Marine Mammal Incident Readiness and Response SOP

Standard Operating Procedure

Contents

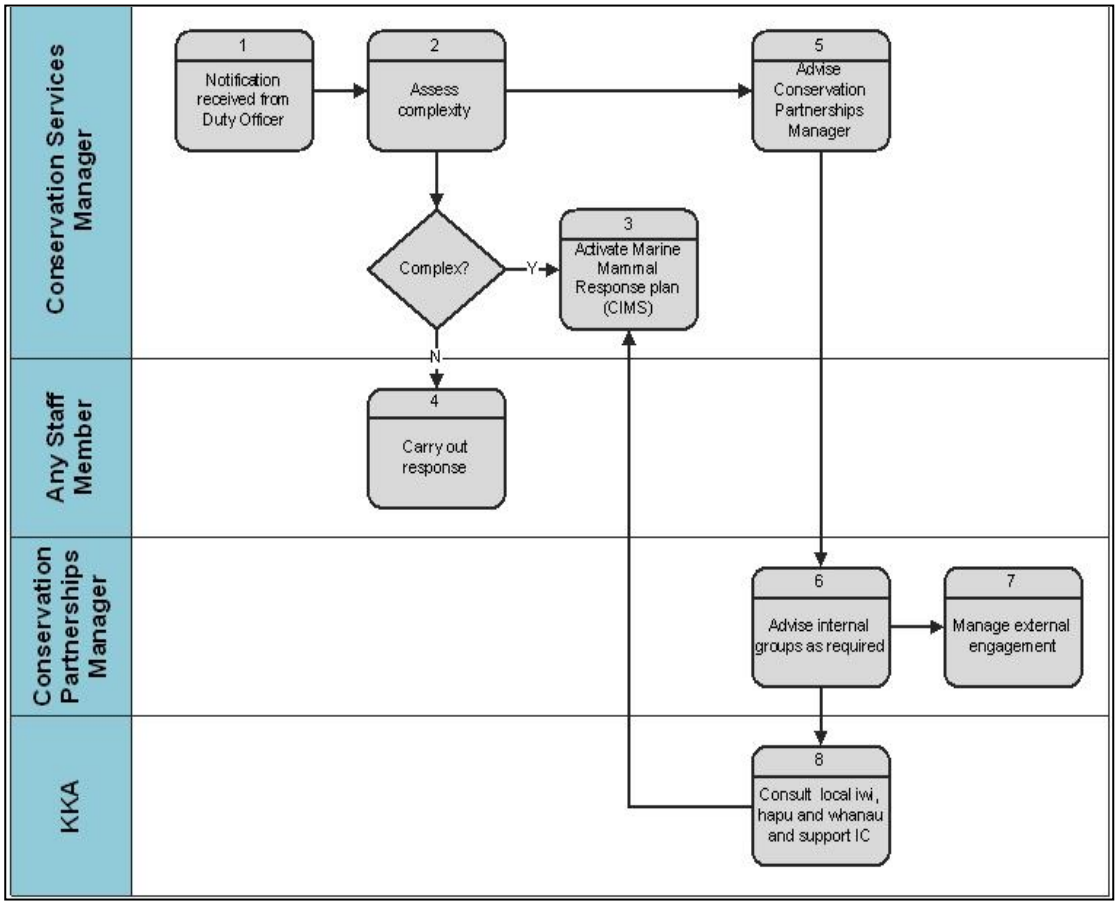
I. Purpose

This document provides advice on national requirements and key principles for ensuring a state of readiness for Operations staff who may be involved in responding to marine mammal strandings and emergencies. The principles addressed in this document work toward the implementation of a consistent national approach to the management of marine mammal emergencies. This document does not address operational procedures for attending marine mammal incidents; these are detailed in the 'Operational Plan'. Local areas (districts or field bases) are responsible for the creation of 'Operational Plans' to address their local variations and needs. This SOP contains information on the following:

Marine Mammal Incident Readiness and Response SOP	Marine Mammal Response Process
Develop local Operational Plan, review period for Operational Plan, and ongoing training schedule, update staff training and competencies in DOCLearn	Operational Plan Toolbox DOCLearn DOC National Contacts External Contacts for Stranding Protocols
Develop a Coordinated Incident Management Structure (CIMS), especially at mass strandings	CIMS forms
Develop adequate health and safety plans	Risk Manager Safety Plan No. 5943
Develop and document protocols regarding key contacts	Area community relations plans
Develop a media strategy	Area media plans, SOPs
Complete operations/ Wrapping up	Annual reporting form

II. Process

The diagram below describes how to respond to a marine mammal emergency. This document is to be used by all Operations Staff who may be required to respond to stranded or distressed marine wildlife, other than during an oil spill.



The table below describes some of the new responsibilities and accountabilities for the roles involved in this process.

Role	Responsibilities	Accountabilities
Operations Manager	• Assess complexity of response • Direct staff member to carry out response, or • Activate Marine Mammal Response plan • Advise KKA & S&P Marine • Manage external engagement • Advise Partnerships Manager if necessary	• Ensure appropriate level of response and manage process to its completion. • Ensure SOPs followed
Pou Tairangahau	• Manage all engagement with whänau, hapü and local iwi. • Provide advice in accordance with cultural and tikanga values in response to the plan e.g. what samples can be taken	
S&P Marine	• Provide advice during response	

III. Requirements table

Tier 4 or higher managers are authorised to approve variation from SOP requirements and are accountable for those decisions. They are required to use their professional judgment and seek advice or escalate to the next level up when in doubt. All decisions should be documented. It is expected that variations from requirements will be the exception rather than the norm, and that legal (i.e. legislation and judge made laws), and health and safety requirements are effectively compulsory. Common sense should prevail in the case of exceptional or emergency field situations.

REQUIREMENTS	WHO IS ACCOUNTABLE FOR CARRYING OUT THE REQUIREMENT	SUPPORT ROLE	WHY?/CONSEQUENCE	LINKS	COMPLETED / COMMENTS
Reviewing the format of the Marine Mammal Incident Readiness and Response SOP every two years, authorising amendments and communicating any changes to all Conservancies and Areas.	Operations Manager	S&P Marine	Marine mammal incidents are a highly emotive and publicised event. Constant review of best practice procedures will ensure the Department of Conservation is responding to these events in a safe, ethical, efficient and professional manner.		
Communicating any changes to Teams	Operations Manager	S&P Marine	To ensure consistent application of national approach to marine mammal incidents around the country.		
Informing and training	Operations staff	S&P Marine	To ensure Areas have the		

all Area staff about the SOP. Maintain awareness of the Operational Plan location and initial response procedure – especially with reception staff and duty officers.			appropriate capability to respond to marine mammal incidents in a safe and efficient manner.		
Ensuring that staff within their operational areas follow and implement the procedures outlined in this SOP and the Operational Plan.	Operations Manager		To ensure a nationally consistent approach to managing marine mammal incidents, which can be highly emotive and publicised events.		
Ensuring that within their operational area an appropriate level of readiness is maintained.	Operations Manager		To ensure an efficient and professional response is conducted. This prevents the public from attempting a rescue on their own which puts themselves and the animals in danger.		
Having in place protocols for the involvement of tangata whenua in the stranding response and disposal of dead marine mammals.	Pou Tairangahau		To give effect to the principles of the Treaty of Waitangi. To ensure appropriate engagement is conducted and tikanga is followed at marine mammal incidents.		

