be parked as close as practical to chosen trap location. Use appropriate equipment and tools to manoeuvre the cage.
- Appropriate personal protective equipment should be worn when conducting onsite maintenance or cleaning of cages.
- Food to be used as trap bait, should still be contained, handled and disposed in appropriate manner and must not be mixed with other food items or near chemicals.
- Firearms should only be carried and operated by authorised staff. All other people present during pig shooting must stay well behind the shooter to prevent injuries from stray bullets or ricochets.
- Care must be taken during the removal of pig carcasses due potential diseases such as leptospirosis, Q fever, brucellosis, sparganosis, melioidosis and tuberculosis that can affect humans and other animals. Protective clothing measures (i.e gloves) must be used during handling of carcasses and routinely wash hands and any other body parts which may have come in contact with the animals.
- Carcasses can be heavy (> 100 kg), so care must be taken when lifting/dragging.



- Never enter a trap with a captured adult pig. Feral pigs can be aggressive and will attack, especially in situations when they, or their dependent piglets, are distressed or threatened.



Appendix B: Standard Operating Procedure for 1080 Baiting

This document outlines the standard operating procedures (SOP) for the use of poison 1080 (sodium monofluoroacetate) to control feral pigs to be used by Ella Bay Pty Ltd and its feral animal control subcontractors. This standard operating procedure (SOP) is a guide only, and it does not replace the legislation which applies to the use of 1080 in the State of QLD and the safety guidelines established by the Department of Environment and Resource Management (DERM) and Poisons Regulations Act (1973).

Determine if 1080 will be a practical option for control. 1080 is primarily used when there are large numbers of pigs or the pigs have become trap shy.

A permit for approval for the use of 1080 baiting must be obtained from the CEO of Ella Bay Pty Ltd or the CEO of the body corporate.

Data Reporting

Ella Bay environmental staff will monitor and manage all pig control activities and the subcontractor will be required to provide a feral animal control monthly report. The report will summarise the activities, collate the data, results and any other relevant information regarding feral animal control. The following information will be required for each baiting activity: The information should be obtained from monitoring cameras photographs and carcasses.

Location Details	Animals Details
Location GPS	Pig ID
Location Name	Weight Approx
Trap ID	Sex
Vegetation	Age Approx
Bait Used	Condition
1080 Quantity	
1080 Responsible Officer	

1080 Bait Location Selection

The location site where possible should be at a common point area where feral pigs are known to move through. The location should not be at water points or inside forest areas to further reduce the risk of non target species bait uptake. Typically the best times are towards the end of the dry season.

The baiting location will be chosen by:

- Conducting search of areas to identify presence of feral pigs;
- Observation and monitoring by Ella Bay staff;
- Opportunistic observations by Ella Bay staff; and
- Wildlife motion detection camera monitoring;

Conduct a search of the area to determine what other wildlife if present. Consult with Ella Bay Environmental Manager to determine the presence of other wildlife. The use of wildlife motion detection camera(s), cleaning of debris and preparation of ground around trap and bait will allow for easier animal activity identification. The site should be cleared of debris, to allow easier bait access and prevent false camera triggers. Human activity should be kept to an absolute minimum to avoid leaving unnecessary human scent by urinating, smoking and waiting for pigs at the location.

Ensure bait site location meets minimum safe distances criteria by notification and consultation with authorities

Notifications



Notifications are required to all landholders within a radius of 2 km. Contact CCRC Pest Officer and GIS staff for distribution list and liaison with neighbouring land holders. Contact the Wet Tropics Region Queensland Parks and Wildlife Services and send “NOTIFICATION OF INTENT TO CONDUCT 1080 BAITING TO CONTROL FERAL PIGS AT ELLA BAY”. Consult with Ella Bay Environmental Manager to ensure required stakeholders are notified. 72 hours notice is required before bait material can be laid before baiting can commence. The CCRC Pest Officer will conduct a site inspection prior to bait material being laid.

