

Workplace Health and Safety Management Plan

Provided to:

Commonwealth Environmental Water Office

for

Monitoring, Evaluation and Research

Lower Lachlan river system Selected Area

Version WHS 202.1

WHS Management Plan

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1. Project details and introduction

Organisation Details	
Business/Trading name	Faculty of Science and Technology, University of Canberra
ACN/ABN	633 873 422
Contract Job Number	TBA
Authorising Person	Professor Eileen McLaughlin
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The following table sets out a brief description of the work to be carried out by University of Canberra and project team institutions during the course of the Lachlan river system Selected Area Monitoring, Evaluation and Research Project managed by Fiona Dyer.

Date	Description of Works	No of Employees (inc subcontractors)
July 2019 – July 2022	Fish monitoring (including riverine and larval fish, microcrustaceans, turtles and decapods) Frogs and tadpole monitoring Waterbird monitoring (breeding and diversity) Water quality monitoring (including stream metabolism) Hydrology (riverine and wetland) Vegetation monitoring	Total = 13 – 16 (including project leads, researchers and technical assistants)

The table below identifies the designated person with ultimate responsibility for the management of workplace, health safety and environment for the Monitoring Evaluation and Research Project: Lachlan river system Selected Area.

Name	Contact Details
Fiona Dyer	fiona.dyer@canberra.edu.au Mob: 0429 949 121

The external project team institutions intended to be used on this site are:

Business	Contact Details
New South Wales DPI Fisheries	Jason Thiem jason.thiem@dpi.nsw.gov.au Mob: 0408 327 528
University of New South Wales	Kate Brandis kate.brandis@unsw.edu.au Mob: 0431 242 396
New South Wales Office of Water	Patrick Driver Patrick.Driver@water.nsw.gov.au Mob: 0427 406 949
Charles Sturt University	Andrew Hall ahall@csu.edu.au Mob: 0423 459 987

University of Canberra will ensure that the above mentioned project team institutions will provide SWMS for their specialised work, and that University of Canberra shall review the SWMS, and append the SWMS to this Plan. If they are an employer, University of Canberra will also ensure that evidence relating to a current workers compensation policy is provided.

Name of authorising person: Professor Eileen McLaughlin (Executive Dean, Faculty of Science and Technology, University of Canberra)

Signature: 
Date: 24 May 2019

2. Document Control

University of Canberra

- Maintains an up to date version of this WHS Management Plan.
- Retains all obsolete pages of the Plan for a minimum of 7 years to demonstrate a record of WHS management practices.
- Provides a copy of the current version of the WHS Management Plan to Commonwealth Environmental Water Office.
- Reviews the Plan on annual basis.
- Ensures all amendments to the Plan are recorded in the Register of Amendments.

Register of Amendments					
Date	Page/Form No.	Version No.	Description of Amendments	Prepared by	Approved by

Distribution Register			
Version No.	Date of Issue	Name of Recipient	Position / Organisation
WHS-202.1		Commonwealth Environmental Water Office area leader	Monitoring and Evaluation Section Commonwealth Environmental Water Office

3. Objectives and targets

University of Canberra has established the following objectives and targets to support and maintain the effectiveness of the WHS Management Plan.

Planning

Objective:

Employees are provided with regular and up-to-date information on WHS for the duration of the contracted/agreed works.

Target:

Review the content of the WHS Management Plan 6-monthly intervals to maintain the currency of information provided to Commonwealth Environmental Water Office.

Risk Management

Objective:

Employees are familiar with hazards and risks associated with the contracted/agreed works that are assessed as a medium to high risk.

Target:

Risk Assessment(s) or the equivalent list cover, as a minimum, those hazards and risks associated with the contracted/agreed works that are assessed as a medium to high risk.

Consultation

Objective:

Employees are regularly consulted on matters that affect WHS.

Target:

Regular email and phone contact between project team institution leads.

Training

Objective:

Employees are provided with training to enable work practices to be undertaken that are safe and minimise risk to the environment.

Target:

All employees involved with the contracted/agreed work have undertaken as a minimum the three levels of induction training, i.e. general industry (safety awareness) training, site specific training and work activity training as noted in the Risk Assessment(s) specific to the contracted/agreed works.