Following and implementing the procedures outlined in this SOP.	All staff		To ensure a nationally consistent approach to managing marine mammal incidents.		

IV. About this document

Owner

DDG, Conservation Services

Approved for use

DDG, Conservation Services

Signed

Date

Amendments

AMENDMENT DATE	AMENDMENT DETAILS	DOCDM VERSION	AMENDED BY

Acknowledgements

The following DOC people played significant roles in developing this standard: [redacted] have provided valuable input as well. Many others have provided input at various stages of the process. Thanks again for your time, knowledge and efforts – regards [redacted]

Dedication

The revision of this Standard Operating Procedure and associated Operational Plan for Attending Marine Mammal Incidents is dedicated to the memory of William Samuel Macrae. William was lost in a fire fighting accident in 2011, and will be missed.

William 'MacGyver', permanently joined the Department of Conservation after a stint of contracts in 1995. He became very active in marine mammal response, from refloating and transporting stranded whales, helping to disentangle a humpback whale right through to the difficult job of euthanasia. His passion for inventing and believing that you can always improve how you do something, found William developing special lifting frames for safely maneuvering whales from the beach onto a truck. He was also working on developing an alternative method for large whale euthanasia.

He was always willing to help out others around the Department and was keen to share his knowledge and experiences. A characteristic that stands out the most about William is his focus on a job and unflappable nature. No matter how new something was or what the pressure he was cool calm and collected. He was a conscientious team player and incredibly professional.

Many people throughout the Department have fond memories and funny stories to tell about William, and are grateful for his contributions to conservation, fire fighting, and of course, whale stranding response. His memory will always be close to our hearts, with a smile never far away.

1. Use of this SOP, roles and responsibilities

1.1 Introduction

Marine mammal strandings are often highly publicised events that require the Department to perform in a quality way for our collective benefit. This plan sets out the standards for managing marine mammal incidents, strandings, and emergencies.

All species of marine mammal occurring within New Zealand and New Zealand's fisheries waters are absolutely protected under the Marine Mammals Protection Act 1978. The Department of Conservation is responsible for enforcing this Act.

At a stranding the Department is responsible for:

- the welfare of the stranded animals,
- the disposal of any dead marine mammals (including any part of a marine mammal),
- the health and safety of its staff and any volunteers under its control, and the public, and
- enabling any cultural protocols or actions.

From the Department of Conservation Statement of Intent 2011-2014 - 3.1 Natural Heritage two goals are:

Conserving nationally threatened native species to ensure their persistence, and

Maintaining and restoring the native species that the majority of New Zealanders consider nationally iconic.

This version of the SOP, along with the Operational Plan replaces the National Template for Marine Mammal Stranding Contingency Plans. It is to be used by all staff dealing with marine mammal incidents. In addition to the SOP and Operational Plan a 'Toolbox' of documents is available in the final section of this document that includes more background information on specific topics, additional procedures, technical documents etc. While this SOP and the Operational Plan do not directly address procedures at oil spills, the principles addressed within this SOP and some of the procedures within the Operational Plan will be applied at an oil spill. For specific procedures relating to "Oiled Wildlife Response" this can be accessed through the Toolbox.

This SOP is will be continually reviewed and improved by those at the front end of the work. If you can add improvements - please let us know. mailto: marine@doc.govt.nz.

1.2 How to use this SOP

The principles addressed in this document work toward the implementation of a consistent national approach to the management of marine mammal emergencies. Ensure all staff are familiar with this SOP. Follow the Process as laid out in section II and establish an Operational Plan for your local office.

2. Managing Incidents

2.1 Develop Area Specific Operational Plans

Follow this link to view the template for developing your offices Operational Plan. Save your plan with the following name: [Office abbreviation] Marine Mammal Operational Plan [YEAR] onto DOCCM.

The Operational Plan covers the specific procedures, forms and checklists needed for marine wildlife responses, as well as including equipment lists and contact lists. The regional components of your Operational Plan should be updated annually prior to the 'stranding season' and integrated with other emergency management procedures, for example at the same time as Fire and Health and Safety Plans are updated. Duty officer kits should include the updated plan. The key areas that must be updated on a regular basis are (but not limited to):

Local protocols with key contacts (protocols with tangata whenua, media plan etc.)

Staff training and capability register (record trainings and capabilities in DOCLearn where appropriate)

DOC National Contacts

External Contacts for Stranding Protocols (appending the updated National list, and updating and appending the local contacts)

Equipment list

Health and Safety plan

2.2 Health and safety

There is a significant range of hazards associated with marine mammal work. These range from hazards associated with contact with the marine mammals themselves, to the environment, equipment used onsite, as well as working with the public and volunteers.

It is the responsibility of each office and all staff to ensure that all hazards are identified and managed appropriately. This should be done by developing a Working with Marine Mammals Safety Plan through the Risk Manager System. A National Template Safety Plan for working with marine mammals has been created in Risk Manager as a starting point. To modify this plan for your local conditions follow these steps:

- Log on to Risk Manager as normal
- Go to "All Safety Plans"
- In the search criteria enter "5943" in the ID number field (make sure you have ticked the "All Safety Plans" box)
- When the safety plan appears, click on the numerical hyperlink
- When the plan opens, select "edit details"
- Select "Duplicate Plan", from here you can change the title and any other field, and choose your own reporting line
- Select "Add"
- From here you can remove hazards that are not relevant to your Area, add any that are needed, and apply local controls if needed.

Once you have completed this exercise you must ensure that a copy of your safety plan is included in your Office's Hazard Register, and in your Operational Plan.

Infection risk

The risk of bacterial infection is significant (especially from seals) but is reduced by taking sensible precautions. Infection can be through fluids, or airborne transfer. People and dogs can be susceptible to infection. Potentially infectious diseases reported in New Zealand marine mammals include tuberculosis, salmonella, brucella and "seal finger" (a virulent necrotising bacteria). References relating to seal finger and diseases in stranded marine mammals are available from the Toolbox at the end of this document. It is recommended that anyone working with marine mammals obtains and reads these publications.

