



Australian Government

Department of the Environment

Australian Antarctic Division

TERRITORY OF HEARD ISLAND AND MCDONALD ISLANDS

ENVIRONMENT PROTECTION AND MANAGEMENT ORDINANCE 1987

CORDELL EXPEDITIONS 2016

I, Gillian Louise Slocum, Delegate of the Minister for the Environment, acting under section 15 of the *Environment Protection and Management Ordinance 1987*, considering: (i) the need to protect the environment, and (ii) the safety of persons, aircraft, vehicles and vessels, grant to:

Cordell Expeditions
4295 Walnut Boulevard
Walnut Creek
California
United States of America¹

a permit authorising entry to the Territory of Heard Island and McDonald Islands (the Territory) to undertake the following two specific activities subject to conditions² which unless authorised are offences as per:

- s.12(1) enter the Territory;
- s14(1)(c) take any organism from the Territory;
- s14(1)(d) engage in conduct that results in death or injury to, or interference with, any organism in the Territory;
- s14(1)(e) remove from the Territory any organism indigenous to the Territory;
- s14(1)(f) land an aircraft, drive a vehicle or sail a vessel in the Territory;
- s14(1)(h) remove any soil or other geological matter from the Territory;

¹ For the purpose of this permit, Cordell Expeditions is defined as all those persons listed on the crew and passenger manifests of the vessel *MV Braveheart*.

² Failure to adhere to these conditions is an offence and may result in compliance action, including the suspension or cancellation of this permit.



- s14(1)(j) engage in conduct that results in interference to any soil or other geological matter in the Territory;
- s.14(1)(k) collect material in the Territory.

1. Specific Activity No. 1 (COMMUNICATIONS PROJECT)

Cordell Expeditions may undertake a COMMUNICATIONS PROJECT in the Territory as described at page 2 of its cover letter submitted to the Australian Antarctic Division on 09 October 2015. The objective of this COMMUNICATIONS PROJECT is the amateur operation of radio communications equipment, satellite communications equipment and computer equipment only.

2. Specific Activity No. 2 (FIELD RESEARCH PROJECT)

Cordell Expeditions may undertake a FIELD RESEARCH PROJECT³ within the Territory in accordance with the supplementary science application that Cordell Expeditions submitted to the Australian Antarctic Division on 12 January 2016. The scientific objectives of this FIELD RESEARCH PROJECT concern volcanology, glaciology, biology and ecology.

3. Time period:

(a) Specific Activity No. 1 (COMMUNICATIONS PROJECT)

10 March 2016 and 30 April 2016.

(b) Specific Activity No. 2 (FIELD RESEARCH PROJECT)

10 March 2016 and 30 April 2016.

4. Authorised persons:

(a) Specific Activity No. 1 (COMMUNICATIONS PROJECT)

All persons listed on the crew and passenger manifests of the vessel *MV Braveheart* may undertake Special Activity No. 1 (COMMUNICATIONS PROJECT).

(b) Specific Activity No. 2 (FIELD RESEARCH PROJECT)

All persons listed on the crew and passenger manifests of the vessel *MV Braveheart* may undertake Special Activity No. 2 (FIELD RESEARCH PROJECT). Teams undertaking Specific Activity No.2 must:

- consist of at least two persons;
- consist of no more than six persons; and
- include a person capable and suitably experienced in field operations.⁴

³ As per definition of 'field studies' at page 4 of Cordell Expeditions' submitted Environmental Approvals Application Form: '[f]ield studies related to recent environmental changes, biodiversity and climate change'.

⁴ Persons capable and suitably experienced in field operations must: (i) possess relevant and extensive field operations experience; and (ii) be fit and healthy enough to undertake effective search and rescue operations.

5. Post-activity reporting:

- (a) As per section 7.1.11 of the *Heard Island and McDonald Islands Marine Reserve Management Plan 2014-2024*, a comprehensive report on Specific Activity No. 1 and Specific Activity No. 2 must be provided to the Australian Antarctic Division within 60 days of the completion of the expedition. This report must include:
- details of any environmental or safety incidents;
 - details of the location of any markers, facilities and equipment used or placed in the Reserve;
 - the number, duration and activities of persons ashore at each location visited;
 - a statement of compliance with permit conditions; and
 - other information considered necessary to assist with the management of the Reserve.
- (b) Where appropriate, the report must include details of existing structures, materials or supplies used in an emergency.

6. General⁵ conditions and notes:

(a) Biosecurity

- (i) The Territory may only be entered if the delegate is satisfied that the expedition poses a sufficiently low biosecurity risk to the Territory.⁶
- (ii) The Territory may only be entered if the *MV Braveheart* passes a comprehensive biosecurity inspection and assessment (including a hull inspection for potential invasive species) at Cape Town, South Africa.⁷
- (iii) The *MV Braveheart* must not enter the Territory if it makes landfall anywhere after departing Cape Town.
- (iv) The Territory may only be entered if the *MV Braveheart* possesses a valid de-ratting certificate (issued within 14 days prior to the *MV Braveheart's* departure for the Territory from Cape Town).⁸
- (v) Rodent exclusion devices must be installed on the mooring ropes of the *MV Braveheart* before its scheduled to visit the Territory.
- (vi) Rodent traps must be deployed on the *MV Braveheart* prior to its departure for the Territory from Cape Town. These rodent traps must be monitored daily for evidence of rodents.

