


<b>HIRAC No.:</b>	HIRAC-ENV-003	<b>Activity:</b>	Bushcare volunteers undertaking environmental restoration activities				
<b>Location:</b>	WSC Bushcare/Rivercare Sites – various locations			<b>Author:</b>	K. Guymer	<b>Date:</b>	13/08/2018
<b>Consulted with:</b>	J. Slattery, J. Reiman, M. Raven, E. Bennetts, R. Hallowell, M. Lindsay			<b>Approved:</b>	B. Arthur 	<b>Date:</b>	15/08/2018

Risk Assessment Matrix (Risk Rating)		CONSEQUENCES (C)				
		1	2	3	4	5
		Minor/No treatment	First Aid treatment	Significant injury	Major injury	Fatality
LIKELIHOOD (L)	<b>A</b> Almost Certain	MEDIUM	HIGH	HIGH	EXTREME	EXTREME
	<b>B</b> Likely	MEDIUM	MEDIUM	HIGH	HIGH	EXTREME
	<b>C</b> Possible	LOW	MEDIUM	HIGH	HIGH	HIGH
	<b>D</b> Unlikely	LOW	LOW	MEDIUM	MEDIUM	HIGH
	<b>E</b> Rare	LOW	LOW	MEDIUM	MEDIUM	HIGH

**Assessment Rating**

**Extreme** - Immediate action-stop prevent the activity  
**High** - Initiate treatment immediately **or within 1 day**  
**Medium** - Initiate treatment as soon as possible or 2 week  
**Low** - Monitor or do by an agreed date

**Hierarchy of Control Measures:** How can the frequency, duration or severity of the hazard be reduced?

- Elimination
- Substitution
- Isolation
- Engineering-structural change to environment or process
- Administrative-(alter procedures, provide instruction)
- Personal protective equipment (PPE)

Job Steps Break down the activity into separate job steps	Potential Hazards What can happen and how	Consequences (1 - 5)	Likelihood (A - E)	Risk Rating Score	Control Measures / Treatment	Consequences (1 - 5)	Likelihood (A - E)	Risk Rating Score	When is it to be done?	Responsible Officer (RO) Makes sure it happens
Pre-start assessment	Exposure to inclement weather e.g. too windy; too wet; too hot; too cold; Fire Danger Rating (FDR) Extreme or higher or TOBAN (Total Fire Ban) announced by NSW RFS	3	C	H	Check weather forecast. Check FDR and TOBAN during the Bush Fire Danger Period (BFDP) prior to the working bee. Cancel working bee if needed. Check mobile phone battery. Advise volunteers in advance by email / phone; If some volunteers cannot be contacted attend site and advise / erect signage.	1	C	L	Prior to or on arrival	Bushcare Team Member or Buschare convener
Site establishment	Hazards do not get identified / assessed	4	C	H	Complete TAKE 5 prior to commencing every Bushcare session. Document any new hazards not previously identified. Check mobile phone signal and battery status Know your own capabilities and work within them Assess stability of site for combination of terrain, work method and weather	3	D	M	Arrival on site	All workers / volunteers

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	Collisions between vehicles and pedestrians	5	B	E	Maintain public exclusion zones around moving vehicles and plant; set up worksite signs and safety zones / barriers, if required.	4	D	M	Arrival on site	Bushcare Team Member or Buschcare convenor
	Sprains and strains from erecting signs, temporary barriers and other control measures.	2	C	M	Use team lift, or mechanical aids to load and unload materials, Avoid over stretching, bend at knees, raise load with legs, team lift when lifting heavier materials, maintain a good posture and keep load close to body.	1	C	L	Whilst on site	Bushcare Team Member or Buschcare convenor
	Exposure to extreme weather conditions	3	C	H	Cancel if too extreme (see first line in table). Wear appropriate PPE e.g. wide brim hats, sunscreen and sunglasses for hot conditions and jackets and gloves for cold conditions. Maintain and keep hydrated.	1	C	L	Whilst on site	All workers / volunteers
	Bites / stings / scratches from flora and fauna	3	C	H	Participate in site inspection to identify potential environmental hazards; Know the location of First Aid kit; have mobile phone available. Do not approach or handle any fauna found on site and if fauna appears injured or dead report the situation to the Bushcare Team or Animal Rescue Organisation for direction.	2	D	L	Arrival on site	All workers / volunteers
	Cuts and scratches	2	B	M	Inspect site and material being handled for any potential hazards, Wear appropriate PPE.	2	D	L	Arrival on site	All workers / volunteers
	Slips trips and falls from obstacles on ground	4	B	H	Visual inspection of work area to identify trip hazards; Wear appropriate PPE. Use safest route to work site.	4	D	M	Arrival on site & while on site	All workers / volunteers
Bush Regeneration and maintenance activities	Exposure to extreme weather conditions	3	C	H	Cancel if too extreme (see first line in table). Limit duration of exposure to extreme weather conditions by moving around site e.g. work in shade in summer and sunny areas in winter.	1	C	L	Whilst on site	All workers / volunteers
	Sprains and Strains from lifting materials equipment and debris;	3	C	H	Apply manual handling techniques, where possible use mechanical aids, rotation of	3	D	M	Whilst on site	All workers / volunteers

