

9423 - Biodiversity Safety Plan

Business Area:	Conservation Services: CS North and Western SI: Motueka Biodiversity	Site:	All	Location:	Motueka Office
Person Responsible:	Chris Golding	Start Date:	01 Jul 2015	Review Date:	30 Jun 2016
Description of Work:	All generic day to day hazards associated with office and biodiversity field work.				

General Comments on Safety Plan

All staff to receive Outdoor First Aid training with regular refresher training.

individual safety plans have been developed for work tasks that carry their own specific hazards.i.e Diving,Goat Control,Pest Fish Ops,CLC & Fire

JSAs & Toolbox talks are to be developed by the team leader for each work task prior to the work being undertaken.

Always review Staff Competency (in DOCLearn) before using staff for new tasks. This will ensure they are deemed competent and can safely undertake the work without risk to themselves or others.

Backcountry: Any staff working in the backcountry must carry a VHF radio, First Aid Kit and EPIRB with them.

Overnights trips: Overnight field trips must be recorded on the "Field Trip Intentions Sheet", and radio scheds must be kept at the appointed time or as soon as possible after this time.

Day trips: On day trips staff must fill in the intentions whiteboard in reception, and check in by radio or personally, by 4:30pm. If going to be late back then arrangements must be made to report to someone when you get back.

Chainsaws: Bill Franklin is responsible for assessing biodiversity staff competency for windfall clearance and tree felling. A minimum 2 person team is required for all chainsaw operations, with signs and sentries as required in public use areas. Adequate communications on site is essential and where unreliable communication a minimum of 3 people present. Keep a listening watch on their VHF radios on the 'scan' setting.

Conservation Services Manager, Senior Ranger and/or Project Leader to determine if personnel are competent.

Relevant Documents

Emergency Plan, Motueka Office

Annual H & S plan, Motueka

Emergency Plan

Overnight trips: An emergency response will start if two consecutive pre-arranged scheds have been missed (+1hr).

Daytrips: An immediate response will start for any staff who fail to check in by 5:30pm, or their arranged sched time (+1hr).

Actions: If staff are injured and need to be flown out then a 111 call should be made to the police. An EPIRB can also be set off at this time but you MUST let the operator (or office) know that this has been done otherwise two searches will be initiated.

The Conservation Services Manager at the Motueka Office must be notified as soon as possible of any incident or emergency.

Refer Motueka Area Emergency Plan - March 2014 (DOCDM-285609) for more details.

Emergency Contacts

N/A

WorkSafe Notifiable Work (if applicable)	Permit to Work (if applicable)

Approval Signatures		
Person Responsible : Chris Golding	Signed :	Date:
Manager : Chris Golding	Signed :	Date:

Hazard Management				
ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
947	4WD Use	Vehicle sliding out of control. Vehicle rolling. Loose equipment within the vehicle. Rolling onto or crushing by vehicle. Vehicle being the cause of fire. Inadequate rated tow hook could cause serious injury.	<p>Management Controls: Ensure vehicle is registered for towing weight and correct label is displayed. Appropriate vehicle recovery kit should be carried. Ensure tow hook for vehicle recovery is appropriately rated (>7000kg). Where vehicle is being used in an emergency vehicles will have CIMS and effective communications in place. Bullbars not permitted without Manager approval (see policy)</p> <p>Minimum Competencies: Experienced, or supervised by someone who is. Driver to hold a licence valid for the vehicle and have proven experience. Attend a 4WD course to obtain NZQA unit standards #17976 and #17978. All staff to be assessed by a competent operator including vehicle recovery. If operating under lights and siren ensure driver is trained and qualified as per the DOC Fire Plan (use of emergency vehicles).</p> <p>Work Instructions: Keep body parts in cab while driving off road. Secure loose gear that is inside the cab or on vehicle deck. Ensure safe fuelling technique. Assess rivers prior to crossing. If used in an emergency implement lookouts. Recognise the symptoms of fatigue and observe safe driving hours policy. Arrange ETAs with local office.</p> <p>PPE: Wear seat belts</p>	
566	4WD use - river crossings	Loss of life through vehicle drowning, rolling or crushing	<p>Management Controls: Use only experienced drivers in river crossing. Carry vehicle recovery equipment</p> <p>Minimum Competencies: Gain knowledge from a 4x4 river crossing course.</p> <p>Work Instructions: Be very wary of deep crossings, fast flow, soft sand and underwater obstructions. Carry vehicle recovery equipment and know how to use it. If in any doubt walk the crossing first. Unfasten seat belt when crossing rivers.</p> <p>PPE: As directed by Team Leader</p>	
1147	Adverse weather (rain, cold, storm)	Wind, cold, glare, rain (flooding), lightning storm, hail. Hypothermia, frostbite	<p>Management Controls: Prepare for adverse weather and system to monitor staff</p> <p>Minimum Competencies: Person is competent to work in a variety and in extremes of weather conditions. Ensure staff are educated and briefed on symptoms of hypothermia</p> <p>Work Instructions: Prepare for adverse weather. Carry extra clothing and shelter if required. Ensure adequate water supply. Use weather forecasts to aid decisions prior to and during the field trip. Be aware of the effect that adverse weather can have on topography and other aspects of the work sites. Share the work load and monitor staff</p> <p>PPE: PPE as directed by Team Leader for task</p>	<ul style="list-style-type: none"> • Warm clothes and a raincoat should be carried in the vehicle when the weather forecast predicts cold and or wet conditions • Use weather forecasts to aid decision making processes and predictions

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548	Adverse Weather (Sun, Heat)	Exposure to direct sunlight/UV. Heat exhaustion. Radiation/dehydration/hypothermia.	<p>Management Controls: Staff awareness of environment.</p> <p>Minimum Competencies: Person must be competent to work in a variety of weather conditions, including extreme conditions. Ensure staff are educated and briefed on symptoms of both hypothermia, hyperthermia, and dehydration before leaving the office.</p> <p>Work Instructions: Expect adverse weather and be prepared for it. Use weather forecasts to aid decisions prior to and during the field trip. Share the work load and monitor staff.</p> <p>PPE: Ensure adequate water supply, and if appropriate sunscreen and hat.</p>	<p>Sun glasses to be worn to protect eyes from glare</p> <p>Waist bags are worn with water bottles carried</p> <p>Vehicles are to carry an adequate supply of water and sun screen for at least one day</p> <p>Staff wear broad brim hats for sun protection</p>
1644	Aggressive animals	Attack from animal, bites, lacerations etc	<p>Management Controls: Staff are aware of procedures and safe working practices</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Assess degree of threat from animal and withdraw if necessary. Remain calm and still. If you say anything speak calmly and firmly. Try to stay still until the animal leaves or back away slowly until the animal is out of sight. Don't turn and run. If you fall or are knocked to the ground curl into a ball with your hands over your head and neck. Protect your face. Avoid eye contact with any dog, treat any free-running dog as potentially dangerous and don't crouch down to an unfamiliar dog as it brings your face too close to theirs.</p> <p>PPE: As directed by Team leader</p>	
2118	Animal Handling - dead or alive animals	Bites, scratches and lacerations from handling dead or alive animals and birds. Also infectious diseases and exposure to harmful pathogens.	<p>Management Controls: Appropriate vaccinations. Regular health checks for staff who may come into contact with TB</p> <p>Minimum Competencies: Staff to be appropriately briefed and familiar with animal and habitat. In house training where required. At least one person in the group to have a current first aid certificate.</p> <p>Work Instructions: Practice a high standard of hygiene. Cover broken skin before, and clean hands thoroughly with antibacterial wipes/lotion after handling animals. Seek medical advice if feeling unwell after handling animals. Carry first aid kit.</p> <p>PPE: Wear appropriate PPE, particularly gloves</p>	

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380	Backcountry work/remote locations/field travel	<p>Field visits required for work in back country / remote locations. Usually short and rarely overnight, but preparations should include this possibility.</p> <p>Prolonged period in the back country. Isolation. Weather extremes. Becoming lost. Injury due to slip, trip or fall. Negotiating steep or rough terrain. Pre-existing medical condition. Being shot by hunters.</p>	<p>Management Controls: Team leader appointed and ensure; - Communications and backup comms as per local procedures - Emergency procedures in place. Training and mentoring for less experienced staff - Be aware of medical conditions of staff - Only experienced and authorised staff may work alone. Detailed trip intentions supplied</p> <p>Minimum Competencies: All staff to be trained and assessed as competent in Radio use (u/s 4573). Navigation training (u/s 431 and 432) recommended. The Field Competency Assessment to be completed (revised 24 monthly). First aid certificate by at least one team member.</p> <p>Competent/experienced person in field situations, or under the supervision of someone who is fit for the task.</p> <p>Work Instructions: Team leader appointed and ensure; - Communications and backup comms as per local procedures - Emergency procedures in place and understood - Detailed trip intentions supplied and understood - High risk topography identified and explained - High risk weather conditions identified and understood - Local hazards identified and explained - Contingency plans made and used as necessary. Make presence known if hunters are in the area. First Aid kit should be carried.</p> <p>PPE: Adequate clothing and footwear worn and carried for worse than expected conditions. Wear high viz vest. Personnel to carry PLB and know how to use in an emergency. Manager to determine staff necessary to hold a current First Aid Certificate.</p>	
386	Battery charging & use	<p>Electrocution and explosion from hydrogen gas. Acid burns. Inhaling fumes.</p>	<p>Management Controls: Staff awareness of risks involved. Ensure MSDS and safe instruction guide are followed.</p> <p>Minimum Competencies: Competent person - familiar with hazards involved</p> <p>Work Instructions: Refer to MSDS and safe instruction guide. Prior to handling or transporting ensure that any open vent holes/filling holes or spouts are sealed off. When transporting ensure batteries are segregated from other hazardous goods and are secured. When charging ensure adequate ventilation and separate from other ignition sources. Use a designated charging area. Avoid flame and sparks near battery and fuel. Fit isolation switch if appropriate. Follow manufacturers specifications.</p> <p>PPE: Wear eye protection and rubber gloves.</p>	
389	Bird & wildlife monitoring	<p>Harm from catching equipment/techniques. Infection/disease from bird bites, scratches & punctures. Penguin nest sites, dumps etc. Ear damage or hit by projectile. Psittacosis, salmonella etc. can be inhaled</p>	<p>Management Controls: Supervisors ensure TB vaccinations are up to date. Care with needles.</p> <p>Minimum Competencies: Trained in techniques and equipment use prior to undertaking catching or telemetry work. Only trained staff to use liquid nitrogen, formalin etc. Only trained and competent staff wearing appropriate safety gear (helmet and face shield) to use sling shots to fire lines. Staff to be briefed prior to species work.</p> <p>Work Instructions: Hands washed with anti-bacterial soap after handling birds. All wounds cleaned immediately. Personal first aid kit to be carried. Supervisors ensure TB vaccinations are up to date. Care with needles. Ensure staff familiar with the animals encountered and their habits. Handheld radio or cellphone to be carried. ETAs, routes and locations logged with base. Staff to be aware of TB transmission and prevention methods. Wet wipes/waterless soap etc. to be carried. Regular health checks for staff. When mist netting wear helmets during construction phase and when firing slingshot and only essential staff to be in the vicinity.</p> <p>PPE: Wear protective clothing, gloves, eye protection.</p>	