⁵ General conditions and notes apply to *both* Specific Activity No.1 and Specific Activity No.2.

⁶ It follows that Cordell Expeditions (including the *MV Braveheart*) must pass all biosecurity inspections/assessments.

⁷ The biosecurity hull inspection and assessment must be undertaken by appropriate persons endorsed by the Australian Antarctic Division.

⁸ For a de-ratting certificate to be valid, the delegate must be satisfied that it was issued pursuant to biosecurity standards that are consistent with Australian Government biosecurity standards.

- (vii) All sightings of new species or disease events in the Reserve, or while on a vessel travelling to or from the Reserve, must be reported to the Director at the first available opportunity.
- (viii) Prior to departure for the Reserve:
- the quantity of material to be taken ashore must be minimised to the greatest practicable extent;
 - all items travelling in the *MV Braveheart's* cargo spaces or on deck (such as equipment, stores, field accommodation, vehicles, personal gear shipped as cargo) to be taken ashore in the Territory must be hot-washed, disinfected, fumigated or otherwise treated, and inspected for contaminants (which if found must be removed and destroyed);
 - all personal luggage and carry-on gear must be cleaned and inspected for organisms, soil and other contaminants (which if found must be removed and destroyed);
 - Unmanned Aerial Vehicles (UAVs)⁹ and any support equipment must be cleaned and inspected for organisms, soil and other contaminants (which if found must be removed and destroyed);
 - the All-Terrain Vehicle (ATV) must be thoroughly and rigorously hot-washed and inspected for organisms, soil and other contaminants (which if found must be removed and destroyed).
- (ix) To the extent practicable, items to be used ashore or in the waters of the Territory must be transported in clean cargo holds, within clean (hot-washed at a minimum), inspected and sealed containers that contain only cleaned and inspected cargo.
- (x) All vessel equipment routinely in contact with the water (such as mooring lines and anchor chains) to be used in the Territory must be cleaned and/or treated prior to entry into the Territory to minimise the risk of marine introductions from fouling species. All other equipment to be used in the waters of the Territory must be thoroughly cleaned, where practicable by hot-washing, prior to use in the Territory.
- (xi) After departure from Cape Town and prior to arrival in the Territory:
- all clothing, personal gear (such as bags, cameras, back packs) and emergency equipment (such as sleeping bags, ropes) to be taken ashore must be inspected for organisms, soil and other contaminants (which if found must be removed and destroyed);
 - footwear to be taken or worn ashore must be thoroughly scrubbed to remove all organisms, soil and other contaminants (which if found must be removed and destroyed) and must be treated with a biocide; and
 - all other items to be deployed ashore or in the waters of the Territory must be inspected for organisms, soil and other contaminants (which if found must be removed and destroyed).
- (xii) Clean rodent traps and baits must be deployed onshore by the first landing party at each location where ship to shore transfers take place, prior to the offloading of cargo. Rodent

⁹ UAVs are colloquially known as 'drones'.

bait stations and traps must be of a kind designed to avoid bycatch of native species. Traps and baits must be monitored regularly and be removed upon departure.

- (xiii) Live plants, live animals, growing media or soils must not be taken on a vessel travelling to the Territory.
- (xiv) The Director must be promptly informed of the detection of any rodent on a vessel that is underway to the Territory.¹⁰
- (xv) All outer clothing to be taken ashore in the Territory must be new or thoroughly cleaned with a biocide to kill all organisms (including reproductive material).¹¹
- (xvi) To reduce the risk of rodent introduction, the *MV Braveheart* must not moor directly to the shore.
- (xvii) The expedition leader¹² must ensure that all visitors going ashore are suitably briefed on biosecurity requirements and comply with pre-landing biosecurity processes.
- (xviii) The following food products must not be taken ashore in the Reserve:
 - brassicas (includes broccoli, cabbages and turnips);
 - other fresh vegetables and fruit;
 - poultry or poultry products (other than egg powder, or products containing egg powder, which can be taken ashore if kept in sealed containers and opened only in an enclosed shelter);
 - other animal products intended for human consumption that have not been inspected for disease causing agents or approved to the standard required for domestic consumption or export (whichever is the higher);
 - viable seed products (such as sunflower seeds, bean sprouts); and
 - viable fungal products (including dried mushrooms).
- (xix) If yeast products are taken ashore:
 - such products must be kept in secured, sealed containers and opened only in an enclosed shelter;
 - all waste or surplus products (including packaging) must be removed from the Territory in a sealed container; and
 - all containers and utensils used with such products must be washed with boiling water and the resulting waste water disposed of in accordance with the prescriptions in section 5.3 Waste management of the *HIMI Marine Reserve Management Plan 2014-2024*.