Free Feeding

Typically soaked cracked corn with a **blue** food dye will be used as a bait. Soak for 24 hours to allow fermentation. The use of blue and green dye is to reduce the attractiveness of the bait to non target fauna especially birds.

Commence free feeding with the bait without 1080 for as long as practical or until constant pig activity is established at the location. Once pigs begin to feed at the bait station or along trails, progressively offer more bait material until consumption is no longer increasing. Once the amount of bait being taken is consistent, the number of pigs will have reached critical mass and be ready for the laying of 1080 bait.

The location has to be checked daily. Evidence of pig activity should be identified, images on cameras viewed, and food bait checked and restocked if required. Activity of pigs and other animals during the free feeding stage if present must be recorded in the “Pig Control Database” on an event basis.

Setting 1080 Bait

The laying of the 1080 bait will occur once the feral pigs have reached a critical mass. Record of the daily bait usage will assist to determine how much 1080 bait will be required to ensure the minimum amount of bait remains at the end of the night.

Prior to laying baits confirm the weather condition and that heavy rain is not forecast. If more than 25mm continue to free feed until weather conditions improve.

All information should be recorded in the Ella Bay Pig Control Database.

Only the authorised Local Government Pest Officer can prepare 1080 solutions. Contact the authorised pest officer to arrange an appropriate time onsite for delivery or pick up. To place the 1080 bait, arrive at the location towards the latter part of the day prior to sunset. Allow enough time to mix **green** food dye with bait material and lay 1080 whilst it is still daylight. Return at daylight next morning to view bait uptake, record results and retrieve camera information and cover up bait with appropriate bait cover drums to prevent non target animal uptake of bait during daylight hours.

Prior to sunset return to location and repeat the baiting process with 10% of the original bait quantity. This will ensure any stragglers are not missed. Return the next day at daylight and view results. If bait is again consumed check camera and ground for uptake and return and repeat process again until no more feral pigs are consuming bait. Once confirmed that all bait is in position and untouched, clean location and bury unused bait material at pre selected one metre deep disposal pit. Re-lay un-poisoned bait material and continue daily monitoring for approximately one week to confirm feral pigs have been destroyed.

It is important that dead pig carcasses are searched for and found to reduce the risk of secondary ingestion. Typically baited pigs will not suffer any effects for an hour and may take up to 4 hours to die. Pigs will frequently vomit over a number of hours and this material should be covered with greater than 300mm of soil if located. The search for pig carcasses will be required over a 500m radius.

Dead pig carcasses located are to be removed with care and placed at pre selected one metre deep disposal pit.



Non Target By-Catch

Poison baiting is a sensitive issue. All care and due diligence must be followed in order to prevent non target by-catch. In the event of identifying that non-targeted animals (not pigs or any other feral animal) are found to have eaten or died from 1080 baiting, this should be reported immediately by contacting the Environmental Manager who will take over responsibility and contact appropriate authorities. All information of the event must be recorded. Cover up bait with appropriate drum and do not interfere with location until further notice.

If the cassowary is suspected of being poisoned the Cassowary Emergency Management Procedure must be implemented immediately - refer to Appendix B of the Southern Cassowary Management Sub-Plan.

Warning signs

One notification has taken place “1080 Baiting in Progress” warning signs at entrances of Ella Bay property, at clear, unobstructed locations nearby the bait location and at the bait location itself. Warning signs are to remain in location for a period of twenty eight days post activity. The 1080 signs must only be used during the specification set out above.

Health and Safety

1080 is a highly toxic compound which requires strict safe handling guidelines. Always ensure you have appropriate protective clothing e.g. overalls, rubber gloves and rubber boots and storage container. During the transportation of the contaminated baits take care in locating the storage container in a secure and safe location. Check that no leakage of solution has occurred. Don't place contaminated baits or its container near food or drink items. Care must be taken during the removal of pig carcasses due to heavy lifting, potential diseases carried by pigs and contamination from the poison. Protective clothing measures (i.e gloves, overalls) must be used during handling of carcasses and routinely wash hands and any other body parts which may have come in contact with the animals. Record and report any incidents involving the 1080 solution or contaminated baits.