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390	Bluffs and mine shafts	Falls.	<p>Management Controls: Staff to be briefed on presence/location of mines in area</p> <p>Minimum Competencies: Competent in terrain</p> <p>Work Instructions: Staff to be briefed on presence/location of mines in area and stay within intended area. Walk slowly and cautiously through tight vegetation. Carefully assess safe travel and escape routes. If no safe routes are present avoid danger area. Where practical mark with tape and advise Manager</p> <p>PPE: Hazard tape</p>	
1238	Boat - boarding, disembarking, loading	Fractures, strains & sprains due to unstable and moving surfaces while loading, disembarking, loading stores and equipment, and overloading. Crushing of limbs between boat, wharf or pier.	<p>Management Controls: Maximum load limit to be determined and stated in each vessel's SSM Manual / Vessel Operating Plan. Staff to be trained in correct lifting techniques. If lifting gear such as davits/hiabs used staff should be trained in the appropriate use of these. Vessel should have sufficient handholds, stepping devices and application of non skid material to minimise the risk of slips or falls which are practically placed.</p> <p>Minimum Competencies: Competent trained person</p> <p>Work Instructions: Skipper and/or crew to be present at the boarding and disembarkation point to monitor and manage all aspects of getting people and things on and off the boat and to assist others where required. The combination of people and gear should remain within the load limits for the vessel (refer to SSM Manual / Vessel Operating Plan). Children on passenger vessels to be closely monitored.</p> <p>PPE: Life jackets to be worn as per docdm-764211 and any other equipment/clothing as conditions dictate or at the direction of the skipper.</p>	
1239	Boat - carriage of hazardous goods	Spills, fire, toxic fumes, danger to health, etc.	<p>Management Controls: Guidelines for the 'Carriage of 'Dangerous Goods on Water' docdm-865589 in place. Skippers and crews to be trained to ensure they have an understanding of the requirements</p> <p>Minimum Competencies: All crews to be trained in carriage, storage & handling hazardous/dangerous goods (Approved Handler may apply).</p> <p>Work Instructions: Inform the skipper of any hazardous/dangerous goods being bought on board the vessel. Hazardous goods must be listed in the Ship's Log for minor quantities or a formal manifest for large or complex loads (with a copy for the operational base). Ensure any hazardous goods are appropriately segregated. For high hazard goods such as explosives, petrol & LPG the number of people on the vessel should be minimised. Refer to 'Carriage of Dangerous Goods by Water' docdm-865589.</p> <p>PPE: As per any requirements relating to the hazardous goods being carried</p>	

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1231	Boat - collision	Collision with another vessel, debris, rocks, whales and other marine mammals - drowning, impact injuries	<p>Management Controls: Skippers have understanding of Maritime Rule Part 22 - Collision Prevention. New skippers to be briefed on relevant local conditions including high traffic, flood conditions, debris, presence of rocks or reefs that may increase the risk of collision.</p> <p>Minimum Competencies: Skipper qualified and competent as per the Boat Operator Certification SOP and is familiar with relevant local conditions that could increase the risk of collision. If working around whales, competent persons on board capable of observing and understanding whale behaviour.</p> <p>Work Instructions: Keep a proper lookout using all available means at all times in all directions. If the vessel is fitted with a radar it must be on at all times when the vessel is in operation. Be aware that radar may be ineffective in identifying logs, debris and smaller non metal crafts such as kayaks. Maintain extra vigilance in high traffic areas, restricted visibility and narrowing winding waterways. Operate at an appropriately safe speed (dependent on visibility, traffic density, manoeuvrability of vessel, state of wind, sea and current, proximity of navigational hazards, etc) so that proper & effective action to avoid a collision can be taken and the vessel can be stopped within a distance appropriate to the prevailing circumstances and conditions. Lights must be exhibited from sunset to sunrise or in any other restricted visibility conditions. If large marine mammals such as whales are present, observe pattern of whale behaviour. Predict likely location of surfacing, change of direction and risk of breaching or other surface active behaviour.</p> <p>PPE: Life jackets as per DOC Life Jacket Policy docdm-764211</p>	
1236	Boat - dragging the anchor	Hitting rocks, going ashore, foundering - impact injuries	<p>Management Controls: Staff awareness of safe operation</p> <p>Minimum Competencies: Competency is achieved by practical training or familiarisation sessions in conditions that are not ideal.</p> <p>Work Instructions: a) Positive means of determining if anchor is holding. (b) Set anchor watch in less than ideal conditions. (c) Ground tackle (anchor type/chain/warp) to be sufficient and appropriate to the environment.</p> <p>PPE: Life vests as directed</p>	

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1433	Boat - fatigue and other human factors	Incident or accident created by falling asleep or extreme tiredness resulting in slow reaction to situation or poor decision making process.	<p>Management Controls: Ensure skippers and crews are aware of 'Boat Operations - Management of Fatigue and Human Factors' doc-2514966. Have procedures in place to ensure there are sufficient crew to spell watches where necessary.</p> <p>Minimum Competencies: Skipper/crew have been briefed on risk factors and are are competent to manage the risk.</p> <p>Work Instructions: If the skipper or member of crew's judgement could be impaired for whatever reason, they must not be involved in the operation of the vessel. Skippers must not operate the vessel if they are under the influence of alcohol or judgement is likely to be affected by any drug (prescription or non prescription) Skippers to be aware of and alert to the dangers of long work hours and fatigue. Plan sufficient rest periods in to a project or long voyage. Have sufficient crew to spell watches. Where crew are required or present onboard, at least one member of the crew to stay awake as a lookout. You should not operate the vessel if you are feeling fatigued, have worked for more 5.5 hrs without a break or you have not had a 10 hour break from work in the last 24 hours. Any exceptions to this must be discussed with the relevant Manager. Ensure sufficient food and water are available for the trip to keep well fed and hydrated.</p> <p>PPE: Life jackets as per docdm-764211 Hearing protection and sunscreen where necessary</p>	
1232	Boat - fire or explosion	Flammable goods present on vessel may ignite resulting in burns and fatality	<p>Management Controls: Fire extinguishers to be board and must meet MNZ requirements (Maritime Rule 42B: Safety Equipment - Fire Appliance Performance Standards). Maintenance Plans for vessels must include visually checking fire extinguishers as part of the monthly checklist and an annual check by a service agent. Staff to be aware of requirements relating to flammable goods and trained in emergency procedures relating to fire and how fire extinguishers are set off in the event of fire.</p> <p>Minimum Competencies: The skipper & crew are trained in fire prevention and fire suppression and awareness of the requirements when carrying hazardous goods.</p> <p>Work Instructions: No smoking in or around vessels. Identify and eliminate any ignition source of flammable liquids or gases carried or being loaded. Fuel to be carried in appropriate containers. Flammable goods and explosives to be carried and appropriately segregated as per 'Carriage of Dangerous Goods by Water' docdm-865589. Gas appliances to meet the appropriate standard. No naked flames in the vessel while refuelling</p> <p>PPE: Life jackets as per docdm-764211 and any other as directed by the skipper.</p>	

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1720	Boat - landing on shoreline or riverbank	Landing people on rocks, beaches or landing with unpredictable waves, wind or tidal flows.	<p>Management Controls: Staff are aware of procedures and safe working practices relating to island landing</p> <p>Minimum Competencies: Skipper and crew have been tested and competent in shore landing techniques. Qualified skipper in charge of vessel at all time.</p> <p>Work Instructions: Wave size, direction and frequency on the beach or landing area should not exceed the vessel's operating limit or the skipper's skill level. If a dinghy is being used to transfer people from a larger vessel to the shore, the skipper will decide if it is safe to load people from one to the other. Skipper to decide if it is safe to disembark/embark to shore. Crew/passengers should be briefed on how to disembark/embark and from what part of the vessels, the order of disembarking from first to last and how equipment will be unloaded. Be aware that the boat is likely to surge back & forward due to wave action, small boats are prone to taking on water, increasing their weight and the potential for crushing people, larger boats are already heavy & hazardous. Get out of the way of the boat as soon as you are ashore. Assess personal safety before helping others in difficulty. Only attempt to do so if confident of success.</p> <p>PPE: Life jackets to be worn while disembarking/embarking from / to boat</p>	
391	Boat - launching & retrieving at ramp	Crushed by boat between boat / trailer / jetty. Winch cable fraying / breaking. Impact from winch handle. Falling off trailer / boat /jetty. Slipping on board on trailer/ jetty.	<p>Management Controls: Trailer and vehicle are fit for purpose, in good order and in full operational condition. All security devices on trailer/boat are in good order. Documented monthly inspection and maintenance regime of both trailer and land fixed winches which should include a close inspection of the condition of the full length of the cable in place. Land fixed winches should have an engineers inspection at least annually. Winch and brake drum should be appropriate for the size of the vessel being launched.</p> <p>Minimum Competencies: For trailer launching person operating vehicle towing the trailer must have been tested and certified as fully competent as per boat and trailer SOP. Training by a competent winch operator</p> <p>Work Instructions: Only people essential to launching / retrieving operation should be in the vicinity of the operation. Any deterioration / faults with the winch or winch cable/rope noticed should be followed up immediately.</p> <p>PPE: If someone is in the vessel as it is being launched into the water, a life jacket should be worn as per docdm-764211</p>	
1228	Boat - man overboard	Falling overboard and drown or suffer from hypothermia	<p>Management Controls: Emergency Procedure to be in place in SSM Manual / Vessel Operating Plan, staff to practise procedure at least once a year and note in vessel log</p> <p>Minimum Competencies: Skipper and crew to be trained and competent in man overboard procedures</p> <p>Work Instructions: Immediately notify the skipper of any person overboard and position should immediately be marked on the GPS plotter if the vessel is fitted with one. Skipper to reduce speed immediately and manoeuvre the vessel back towards the spot positioning the vessel to minimise the hazards from the propellers and hull and retrieve the person. Try to keep the person who has fallen overboard in sight. If operating alone in a vessel powered by a outboard motor consider if an engine stop safety lanyard should be worn (refer to docdm-928246).</p> <p>PPE: Life jackets to be worn as per docdm-764211 and any other equipment/clothing as per the conditions or as directed by the skipper</p>	