¹⁰ To contact the Australian Antarctic Division, please call 0419 135 500 or 03 6232 3159, or email himi@aad.gov.au.

¹¹ Note that new outer clothing is preferred over thoroughly cleaned pre-used outer clothing.

¹² The expedition leader is Dr. Robert Schmieder of Cordell Expeditions.



- (xx) No wood may be taken ashore unless it has undergone a Department of Agriculture and Water Resources recognised treatment to kill any organisms (including reproductive material) and to prevent fungal growth.¹³

(b) Asbestos management

- (i) The expedition leader must provide an asbestos safety briefing to all persons listed on the crew and passenger manifests of the vessel *MV Braveheart* prior to entry into the Reserve. This briefing must:
- provide guidance on the identification of asbestos containing material;
 - include information on the health risks associated with exposure to asbestos;
 - advise persons not to disturb (e.g. handle, kick, move etc.) any debris that may contain asbestos containing material;
 - advise that asbestos containing material is present within the Heritage Zone;
 - advise that entry into the Heritage Zone is strictly prohibited;
 - using the map at page 26 of the *HIMI Marine Reserve Management Plan 2014-2024*, accurately describe the location and boundaries of the Heritage Zone; and
 - advise that asbestos containing material is present in parts of the Atlas Cove Main Use Zone that adjoin the Heritage Zone.
- (ii) A ground inspection for possible asbestos containing material must be undertaken prior to the establishment of any encampment within the Atlas Cove Main Use Zone.
- (iii) The main encampment proposed for the Atlas Cove Main Use Zone may only be established at a site where asbestos containing material would pose an acceptably low level of risk to health and safety.
- (iv) Upon landing ashore at Atlas Cove, markers must be installed to clearly delineate the Atlas Cove Main Use Zone from the adjoining Heritage Zone and Restricted Zone. These markers must be installed no more than 10 metres apart, and must be removed from the Reserve upon departure.
- (v) The temporary refuge facilities in the Atlas Cove Main Use Zone may only be accessed during an emergency.¹⁴
- (vi) Incidents of exposure to asbestos containing material must be reported to the Director as soon as practicable.

(c) Waste management

- (i) The waste management requirements stipulated at 5.3 *Waste Management* of the *HIMI Marine Reserve Management Plan 2014-2024* must be complied with.

¹³ See <http://www.agriculture.gov.au/import/goods/timber-packaging/ispm-15>

¹⁴ Notwithstanding condition 6(b)(v), the expedition leader may access the temporary refuge facilities once to sign the visitor logbook.

- (ii) All waste must be removed from the Reserve upon departure.
- (iii) Human waste, food waste and non-toxic combustibles generated whilst ashore in the Reserve may be incinerated in the Reserve provided:
 - incineration is undertaken in a container that will prevent the dispersal of material or ash; and
 - all resultant ash and residue is contained, stored and removed from the Reserve upon departure.
- (iv) All human waste, food waste and non-toxic combustibles generated whilst ashore in the Reserve that are not managed via incineration must be appropriately contained, stored and returned to the *MV Braveheart* for appropriate management.
- (v) Food and food wastes must be secured and contained at all times to prevent leakage, dispersal and foraging by fauna.
- (vi) The use of packaging and wrapping material, including packaging bands, must be minimised. Once removed from packages, plastic packaging bands must be:
 - cut into approximately 300mm sections (so that they do not form a continuous loop); and
 - contained, stored and transferred to the *MV Braveheart* for storage and disposal.
- (vii) Polystyrene beads and similar particulate material must not be taken into the Reserve.
- (viii) Chemically treated human wastes must not be disposed of ashore in the Reserve.
- (ix) Human waste (treated or untreated) on-board the *MV Braveheart* must not be disposed of inside the Reserve's Inner Marine Zone.
- (x) No ballast water may be discharged or exchanged inside the Reserve's Inner Marine Zone.
- (xi) Only detergents which are fully biodegradable and low in phosphates may be used in the Reserve.
- (xii) Washing water may be disposed of below the high water mark provided reasonable efforts have been made to remove food matter prior to disposal.

(d) Environmental protection

- (i) The *MV Braveheart* must possess a Shipboard Oil Pollution Emergency Plan and relevant equipment to manage fuel and waste spillages.
- (ii) No equipment or materials (including commemorative markers) may be left behind in the Reserve.
- (iii) To minimise the risk of bird strike:

- masts and guy wires must be appropriately marked to ensure that they are reasonably visible; and
 - the use of lighting must be minimised as much as reasonably practicable.
- (iii) Concentrations of vegetation (including plants, grass, moss) must not be trampled upon by persons, ridden over with the ATV, or landed upon with a UAV.
- (iv) When walking outside the Main Use Zones, great care must be taken to identify and avoid burrowing birds and their burrows. If a person locates a burrowing bird or bird burrow on the ground, they must:
- not approach or disturb it;
 - turn and walk back the way they came; and
 - locate an alternate route to their intended destination.
- (v) In order to minimise the likelihood of interactions with burrowing birds and their burrows, persons walking within the Wilderness Zone polygon defined at **Attachment A** must – as much as practicable – keep to stable waterway peripheries (e.g. beaches, lagoon edges etc.)
- (vi) To prevent cross-contamination between sample sites, all equipment and footwear used at a sample site must be rigorously cleaned with a bleach solution after sampling has been concluded.