Date

Environmental Manager,
PO Box 239,
Flying Fish Point,
QUEENSLAND, 4855.

Mr Vaughn Smith,
Senior Ranger,
Wet Tropics Region,
Terrestrial Parks,
Queensland Parks & Wildlife Service,
PO Box 44,
INNISFAIL,
QUEENSLAND 4860.
Fax 40619853

**NOTIFICATION OF INTENT TO CONDUCT 1080 BAITING TO CONTROL FERAL PIGS AT
ELLA BAY**

Dear Mr Smith,

I am writing to inform you that 1080 (Sodium Fluoroacetate) is planned to be utilized during feral pig control activities adjoining Ella Bay National Park L1024 NPW151

The 1080 will be placed on Properties owned by Satori Resorts Ella Bay Pty Ltd at

- Little Cove L320 N157629, and
- Ella Bay & L337 NR53

This notification is 7 day prior to the use of 1080 and no baits will be laid before then. The activity will be ongoing for a period of 4 weeks. The CCRC pest officer will conduct a site inspection prior to bait material being laid.

The decision to use 1080 control of feral pigs has been taken because:

- A high number of feral pigs have been observed which will be difficult to trap; and
- The pigs have been observed to be trap shy (monitoring camera results)

Bait will be laid once a feeding pattern has been established over several nights. Monitoring cameras will be used to confirm the number of feral pigs feeding and assist in identifying non target animals. If non target animals are observed during this time the site will be moved.

Bait material will be soaked cracked corn which will be laid in the afternoon and checked early in the morning. Uneaten bait material will be either covered with a drum and uncovered again prior to sunset or if uptake is completed uneaten material will be removed.

I will liaise with you further or your nominated staff member as to the exact date/dates the above activities will take place. Feral pig activity is often unpredictable and feral pig activity can arise any time. The above areas have seen consistent feral pig activity over many years and will require ongoing follow up treatment.

If you require further information please contact me on the number provided.

Yours sincerely,

Environmental Manager
Ella Bay Pty Ltd



Appendix C: Boar Busters September Report



Feral Pig Trapping Monthly Report

Client: Rod Lamb

Organization: Ella Bay Services Pty Ltd

Address: Unit F6, Level One, The Precinct, 12 Browning Street, South Brisbane, 4101 QLD Australia

Site: Ella Bay

Reporting Period: May – September 2010

Report Date: 14 September 2010

Summary

There are minimal feral pigs within the Ella Bay area at present. Pig activity in over the period was concentrated inside re-vegetation areas (approx 1 ha of soil disturbance from pig digging). Also approx 3 ha of pasture destroyed from feral pig digging. There were three traps in operation covering a majority of the Ella Bay area. One trap was moved to little cove to remove a very large and pregnant sow that destroyed approximately .5 of a ha of established lawn and garden area. A total of 6 pigs have been trapped and a total of 35 pigs have been baited.

Impact of Weather

Weather conditions have been continually wet. There was intermittent access to the site.

Site Access Issues:

Wet weather impacted onsite access at times.

Monitoring – Method - & Activity

Methods used to monitor feral pig activity have been by physical observation of the area. Remote cameras have been placed at bait stations and trap sites to observe and monitor feral pig activity. See attached images

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Level of Feral Pig Activity

The level of feral pig activity at present is low to medium after the two 1080 baiting activities.

Feral Pig Control – Method & Activity

There are three traps in operation throughout the Ella Bay property. To date 900 kg of cracked corn has been used during feral pig control operations in 2010. All traps are constantly baited and monitored. Traps and bait stations are continually free feeding and then set/baited when feral pig activity at each site is present. This process eliminates the non target species capture.

Notable Events

A total of 41 feral pigs have been removed from Ella Bay.

Trap Disturbance – Incidents Impacting on Program:

Several trespass incidents have occurred during the program. Poachers hunting feral pigs with dogs have accessed the site after hours. These individuals have been caught on several Satori remote cameras placed at various points across the property. Several large feral pigs have been killed and had their heads removed and taken off site.