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1437	Boat - mechanical breakdown at sea	Engine stops and/or fails to restart at sea. Out of fuel. Loss of propellor. Striking rocks, capsizing in rapids, overfalls, drowning, injury, hypothermia.	<p>Management Controls: Engine(s) fuel system and batteries are serviced regularly.</p> <p>Minimum Competencies: Skippers are tested as competent within certificate of competency programme. Service agent and/or DOC maintenance person is trained & competent.</p> <p>Work Instructions: Know accurate fuel consumption. Target common faults - engine out of tune, fuel filters contaminated/blocked, water or debris in fuel tank, batteries or electrical cabling in poor condition, propellor not serviced correctly.</p> <p>PPE: Life jackets as directed</p>	
396	Boat - operational condition	Boat unsafe due to hull condition, lack of maintenance or repair/replacement of known significant defect or deficiency. Persons aboard could be injured by unsafe equipment or drown if vessel sank.	<p>Management Controls: Vessel holds a current 'Fitness for Purpose Surveyors Report' / 'Certificate of Survey' and remains in the condition that it held when inspected and approved when the vessel's survey was undertaken and the Report / Certificate was issued by an MNZ approved surveyor. A maintenance plan must be in place and regular monthly maintenance checklists completed and documented as per the plan and the vessel's Safe Ship Management Manual / Vessel Operating Plan. A regular motor servicing regime must be in place.</p> <p>Minimum Competencies: Licenced and competent skipper.</p> <p>Work Instructions: Maintenance plan to be followed and regular monthly checklists completed and documented. Any maintenance issues to be promptly followed up. Surveys to be completed before the expiry of the 'Fitness for Purpose Surveyors Report' / 'Certificate of Survey'. Vessel must be carrying equipment listed on its Official Equipment List / Safety Equipment & Spare Parts List.</p> <p>Motors must be regularly serviced</p> <p>PPE: Life jackets as per docdm-764211 and anything else as directed by the skipper</p>	
1235	Boat - restricted visibility	Operating boats in fog or heavy rain. Collision - impact injury, drowning, and hypothermia.	<p>Management Controls: Maritime NZ guidelines for operating in restricted visibility to be followed. Skippers and crew to be aware of Maritime Rule Part 22: Collision Prevention and trained to operate in limited visibility.</p> <p>Minimum Competencies: Staff to be trained & competent in the use of electronic navigation systems (Radar/GPS) on those vessels to which systems fitted including navigating blind by instruments/electronics alone.</p> <p>Work Instructions: Consider if the journey is necessary or could be delayed until conditions improve. Vessel navigation lights to be on. If the vessel is fitted with electronic navigation systems (radar/GPS) these must be switched on used. Lookout to be posted. Vessel to reduce speed to that appropriate to the situation.</p> <p>PPE: Life jackets as per docdm-764211 and anything else as directed by the skipper</p>	

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394	Boat - river bar	Capsize on bar resulting in drowning or crushing injuries.	<p>Management Controls: Maritime NZ guidelines for working a bar to be followed - see attached</p> <p>Minimum Competencies: All COC skippers to have their licenses endorsed for working a particular bar. All other licensed skippers (LLO, CLM etc) to be tested as competent and authorised in writing.</p> <p>Work Instructions: Follow advice of skipper</p> <p>PPE: Life jacket as per docdm-764211</p>	
1234	Boat - stranding/running aground	Running aground or striking rocks/shoal at speed. Serious Impact injury	<p>Management Controls: All operators are practised and competent in all forms of navigation appropriate to their area of operation.</p> <p>Minimum Competencies: Licenced and competent operator.</p> <p>Work Instructions: If vessel is fitted with electronic navigation equipment it must be switched on at all times when the vessel is in operation. Skipper should review charts if unfamiliar with the area and seek advice from a skipper who is familiar with the area. Take care not to get between boat and shore during groundings. Speed should be appropriate to the conditions and a lookout maintain at all times.</p> <p>PPE: Life jackets as per docdm-764211, any other clothing / equipment as conditions dictate and/or as directed by the skipper</p>	
1435	Boat - towing other craft/object	Multiple hazard, various serious injury from breaking towline, tow fitting or towboat capsize	<p>Management Controls: Staff are aware of guideline and safe practices</p> <p>Minimum Competencies: Skipper & crew are tested as competent.</p> <p>Work Instructions: Ensure the guideline is followed</p> <p>PPE: Life jacket as directed</p>	
404	Campsite operation	Hot liquids and fire risk while cooking or boiling water. Food poisoning due to poor hygiene and/or contaminated/aged food. Poor campsite location - camp subject to flooding slips treefalls. Cutting firewood. Fire/explosion from gas cookers or stoves. Carbon monoxide poisoning in confined space.	<p>Management Controls: Areas identified where camping is excluded</p> <p>Minimum Competencies: Competent person.</p> <p>Work Instructions: Locate camp away from dangers e.g. large trees epiphytes dead material prevailing winds and flood zones in well drained site. Do not camp on river islands and be aware of potential slips and avalanche routes. Check river levels. Ensure escape routes are planned. Light fire away from flammables ensure well contained within fireplaces and properly extinguished. Do not use burners in confined spaces without the correct ventilation. Do not use stoves that are throwing a yellow flame or suspected to be faulty. Appliances to be checked for leaks by task leader including fittings seals. All appliances to be refuelled after cooling outside away from camp</p> <p>PPE: As directed by team Leader</p>	