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	and treating weeds				repeated tasks; avoid over stretching, bend at knees, raise load with legs, team lift when lifting heavier materials, maintain a good posture and keep load close to body.					
	Slips trips and falls	4	B	H	Use safest route to worksite, avoid obstructing the path. Check stability of hand / foot holds before using them to access / egress sites Don't work alone on steep slopes Don't use body as counterweight when removing weeds	4	D	M	Whilst on site	All workers / volunteers
	Cuts and scratches from vegetation and other objects	2	A	H	Wear appropriate PPE for working in bushland / natural areas Leave space in front and behind when walking/ working through bushy areas Note location of plant stakes to avoid injury.	2	C	M	Whilst on site	All workers / volunteers
	Cuts and scratches from collecting and bagging rubbish or finding sharps on site	3	B	H	Always wear appropriate gloves when picking up rubbish; never handle sharps (needles) if encountered. Report sharps to Bushcare Team for disposal.	3	D	M	Whilst on site	All workers/ volunteers
	Bites / stings / scratches from flora and fauna	3	C	H	Continually monitor site for hazardous flora and fauna. Do not approach or handle any fauna found on site and if fauna appears injured or dead report the situation to the Bushcare Team or Animal Rescue Organisation for direction. Wear appropriate PPE if needing to handle flora or fauna for safety reasons. Know location of First Aid kit; have mobile phone available.	2	D	L	Whilst on site	All workers / volunteers
	Allergic reaction from flora or fauna eg bee stings	5	D	H	Continually monitor site for hazardous fauna and flora. It is up to the individual (staff or volunteers) to ensure they have the necessary medical supplies such as an EpiPen or antihistamines if at risk of anaphylactic or allergic reaction.	2	C	M	Arrival on site	All workers / volunteers

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	Chemical exposure	3	C	H	Only apply chemicals using application bottle or dabber. Follow current Safety Data Sheet (SDS) label / off-label instructions, wash hands and face with clean water and soap after any exposure or spill and be aware of location of spill kit.	2	D	L	Whilst on site	All workers / volunteers
	Inhalation of dust or skin exposure from using fertiliser, potting soil media or dust generated by works	3	C	H	Follow SDS; wear PPE; monitor wind conditions and co-worker locations; wash hands and face with clean water and soap after any exposure.	2	D	L	Whilst on site	All workers / volunteers
	Falling into water (creeks dams and rivers) from land	5	D	H	Never work alone on edges/banks of water bodies; Check waterway edge for softness or overhangs (eg undercut banks). Only competent swimmers to work near water.	4	E	M	Whilst on site	All workers / volunteers
	Falling from heights e.g. cliff / quarry edge	5	C	H	Avoid working near cliff edges where possible, assess terrain for stability for eg slippery/loose surface and always keep a minimum of 1.5 body lengths (>2.5m) distance from cliff edges.	4	E	M	Whilst on site	All workers / volunteers
	Injury from falling tree branches	4	C	H	Look for tree hang ups in work area/s Avoid working under tree hang ups where practical Don't pull vines from tree canopy Don't work under trees in strong winds.	3	D	M	Whilst on site	All workers / volunteers
	Abuse or aggression from member of public	2	C	M	Avoid engaging with abusive or aggressive people; direct them to council staff member e.g. Bushcare team, or advise they contact council; consider relocating to another site or suspend activities; lodge Incident Report	1	E	L	Whilst on site	All workers / volunteers
Operating battery powered drills and manually operated hand tools, shovels, wheelbarrows etc.)	Sprains and strains from using tools and equipment	3	C	H	Use a team lift when lifting heavier items; maintain good posture when working and take regular breaks; use correct, well maintained tools for the job; use appropriate PPE for the job	3	D	M	Whilst on site	All workers / volunteers
	Eye injury or inhalation of dust from falling or flying debris	4	C	H	Wear correct PPE e.g. safety glasses and / or visor; Suspend work in forested areas if strong winds develop or if dust is being	3	D	M	Whilst on site	All workers / volunteers

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					whipped up by wind					
	Electric shock from faulty battery powered tools e.g. cordless drill	4	C	H	Ensure battery pack is not damaged; do not short out battery terminals.	3	D	M	Whilst on site	All workers / volunteers
	Cuts and scratches from battery powered drill	2	C	M	Wear correct PPE e.g. eye protection and appropriate gloves (tight fitting)	2	D	L	Whilst on site	All workers / volunteers
	Cuts, lacerations or puncture wounds from hand tools	2	C	M	Use only well maintained tools / equipment appropriate to the job; use correct PPE;	2	D	L	Whilst on site	All workers / volunteers
	Noise from machinery and equipment	3	C	H	Work away from noisy machinery; wear correct PPE if it is necessary to work near noisy machinery e.g. earmuffs / ear plugs	3	D	M	Whilst on site	All workers / volunteers
	Injuries to eyes and hands from plant guard stakes	3	B	H	Hammer stakes level with top of plant guard where possible; use appropriate PPE suspend activity if ground is very hard to avoid splintering stakes	2	C	M	Whilst on site	All workers / volunteers
Emergency situation	Uncoordinated response to emergencies could lead to increased risk of accident or loss of life	5	C	H	Understand Emergency Response Plan; Know where it is located.	4	D	M	If required	All workers / volunteers
Site disestablishment	Slips trips and falls from obstacles on ground	4	B	H	Visual inspection of work area to identify trip hazards Erect safety signage if required	4	D	M	Leaving site	All workers / volunteers
	Sprains and strains from removing signs and other control measures	3	C	H	Do not carry too many signs at once, make multiple trips instead; Use a team lift when removing heavy / awkward items; Consider use mechanical aids	3	D	M	Leaving site	Bushcare Team Member or Buschare convenor