Recommendations

Boar Busters will continue feral pig control as required and dictated by feral pig activity on site.

Paul Smith

Director

NQ Feral Pig Management Solutions Pty Ltd

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 1



Large pregnant sow at Little Cove that destroyed .5 ha of established lawns and gardens.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 2



Satori staff with destroyed feral pigs on 10 June 2010.

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Attachment 3



Pasture disturbance from feral pig digging.

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Attachment 4



Note how the soil is now exposed allowing weeds to germinate.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 5



Soil disturbance from feral pig digging inside rainforest area at Ella Bay. Water will flow over this area during heavy rain washing topsoil into fast flowing coastal creeks.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 6



Trap shy feral pigs consuming 1080. These feral pigs would not enter the trap after pigs were trapped there on 10 June 2010. After several weeks of trying to entice them into the trap 1080 was utilized to remove them.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 7



Feral pigs consuming 1080 bait material. Bait material was laid at 4:30 pm and feral pigs arrive 20 minutes later to consume bait material. This feeding pattern was established over several weeks to train the feral pigs to receive their food at approximately the same time each day.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 8



Feral pigs consuming 1080 bait material.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 9



Dead feral pig 50 m from feed station in recently re-vegetated zone at Ella Bay. These seedlings were gradually being destroyed by feral pigs digging up the soil during wet weather.

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Feral Pig Control Report Ella Bay May - September 2010

Attachment 10



Covers are placed over selected bait stations during daylight hours when pigs are feeding predominately at night.

Note: Date format is Month/Day/Year.

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Appendix D: Boar Busters Risk Assessment

Risk Assessment

For investigating risks to personnel, plant or equipment associated with tasks being conducted by Boar Busters.

Likelihood	Consequences			
	Extreme	Major	Moderate	Minor
Very Likely	1	2	3	4
Likely	2	3	4	5
Unlikely	3	4	5	6
Very Unlikely	4	5	6	7

Very Likely	Could happen frequently	Extreme	Fatality, permanent disability, detrimental long term impact on the environment.
Likely	Could happen occasionally	Major	Serious bodily injury, long term effect on the environment.
Unlikely	Could happen but rare	Moderate	Casualty treatment, no lasting effect on the environment.
Very Unlikely	Could happen, probably never will	Minor	First aid treatment, no lost time, effect on environment localised and immediately rectifiable.

Site/Project	Lower Johnstone Catchment Cassowary Coast Regional Council	Business	NQ Feral Pig Management Solutions Pty Ltd	Date	20 February 2010
Person Conducting Assessment	Paul Smith	Activity	Integrated Feral Pig Control Program		

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
1.	Use of firearms	Injury/death to operator or other personnel	Incorrect use or accidental discharge of firearms	Likely	Fatality or hospitalisation	Level 2	<ul style="list-style-type: none"> Operators are appropriately trained and licensed Police & residents notified of activities in urban area Warning signs are erected throughout the working area Serviceable first aid kits are available in Firearms are stored in lockable safes and in the unloaded condition when not in use Operators are to fire weapons away from infrastructure and other personnel All equipment to be serviced and in a working condition 		Level 4

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
2.	Use of firearms	Hearing loss over prolonged use	Not using appropriate PPE	Very Likely	Loss of body function	Level 2	<ul style="list-style-type: none"> Personnel to wear adequate hearing protection when using firearms 		Level 7
3.	Driving 4wd vehicle	Injury/death to operator or other personnel	Driving in slippery or 4wd conditions, driver fatigue, speeding, collision with another vehicle, vehicle malfunction.	Likely	Fatality or hospitalisation, damage to vehicle	Level 1	<ul style="list-style-type: none"> Log sheets and trip details supplied to Boar Busters management before departing on daily activities Regular rest stops taken All drivers are licensed and adhere to current QLD road rules and regulations Vehicle's are serviced on schedule Drivers are briefed, fit for work and conduct vehicle inspections before trip 		Level 6
4.	Removing pig carcasses	Medical illness/contraction of diseases (Hendra Virus)	Handling infected animals. Contact with pig urine/faeces. Unhygienic practices	Very Likely	Fatality or hospitalisation	Level 1	<ul style="list-style-type: none"> Personnel are to wear appropriate PPE such as Gum boots, rubber gloves and glasses Long sleeve shirt and trousers to be worn Personnel to wash down equipment and themselves after contact Unnecessary contact is to be avoided Any cuts or grazes are to be dressed and covered so to avoid exposure. 		Level 6