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406	Cannabis Plots	Booby traps. Threats from growers. Direct confrontation with growers in plots.	<p>Management Controls: Staff awareness around discovery of plots</p> <p>Minimum Competencies: Competent in dealing with such situations, and observe local protocols</p> <p>Work Instructions: Watch for trip wires, cyanide paste on trees and stakes, traps. Stay out of plot. Do not remove plants. Carry amyl nitrate if exposed to this frequently. Report to CLE co-ordinator. Leave area immediately without alarming growers. Assessment of risk to be made on complexity of operation.</p> <p>PPE: N/A unless advised by Team leader</p>	
407	Canoe/kayak/minnow other nonpowered boat use	Canoe capsize, sinking or operator falling overboard. Getting lost, change in weather conditions. Paddler swept against logs or bank, boat lands on paddler when capsized. Swept away river or by winds.	<p>Management Controls: Ensure full briefing is undertaken and safety equipment including radio is carried. Notify schedule.</p> <p>Minimum Competencies: Trained to, or similar to: Still or shallow moving water - unit standard 20818; Grade I water - unit standard 20819; Grade II water - unit standard 20121</p> <p>Work Instructions: Ensure full briefing is undertaken and safety equipment including radio is carried. Notify schedule. Staff to remain within 200 metres off shore at all times (except inner harbour use). Identify path if operating in windy conditions. If paddle leash is used, ensure it has a quick release system that is functioning correctly. Minnows only to be used on flat water. Kayaks not to be used on grade III water.</p> <p>PPE: NZS 5823 approved flotation jacket NZS approved kayak hard hat to be worn in white water. Wear high visibility clothing</p>	
409	Chainsaw use - base level	Handling sharp object. Handling fuel. Carrying sharp object. Fitting/adjusting chain, sharpening chain. Fueling/refueling. Starting motor. Loss of balance. Kickback/traction/recoil. Concealed wire rope and metal objects. Vibration. Inadequate protection or entanglement causing injury. Fire or accident. Noise. Physical harm due to equipment failure. Sawdust in the eye.	<p>Management Controls: A team leader must be appointed. Relevant work or project intentions are held with the Manager and/or either current office intention system and/or reliable person. Minimum of 2 person team. Reliable communications on site. Three people are required where there is not direct communication available or where the communication may not be reliable. In remote situations 2 reliable forms of communication are required one of which may be an EPIRB.</p> <p>Minimum Competencies: First aid trained to unit standards. Base chainsaw unit standards 6916 and 6917. Minimum 20 hours supervised chainsaw use. Initial internal assessment. Three yearly external assessment.</p> <p>Work Instructions: The team leader will undertake a daily hazard briefing with all chainsaw operators and support staff. Signs and sentries as required in public use areas. Check equipment and communications.</p> <p>PPE: Safety helmet AS/NZS1801:1997, eye protection AS/NZS 1337:1992 (exception: where the eye protection itself is likely to cause a greater hazard), hearing protection (grade 5) AS/NZS1270:1988, hi-visibility clothing AS/NZS 4602, leg protection AS/NZS4453.3:1997, safety footwear AS/NZS2210, trauma based first aid kit including two No 15 large wound dressings and emergency blankets</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
413	Chainsaw use - high level	Overhead hazards, tree lean and weight distribution, Stability of tree, effects of wind, felling direction, felling technique low branches, crushing, noise, vibration	<p>Management Controls: A team leader must be appointed. Relevant work or project intentions are held with the Manager and/or either current office intention system and/or reliable person. Minimum of 2 person team, both competent operators. Reliable communications on site. Three people are required where there is not direct communication available or where the communication may not be reliable. In remote situations 2 reliable forms of communication are required one of which may be an EPIRB..</p> <p>Minimum Competencies: First aid trained to unit standards. Unit standards 6916, 6917, 17766 and 17763. NZQA hazardous trees standard optional. Initial internal assessment. Three yearly external assessment.</p> <p>Work Instructions: The team leader will undertake a specific hazard assessment. Signs and sentries as required in public use areas. Check equipment and communications. A second chainsaw user is required to be on site who is capable of providing cutting assistance in the event of an emergency situation.</p> <p>PPE: Safety helmet AS/NZS1801:1997, eye protection AS/NZS 1337:1992 (exception: where the eye protection itself is likely to cause a greater hazard), hearing protection (grade 5) AS/NZS1270:1988, hi-visibility clothing AS/NZS 4602, leg protection AS/NZS4453.3:1997, safety footwear AS/NZS2210, trauma based first aid kit including two No 15 large wound dressings and emergency blankets,</p>	
412	Chainsaw use - windfall	Use - Kick back/tensions, chain comes off. Crushing from windfall. Repetitive actions. Noise. Vibration	<p>Management Controls: Regular saw and chain maintenance. Ensure on-site hazard assessment is undertaken. Minimum of two person teams. Reliable communications in place.</p> <p>Minimum Competencies: First aid trained to unit standards 26551 and 26552. Base chainsaw unit standards of 6916 and 6917 required. Additionally, assessed to the DOC windthrow standard, plus assessment as outlined in the SOP. At least one member of each team should hold unit standard 43 (maintain a chainsaw)</p> <p>Work Instructions: Ensure on-site hazard assessment is undertaken. For complex windfalls consider other options i.e. reroute, machinery etc. Use second person to spot in areas of high use. Regular saw and chain maintenance on site as work progresses.</p> <p>PPE: Chainsaw chaps/trousers, hearing protection - class 4 minimum, helmet, eye protection, steel capped boots and hi-vis vest</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
5525	Compliance operations and/or responses	Dealing with a wide range of compliance situations including confrontation, aggressive people, assault, threats of violence and / or intimidation.	<p>Management Controls: Personnel should not work alone and NZ police may be required.</p> <p>Minimum Competencies: Warranted officers have attended an Area Warranted Officer (AWO) or Area Compliance Officer (ACO) course, and including approved Officer Safety Training. All warranted officers appointed prior to 1 January 2009 must have attended an approved Officer Safety training course. Any non-warranted staff are to be accompanied on compliance operations or responses by a suitably qualified warranted officer who meets this minimum competency.</p> <p>Work Instructions: Where complex or confrontational operations are anticipated advice should be sought of an ACO or PCO. On all compliance responses a functioning radio or cellphone is to be available. Standard check in/out Intention to be completed .</p> <p>PPE: As directed by Team Leader</p>	<ul style="list-style-type: none"> Continued exposure to a negative response to the programme from land owners can cause accumulated stress; this needs to be reported to their Team Leader and Operations Manager so a stress reduction strategy can be implemented Where difficult or confrontational situations are anticipated, person is accompanied by another Ranger as risks are minimised when working in pairs Radio or cell phone contact is available at all times All incidents are recorded, and noted as 'P' threats for mapping, and are contacted prior to property visit if required Thorough documentation is maintained for 'P' threats and all phone calls are logged The Operations Manager (Simon Bayly) will be notified when a site visit is planned for a property with a known aggressive person. This visit will be approved by the Operations Manager, and the team lead by a DOC Warranted Officer
416	Computer use	OOS, sprains or strains	<p>Management Controls: Arrange workstation assessment if necessary</p> <p>Minimum Competencies: All staff to receive appropriate training in correct use and set up of their work station.</p> <p>Work Instructions: Regular breaks, including micropauses. Workstation to have good ergonomic layout. Arrange workstation assessment if necessary. Report and monitor any early signs of pains/niggles to supervisor/manager.</p> <p>PPE: wrist supports, footstands monitor stands</p>	
424	Drawsaw and Circular bench saw use	Noise. Moving blade and parts. Dust. Saw run off the work bench. Electrocutation.	<p>Management Controls: Ensure WorkSafe Best Practice Guidelines are followed.</p> <p>Minimum Competencies: Competent and/or appropriately trained in unit standards 12999 and/or 13000 or similar.</p> <p>Work Instructions: Turn off during adjustments. Check adjustment locks. Ensure maximum ventilation. Be aware of others nearby. No loose clothing, long hair is tied back.</p> <p>PPE: Use Class 4 hearing protection and eye protection/safety glasses and mask.</p>	
425	Drinking water contamination	Water contamination from bacteria, giardia etc	<p>Management Controls: Identify areas where contamination is possible</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Boil or filter water or use water purifying tablets. If in a hut clean gutters/tanks and if in doubt carry bottled water if practicable.</p> <p>PPE: n/a</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
1586	Estuarine Mud	Working with soft estuarine mud (Crossing estuaries, Marine Mammal Strandings, Monitoring, and Compliance Work).	<p>Management Controls: Minimum of two people.</p> <p>Minimum Competencies: Experienced field team with knowledge of tide charts and estuary conditions.</p> <p>Work Instructions: Project leader to make team aware of tide charts for the day and determine times suitable for access to and from the worksite. Mud porosity to be tested with a prob stick to assess the depth and density of the mud. Work to be undertaken 2 hours either side of low tide. If concerned with mud depth, lie flat on surface and spread body weight evenly. Use hands and feet to push along surface to stable ground.</p> <p>PPE: Clothing to be worn: wetsuit, proper marine footwear (diving boots or suitable footwear - not gumboots).</p>	
433	Falling objects (rocks, trees)	Being hit by an object falling from height (e.g. rocks, trees, branches)	<p>Management Controls: Identify areas of potential falling objects, discuss with staff</p> <p>Minimum Competencies: Competent in this terrain and can observe hazardous situations</p> <p>Work Instructions: Undertake job safety analysis. Review immediate vicinity for obviously weakened trees/windfall. As much as possible avoid work at bottom of rocky slopes or cliffs. Remove suspect trees. Avoid working in forest when wind is high, during or directly after heavy snowfall when branches or trees are likely to come down.</p> <p>PPE: Hard hats to be worn when falling hazards exist.</p>	
443	Firearm use	Accidental shooting, explosion, ricochets. Rubber stock causing friction on cheek	<p>Management Controls: Team leader and members to be conversant with Department's Hunting Safety Practices guideline and the Hunters Hearing Strategy, and Arms Code.</p> <p>Minimum Competencies: Adequate training including Firearms Licence and close supervision required until person deemed competent.</p> <p>Work Instructions: Refer to the Arms Code. Firearms well maintained. Treat every firearm as Loaded. Always point firearms in safe direction. Load a firearm only when ready to fire. Identify your Target. Check your firing zone. Store firearms and ammunition safely - in cabinet with one person in sole charge of key. Consider hard ground / rocks when dispatching animals at close range bone fragmentation rock splinters and projectile ricochets projectile deflection or ricochets off bone shoulder bones. Consider projectile deflection off vegetation prior to contact with intended target. Consider best shot placement for calibre and projectiles on heavy boned animals. Take particular care of firearms inside aircraft. Renew stock or if necessary wrap stock with smooth tape to avoid friction on cheek.</p> <p>PPE: High visibility clothing is to be worn (blaze orange or navy blue). Sound moderators to be fitted or Class 5 or 3+ hearing protection to be worn for most firearms.</p>	
514	Flammables use	Poison and fire	<p>Management Controls: Ensure all HSNO controls are in place. Accumulation of flammables could trigger HSNO requirements such as Test Location Certificate or Hazardous Atmosphere Zone, etc. Make Material Safety Data Sheets available.</p> <p>Minimum Competencies: Approved Handler if amount held triggers this requirement, otherwise competent in use.</p> <p>Work Instructions: Always refuel outside and away from open flames. Never use fuels in a tent. Wait for appliances to be cold before changing fuel canisters. With any fuel spills extinguish all flame, clean up and ventilate space until fumes clear.</p> <p>PPE: As directed by Manager, and required by procedures</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
445	Food Services, Food Preparation, Safety in the Kitchen	Food poisoning, burns and cuts	<p>Management Controls: Strict guidelines at DOC events should be followed with a documented food preparation plan and itemised list. Regular checking that the kitchen area is clean.</p> <p>Minimum Competencies: Competent personnel</p> <p>Work Instructions: Assign food preparation management to one person who will oversee the tasks, assign duties, etc. Take care with sharp objects and hot equipment. Ensure electrical appliances are all compliant. Limit number of people if necessary. Strict guidelines at DOC events should be followed with documented food preparation plan and itemised list. Ensure proper hand cleaning is available, including anti-bacterial soaps and towels (preferably paper) in washrooms. Regular checking that the kitchen area is clean.</p> <p>PPE: Latex gloves to be worn when handling/preparing food.</p>	
454	Generator/Pump use	Faulty power points or damaged tool. Burn from exhaust. Sprain or strain from lifting. Hearing loss due to noise. Fire. Electric shock. Fire. Carbon monoxide poisoning	<p>Management Controls: Isolating transformer, or circuit breaker/RCD to be used. Maintain electrical equipment. Refer to the AS/NZS standard</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Isolating transformer, or circuit breaker/RCD to be used. Do not allow hot engine or exhaust to heat any sources of ignition. Never use in a confined space. Use an exhaust tube to carry fumes well away from living quarters. Maintain electrical equipment. Refer to manufacturers specs. Take care if cranking engines, as handles may come free and swing wildly or may run on once generator starts if they jam. Refer to the AS/NZS standard. Use correct lifting techniques.</p> <p>PPE: Use Class 4 hearing protection.</p>	
1781	Handsaw, hatchet and lopper use	Lacerations, impacts, back strain and eye injuries whilst using handsaws, hatchets and loppers.	<p>Management Controls: Staff aware of safety procedures around handtool use and tools are purchased fit for purpose and well maintained.</p> <p>Minimum Competencies: Acknowledgment of prior experience or competency assessment by supervisor.</p> <p>Work Instructions: Observe minimum 3 metre spacing to other workers when using hatchet. Carry hatchet in holster on belt with cutting edge facing backwards. Do not carry in hand when walking. Do not drop or throw hatchet. Keep free hand well clear of hatchet swing. Regularly check condition of hatchet - retire from use or repair if head is loose or handle is fractured. Keep hands clear of handsaw blades or lopper jaws. Guard against back injuries by observing proper bending techniques when using handtools below waist level. Establish eye contact before passing or approaching another staff member.</p> <p>PPE: Wear safety glasses when using hatchet and other PPE as advised by Team Leader</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
460	Handtool use	Use of variety of handtools including manual/electric screwdrivers, hammer, grubber etc. Heavy objects. Flying objects. Extended use (loss of control). Sharp blades/objects. Impacts, entanglement. Vibration. Public access.	<p>Management Controls: Correct sharpening procedure used and tools maintained regularly checking for loose heads on axes, slashers, grubbers etc. Where necessary, warning signs in area of operations where public have access. Ensure best practice guidelines are followed</p> <p>Minimum Competencies: Competent in use, i.e. completed the required training for the task or use of equipment, and/or assessed as competent by supervisor</p> <p>Work Instructions: Do not carry tools over the shoulder or leave tools lying around where people have access. Be aware of the location of others and work at least 3 metres apart. When transporting tools handle them appropriately or in containers with safety catchers on. Return tool to be stored appropriately in a secure workshop</p> <p>PPE: Recommended relevant PPE includes gloves, safety boots, overalls, leg protection, protective glasses if considered necessary by supervisor.</p>	
461	Hazardous substance storage	Lifting heavy weights. Spillage. Absorption, inhalation or ingestion. High shelves / confined space. Chemical reactions. Fire. Fumes.	<p>Management Controls: Store in appropriate DG Store. - Segregation of packages of hazardous substances. All containers clearly and appropriately labelled. Follow storage clean up procedure as shown on spill chart in poison store & use spill response kit. No smoking. Dry powder extinguisher</p> <p>Minimum Competencies: Approved Handler required for some substances. Consider manual handling training</p> <p>Work Instructions: Store in DG Store. - Segregation of packages of hazardous substances. All containers clearly and appropriately labelled. Never store a hazardous substance in a food or drink container. Follow storage clean up procedure as shown on spill chart in poison store & use spill response kit. No smoking. Dry powder extinguisher (at least 2kg) at the store entrance. Adequately ventilated building. Mixing chemical outside of store. Accumulation of various classes of chemicals may trigger requirements such as Test Location Certificate or Hazardous Atmosphere Zone. Refer to MSDS if appropriate. Practice good lifting techniques - do not twist while lifting and use legs to provide lift rather than back.</p> <p>PPE: As directed by Team Leader</p>	
462	Hazardous substance transport	Lifting heavy weights. Spillage, vehicle accident or breakdown. Chemical reactions. Fire. Fumes.	<p>Management Controls: Refer to substance specific SOP for rules on transport. Carry a suitable fire extinguisher in vehicle. Have written emergency procedure covering all hazardous substances on the vehicle readily accessible at all times. Refer to MSDS if appropriate.</p> <p>Minimum Competencies: Approved Handler required for some substances. Drivers or operators to demonstrate familiarity with the dangers of the substances carried, procedures for their safe loading, handling and storage on the vehicle and the emergency procedures. Consider manual handling training.</p> <p>Work Instructions: Refer to substance specific SOP for rules on transport. Carry a suitable fire extinguisher in vehicle. Have written emergency procedure covering all hazardous substances on the vehicle readily accessible at all times. Refer to MSDS if appropriate. Practice good lifting techniques - do not twist back while lifting and use legs to provide lift rather than back.</p> <p>PPE: Fire extinguisher suitable for substance</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
463	Hazardous substance use	Spillage. Confined space. Absorption, inhalation or ingestion. Chemical reactions. Fire. Fumes.	<p>Management Controls: Follow manufacturers instructions</p> <p>Minimum Competencies: Approved Handler required for some classes of substance. Assessed as competent to use.</p> <p>Work Instructions: Identify hazardous substance and apply controls. Follow manufacturers instructions. No smoking or handling food while using chemicals, chemical first aid kit at store. Refer to MSDS if appropriate</p> <p>PPE: Correct protective clothing for chemical being used,</p>	
2036	Helicopter - aerial herbicide spraying	Aerial herbicide spraying - chemical contact and equipment use risks to operators, staff and public	<p>Management Controls: Employ, qualified, experienced aerial spraying operators to minimise chemical contact risk.</p> <p>Minimum Competencies: Qualified aerial spray operators and staff. Competent staff to watch for and alert public. Approved Handler on site.</p> <p>Work Instructions: Ensure public are adequately informed or warned of spray operation in progress to avoid spray zone, using clear signage and / or personnel on site. If using a spray pump for aerial helicopter spraying, ensure that pumps / exhaust cool before moving or carrying them. Ensure wind conditions minimise spray drift.</p> <p>PPE: Ensure use of correct PPE wherever required. Ground staff to wear approved high visibility clothing and maintain radio contact as necessary.</p>	
1386	Helicopter - refueling, haz substances	Hazards during Aircraft Re-fueling and transportation of Dangerous Goods (Fire, explosion, Burns)	<p>Management Controls: Follow contractor's flight manual for refuelling procedure Follow procedures for transporting specific hazardous substances. Only pilot or company personnel to undertake refuelling.</p> <p>Minimum Competencies: Competent person, licensed as required</p> <p>Work Instructions: Follow contractor's flight manual for refueling procedures, allow pilot to refuel aircraft and complete pre-flight checks. Ensure driver of support vehicle has Dangerous Goods Licence and appropriate signage. Follow procedures for transporting specific hazardous substances in the HSNO intranet site</p> <p>PPE: Wear PPE as required by task SOP</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
470	Helicopter - sling loads	Crash. Hit by objects. Dust. Noise. Jet exhaust. Rotorwash. Clothing entanglement. Swinging or snagged long-strop hook.	<p>Management Controls: Ensure equipment is certified and company is registered with proven competency in task. DOC sling load equipment to be checked and certified annually.</p> <p>Minimum Competencies: Staff to be familiar with relevant documents and brochure Working with Helicopters. If supervisor - CAA Regulations. In house instruction (induction, briefing, hazard disclosure) on working with helicopters. Competent operator as team leader assigned.</p> <p>Work Instructions: Follow pilots instructions and briefing at all times and ensure adequate supervision of work, including appointing team leader. Check load maximum before operation starts. Advise pilot of length of tools - follow pilot's instructions for loading and unloading. Ensure weight of loads are to pilots specifications. Ensure adequate communication with the pilot. Complete site assessment of over hanging trees and terrain. Terminate operation if unsafe practices evident. Allow chain to earth before touching, and don't stand underneath suspended net or in flight path. Ensure clips (e.g. radio clips) attached to peoples belts are kept free from net.</p> <p>PPE: Wear the correct PPE (e.g. hearing protection and hard hat) as identified by Team Leader when working around the helicopter</p>	
469	Helicopter Use	Rotorwash. Being hit by rotor. Objects hitting rotor. Alighting/disembarking aircraft. Noise. Dust/debris in eye.	<p>Management Controls: Ensure loose items are secure during take off and landings.</p> <p>Minimum Competencies: Staff to be familiar with relevant documents such as the Helicopter Safety SOP. Refer to relevant helicopter safety pamphlets linked from the SOP. In house instruction (induction, briefing, hazard disclosure) on working with helicopters - Use Safety Around Helicopters DVD. Competent team leader assigned.</p> <p>Work Instructions: Follow pilots instructions and briefings at all times. Do not move towards the rear of the helicopter while in operation.</p> <p>PPE: Hearing protection, high visibility vest and safety helmet with chin strap is to be worn.</p>	
525	Herbicide and Penetrant use	Absorption and/or inhalation and/or ingestion.	<p>Management Controls: Maintain equipment and ensure that standard operating procedures are followed.</p> <p>Minimum Competencies: Approved handler, or under the supervision of one. For knapsack spraying all users must be given a safety briefing and training prior to use by an approved handler.</p> <p>Work Instructions: Maintain equipment and ensure that standard operating procedures are followed. Avoid skin and eye contact, and breathing vapour. Use with adequate ventilation. Wash hands before eating, drinking, using the toilet etc. Always check container lids are secure. Appoint Team Leader.</p> <p>PPE: Wear PPE such as suitable eye wear, overalls, rubber gloves and respirator as recommended by the manufacturer or on the label.</p>	All herbicide work to be coordinated by host plant controller, Derek Walker