Cawthorn 1994

Duignan 2003

2.3 Firearms Procedures

Each office will need to establish its own firearm procedures and include them in its Area plan. All personnel that hold or use firearms must be licensed by the NZ Police.

The principal statutory and regulatory controls for firearms come from the Arms Act 1983 and the Arms Regulations 1992, which restrict the ownership, storage, transportation and use of firearms, and introduce licensing provisions. These provisions are summarised in the Arms Code (1996 edition), available from the NZ Police.

For further detail on the department's protocol for firearm possession, storage and use see the following document, Hazardous Substances: Standards for Storage and Disposal of, particularly sections 1 and 3.1.5.

2.4 Animal Welfare

Making well informed decisions to protect the welfare of marine mammals that are in distress is paramount to the successful implementation of an incident response. Incident response teams will conduct all activities consistent with ethical and cultural standards and expectations under all situations and for the duration of the incident, including necropsy and burial, to ensure appropriate welfare and care of animals and to demonstrate best practice ethical behaviour under sensitive circumstances.

Decisions on care, release or euthanasia of animals will require assessment of their condition, their chance of survival, the degree of suffering they will be exposed to and wider consequences including conservation value, population health, public health, and costs. Practical considerations should include the individual scenario and the experience of the team. In some instances marine mammal veterinary or science advice may be required for this assessment.

2.5 CIMS Structure

Incident control: CIMS

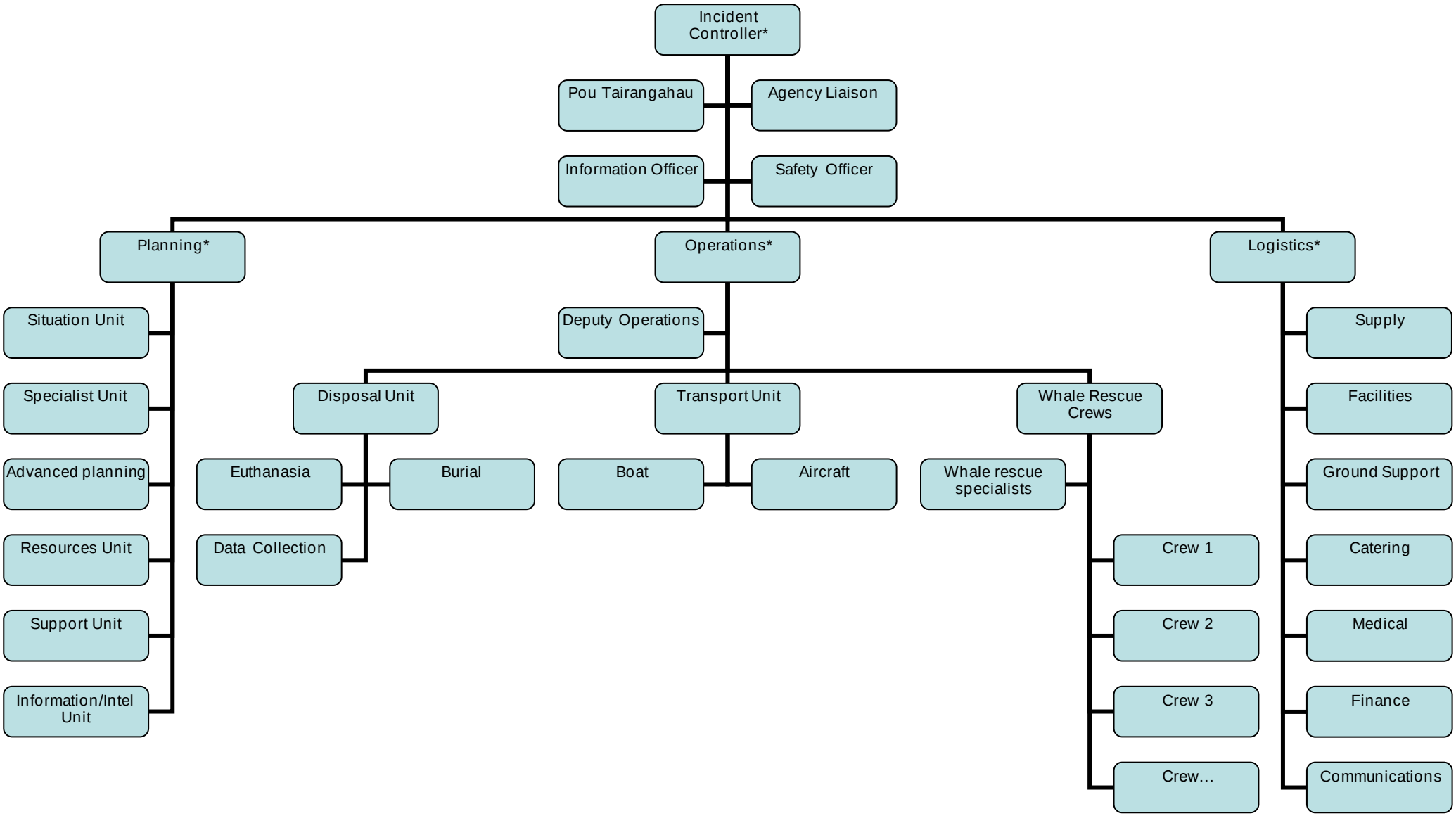
The New Zealand Coordinated Incident Management System (CIMS) will be used to manage all emergencies by the Department of Conservation, including the management of mass whale stranding incidents, and single strandings of high public interest.

The Blue CIMS manual1 provides the basic structure of CIMS in NZ which is used by all Emergency Services. In addition the Incident Management Team (IMT) role descriptors can be found in the green Rural Fire Management Handbook (Section 4) which can be found on the NRFA website; www.nrfa.org.nz, or CIMS role descriptors. It is recommended that a copy of the CIMS manual and/or the Rural Fire Management Handbook is kept with your duty bag for all emergencies. CIMS forms are available from NRFA Incident Management Forms.

A diagram of the key elements of the CIMS structure with additional roles specific to whale strandings is included below (Figure 1).

1 The New Zealand Coordinated Incident Management System (CIMS): Teamwork in Emergency Management. (1998) New Zealand Fire Service Commission, Wellington, New Zealand. ISBN 0-908920-32-6

Fig. 1: Co-ordinated Incident Management System (CIMS) Structure Diagram



The following is a brief description of key CIMS concepts and roles and additional roles specific to whale strandings that you might wish to employ.

Control and Command

CIMS is designed to enable a multi-agency response to any incident. Each agency is likely to come with its own command structure and may be assigned to one or more functional areas. A Liaison Officer may be assigned to assist communications between agencies, allowing the Incident Controller to have control over the management of the incident without disrupting individual agency command structures.