(e) Health and safety

- (i) The main encampment must possess sufficient emergency equipment¹⁵ and supplies to shelter and sustain the maximum number of people ashore for an extended period of time.
- (ii) The main encampment must be capable of maintaining two-way voice communication with the *MV Braveheart* at all times.
- (iii) All groups undertaking activities beyond the main encampment must possess sufficient emergency equipment and supplies to shelter and sustain the maximum number of people ashore for an extended period of time.
- (iv) All groups undertaking activities beyond the main encampment must be capable of maintaining two-way voice communication with the main encampment and the *MV Braveheart* at all times.
- (v) All groups undertaking activities beyond the main encampment must report-in to the main encampment at least every 12 hours at a scheduled time.
- (vi) The expedition leader must ensure that all visitors going ashore are suitably briefed on human safety requirements and have appropriate equipment, clothing and footwear.
- (vii) Glaciers must not be travelled or climbed upon.
- (viii) Glaciers may only be approached or travelled in front of:
- in the pursuit of scientific research samples¹⁶; and

¹⁵ Emergency equipment includes a field stretcher.

¹⁶ And therefore not for any recreational purpose whatsoever.

- when a person capable and suitably experienced in field operations,¹⁷ having full regard to all relevant safety factors, has determined¹⁸ that it is reasonably safe to do so.
- (ix) No person may ascend above an altitude of 350 metres above sea level.
- (x) Notwithstanding condition 6(e)(ix), Gavin Marshall and another person capable and suitably experienced in field operations may ascend above 350 metres above sea level within the Wilderness Zone polygon defined at **Attachment B** to obtain geological samples. However, they must not access any areas:
- that reasonably require advanced climbing preparations and procedures;
 - that reasonably require climbing tools (including ropes);
 - that possess ice, cliffs, very steep topography or unstable ground; and
 - where search and rescue operations (including extraction by stretcher) could not be reasonably undertaken.

(f) Management of petroleum products

- (i) Fuels and lubricants must only be taken ashore for the purpose of refuelling aircraft, vehicles or small support boats where the refuelling cannot reasonably be carried out aboard the *MV Braveheart*. Where refuelling cannot reasonably be carried out aboard the *MV Braveheart*, the refuelling must only be undertaken in Main Use Zones.
- (ii) The spillage of any petroleum product in the Reserve must be reported to the Director as soon as practicable.
- (iii) All appropriate precautions must be taken to minimise the risk and harm of petroleum product spillage (including the use of funnels and drip mats).
- (iv) Any petroleum products taken ashore must be transported and stored in a secure container.
- (v) Appropriate petroleum product spill management equipment must be readily available for use in an emergency.
- (vi) If a petroleum product is spilled, all reasonable measures must be immediately undertaken to contain the spill and minimise environmental harm.
- (vii) All fuel and fuel containers must be removed upon departure from the Territory.

(g) Transport management

- (i) Persons operating small support boats, UAVs or the ATV must take all reasonable steps to minimise damage to the Reserve's values and wildlife disturbance.
- (ii) The ATV shall only be used:

¹⁷ See footnote 4 above.

¹⁸ The relevant safety factors that must be regarded are: weather conditions; sea conditions; tide conditions; ice stability; location of ice (noting that overhanging ice must not be approached or walked in front of); and the need for conservative decision making vis-à-vis safety.

- within the Atlas Cove Main Use Zone;
 - over ground that is totally devoid of burrowing birds and their burrows; and
 - for logistical support purposes only.
- (iii) Small support boat use in the Reserve must be restricted to the minimum level reasonably necessary to safely carry out Specific Activity No.1 (COMMUNICATIONS PROJECT) and Specific Activity No.2 (FIELD RESEARCH PROJECT).
- (iv) To minimise the risk of bird strike, vessels must only use the minimum level of lighting reasonably required for navigation and safety.

(h) Management of facilities

- (i) A temporary main encampment within the Atlas Cove Main Use Zone aside, no facilities (including Automatic Weather Stations) may be established in the Reserve.

(i) Incident management

- (i) The Director must be notified of any environmental or safety incidents in the Reserve as soon as practicable.

(j) Daily reporting requirements

- (i) The Director¹⁹ must receive daily reports from the expedition leader detailing:
- all activities undertaken on the preceding day (including locations visited);
 - all activities planned for the following day (including locations to be visited);
 - the health and wellbeing of all persons listed on the crew and passenger manifests of the *MV Braveheart*;
 - any environmental incidents (e.g. any disturbance to fauna or flora, petroleum spills, waste spills etc.); and
 - current weather conditions.