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
476	Hunters in the vicinity	Working in the vicinity of recreational hunters and others - mistaken ID by hunter -accidental shooting	<p>Management Controls: Timing and location of fieldwork should be programmed to avoid high risk areas and times where possible.</p> <p>Minimum Competencies: Competent person. Be active in support of hunter education programmes.</p> <p>Work Instructions: Timing and location of field work should be programmed to avoid high risk areas and times where possible. Carry transmitter/hand held radio/EPLB and/or satellite phone. Place signs at obvious access points warning hunters of your whereabouts.</p> <p>PPE: Wear high-vis clothing whenever in the field, in accordance with the Dept's Hunting Procedures.</p>	
2872	Karst country and boulderfields	Karst landforms and boulderfields have holes/slots (many of these can be deep) that people could fall into. Holes/slots can be hidden by vegetation. Other hazards can be crumbly edges/slopes, wet, slippery rocks, sharp jagged rock. Navigation can be slow and difficult.	<p>Management Controls: Staff unfamiliar with Karst/boulderfields should not work alone.</p> <p>Minimum Competencies: Staff should be experienced in working in karst and boulderfield landforms. Non competent staff to be supervised at all times.</p> <p>Work Instructions: Staff must be watchful, check edges are safe. Travel slowly and cautiously through tight vegetation. Where possible work in groups. Walk around slump holes, not across them. Carry map, compass and GPS at all times. Travel can often be slow, so allow extra time to traverse difficult ground. When working in groups, person with radio (or PLB) and GPS should not lead in case of fall.</p> <p>PPE: As directed by Team Leader</p>	
488	LPG use	Working around or using LPG cylinders, including supply lines. Explosion, leakage, and physical damage to cylinder and valve. Gas leakage. Asphyxiation. Lifting. Heavy object falling.	<p>Management Controls: Ensure all controls are in place and staff are aware of procedures</p> <p>Minimum Competencies: Competent in the use of the substance, and installations. Approved Handler where required. Consider manual handling training</p> <p>Work Instructions: Refer LPG SOP, incl for use, storage (test location certificates) and transportation. Secure cylinders correctly when transporting to prevent movement and damage. Cylinders in upright position with valve closed. If investigating suspected gas leak, extinguish all flame first. Check valve on cylinder is closed before disconnecting pipe. Check rubber sealing washer is in position, in good condition. Check for leaks using soapy water on all joints and connections. Check any flexible hose for signs of age or cracking. Any area that is affected by gas leakage must be cleared of gas before it can be entered safely. All gas installations certified by approved installer. Ensure satisfactory ventilation. Never use gas appliances in confined spaces. Ensure gas appliances supervised at all times when in use. Ensure correct lifting techniques are practices - do not twist while lifting and use your legs to provide lift rather than back.</p> <p>PPE: Leather gloves to be worn when changing bottles</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
485	Manual handling	Sprains and strains. Crushing. Slips, twisting, compression.	<p>Management Controls: Seek alternatives to manual lifting/handling. Make sure staff are suited to the tasks and do not have serious disabilities. Familiar with principles of the Code of Practice for Manual Handling</p> <p>Minimum Competencies: Manual handling training recommended.</p> <p>Work Instructions: Minimise the need for lifting heavy loads by choice of equipment, position of equipment. Seek assistance when lifting heavy or awkward loads. Do not twist while lifting and use your legs to provide lift rather than your back. Items are stored securely and will not fall..</p> <p>PPE: As directed by Team Leader</p>	
4003	Marine mammals - sea conditions & tidal currents	Crushing by swell rolling whale. Tidal flow dragging people out to sea	<p>Management Controls: Staff awareness and training</p> <p>Minimum Competencies: Experience with refloating marine mammals</p> <p>Work Instructions: Determine that sea conditions are safe to refloat the whale at the stranded location. Consider moving. Keep watch on sea conditions and how they are moving the marine mammal. Monitor the tidal flow and ensure rescue staff let go of the whale so they can still get back to shore.</p> <p>PPE: Wet suit</p>	
495	Mist netting - waterfowl	Working in cold water resulting in hypothermia. Loss of control in swift, deep water, resulting in injury or drowning. Net entanglement resulting in drowning	<p>Management Controls: For 4 person teams no more than two people are to work in the river while at least two others remain shore-based. For 3 person teams the necessity for shore-based personnel shall be at the discretion of the team leader.</p> <p>Minimum Competencies: All personnel are to be briefed and to have current first aid certificates. Shore based personnel to be trained in the use of throw-ropes.</p> <p>Work Instructions: Wetsuits are to be worn at the discretion of individual netting team members. Safe netting sites are to be carefully chosen and no attempt should be made to net where personnel have safety concerns. Netting sites will allow for safe recovery of team members downstream should footing be lost in river current. A throw-rope for rescue in difficult water will be available on shore. All personnel will carry warm clothing and be aware of the symptoms of hypothermia. Personal first aid kits will be carried by all personnel, and communication will be on hand. If possible personnel will remain downstream of the capture net while setting it across the river</p> <p>PPE: All personnel working in the river to wear inflatable lifejackets where necessary.</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
501	Nail gun use	Nail impact from inadvertent or misdirected 'shot'. Concealed electrical wiring. Firing into concrete. Misfire	<p>Management Controls: Only skilled and experienced operators with well maintained nail gun.</p> <p>Minimum Competencies: Certificate of competency where powder actuated, or working under the supervision of someone who has. Recommend trained to NZQA u/s 18967, and/or 13000 or similar.</p> <p>Work Instructions: Place gun firmly against work surface before firing. Tag any faulty equipment. Don't drive fasteners into concrete where nearer than 75mm to edge, nearer than 75mm to another fastener, thickness of material is less than 100mm or within 150mm to where another fastener failed to penetrate. Operate to manufacturers specifications. Ensure tool has a current certificate of fitness. Operator to wear eye protection to at least AS/NZS1337 and hearing protection.</p> <p>PPE: Operator to wear eye protection to at least AS/NZS1337 and hearing protection.</p>	
502	Night work	Unfamiliarity with working at night. Slip of fall with serious injury	<p>Management Controls: Put intentions on intentions board/book.</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Assess local conditions and thoroughly plan night route. Always advise other members of the party if moving away from them. Carry communication. Sites selected during day light and possible falling debris, holes and other obstructions and any other hazards identified at that time. Access and egress points should be marked with reflective markers where practicable. Staff to be well equipped with warm clothing. Put intentions on intentions board/book.</p> <p>PPE: Torch</p>	
592	Pest/predator control - dogs	Bite from attack causing lacerations	<p>Management Controls: Staff awareness</p> <p>Minimum Competencies: Competent in handling dogs.</p> <p>Work Instructions: Ensure dog under control at all times and well trained for task. Allow only two dogs per hunter.</p> <p>PPE: As directed by team Leader</p>	
512	Pest/predator control - skinning, cutting animals	Cuts from knives may lead to infections or serious lacerations.	<p>Management Controls: Staff to carry personal first aid kits.</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Wounds to be cleaned and treated in accordance with first aid requirements. Ensure animal dead and that all knives are sharp and have a good handle grip.</p> <p>PPE: As directed by Team Leader</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
13625	Pest/predator control traps	Trap closing on operator. Breakage to trap causing injury. Bites, scratches from animals.	<p>Management Controls: Keep traps well maintained.</p> <p>Minimum Competencies: Training of all people operating traps showing them how to hold & set to minimise accidental triggering, and use safety catches.></p> <p>Work Instructions: Use in accordance with trap SOP &/or best practice guidelines. Use setting tool if appropriate & keep body parts well clear of closing mechanism. Carry radio & first aid kit. Be aware of sharp edges on mesh at ends of tunnels. wash hands before eating and/or at end of day. Carry soap & water for this. Ensure animal is dead before removing from trap.</p> <p>PPE: Wear gloves when handling animals.</p>	
2374	Pesticide Transport and Storage	Pesticides could spill or be damaged when they are being stored or transported resulting in inhalation, ingestion or absorption.	<p>Management Controls: Have available, understand and comply with the Safe Handling sheets for the relevant pesticide</p> <p>Minimum Competencies: Everyone transporting or storing pesticides must be an approved handler or under the direct supervision of someone with approved handler status.</p> <p>Work Instructions: Have available, understand and comply with the Safe Handling sheets for the relevant pesticide</p> <p>PPE: As directed by Team Leader</p>	
2903	Petrol drill use	Handling fuel, handling sharp object, using a mechanical tool- starting motor, changing gears. When changing gears, drill may kick/spin if not held securely. Noise, loss of balance, vibration. Concealed objects in what is being drilled may cause erratic movement of drill.	<p>Management Controls: Drill is well maintained and personnel are competent</p> <p>Minimum Competencies: Trained by experienced user.</p> <p>Work Instructions: When refuelling, stop motor, no smoking, use funnel. Restart at least 3m from refuelling site. Always start in neutral. Before starting work, check all safety features on drill. Always wear earmuffs, including second person injecting herbicide if applicable. Use in well ventilated area. Shift into neutral when moving around tree. Hold drill firmly when changing gear to prevent drill body spinning.</p> <p>PPE: Wear earmuffs, and goggles.</p>	
1452	Portable fuel container/jerrycan use	Fuel splash, fuel container leak, ignition of fuel whilst filling fuel container. All resulting in burns. Direct sunlight on any fuel can containing fuel will naturally cause internal expansion thus creating a sudden gush when the top is opened (release of compressed air)	<p>Management Controls: All metal fuel dispensing cans should have a built-in flash arrester. All 2 stroke containers and jerrycans will be painted blue, red for petrol, yellow for diesel. Include additional clearly visible identification</p> <p>Minimum Competencies: Competent person. Correct handling and storage procedures of cans should be covered during training</p> <p>Work Instructions: Ensure earth strapping or flash arrester is used or earth linkages are attached when decanting from portable metal fuel containers. All metal fuel dispensing cans should have a built-in flash arrester. Transport only the amount of fuel that is needed for the work - no more than two 20 l jerrycans per vehicle is recommended. Never transport fuel in the same cargo space with oxidizers, acids, or batteries. Never leave fuel cans in direct sunlight.</p> <p>PPE: Wear safety glasses and protective gloves when opening and dispensing fuel at all times</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
519	Potting mix handling	Legionnaires disease, or other disease, and eye injury caused by dust derived from potting mix. Hay-fever like complaints due to common fungi	<p>Management Controls: Staff awareness of risk and information on legionnaires disease</p> <p>Minimum Competencies: Staff briefed and be aware of the risks associated with potting mixes and procedures required to handle it safely.</p> <p>Work Instructions: Potting mix kept covered when not in use and dampened down before and during propagation work. Avoid opening bags in enclosed areas. Wash hands thoroughly after gardening or use of this product. See info on legionnaires disease.</p> <p>PPE: Use goggles and respirator or disposable dust mask (or half face mask with dust filters) for dusty operations such as moving, loading or opening fresh or dry potting mix. Always wear gloves when gardening or using the product.</p>	
1626	radio telemetry	Electrocution from lightning strike, arm/shoulder strain, injury of worker or assistant from aerial. Ear discomfort/damage from interference when using headphones or earpiece.	<p>Management Controls: Staff are aware of procedures and safe working practices</p> <p>Minimum Competencies: User made aware of Hazards and methods of control. Like keeping assistant 1.5 m from aerial and using lowest practicable volume especially when using an ear piece.</p> <p>Work Instructions: Be aware of weather conditions and cease telemetry if electrical storms threaten. If lightning is imminent disconnect aerial and place it on the ground then move to an open space. Be aware of proximity of others when using aerial. alternate arms if arms/shoulders tires during telemetry.</p> <p>PPE: As directed by Team leader</p>	
1425	Removing Wildlife on Roads	<p>Staff called to pick up/remove native wildlife from roads are at risk from other road users. The Wildlife Recovery section of the approved Traffic Management Plan DM-1520935 sets out the approach to managing this hazard.</p> <p>Large animals (eg seals and sea lions) may be a traffic hazard. The Police will be notified if wildlife is encroaching on the road reserve or posing a risk to road users. The Police should be requested to undertake traffic control during wildlife movement or recovery. If the Police are not available, this operation should only be conducted with the approval by the Conservation Services Manager.</p> <p>Small animals or birds (eg penguins, shags) recovery can generally be managed by the department, but the Police should be called if traffic or other features increase hazards (eg, peak traffic times).</p>	<p>Management Controls: Staff awareness around processes. Approved Traffic Management Plan - refer section of wildlife recovery on roads.</p> <p>Minimum Competencies: Refer generic Traffic Management Plan for Wildlife Recovery. For local roads: brief training by DOC STMS (annually). For state highways: must be under direct supervision of an STMS. Some experience handling the animal species being rescued (or a similar)</p> <p>Work Instructions: YOU SAFETY COMES FIRST. If there is a significant risk to you or other road users, notify the Police. If leaving from the office, take and use the vehicle-mounted warning signs and magnetic flashing light stored in the basement. Always wear a high visibility vest and turn on vehicle hazard lights. Assess the situation before going onto the road (traffic frequency, possible animal response, your plan of action, visibility). Ensure you have the right equipment for recovery of the wildlife. If there is more than one person, use traffic lookouts/controllers. This person may need to slow, stop or redirect traffic while you are on the road, or warn you to move.</p> <p>PPE: All participants must wear high visibility vests, activate hazard lights and used signs or other warnings.</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
533	River crossings	Deep water, holes, slippery rocks. Fast/large rivers. Tipping due to uneven ground, rocks, banks on river beds/banks. Drowning.	<p>Management Controls: Staff are aware and educated in this risk</p> <p>Minimum Competencies: Trained/competent in river crossings</p> <p>Work Instructions: When river swollen or in flood do not cross. Check weather forecasts. Consider river conditions, holes, slippery rocks and run out zone. Where practicable site camps and work on the same side of the river. If swept over in river keep legs up and travel feet first. Take appropriate action to prevent hypothermia in the event of slipping or falling during a river crossing. Ensure fitness levels good.</p> <p>PPE: Use appropriate and correct clothing and footwear.</p>	
534	Road work - working on/near	Working on or near road where other vehicles could collide with parked vehicle or personnel causing serious or fatal injury.	<p>Management Controls: All road work must comply with the NZTA Code of Practice for Temporary Traffic and an approved traffic management plan for the area. Qualified supervisor appointed.</p> <p>Minimum Competencies: Training to Traffic Controller and Site Traffic Management Supervisor as necessary</p> <p>Work Instructions: Work to traffic management plan protocols. Consider use of contracted expertise or police. Appoint Traffic Supervisor</p> <p>PPE: Hi vis vests must be worn.</p>	Staff are to be cautious working around roads for risk of being hit by vehicles and cars Staff are to wear Hi Vis vests at all times
537	Rubbish handling	Sharp objects. Heavy bags.	<p>Management Controls: Net or tarpaulin to be used to contain rubbish on ute when transporting</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Identify object before grasping handle bags of rubbish with caution treat any cuts with antiseptic however minor immediately. Good lifting techniques. Wash hands after handling rubbish. Net or tarpaulin to be used to contain rubbish on ute when transporting</p> <p>PPE: Use gloves if necessary</p>	
541	Scrub-bar/Brush Cutter/weedeater use	<p>Flying debris - cuts/impacts/eye damage. OOS - back strain/vibration/circulation. Noise. Fire - machine. Fuel use. Falling over. Public in vicinity. Blade (Circular/Star).</p> <p>Often an interchangeable attachment can be used (flexible bar and/or flail/whip cord (nylon)) on a scrub-bar/Brush Cutter motor (turning it into a weedeater) for clearing grass and small vegetation up to 5mm.</p>	<p>Management Controls: Consider alternative safer methods such as mowing or spraying. Otherwise ensure radio communication available at all times - 2 forms of communication when in the backcountry. Ensure blade is maintained. Discuss risks, including hand/arm vibration syndrome. Read and understand Scrub-bar Guidelines. Appoint Team Leader.</p> <p>Minimum Competencies: Scrub-bar/Brush cutters: New users are trained to NZQA unit standard 24540 and assessed as competent in local use. Experienced users complete a self assessment and are assessed by competent person in local use. Weedeater attachment: Trained and assessed by competent person in local use.</p> <p>Work Instructions: Guard is attached. Check area prior to work for obstacles, place warning signs in public areas and minimum of two workers on site where cutter is fitted with a star blade. Check fuel lines and components before and during work. Minimum operating distance of 15m from maximum reach of machine, between workers. Carefully consider use in high/extreme fire conditions. Use correct fuel mixture. Undertake Job Safety Analysis for the task. Take regular breaks.</p> <p>PPE: Steel cap boots, helmet with visor or goggles, gloves, hi vis vest/T shirt, suitable clothing to protect all exposed areas of body, (i.e chainsaw chaps (Scrub-bar) or light chaps (flail cord)), and first aid kit, containing eye wash. Hearing protection - Grade 3-5.</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
12880	Stranded marine mammals	Stranded marine mammals pose a risk to potential rescuers through direct physical harm (ie struck with tail) and through the transfer of disease.	<p>Management Controls: Refer to appropriate hazard id for more details around these hazards.</p> <p>Minimum Competencies: All staff and volunteers should be briefed about the hazards associated with marine mammals and marine mammal rescue when they 'check in'.</p> <p>Work Instructions: Use caution when working around marine mammals. Keep clear of the tail area, being especially mindful not to step over the tail at any time - Whales can roll and crush people - Be especially cautious when refloating in the surf as whales can roll on top of and pin people under the water. Wash hands before eating or drinking - Avoid touching animals if you have exposed wounds - Avoid contact with blood or other bodily fluids from marine mammals - Avoid breathing air expelled from animals. Supervise children around animals at all times - be aware of other hazards associated with marine mammals such as Drowning, Injury caused by manual lifting, use of machinery and hand tools etc.</p> <p>PPE: Wear appropriate PPE (including gloves) when handling dead or sick animals.</p>	
559	Trailer use	Serious harm from loss of traction/manoeuvrability if load too heavy or coupling coming loose. Sprains, strains, crushing while loading.	<p>Management Controls: Ensure tow ball connections are consistent. Tag ball with appropriate size. Fit with warning labels in the immediate vicinity of the tow ball indicating the maximum towing capacity of the vehicle. Trailers are clearly marked on the draw bar with the tare</p> <p>Minimum Competencies: Licence, induction and assessment completed. All staff who use trailers, and their supervisors, are to be fully briefed in the technical document.</p> <p>Work Instructions: Follow instructions set out in the Trailer Use Guide</p> <p>PPE:</p>	
562	Travelling, coastal	The danger zone is below vegetation and the driftwood line. Wave action (including surges). Tidal action causing entrapment. Strong tidal currents. Slippery, sharp or unstable rocks. Steep pebbly beaches with wave action. Quicksand on beaches or main river valleys.	<p>Management Controls: When seas are rough no travelling or work is to be carried out within the intertidal zone. Defining rough seas requires judgement as there are many variables such as how steep the seabed and shore is, shape of coast currents etc. But people assessing the conditions need to understand that in some situations waves / currents a little higher than the knee can knock a person over and sweep them away. Personnel to be briefed on the coastal environment to be travelled.</p> <p>Minimum Competencies: Group leader is competent in the coastal marine environment and delegates tasks appropriate to individual capabilities. Individual fitness and agility must be appropriate to tasks performed, including swimming capability relevant to the conditions. Consider coastal awareness training.</p> <p>Work Instructions: Team leader is fully competent and aware of the hazards for that particular location. Team leader should assess the site before beginning activity.</p> <p>PPE: Use appropriate clothing/equipment and PPE as directed by Team Leader.</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
563	Travelling, Land	Negotiating steep terrain. Weather extremes. Falling or sustaining injury. Land movements/slips. Windfall/logs/spurs/rocks. Negotiating terrain in the dark. Getting lost. Wire fences. Fence posts and rails. Blown dust, sand, debris. Sharp bush causing puncture wounds and eye injury.	<p>Management Controls: Ensure all staff carry suitable survival equipment (eg PLB, radio, satellite phone, survival blanket, GPS, map, compass, lighter etc). Notify intentions, arrange schedule times prior to departure. Check short and long range weather forecasts Check medical conditions and carry appropriate medication</p> <p>Minimum Competencies: Staff are competent in the environment and fully briefed. Personal fitness must be appropriate to tasks performed. Trained in radio use.</p> <p>Work Instructions: Where possible avoid working or travelling across steep areas where there is a high risk of fall. Ensure all staff carry suitable survival equipment (eg PLB, radio, satellite phone, survival blanket, GPS, map, compass, lighter etc). Notify intentions, arrange schedule times prior to departure. Check short and long range weather forecasts. Staff to check for potential for slips when picking travel routes, choosing campsites, etc. Staff must not work in an area that is unstable or directly below another person on a debris face. Be aware of natural rockfall sites. Check medical conditions and carry appropriate medication.</p> <p>PPE: Use appropriate clothing/equipment and PPE, including goggles if high risk of eye injury from branches. Helmets are to be worn at all times while working on a slip face area.</p>	<ul style="list-style-type: none"> • Assess work area as a group to identify hazards during on site 'toolbox talk' • Plan to eliminate, isolate and minimise identified hazards • Assess terrain and stability of ground, choosing alternative routes when necessary to avoid risk and minimise potential hazards such as; <ul style="list-style-type: none"> - unstable rocks - slippery paths - wooden edging - gates/fencing/edging in poor condition - hidden objects - unseen holes - wild areas of vegetation - vines causing tripping and falls • Wear suitable footwear and appropriate uniform items for weather conditions • Wear overalls, long trousers and sleeves for skin protection • Wear sunglasses to protect eyes • Ensure person is carrying radio or cell phone at all times • Wear a high visibility vest at all time
572	Vehicle use - general	Lose control of vehicle, collision. Driving into water at speed, brake failure. Fatigue. Goods moving inside the vehicle causing injury. Fire – operating in smoke hazard and/or with lights and siren.	<p>Management Controls: All vehicle drivers must be briefed on and understand the Department's Policy for the Use of Motor Vehicles and Safe Driving Policy, have provided a copy of their drivers licence and have completed a Confirmation to Drive form which has been verified by the relevant Manager/Director. Managers to ensure that all drivers are familiar with the handling characteristics of the different types of vehicles (e.g. car, 2WD ute, 4 WD ute when driving on road) Managers to decide what is appropriate to be carried in a vehicle such as:</p> <ul style="list-style-type: none"> - Method of communication - First Aid kit - Fire extinguisher (must be carried if flammable goods are being carried) - Reflective vest, torch and emergency triangle <p>Minimum Competencies: Appropriately licenced for the type of vehicle being driven Read and understand the Department's Policy for the Use of Motor Vehicles and Safe Driving Policy Recommended Advanced Driver Training (anti skid training) where it may be appropriate. Those driving under lights and siren are appropriately trained</p> <p>Work Instructions: Drive to conditions within speed limits. Refer to road condition reports if in doubt. Notify intentions and schedule times as appropriate. Ensure the potential for fatigue is managed by recognising fatigue and observing safe driving hours. A radio telephone (where fitted) to be kept on at all times while in or near vehicle. Secure loose gear that is inside the vehicle or tie down on vehicle deck. No persons to ride on the rear deck of a ute at any time Vehicles to be kept secure (locked) when not in use Do not use handheld mobile phones when driving Emergency vehicles must be fitted with lights and siren equipment.</p> <p>PPE: Seat belt</p>	<ul style="list-style-type: none"> • Drive to the conditions and speed limit • While working in an urban environment special care must be taken around schools and driveways - watch out for children • While getting in and out of vehicles, pay attention to the movements of other vehicles and cyclists • Vehicles are to be reversed into DOC car parking spaces • All staff are briefed at induction and familiar with the Departmental Vehicle Policy • All staff have signed a confirmation to drive form and are aware of the payment process for infringements, what to do in an accident and departmental employee responsibilities • GWB fleet is regularly serviced and fortnightly vehicle checks are carried out by teams to identify any issues • Objects such as spray packs are secured in the vehicle where possible, or kept in plastic cubes to contain movement • Four wheel drive is selected when necessary to negotiate steep gravel driveways or terrain where loss of traction can occur