4. WHS Policy

The University of Canberra Health and Safety Policy defines the principles of the health and safety commitment of the University of Canberra and its approach to the continuous improvement and compliance of health and safety in the workplace. This policy document is attached at the end of this plan.

5. Hazard identification, risk assessment and control

University of Canberra will not commence work unless:

- University of Canberra and the project team institutions have undertaken an assessment of the risks associated with the work activities and prepared a written Risk Assessment; and
- University of Canberra or project team institutions (as appropriate) have provided relevant induction training to all employees.

Risk assessments for each monitoring task will be prepared, maintained and updated by the responsible project team institution (outlined in section 7 below). The University of Canberra will maintain and update a compiled / overarching risk assessment.

Project team institution leads will identify the potential hazards of the proposed work activities, assess the risks involved and develops controls measures to eliminate, or minimise, the risks.

The risk management process is carried out in consultation with employees. University of Canberra is responsible for maintenance, oversight and enforcement of this process and roles.

5.1. Identifying Hazards

University of Canberra in consultation with project team institution leads will breakdown specific work activities into job steps to assist in identifying all potential hazards.

The risk management process includes:

1. Identification of a hazard
2. Identification of the associated risk
3. Assessment of the risk which includes:
 - The likelihood
 - The consequence
 - Assigning a priority for rectification
4. Control the risk using a hierarchy of control measures consisting of (in order of preference):
 - Elimination
 - Substitution
 - Isolation
 - Engineering controls
 - Administrative controls (SOPs, training)
 - Personal Protective Equipment
5. Documentation of the process
6. Monitoring and review of the process.

These work activities are detailed in a task specific Risk Assessment. The Risk Assessment is a list of job steps and other work related practices. For each of the work activities and associated job steps identified in the Risk Assessment, University of Canberra in consultation with project team institution leads has identified potential hazards and their risks.

To assist in identifying hazards and risks, University of Canberra in consultation with project team institution leads has considered the use of resources such as codes and standards, industry publications (i.e. safety alerts; hazard profiles for specific trade groups), workplace experience and consultation (i.e. Toolbox Talks).

5.2. Assess Risks

University of Canberra in consultation with project team institution leads has identified a risk class/ranking for potential workplace hazards by referring to the categories ranging from high to low in a Risk Matrix.

6. Personal Protective Equipment (PPE)

University of Canberra and project team institutions maintain all PPE supplied to employees where such PPE is specified as a control measure in the Risk Assessment. University of Canberra and project team institutions will ensure all items of PPE are manufactured, used and maintained in accordance with the relevant Standard. Proof of Standard compliance will be provided, e.g. labelling. Each employee will be instructed and trained in the correct use of the PPE issued.

7. Roles and Responsibilities

University of Canberra and project team institutions will provide the following key trained and competent personnel:

Employee Name	Position	Contact Details
Fiona Dyer	Project lead; hydrology; Water Quality	fiona.dyer@canberra.edu.au ph: 02 6201 2452 mob: 0429 949 121
Ben Broadhurst	Project delivery; larval fish	ben.broadhurst@canberra.edu.au ph: 02 6206 8608 mob: 0423 363 636
Jason Thiem	Riverine fish	jason.thiem@dpi.nsw.gov.au ph: 02 6958 8219 mob: 0408 327 528
Ross Thompson	Stream Metabolism	ross.thompson@canberra.edu.au ph: 02 6201 5041
Will Higginson	Vegetation	will.higginson@canberra.edu.au mob: 0412 945 730
Kate Brandis	Waterbirds (breeding; diversity)	kate.brandis@unsw.edu.au Mob: 0431 242 396
Andrew Hall	Frogs and tadpoles	ahall@csu.edu.au mob: 0423 459 987

8. Training and Competencies

Having regard to the hazards and risks associated with the work activity, University of Canberra and project team institutions will assure that all employees are trained and competent to perform all tasks in a way that is safe and does not adversely impact on themselves, others or the environment. Institutional requirements on training to be provided will be outlined in SWMS (attached below), however, some generic training that will be undertaken is outlined in the table below.