7. Conditions and notes for Specific Activity No. 1 (COMMUNICATIONS PROJECT)

- (a) Specific Activity No.1 (COMMUNICATIONS PROJECT) must be conducted in accordance with the *Heard Island and McDonald Islands Marine Reserve Management Plan 2014-2024*.
- (b) Specific Activity No.1 (COMMUNICATIONS PROJECT) must be conducted in accordance with the *Environmental guidelines for visitors to the Heard Island and McDonald Islands Marine Reserve*.
- (c) Specific Activity No.1 (COMMUNICATIONS PROJECT) must be conducted in accordance with Cordell Expeditions' application package (received by the Australian Antarctic Division on 09 October 2015).

¹⁹ Daily Director reports shall be emailed to: himi@aad.gov.au.



- (d) Specific Activity No.1 (COMMUNICATIONS PROJECT) must be conducted in accordance with all 09 October 2015 to 10 February 2016 email correspondence between Cordell Expeditions and the Australian Antarctic Division.
- (e) As per the zone descriptions provided in the *Heard Island and McDonald Islands Marine Reserve Management Plan 2014-2024*, Cordell Expeditions may **only** undertake Specific Activity No.1 (COMMUNICATIONS PROJECT) within the following Main Use Zones and Visitor Access Zones of the Reserve:
 - (i) Atlas Cove Main Use Zone;
 - (ii) Atlas Cove Visitor Access Zone; and
 - (iii) Spit Bay Main Use Zone.

8. Conditions and notes for Specific Activity No. 2 (FIELD RESEARCH PROJECT)

- (a) Specific Activity No.2 (FIELD RESEARCH PROJECT) must be conducted in accordance with the *Heard Island and McDonald Islands Marine Reserve Management Plan 2014-2024*.
- (b) Specific Activity No.2 (FIELD RESEARCH PROJECT) must be conducted in accordance with the *Environmental guidelines for visitors to the Heard Island and McDonald Islands Marine Reserve*.
- (c) Specific Activity No.2 (FIELD RESEARCH PROJECT) must be conducted in accordance with Cordell Expeditions' supplementary science application (received by the Australian Antarctic Division on 12 January 2016).
- (d) Specific Activity No.2 (FIELD RESEARCH PROJECT) must be conducted in accordance with all 09 October 2015 to 10 February 2016 email correspondence between Cordell Expeditions and the Australian Antarctic Division.
- (e) As per the zone descriptions provided in the *Heard Island and McDonald Islands Marine Reserve Management Plan 2014-2024*, Cordell Expeditions may **only** undertake Specific Activity No.2 (FIELD RESEARCH PROJECT):
 - (i) within the Main Use Zones of the Reserve;
 - (ii) within the Atlas Cove Visitor Access Zone and Spit Bay Visitor Access Zone;²⁰
 - (iii) within the Wilderness Zone polygon defined at **Attachment A**, wherein Cordell Expeditions may collect and document specimens in accordance with its supplementary science application (received by the Australian Antarctic Division on 12 January 2016);
 - (iv) within the Wilderness Zone polygon defined at **Attachment B**, wherein Cordell Expeditions may collect and document specimens in accordance with its supplementary science application (received by the Australian Antarctic Division on 12 January 2016);
 - (v) within the Wilderness Zone polygon defined at **Attachment C**, wherein Cordell Expeditions may:

²⁰ The Long Beach Visitor Access Zone shall not be accessed during this expedition.

- use small support boats to access and navigate the waterway centred at 53° 7' 10" S 73° 41' 16" E; and
- walk up to 2000 metres westward from the edge of the waterway centred at 53° 7' 10" S 73° 41' 16" E

to collect and document specimens in accordance with its supplementary science application (received by the Australian Antarctic Division on 12 January 2016).²¹

- (f) To prevent the spread of *Poa annua*, any person who has entered the Spit Bay Main Use Zone and Spit Bay Visitor Access Zone must not access or undertake activities within the Wilderness Zone polygon defined at **Attachment C**.
- (g) To prevent the spread of *Poa annua*, all clothing, footwear and equipment used within the Spit Bay Main Use Zone and Spit Bay Visitor Access Zone must be thoroughly and rigorously cleaned with a bleach solution on board the *MV Braveheart* before any landings are undertaken elsewhere in the Territory.
- (h) The temporary refuge facilities in the Spit Bay Main Use Zone may be used as accommodation provided:
 - they are found to be in a habitable state;
 - their inhabitation would not pose health or safety risks; and
 - alternative accommodation (e.g. tents) are available lest they are not habitable.
- (i) The temporary refuge facility located approximately 400 metres south of Sydney Cove on the Laurens Peninsula may be used as accommodation provided:
 - it is found to be in a habitable state;
 - its inhabitation would not pose health or safety risks; and
 - alternative accommodation (e.g. tents) are available lest it is not habitable.
- (j) All wastes generated beyond the Atlas Cove Main Use Zone must be contained, stored and returned to the Atlas Cove Main Use Zone for management.
- (k) UAV operations:
 - (i) A UAV that weighs less than 5 kilograms may be operated in the Reserve, but its operation must be restricted to the minimum level reasonably necessary to safely carry out Specific Activity No.2 only.
 - (ii) A UAV must not be operated over, or landed within, the Heritage Zone or Restricted Zone.
 - (iii) Any irretrievable loss of a UAV must be reported to the Director as soon as practicable.
 - (iv) A UAV must be operated in accordance with manufacturer specifications.
 - (v) The expedition leader will ensure that all persons in control of a UAV ('controllers') are:

²¹ Persons may be landed on the beach adjoining Brown Lagoon via small support boat but only in safe sea and weather conditions.

- provided with a copy of this permit; and
 - understand that they are legally bound by its conditions.
- (vi) Controllers must not operate a UAV within 250 metres of wildlife or concentrations of vegetation.
- (vii) Controllers must immediately stop the operation of a UAV if it causes any modification to wildlife behaviour.
- (viii) Controllers must maintain a strong command and control link with their UAV.
- (ix) Controllers must maintain a continuous visual line of sight with their UAV at all times.
- (x) Controllers must not operate a UAV at an altitude greater than 120 metres.
- (xi) Controllers must not operate a UAV within 30 metres of a vehicle, vessel or person.
- (xii) Controllers must only operate a UAV in an area that is devoid of topography that would impede:
- his/her ability to maintain visual line of sight; or
 - a strong command and control link.
- (xiii) Controllers must not operate a UAV through virtual reality goggles.
- (xiv) A UAV must not be operated in temperatures colder than -10C°, in low-light conditions, or in winds greater than 20 kilometres per hour.
- (I) Collection of specimens for scientific research:
- (i) No more than 50 kilograms of rocks may be taken from the Territory.
- (ii) No more than 10 litres of water containing macroscopic inclusions may be taken from the Territory.
- (iii) No more than 5 litres of water taken from glacial streams containing microbiological inclusions may be taken from the Territory.
- (iv) No more than 10 kilograms of driftwood and debris containing microbiological inclusions may be taken from the Territory.
- (v) No more than 10 kilograms of sediment containing microbiological inclusions may be taken from the Territory.
- (vi) No more than 10 kilograms of soil containing small organisms may be taken from the Territory.
- (vii) Accurate measuring equipment (e.g. scales, containers etc.) must be used to ensure that the quantity of specimens taken aligns with the strict take limits set by this permit.

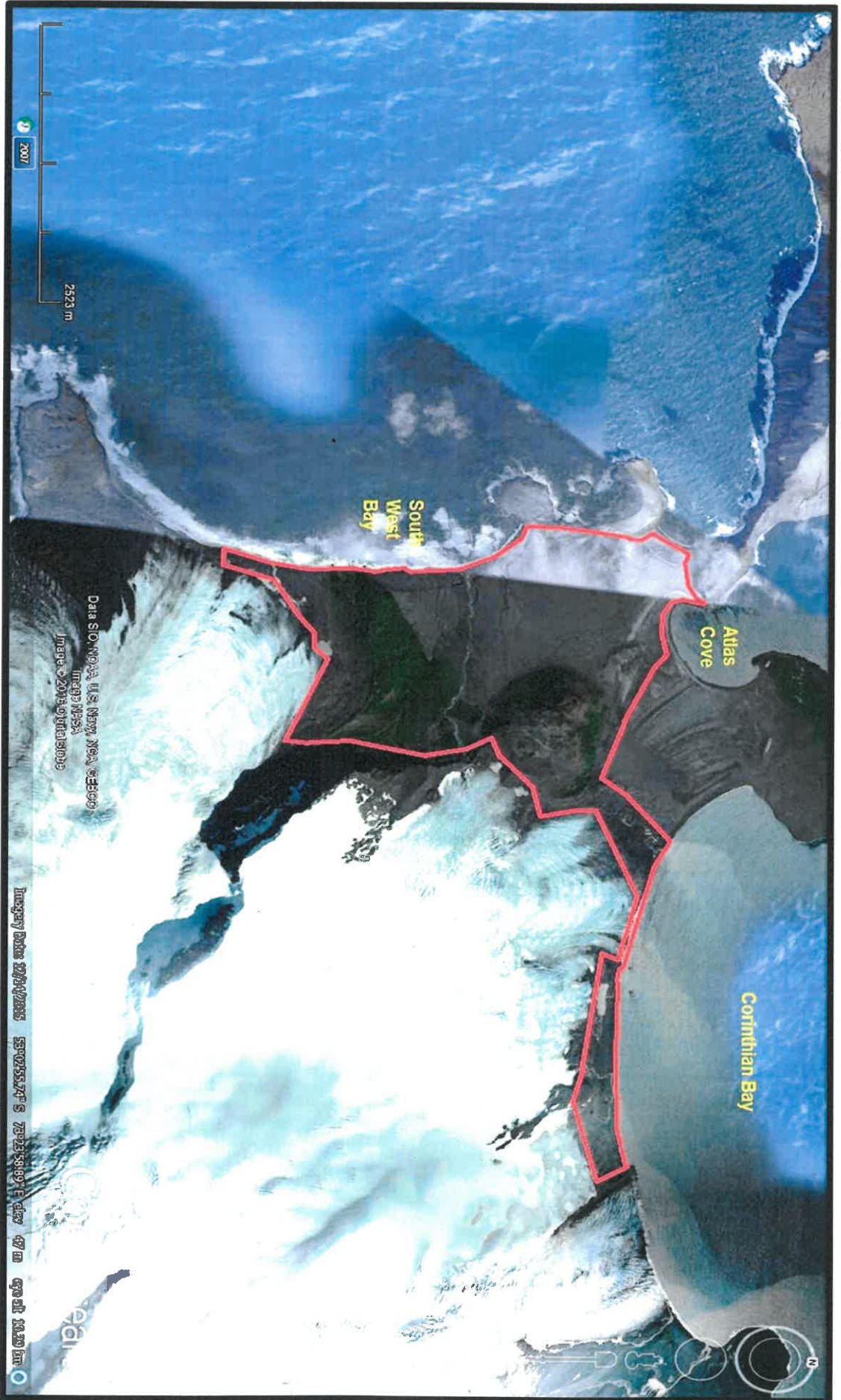
(viii) No specimen of rock, soil, sand, water, ice, wood, glass, plastic, metal etc. may be collected within 500 metres of the Heritage Zone boundary.