Incident Size

The nature of CIMS is that it is an emergency management system that will expand as incident size increases. For small whale strandings one person may well be the Incident Controller, Planning Manager, Operations Manager and Logistics Manager. As the size and complexity of the stranding increases, these roles will be delegated and aspects of the roles further delegated.

Terms

Incidents will be managed by an Incident Management Team (IMT) located at an Incident Control Point (ICP). This may be some distance from the actual stranding. There is also likely to be an Assembly Area (AA) for resources and possibly Staging Areas (SA). Some incidents may require perimeter control cordons and traffic control.

Incident Controller

This person is responsible for the overall control of the incident, including approval of the Incident Action Plan (IAP) and is likely to appoint a deputy to assist. This person is responsible for the overall direction of the response activities and reports to the Director, Operations.

Safety Officer

The function of this person is to develop and recommend measures for assuring personnel safety and to assess/anticipate hazardous situations. They participate in planning meetings and report directly to the Incident Controller. They can also work onsite to ensure compliance.

Media/Information Officer

This person deals with the media and external agencies. He/she acts as a buffer and reports directly to the Incident Controller. The person may have assistants. In addition he/she will source much information from Planning.

Planning

The Planning Manager is responsible for the acquisition, analysis and dissemination of information. They predict incident behaviour and plans how to control the incident. They are responsible for the preparation of the Incident Action Plan. Planning may be divided into Situation, Resources, Management Support and Information Units (which provide internal information for the incident management team). Planning must be supported by an Observer onsite with communications back to the Planning Manager, and may be supported by additional specialists, e.g. Whale Rescue, Science or Veterinary advice. This role is responsible to the Incident Controller.

Operations

The Operations Manager is responsible for carrying out tactical activities in accordance with the IAP. They determine resource requirements and operational structures. The Operations Manager works onsite, but does not become physically involved with the response operation. This person will wear an Operations Manager vest for easy identification. They are responsible to the Incident Controller. They must be prepared to shut down an operation if required to ensure safety. The Operations Manager also makes decisions on euthanasia, and therefore, will need to be a warranted marine mammals officer or have been authorized by the Minister (s.18(1)(c) MMPA). If the operations manager does not have this delegation, they can seek a decision from a warranted marine mammals officer, remembering the this decision can be escalated if needed. They ensure that all protocols are followed and are responsible for safety of all personnel on site.

Logistics

The Logistics Manager is responsible for the provision of all services, materials and supplies. They provide and maintain facilities. Under the Logistics Manager there may be Supply, Facilities, Ground Support, Communications, Catering, Medical and Finance/Accounting Units. They are also responsible for maintaining and updating the Incident Log and provide regular updates to the Planning Manager, Operations Manager, and Incident Controller.

Additional roles are recommended that are specific to marine mammal events. These are described below.

Marine Mammals Officer (under the Marine Mammals Protection Act 1978)

Any warranted officer under the Conservation Act, any fisheries officer under the Fisheries Act and every constable, is also a Marine Mammals Officer under the Marine Mammals Protection Act 1978. A Marine Mammals Officer has the power to destroy or direct the destruction of any aged, sick, distressed or troublesome marine mammal without specific authorisation from the Minister (see section 18(1)(c) of the Act). A Marine Mammals Officer also has the power to advise on the disposal of a dead marine mammal without specific authorisation from the Minister. This includes being able to retain by-caught marine mammals on fishing boats to take back to land for necropsy (see section 18(2) of the Act).

Whale Rescue, Science, Veterinary Advice

These specialists primarily provide advice to the Planning Manager; however, science advisers in particular may also provide support to the Information officer in dealing with media queries. These specialists may also support the Operations Manager, either in assistance with data collection and providing advice relevant to the triage of stranded animals. Decisions surrounding euthanasia, or the level of intervention remain the responsibility of the Operations Manager although they may call on expert advice in making a decision. This specialist advice in some situations can be available locally, as well as through a national network; see the external contacts section of your Operational Plan.

Data Collection Officer

The data collection officer ensures that all required scientific data has been collected from each individual. They will consult with a representative from the Marine Species and Threats team (National Office) to determine a specific sampling regime and if any other samples are requested by permit holding scientists. They must ensure that iwi have been consulted and any local protocols have been followed before samples are collected for research purposes. They are responsible for appropriately collecting and recording the data on each stranded individual (length, sex, measurements, tissue samples etc), and submitting the data for inclusion in the New Zealand Whale and Dolphin Stranding Database. The data collection officer reports to the Operations Manager.

Euthanasia Personnel

These staff are responsible to the Operations Manager.

Develop an Area Contacts list for inclusion in your Operational Plan of staff who are experienced/trained in methods of humane cetacean euthanasia. Only these staff will be permitted to euthanase whales at the direction of the warranted marine mammals officer or the Operations Manager (with authorisation from the Minister). As euthanasia is highly emotive it is imperative that the personnel conducting this have the appropriate experience. They, alongside the Operations Manager, will be aware of the number of aspects that need to be dealt with in relation to euthanasia (i.e. counseling bystanders/volunteers, public relation issues, public safety and crowd control). Note that there may be times, such as when dealing with a sick seal or a single stranded whale, where euthanasia takes place outside a CIMS structure. For more details on euthanasia see Section 4Operational Plan.

Pou Tairangahau

The Pou Tairangahau reports to the Incident Controllers and is the lead personnel responsible for ensuring that all aspects of consultation and engagement with whänau, hapü and iwi have been complied with and are in accordance to the tikanga and kawa of that particular rohe (area) in regards to a marine mammal stranding response. The Pou, assisted by whänau, hapü and iwi will lead and ensure that cultural and customary protocols are captured in a policy framework where traditional use of marine mammal material is requested by whänau, hapü and iwi. The Pou will also ensure that strict protocols and procedures are in place before, during and following the request for marine mammal material for data collection by a data collection officer, and will ensure the requests are not outside any Treaty Settlement agreement or arrangement in respects to whänau, hapü and iwi engagement/ involvement of marine mammal response as Kaitiaki.

Disposal Team Leader

This person reports to the CIMS Operations Manager and, should burial be required, is responsible for:

- identifying appropriate sites in consultation with iwi, and Senior Heritage Advisors or Heritage New Zealand in accordance with local protocols (ensuring that archaeological sites, ecologically sensitive sites and/or waahi tapu sites will not be damaged or destroyed),
- obtaining landowner's permission if on private land,
- ensuring that all scientific and cultural materials have been collected prior to burial
- ensuring the security of the site and specimens; and
- overseeing the safety of the disposal team and ensuring all Health and Safety protocols are followed, eg above MHWS, avoiding waterways, and opening body cavities of carcasses.

Note the opening of carcasses should be done prior to burial to avoid explosion, and if the animals are to be left to decompose to minimise the chance that they float and restrand on another beach.