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
5.	Removing pig carcasses	Muscle strains/damage	Incorrect lifting technique/lifting heavy objects	Very Likely	Possible LTI	Level 2	<ul style="list-style-type: none"> Operator to use hydraulic lifting device when lifting carcasses onto vehicles 		Level 6
6.	Working outdoors	Sunstroke, sunburn, heat stress. Cold/flu.	<ul style="list-style-type: none"> Over exposure to the sun and heat Dehydration Personnel not fit for work 	Likely	Medical treatment not hospitalisation	Level 3	<ul style="list-style-type: none"> Personnel to wear sunscreen, hat, long sleeve shirt and trousers Sufficient water is to be available while working (10L). Regular rest breaks are to be taken Avoid working in the sun in the middle of the day Rain coats/Jackets to be worn in wet weather to avoid cold/flu Personnel to be fit for work (i.e. appropriate personnel fitness, no alcohol or drugs). 		Level 7
7.	Working outdoors and in long grass environments	snake/spider bite.	Walking through long grass or scrub and accidentally standing on snake.	Likely	Fatality or hospitalisation	Level 1	<ul style="list-style-type: none"> Personnel to walk on cleared paths and access tracks where possible Any snakes that are seen are to be given right of way and left alone Personnel are to wear long sleeve shirt, trousers and enclosed footwear. A serviceable snake bite kit is to be available 		Level 2

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
8.	Working outdoors and in long grass environments cont/ Working outdoors	Damage to traps and other infrastructure	Cyclone and strong winds	Likely	Equipment damage and possibility to elevate further	Level 3	<ul style="list-style-type: none"> • Personnel are to be first aid trained • Contractor is to adhere to the site emergency evacuation procedures • Traps are to be appropriately secured to avoid movement or damage during a cyclone event • Traps are not set or removed when a cyclone/storm is likely to impact the site 		Level 7
9.	Working/on the job	Trips, slips, sprains	Walking on rough terrain, slippery surfaces or tripping over logs/branches.	Very Likely	Medical treatment not hospitalisation	Level 4	<ul style="list-style-type: none"> • Appropriate footwear to be worn i.e. High ankle steel cap lace up boots. • Specific environmental conditions to be noted when conducting a take 5 before a task • Formed tracks and access paths to be used where possible 		Level 7
10.	Working/on the job	Cuts and grazes	Constructing traps/setting up work area	Likely	Medical treatment not hospitalisation	Level 4	<ul style="list-style-type: none"> • Appropriate PPE is to be worn - Gloves, long sleeve shirt and trousers and safety boots. • Appropriate tools to be used for the task 		Level 7

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
11.	Movement on and off-site	Weed seed spread	Driving vehicles through areas containing weeds, not following vehicle wash down procedures, driving off formed tracks and disturbing areas of soil.	Likely	Environmental damage	Level 3	<ul style="list-style-type: none"> Personnel are made aware of vehicle wash down procedures and equipment. Presence of weeds around trap sites and access tracks are to be reported to the PM Vehicles are to remain on formed tracks and roads 		Level 6
12.	Working on farms.	Coming into contact with farm machinery whilst driving on property vehicle accident whilst driving on property.	Not notifying property owner you are onsite.	Very likely	Fatality or hospitalisation, equipment damage	Level 2	<ul style="list-style-type: none"> Farm inductions are down with landowner. UHF radio channel known for each property. Drive to the conditions 		Level 6
13.	Operating quad bikes	Crushing accident/injury, vehicle accident	<p>Inappropriate riding (speeding).</p> <p>Striking hidden objects (stumps etc)</p>	Likely	Fatality or hospitalisation, equipment damage	Level 2	<ul style="list-style-type: none"> Agricultural bikes not high performance bikes used. PPE worn. Bike maintained correctly and not modified. Ride to the conditions. Defined check in times 		