Gillian Slocum

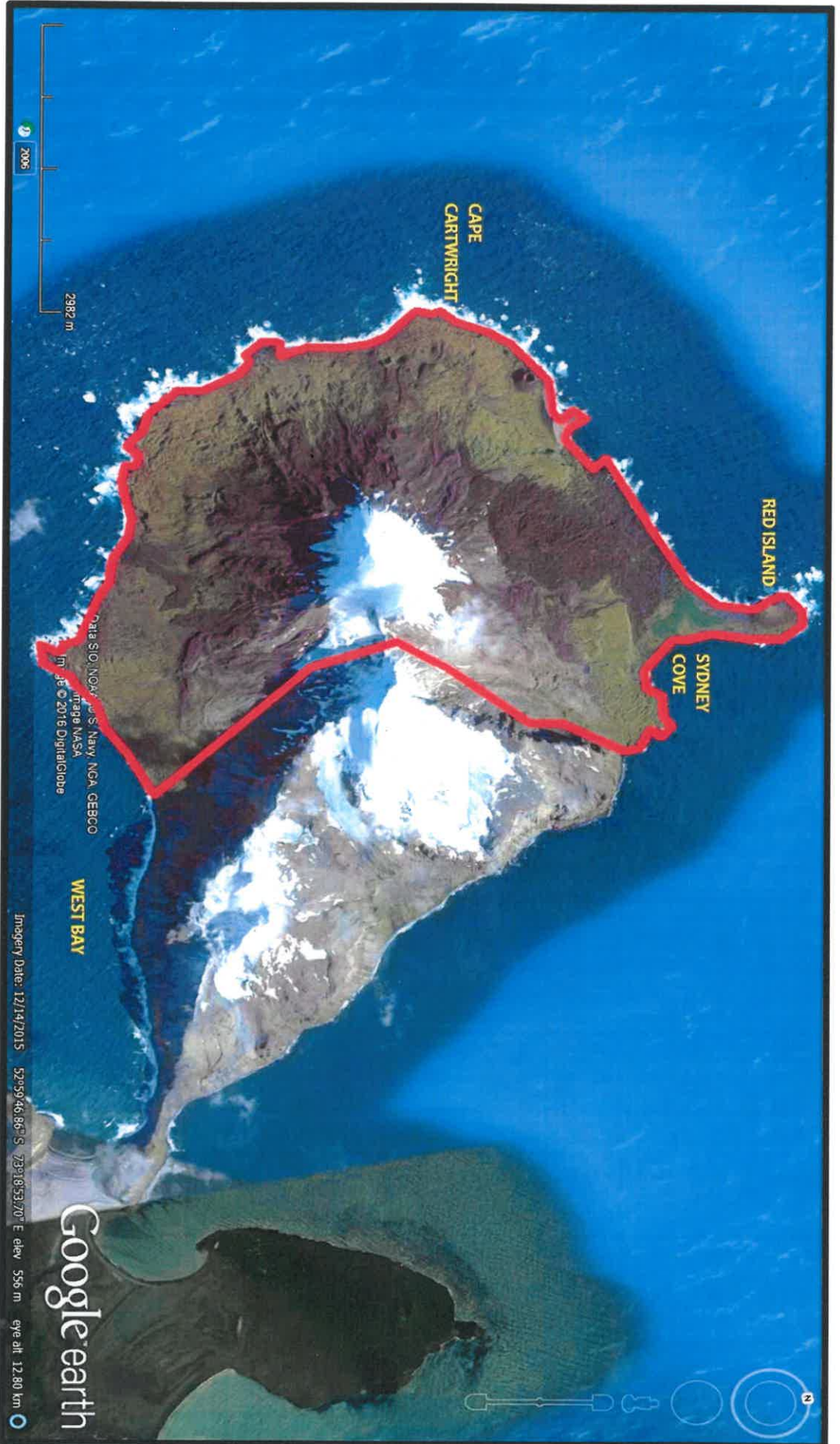
Delegate of the Minister for the Environment