There are alternatives to burial, for example, natural decomposition, composting, or sinking at sea. Consider other options that might be suitable on a case-by-case basis. For more detail on this see Section 8 of the Operational Plan.

Oil spills

Marine Oil Spills are not the Department of Conservation's responsibility to manage – (unless we have caused a local tier spill).

In every case, reports of Marine Oil Spills must be reported directly to the Regional Council responsible. Oil Spills are managed under separate Contingency Plans prepared by Regional Councils or the Maritime Safety Authority:

For a Local Tier 1 spill, action is co-ordinated initially by the Spiller

For a Tier 2 Regional spill, action will be co-ordinated by your Regional Authority under their Regional Plan

For a Tier 3 National Spill, a National Response is initiated by the Maritime Safety Authority (MSA) under the National Marine Oil Spill Contingency Plan.

DOC has no autonomy during an oil spill. The rehabilitation of wildlife is managed by organisations contracted to MSA. DOC may be required to play roles in this work. However, this will be controlled via the On Scene Commander, MSA, and processes identified in the appropriate plan. For more information see the Oiled Wildlife Response.

2.6 Volunteer Guidelines

Volunteers are a common and often vital aspect of marine mammal call-outs, especially mass strandings. However, they can mean added risk and responsibility for the Department. Where practicable, treat volunteers as if they are employees in relation to health and safety requirements.

Here are the basic actions when working with volunteers:

- Use the appropriate volunteer and staff check-in forms as per CIMS structure to record the names of all volunteers as they check in to work at mass stranding events.
- Be familiar with your Safety Plan and use the check-in process to brief volunteers and all staff who attend on all health and safety issues before they start. This must also include any specific hazards that have been identified, or have arisen, at the particular event.
- Ensure that volunteers are familiar with, and trained in the use of, any equipment the Department might allow them to use.
- Take all practical steps in the circumstances to eliminate/isolate/minimise hazards.
- If a volunteer is observed being unsafe this must be raised immediately with them, or their leader.
- Ensure that each volunteer is assigned to a crew leader who is responsible for the safety of that volunteer.

If you are working with large numbers of volunteers and are unable to maintain a designated entry point and working zone, it can be hard to ensure that everyone has received safety briefings and checked in. It is recommended that in these instances you use a marking system for those volunteers who have been briefed. In addition, no more than8 volunteers should be assigned to one crew leader.

If volunteers are derived from an organised group, such as Project Jonah, then you should use their leader to undertake briefings and check in procedures, as per your instructions.

If you regularly work with volunteers it may be useful to become familiar with the Volunteers for Conservation SOP.

Volunteers and ACC

Volunteers assisting at whale strandings do not become employees in terms of accident insurance – even if we provide sustenance at the site, or reimburse direct expenses. Any accidents are regarded as a non-work accident and coverage is provided by ACC. Of course the Department still has a responsibility to act to protect public safety with appropriate hazard management procedures.

2.7 Training

As with any emergency response programme, relevant training to a high standard is vital for safe and successful operations. It is recommended that two training sessions per year are carried out, with at least one prior to the summer stranding season. These do not have to be specific to whale strandings but should incorporate some of the key skills and procedures. For example, one training session per year where CIMS, radios, 4WD components can be refreshed while carrying out other training such as fire.

A whale stranding response team should comprise a combination of staff that have been trained in the key skill areas required:

These may include:

CIMS training

Marine mammal ID, biology

Disentanglement training (whale and seal)

Stranding response training, this may include training with Project Jonah

Boat handling

First Aid

Euthanasia

Boning out

Public and media relations

Autopsy/sampling

Health and Safety

Administration.

It will not always be possible to have all of the skill sets covered. Staff should be aware of the hazards and their team's capabilities and therefore seek the appropriate information, equipment and supervision so that they can operate safely.

Opportunities for training can include but are not limited to:

- National Marine Mammal Workshops
- National (e.g. cross-Region) or International (e.g. Australia) opportunities
- Mock strandings organised by Project Jonah
- Integrated emergency response training e.g. fire, earthquake scenarios
- On the job training at wildlife and other incidents
- Instruction at local level (e.g. refreshers at Area meetings)
- Debriefs after an incident
- Briefings when safety plans, operational plan is updated.
- When undertaking euthanasia use as a learning experience for all staff including practising on already dead animals, and checking the accuracy of the shots etc. Remember to seek iwi approval.

2.8 Protocols Regarding Key Contacts

Relationships with Tangata Whenua

You should ensure that you have consulted your local iwi in respect to planning for marine mammal incidents and have documented any agreements or protocols (either written or otherwise) that have been established and include these in your operational plan. It is important that proactive steps are taken to develop a working relationship with tangata whenua regarding marine mammal strandings prior to an event occurring. You should consult your Pou Tairangahau in the development of this section. Holding regular hui to discuss trends in strandings, findings from necropsies, and facilitating scientists to present their research at the local marae is encouraged. It is important to note that relationships between the Department of Conservation and tangata whenua (including Ngai Tahu) are now being conducted at a range of levels.

Section 50 (3) of the the Marine and Coastal Area (Takutai Moana) Act 2011 provides, in the event of marine mammal strandings:

"When making decisions about managing a stranded marine mammal, a marine mammals officer must-

(a) ensure that the welfare of the marine mammal and public safety are the primary considerations, and

(b) have particular regard to the views of any affected iwi, hapu, or whanau expressed to the officer."

The Department has a policy on the disposal of whale bone and meat from stranded whales. The current policy is dated 13 September 1996.

Please also note that the following statements are contained in the Conservation General Policy that was revised in 2007:

4.4	Marine Species, Habitats and Ecosystems
(h) ii. Tangata whenua, as kaitiaki, will be provided with access to the remains of dead marine protected species for customary use consistent with relevant legislation and agreed protocols.	
(h) iii. Tangata whenua, as kaitiaki, will be provided with immediate notification of strandings where possible.	
(h) iv. Tangata whenua, as kaitiaki, will be involved in the management of stranded marine mammals, in accordance with agreed protocols.	

Role of Te Papa

Te Papa is an approved research institution and public museum under the Marine Mammals Protection Act 1978 and as such are able to receive, exhibit, and study specimens collected under section 4(5)(b) of the Act. Te Papa does not currently have anyone focusing on marine mammal research but will sometimes be interested in rare specimens, as recorded in the Sample and Permit Register, contact someone in the Marine Species and Threats team to discuss. As the National museum, Te Papa will be prioritized for specimen collection over regional museums.