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
2784	Wader use - lakes and rivers	Loose footing, hypothermia, unstable banks, hidden objects. Drowning or serious injury,	<p>Management Controls: Refer to Wader Safety guidelines</p> <p>Minimum Competencies: Competent in the use of waders. Experience staff can be assessed as competent by a manager and assess others through a joint review of 'Wading Safely' and Suggested Course Content from the Wading Guideline. Practical assessment to have been carried out within 12 months prior to use of waders if waders have not been used in that time. Observers to be competent to perform a rescue.</p> <p>Work Instructions: Check rivers, streams and swamps to assess river/lake bed (soft or uneven), depth, speed of flow and site specific hazards. Avoid soft substrate and deep water. Assess risk against local conditions. Implement the following controls where appropriate: A waist wading belt must be worn tightly wherever there is a chance of the waders filling with water due to deep (over 0.5m) and/or fast flowing water or a soft or uneven river or lake bed. Otherwise recommended at all other times. Wherever there is a chance of waders filling with water, a second person competent in rescue must be observing. In case of emergency and if possible, second person to use radio to raise alarm and to have rope and personal flotation device ready to carry out rescue. Review key theory points on day of use of waders.</p> <p>PPE: A flotation device (e.g. inflatable life jacket) must be worn wherever there is a chance of the waders filling with water, and may be worn at all other times - it is recommended that waders not be used in a boat, particularly in fast flowing waterways. The use of chest waders is discouraged if thigh waders suffice. Neoprene waders are preferred for electric fishing. Avoid the use of waders in large, fast flowing rivers.</p>	
371	Wasp nest poisoning with Actellic or Permex dust	Exposure to toxin through ingestion, inhalation or skin absorption	<p>Management Controls: No person with a certified allergy is to undertake this task.</p> <p>Minimum Competencies: Current first aid certificate. Meet requirements of section 1.4 for supervision in Safe handling of Pesticides SOP.</p> <p>Work Instructions: Poison to be applied with spoon on an extended stick, puffer or compressed air (application by tube in the mouth not permitted). Use according to product label instructions for wasp control. Carry product label, MSDS and wasp 1st aid kit at all times (incl epi-pen). Radio to be carried at all times. . Refer to EPA controls for actellic dust, docdm-286239.</p> <p>PPE: Safety clothing to include overalls, dust mask & gloves.</p>	
480	Wasp, bee, insect stings	Allergic reaction, anaphylactic shock etc.	<p>Management Controls: Identify areas of possible wasp activity. Identify allergies within team members</p> <p>Minimum Competencies: Competent team members and team leader who either inform or check with other team members.</p> <p>Work Instructions: Specific prescribed anti-histamines to be carried by any individuals with a known history of allergic reaction. Identify at risk team members at staff briefing - allergies, likely reactions, appropriate medication and treatment prior to departure. Use caution near any beehives, if on foot stay away from hives. Where possible avoid areas or times of year when wasp activity is high.</p> <p>PPE: N/A unless advised by Team Leader</p>	<p>First aid kits contain epipens and antihistamine</p> <p>Staff are to carry a radio and cell phone at all times</p> <p>Staff members emergency contact details and allergies are recorded and accessible to Operations Manager and Team Leaders</p> <p>Team Leader to check team members who have known reactions and check they carry necessary medication</p> <p>Overalls or long trousers are worn in areas where beehives and wasps are present</p> <p>Proerties with beehives are marked on maps with an asterisk and critical information regarding that property is on the back of the map</p>