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
14.	Setting traps	Capture of non-target species	Non-target animals are attracted to baits and enter traps	Very Likely	Very low environmental damage. Trapped non-target species can usually be released	Level 3	<ul style="list-style-type: none"> Traps use a feral pig specific trigger Correct placement of traps to minimise captured animals discomfort Monitoring of wild life present in the area is carried out Traps are shut when non-target species are present. Door rigged to be opened without approaching trap 		Level 7
15.	Approaching set traps	Presence of pigs or other animals outside of trap and causing injury to personnel or themselves.	Animal attacking as a result of unsuspecting personnel approaching trap or cause injury to themselves by thrashing/charging trap.	likely	Lost time injury, inhumane death of animal.	Level 3	<ul style="list-style-type: none"> Personnel to approach traps with caution so as not to spook trapped animals and to detect other animals in the vicinity of the trap. <p>Warning signs are erected and land owner notified of trap locations.</p>		Level 6
16.	Capture and Destruction of feral pigs	Inhumane treatment or animals and poor public image	Poor trapping procedures and incorrect placement of projectile.	Very unlikely	Regional adverse publicity and possible prosecution	Level 4	<ul style="list-style-type: none"> Personnel are appropriately trained in the humane destruction of wildlife Personnel have previous experience and a good track record Set traps are checked daily Shade cloth used to protect trapped animals from the sun 	Pig trapping code of practice.	Level 7

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
							<ul style="list-style-type: none"> • Correct selection of firearms and calibres for the job. • Correct placement of traps to minimise captured animals discomfort 		
17.	1080 Poison Baiting	Non target species Human ingestion of 1080	<ul style="list-style-type: none"> • Poor Placement of Baiting Station • Not using green dye in grain bait • Staff not wearing PPE • Failure to place out signs and notify neighbours. 	Likely	Regional adverse publicity and possible prosecution	Level 1	<ul style="list-style-type: none"> • Site is selected correctly • Notification list is obtained from CCRC and given to landholder. • Copies of signed agreements collected for each activity and kept on file in office. • Remote cameras used to identify target animal and any non target species. • Visual inspection of the immediate area surrounding the site to view physical signs of present resident animals. • Free feeding prior to the laying of impregnated material. • Staff wear PPE when handling impregnated bait material. • Lay impregnated bait material as close as possible to the time the feral pigs are arriving onsite. • Cover impregnated material with drums during daylight hours if feral pigs are only 	Code of Practice for 1080 in the Wet Tropics	Level 6

No.	Key Task Description	Hazard	Cause (How Can It Occur?)	Likelihood	Consequence	Risk	Controls	Document Reference	Residual Risk
	1080 Poison Baiting cont/						feeding at night. <ul style="list-style-type: none"> Follow up inspection after the event to remove any visible carcasses. Remove uneaten bait material and dispose of by burying and dousing with water. 		

HIERARCHY OF CONTROL MEASURES	
Elimination	First Option - can the hazard be removed altogether by elimination of process or substance?
Substitution	Involves replacing hazard with one that presents a low risk
Isolation	Separates the hazard from the person
Engineering Controls	Involves structural change to the work environment or work process to place a barrier to, or interrupt a transmission path between the worker and the hazard
Administrative controls	Reduces or eliminates the exposure to a hazard by adherence to procedures, instructions training. Administrative controls are dependent on human behaviour for success
Personal Protective Equipment	Last Option - Provides a barrier between a person and the hazard. This is dependent on PPE being chosen correctly as well as fitted and worn at all times where required

Approved by: Paul Smith

Position: Director

Signature: _____