Dated this 1st day of March 2016



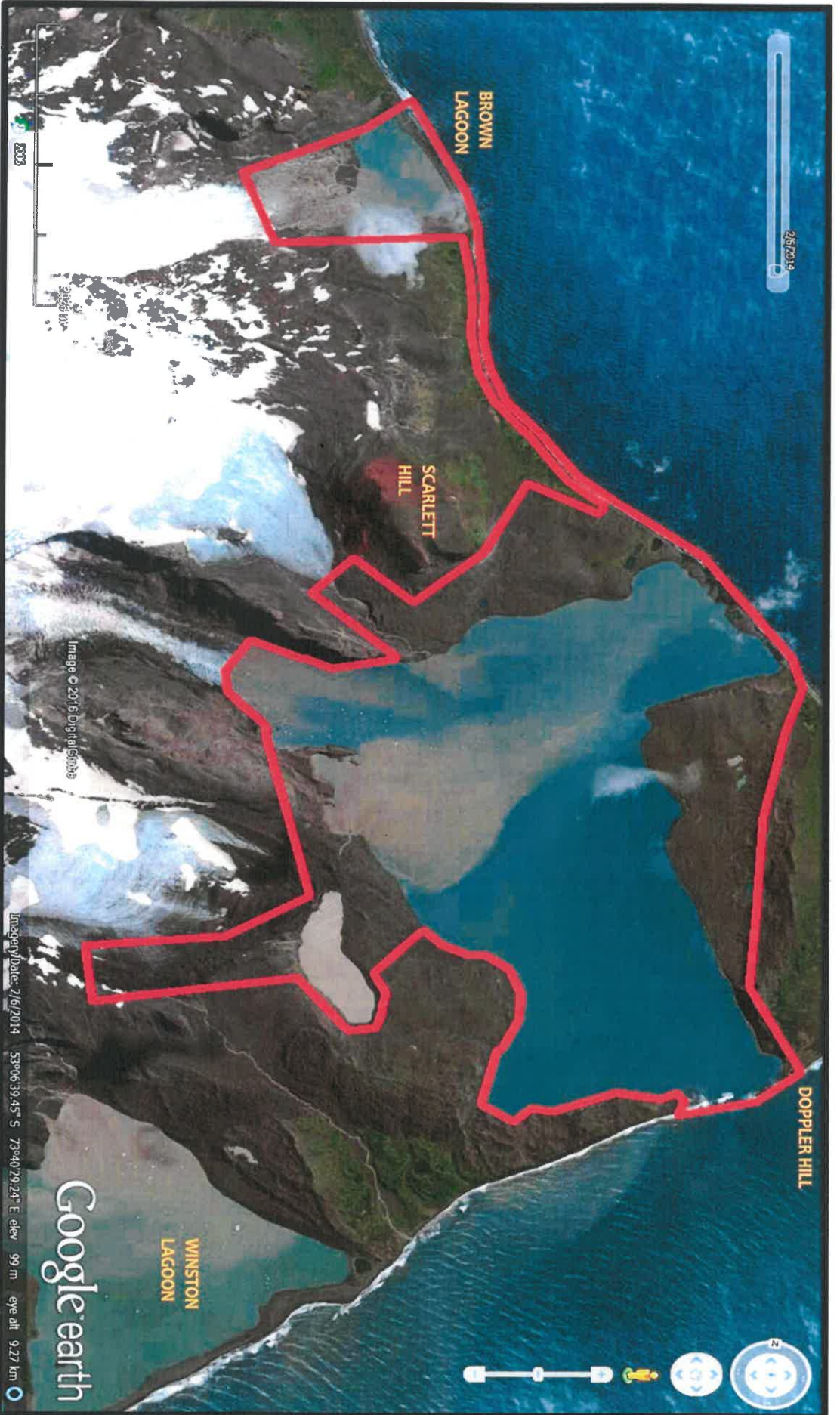
ATTACHMENT A: WILDERNESS ZONE POLYGON – CORINTHIAN BAY AND SOUTH WEST BAY

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ATTACHMENT B: WILDERNESS ZONE POLYGON – LAURENS PENINSULA

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ATTACHMENT C: WILDERNESS ZONE POLYGON – EASTERN HEARD ISLAND