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
2824	Weedeater use	Has a small engine (under 45cc) often with a flexible bar and drive a flail/whip cord and are used to clear grass, and very small veg up to 5mm. Risk - mainly around eye protection from flying debris	<p>Management Controls: Minimum of 2 people on the task if there is risk (i.e. steep terrain, wasps in area). Radio communication available at all times, and first aid kit containing eye wash</p> <p>Minimum Competencies: Trained and assessed by DOC assessor</p> <p>Work Instructions: Minimum of 2 people on the task if there is risk (i.e. steep terrain, wasps in area). Radio communication available at all times, and first aid kit containing eye wash. Ensure correct safety gear is being used. Check area prior to start up for hidden objects (use Job Safety Analysis). Safe working distance from other staff. Appropriate signage.</p> <p>PPE: Safety gear including sturdy boots, visor and/or goggles/safety glasses with class 3 hearing protection, chainsaw pants, chaps or apron.</p>	
1456	Winches/Tirfor (Vehicle & Hand winches)	Risks associated with using vehicle (any) & hand winches being attached to logs and a (dead man) or anchor point. Potential of crushing blows and cuts.	<p>Management Controls: Check cables for frays or wear</p> <p>Minimum Competencies: Experienced person. Competent to change cotter pins in the field if required.</p> <p>Work Instructions: Vehicle & hand winches / cables must be fitted to approved anchor points on vehicles. Where no anchor point is present the rope or chain must be fitted securely around the chassis or axle using the main rope or a short strop or chain that has the capability to withstand the strain. Select good strong dead man or anchor points. Wherever possible bury deadman in a T shape in the direction of the intended pull. Check cables for frays or wear on abrasive rocks and place log or wood under rope, remove bends and kinks in the rope + carry spare cotter pins. Winches need to be sufficient to pull the combined weight of vehicle and additional friction of the stuck vehicle. Stand well clear and watch for rope failure / slip / sudden jerks causing additional strain on winch & /or rope. Use strong rope or chain / bolt or D bolt type connector or joiners attached the winching set -up. If vehicle is not able to move call for additional help or another vehicle. Inspect vehicle & hand winches & cables regularly for frays or wear, prior to taking the strain. All personnel to stand well clear.</p> <p>PPE: Gloves when checking cables</p>	
583	Woodchippers	Getting clothing caught. Feeding lengths into. Noise. Flying chips	<p>Management Controls: No loose clothing in operation</p> <p>Minimum Competencies: Competent in use as determine dby Manager, or under supervision of soemone who is. On-site briefing.</p> <p>Work Instructions: Care when feeding lengths into chipper. Feed and step away. Ensure guards are in place. Do not feed short timbers into machine using hands - use a push stick. Do not allow public or other employees to stand around chipper in use without ear or eye protection (cordon off if necessary). If chipper jams, turn off, wait for moving parts to stop before clearing.</p> <p>PPE: Wear proper hearing and eye protection.</p>	