Role of the Wildbase Pathology

The scientists that comprise Wildbase Pathology at Massey University conduct their own fundamental research on the biology and pathology of stranded marine mammals, as well as providing advice, research and veterinary services under contract to the Department (e.g. necropsy of Hector's and Māui dolphins and NZ sea lions to inform the Threat Management Plans; as well as other species on a case by case basis such as to investigate a compliance issue). They maintain close links with other institutions involved in marine mammal research. [redacted] is our primary contact with Wildbase, as well as [redacted]

The marine mammal veterinary capacity within New Zealand is primarily focused at Massey University through Wildbase Pathology and suitably qualified vets might not always be available to provide advice at the time of a stranding. When updating regional contact lists in your Operational Plan it is suggested to discuss with [redacted] possible contacts within Wildbase Pathology, other institutions, or locally that would have the appropriate qualifications to provide advice in a marine mammal emergency, should the primary contact not be available. This will also enable further development of veterinary capacity nationwide for marine mammal incidents and support the development of a marine mammal vet network within New Zealand.

Regional Museums

The Department will make material available to Te Papa, as the National museum, as a first offer. It should be made clear to Regional Museums that they have access to material in Te Papa through standard loan agreements for exhibition, research and education, including long term loans. Material that isn't required by Te Papa or other researcher institutes may be collected by regional museums provided iwi approve and they have the required permit under the Marine Mammals Protection Act 1978. Details about what species a museum is interested in is recorded in the Sample and Permit Register.

Other Institutions and Groups

DOC supports the use by other bona fide institutions of samples and information gained from stranded marine mammals. You should, wherever possible, support other institutions such as universities in collecting or using information from strandings. If you are not happy about relationships with these other institutions, or are unsure about how bona fide they are (or the person involved is), then you should contact a representative from the Marine Species and Threats team for advice.

Auckland University

The University of Auckland curates a Cetacean Tissue Archive which includes skin, bone, blubber, teeth, blood and other DNA sources. It conducts a variety of research on marine mammals from population studies using genetic analysis, to the impact of ship strike, tourism and other anthropogenic influences on marine mammal populations. A DNA sample from all stranded individuals goes to Auckland University for analysis. Occasionally other samples may be requested (Sample and Permit Register 2011). The key contact is [redacted]

Massey University -Albany

The Coastal - Marine Research Group at Massey University conducts research on a wide range of species and topics. They run the New Zealand Common Dolphin Project as well as conducting research on life history parameters of other cetaceans. Carcasses of stranded dolphins are often requested by Massey University (Sample and Permit Register 2011). The key contact is [redacted] also supervises students at AUT.

Otago University

A number of different marine mammal research programmes are underway at Otago University within a variety of departments. These range from cetacean behaviour, life history and acoustics, population genetics studies of all marine mammal species, to anatomical evolution of cetaceans. The key contact for Otago University is [redacted]

Project Jonah Assistance at Cetacean Strandings

A 'Memorandum of Understanding between Department of Conservation and Project Jonah New Zealand Inc' was made on the 3rd of September 2008, with the premise "that the survival and effective rehabilitation of stranded or injured marine mammals is considerably enhanced if a spirit of mutual respect and co-operation exists between the two organisations."

The following was written and approved by the Project Jonah Board:

Project Jonah (PJ) has worked alongside the Department for many years, offering assistance at stranding events, and occasionally helping with sick or injured seals.

PJ is a New Zealand, non-profit organisation that is dedicated to marine mammal welfare and protection.

Its involvement in stranded cetacean rescue has spanned more than two decades. It has pioneered rescue techniques and technology, and invented the world's first whale rescue pontoons in 1985. Since 1988 it has run whale rescue training programmes, in which members of the public are instructed in basic cetacean first aid and effective re-floating, holding and release strategies. Over the years it has trained DOC staff and other Government agencies overseas.

During PJ training sessions it is emphasised that DOC has total responsibility at the stranding site and that all medics must adhere to the command structure established at the scene.

Once volunteers have completed their training they are added to PJ's national stranding database. Trained medics are available around the country, 24/7 and can be called upon to assist in single or mass strandings events. Please note:

PJ medics offer their assistance in a voluntary capacity to work co-operatively with DOC stranding control staff at the stranding site.

PJ medics have varying degrees of skill and expertise. Designated senior medics do have a wealth of knowledge, acquired through years of hands on experience at stranding sites around the country. All medics have had a minimum of one day's basic training, and are encouraged to refresh their skills every two years.

PJ medics are happy to provide support where it is most needed. This includes providing basic first aid to stranded animals, patrolling beaches (to look for other stranded cetaceans), refloating, holding and releasing animals, assisting with crowd and traffic control, and helping with measurement, sampling and disposal.

PJ can provide rescue equipment, including dolphin lifting mats, whale rescue pontoons, buckets, sheets, shovels etc.

PJ can run specific whale rescue training for DOC staff and will promote and provide training to the public and community groups in regions that require additional volunteer support.

PJ is happy to assist in the management of stranding events, in accordance with DOC procedures, if experienced DOC personnel are not immediately available at the time.

If PJ assists during a stranding you may wish to include it in your debrief session afterwards.

Detail any special arrangements that your Area has with other groups that might be involved with marine mammal events and include these as an appendix with your operational guidelines.

These groups are here to help, NOT take over, or act independently at strandings. PLEASE note the following:

Any feedback, either positive, or negative, can be reported to your region or Area Office, if you feel that matters should be taken up at a higher level with the group involved, or they are of national significance. This is particularly important with matters that relate to the Health and Safety of DOC staff, volunteers and the public. Issues like this might arise out of debriefing sessions.

Whale-Rescue.org

Whale-Rescue.org is a group of a small number of people with considerable experience with whale and dolphin rescue responses who are available to provide assistance in the event of a stranding. They are different from Project Jonah and Far North Whale Rescue in that they do not train up volunteers to become marine mammal medics. They are a small specialised group that can assist the Department in a range of functions as needed. They can be contacted on 0800 SAVE WHALE.

2.9 Media plan

You must develop a basic media plan that is approved by your region's media advisor. It must be able to deal with a mass stranding event. It will detail the appropriate local actions and responses to various marine mammal events and should be in line with any Media Guidelines or SOPs developed. It is suggested that a media advisor provides the basic plan that can be standardised for all Regions. Your media plan should be included in your local operational plan and should include tips on being interviewed and writing a press release.

The following is some general advice on dealing with media at significant marine mammal incidents.

Advise the appropriate levels of the Department, depending on the significance of the event, e.g. it may be necessary to notify senior management.

The Minister of Conservation's office should also be advised of significant stranding events (e.g. high numbers or rare or priority species). This can be done through the NO Media Advice Team.

Appoint a staff member to the role of media officer/spokesperson.

Consider whether the media officer should be based on-site or at the incident control base. This will depend on the scale and nature of the event. If there is a large on-site media attendance, there will be a requirement for a media officer to liaise with media on-site. The preference of off-site media is generally to speak to a media officer on-site who can provide a first-hand account of what is occurring.

An on-site media officer will need a cellphone to take media calls. Ensure the NO Media Team, incident control base and local office staff know that number and can provide it to media. If there is a requirement for a media officer on-site but no cellphone coverage, a second person may need to take off-site media calls.

An on-site media officer will primarily rely on the on-site Operations Manager to provide accurate and up-to-date information. For assistance on key messages see marine mammal stranding media messages.

Television media will often use helicopters to get to a mass stranding and to fly over the stranding site to film the scene. The media officer should liaise with the Operations Manager or Incident Controller on instructions to give to media using helicopters to ensure their actions do not distress whales or disrupt rescue efforts. This can include:

Not to fly offshore in front of the whales especially when they are being refloated.

To maintain a horizontal distance of 150 metres from whales and not fly below 500 feet.

Ensuring that they are following regulations 18-20 of the Marine Mammals Protection Regulations 1992.

2.10 Use of boats

The Department has a range of information regarding the legal requirements relating to vessels operations under the Maritime Operator Safety System (MOSS) and general boating safety. This can be found on the intranet under Vessel Operations. Departmental vessel operations at a whale stranding must comply with MOSS requirements and the department's Maritime Transport Operator Plan.

2.11 Temporary Restricted Airspace

It is often very useful to establish a temporary restricted airspace over the area where a stranding has occurred. The Department does have the ability to request (and be granted) temporary restricted airspace but it must be justified. Requests are only likely to be granted if they meet the criteria laid out in the CAA Aeronautical Service Airspace Policy that a conservation operation (such as a marine mammal stranding) requires the intrusion of aircraft to be restricted due to a major and significantly adverse effect on the operation. You can view the full guidelines for the establishment of a temporary restricted airspace.

To put one in place follow this process:

1. Ring:

(24 hours) Civil Aviation Authority on (04) 560-9400.

During normal office hours ask for the Aeronautical Service Unit and the Air Traffic Service Officer.

2. Request that a temporary restricted airspace is established over the site on a marine mammal stranding:

3. Provide them with the following details:

Location (WGS84 Latitude and Longitude in Degrees, Minutes, Seconds to two decimal places)

Required radius (prefer as small as possible)

Required height

Period of time

Controlling authority - This will be DOC, and allows us to authorise aircraft to enter the zone if necessary and as required for our purposes

Contact Information - Phone number etc.

CAA will immediately issue a NOTAM (Notice to Airmen) that restricts aircraft entering this airspace.

CAA is very strict in the observance of temporary restricted airspace and any infringements should be noted if possible for later possible action. CAA takes this very seriously.

2.12 Data collection and management

In 1988 the Department established the New Zealand Whale and Dolphin Stranding Database (NZWDSD), and developed a standardised data sheet (Incident Form) for recording whale strandings. All stranding events reported to the Department are recorded on the NZWDSD. The information contained on the NZWDSD is available upon request to DOC staff and scientists for management and research purposes, and contributes to New Zealand's annual report to the International Whaling Commission (IWC). The contact to request data from the NZWDSD is: Marine Species and Threats Team, National Office.

2.13 Establishing approved burial sites and procedures

Disposal of cultural material

When disposing of marine mammal carcasses, the appropriate disposal of cultural material needs to be considered. Please ensure that your iwi protocols established as a part of "Relationships with Tangata Whenua" cover this. However, iwi approval to bury carcasses at a location on Public Conservation Land does not remove the Department's legal responsibilities for the protection of heritage sites at the location. The Department remains legally liable for any damage to or destruction of archaeological or historic sites caused by marine mammal burial procedures.

Burial sites

Consultation:

- Burial on site will require approval of the landowner.
- Heritage New Zealand or a DOC Senior Heritage Advisor should be consulted to avoid disturbance of archaeological/heritage sites, if these sites have not already been identified in your Operational Plan recently.
- Tangata whenua should be consulted to ensure waahi tapu and other culturally significant sites are not disturbed, and that tikanga is followed where appropriate and practical.
- Selection of the burial site should also ensure that it will not affect the habitat of any threatened species.

You should include in your office's Operational Plan details on appropriate and approved burial sites and any instructions on seeking permission for burials. Make sure you include:

- Previously established burial sites
- Available/preferred burial sites
- Information on RMA requirements – is it a permitted activity?
- Reference any important Areas of Significant Value – ASCVs
- Identify any Waahi tapu sites that should be respected
- Sites protected under the Historic Places Trust.

Identified archaeological sites are available in DOCGIS and are being added to MyPM. A DOCGIS layer of approved burial sites may be created in the future.

Good burial sites are:

In a good dry substrate (sand is good, clay or blue pug is bad)

Above extreme tides

Away from stream mouths (they will shift and uncover burials)

Away from erosion

Above water tables

Out of vandal range (depth mainly).

Resource Management – District/Regional Plans

If whale carcasses need to be buried without prior documentation (or without being a permitted activity) you should be able to use emergency provisions of your District or Regional Plans. This will probably require retrospective authority. It is worth investigating getting blanket approvals for certain areas.

An example of resource consent approval for burial of marine mammals is available (DOC-6061259).

Historic Places

Before burying a whale, dolphin or seal, check that the site is not protected under the Historic Places Act 1993. It is an offence under this legislation to destroy, damage or modify an archaeological site whether the site is recorded or not. If anyone wishes to do so, then they need to apply to the Historic Places Trust. In addition there may be sites of cultural significance that are not listed, consultation with iwi may help to identify these.

2.14 Contingency fund

In 2017 the Whale Stranding Contingency Fund was baselined. Large strandings will now be treated the same as other unforeseen events in local operations and absorbed into regional budgets. For particularly large-cost events, you should escalate the matter to DDG Operations.

3. "Toolbox" - Reference Section[2]

3.1 Contacts lists

External contacts list for marine mammal incidents - docdm-824399

DOC National Stranding contacts - docdm-1186392

Global Marine Mammal Stranding Organisations - www.marinemammalcenter.org/global

3.2 Associated Protocols, Policy, Legislation

Marine Mammal Response and Readiness SOP docdm-1171061/

Area Operational Plan for attending marine mammal strandings docdm-776969

Massey Oiled Wildlife Response docdm-713648

Submitting specimens to Massey University

Volunteers for Conservation SOP Intranet link

Departmental policy on the disposal of whale bone olddm-748163

New Zealand Firearms code, Wellington 2010 http://www.police.govt.nz

Memorandum of Understanding between Department of Conservation and Project Jonah NZ Inc docdm-353274

Department of Conservation and Project Jonah Service Level Agreement doc-2213663

Criteria for setting up a temporary restricted airspace http://www.caa.govt.nz

Transport within New Zealand Animal Welfare Code of Welfare 2011 - Code http://www.biosecurity.govt.nz

Transport within New Zealand Animal Welfare Code of Welfare 2011 - Report http://www.biosecurity.govt.nz