Hazard Management

ID	Hazard Title	Hazard Description	Master Controls	Local Controls (plan specific)
584	Work around trees/ banks	Falls, crushing	<p>Management Controls: Staff awareness of safe operations. Identify areas of concern.</p> <p>Minimum Competencies: Competent person</p> <p>Work Instructions: Check for hazards before and during work. Do not work under or on steep banks alone. Use harness if appropriate. Appoint Team Leader</p> <p>PPE: Where assessed, hard hats to be worn</p>	
585	Working alone	Injury, lack of assistance and/or treatment, lost	<p>Management Controls: Decide whether person should be accompanied by second person. Maintain scheduled radio times and always leave intended locations/routes and ETA at base.</p> <p>Minimum Competencies: Trained in task(s) being undertaken and competent to work alone. Trained in radio use</p> <p>Work Instructions: At all times carry radio, EPLB and/or satellite phone, or other suitable communication in remote locations. Maintain scheduled radio times and always leave intended locations/routes and ETA at base. Check weather. Carry a first aid kit.</p> <p>PPE: As directed by Team Leader</p>	
459	Workshop appliances/hand held power tools	Cutting, electrocution, entanglement, hearing damage, eye injuries, dust inhalation	<p>Management Controls: Annual check of all appliances cords and RCDs. All equipment safety features are to be in place and used. Use all equipment in accordance with manufacturers specifications.</p> <p>Minimum Competencies: Trained to relevant standard and assessed as competent. Mentor inexperienced personnel.</p> <p>Work Instructions: All machinery to be well maintained and checked prior to use, and tagged. All equipment safety features are to be in place and used. Use all equipment in accordance with manufacturers specifications. Workshop well ventilated.</p> <p>PPE: PPE to be worn including hearing and eye protection where appropriate.</p>	