Western Australian Whale Disentanglement Protocol docdm-870368

Temporary Traffic Management (Guidelines) DOC-625646

Marine mammal carcass freight guidance DOC-3131307

3.3 Technical Documents

Baker, A.N., 1999. New Zealand Whales and Dolphins. Victoria University Press, Wellington. 133p. http://www.nzetc.org/

[2] Also see DOCDM-1124455

Barco, S.G. et al. 2012. Collaborative development of recommendations for euthanasia of stranded cetaceans. VAQF Scientific Report Volume 2012 No. 06. Virginia Aquarium and Marine Science Center Foundation, Virginia. Pgs. 191. docdm-1245946

Cawthron, M.W., 1994. Seal finger and mycobacterial infections of man from marine mammals occurrence, infection and treatment. *Conservation Advisory Science Notes No. 102*, Department of Conservation, Wellington. 15p. http://www.doc.govt.nz/casn102.pdf

Coughran, D.K., Stiles, I., and Mawson, P.R. (2012) Euthanasia of beached humpback whales using explosives. *Journal of Cetacean Research Management* 12(1): 137-144. docdm-1101962

Duignan, P.J., 2003. Disease investigations in stranded marine mammals, 1999-2002. *DOC Science Internal Series No. 104.* Department of Conservation, Wellington. 32p. http://www.doc.govt.nz/DSIS104.pdf

Geraci, J.R., and V.J. Lounsbury. 2005. Marine Mammals Ashore: A Field Guide for Strandings, Second Edition. National Aquarium in Baltimore, Baltimore, MD.

http://books.google.co.nz/

IFAW guide: docdm-1181177 – National Office has pre-printed water proof copies. Email marinemammal@doc.govt.nz to request copies for your stranding kit.

Jefferson, T.A., S. Leatherwood, M.A., Webber. 1993. FAO Species Identification Guide: Marine Mammal Species of the World. Food and Agriculture Organization of the United Nations, Rome. 320p. http://www.fao.org/

Moore, M. 2010. Overview of euthanasia of large whales. Working paper for IWC workshop on: Welfare issues associated with the entanglement of large whales. IWC/A10/E1. http://iwcoffice.org/IWC-A10-E1Rev.pdf, or docdm-870024

Moore, M. et al. 2013. Criteria and case definitions for serious injury and death of pinnipeds and cetaceans caused by anthropogenic trauma. *Diseases of Aquatic Organisms*. 103:229-264. docdm-1219823

Moore, K. and Barco, S. 2013. Handbook for recognizing, evaluating, and documenting human interaction in stranded cetaceans and pinnipeds. US Department of Commerce, NOAA Technical Memorandum, NOAA-TM-NMFS-SWFSC-510, 102p. docdm-1219822

Moore, K. and Barco, S. 2013. Protocol for examining marine mammals for signs of human interaction: exam information and protocols. 18p. docdm-1219821

Olavarria, C. (2012). Remote biopsy sampling of cetacean species. Prepared for the Department of Conservation, December 2012. docdm-1223979

Pugliares, K.R. et al. 2007. Marine Mammal Necropsy: an introductory guide for stranding responders and field biologists. Woods Hole Oceanographic Institution. Woods Hole, MA. 133p. docdm-283014

Rook, H. 1994. Sperm whale jaw removal and preparation. *Conservation Advisory Science Notes No. 65,* Department of Conservation, Wellington. 23p. http://www.doc.govt.nz/casn65.pdf

Schweder-Goad, C.M. (2008) Geographic referencing of the New Zealand Whale Strandings Database. Report to Department of Conservation, Wellington. 22p. docdm-319174

DOC. 2006. Stranded whales and dolphins: how you can help. Department of Conservation, Wellington. Brochure. http://www.doc.govt.nz/stranded-whales-dolphins.pdf

DOC. 2007. The Seal Deal: caring for kekeno together. Department of Conservation, Wellington. Brochure. http://www.doc.govt.nz/seal-deal.pdf

DOC. 2007. Sharing our coasts with marine mammals. Department of Conservation, Wellington. Brochure. http://www.doc.govt.nz/marine-mammal-regulations-summary.pdf

Marine mammal stranding media messaging as agreed with Project Jonah DOC-2598638

Presentation at 2014 Marine Hui by Mike Ogle on marine mammal response docdm-1512429

Note on temporary marking of whales and dolphins with a Paintstik doc-2585613

3.4 Forms and spreadsheets

NOTE: these forms are likely to be amended with database improvements. Notification of these changes will be sent out by email to the marine mammal email list. But please check back here to make sure you are using the most recent form.

CIMS forms: docdm-788833

Sample and Permit Register 2011 docdm-855696

Annual Report Form: docdm-892618

Initial Response Form docdm-870561

Whale and Dolphin Incident Form docdm-870555

Seal and Sea lion Form docdm-870560

Sighting Form docdm-870477

Mass stranding Measurements Form docdm-1007957

Volunteer Check-in Form docdm-1007942

Instructions for submitting forms on docDM and docCM: docdm-726673

Wildlife submission form for Massey University

3.5 Examples and Templates

Permit to dispose of marine mammal material template and examples olddm-203254

Example Debrief from a whale stranding in Golden Bay docdm-914291

Example Stranding trailer and kit bag contents: Golden Bay olddm-613074

Example Stranding trailer and kit bag contents: Hauraki Area docdm-1104145

Temporary Checked Seal Sign:
http://intranet/Documents/Marine/corflute_sign_PRINT.pdf

Care Around Seals sign – North Island: docdm-1490797

Care Around Seals sign – National: docdm-1490794

3.6 Links

Auckland University - Ecology and Animal Behaviour http://www.eab.auckland.ac.nz

Otago University - Marine Mammal Research Group
http://www.otago.ac.nz/marinescience/mammals/home.htm

Massey University - CMERG http://www.coastalmarineresearchgroup.com/

Massey University - New Zealand Wildlife Health Centre
http://www.wildlife.massey.ac.nz

Massey Oiled Wildlife Response http://www.massey.ac.nz/oiled-wildlife-response_home.cfm

Auckland University of Technology http://www.aut.ac.nz/applied-conservation-research-group

Museum of New Zealand Te Papa Tongarewa
http://www.tepapa.govt.nz/pages/default.aspx

National Rural Fire Authority http://www.nrfa.org.nz/Firenet/Regions/Rural/

New Zealand Police http://www.police.govt.nz/

Civil Aviation Authority of New Zealand http://www.caa.govt.nz/

Maritime New Zealand http://www.maritimenz.govt.nz/

Project Jonah New Zealand http://www.projectjonah.org.nz/

Oceanus: the sound of sonar http://www.whoi.edu/oceanus/

The beaked whale resource: http://www.beakedwhaleresource.com