Training required for field-based work

Training details	Indicator	Date of Completion	Staff required to undertake
Senior first aid	All (field based work)	End July 2019	All*
Electrofishing principals	Fish (riverine & wetland)	End July 2019	Field trip leaders - Martin Asmus; Ben Broadhurst
Current drivers licence	All	End July 2019	All those who will drive a vehicle
4wd training	All (field based work)	End July 2019	All**
Boat licence	Fish (Larval, riverine & wetlands); frogs & tadpoles	End July 2019	All persons operating a boat

* At least one member of a field party must have current senior first aid qualifications.

** Drivers of 4wd vehicles must have 4wd operational training.

9. Consultation

University of Canberra and project team institutions promote the active participation of all team members in WHS decisions. Team members will be consulted and given opportunity, encouragement and training to be proactively involved in WHS matters affecting the MER Project and their work activities. Consultation will occur in reference to, but not limited to, the following subjects / topics:

- hazard identification and risk assessment processes;
- control measures for the management of hazards and risks; and
- WHS performance measures.

10. Hazardous substances/dangerous goods on site

University of Canberra and project team institutions will provide a current (within 5 years of the date of issue) MSDS to the principal Contractor (Commonwealth Environmental Water Office) for all products and substances to be used for the work activity. Products identified for the project so

far are listed in the Hazardous substances / dangerous good register (below). Specifically these are:

- Petroleum (used to power outboard motors and generators)
- Diesel (used to power 4WD vehicles)
- Ethanol (used to store fish samples)
- Four-stroke oil (for generators)
- Two-stroke outboard oil (for outboard motors)

Before a product or substance is used for the work activity, University of Canberra and project team institutions will review the Material Safety Data Sheet (MSDS) to determine if the product or substance is classified as hazardous. All employees involved in the use of products classified as hazardous, are provided with information and training to allow safe completion of the required task. As a minimum standard, all safety and environmental precautions for use listed on the MSDS are followed when using the substance and are included in the Risk assessment. No products or substances, including chemicals or fibrous materials, are brought to the workplace without a current MSDS. All products and substances to be brought to the workplace are to be documented on a hazardous substance/dangerous goods register (below).

Hazardous substance / dangerous goods register

Product Name	Application	Quantity	Product labelled		SDS	
Unleaded petrol	Power boat; generator	<25L	Yes X	No <input type="checkbox"/>	Yes X	No <input type="checkbox"/>
Diesel	4WD	<150L	Yes X	No <input type="checkbox"/>	Yes X	No <input type="checkbox"/>
100% Ethanol	Preserving fish samples	<20L	Yes X	No <input type="checkbox"/>	Yes X	No <input type="checkbox"/>
4 stroke generator oil	For 4-stroke engines	<2L	Yes X	No <input type="checkbox"/>	Yes X	No <input type="checkbox"/>
Outboard 2 stroke oil	For 2-stroke engines	<2L	Yes X	No <input type="checkbox"/>	Yes X	No <input type="checkbox"/>

University of Canberra and project team institutions consider the following when selecting chemicals and substances for use on site:

- Flammability and exclusivity;
- Toxicity (short and long term);
- Carcinogenic classification if relevant;
- Chemical action and instability;
- Corrosive properties;
- Safe use and engineering controls;
- Environmental hazards; and
- Storage requirements.

All storage and use of hazardous substances and dangerous goods is in accordance with the MSDS and legislative requirements. All hazardous substances and dangerous goods are stored in their original containers with the label intact at all times. Hazardous substances and dangerous goods of any quantity are not stored in amenities, containers (unless properly constructed for the purpose), sheds or offices.

11. Electrical equipment on site

University of Canberra and project team institutions will ensure that the use of electrical wiring, equipment, portable tools and extension leads is in accordance with applicable codes and standards. University of Canberra and project team institutions will ensure that all electrical equipment brought on site is listed on the Electrical Equipment Register below. The register is completed prior to commencement of the works and maintained for the duration of the works on site. All electrical equipment including leads, portable power tools, junction boxes and earth leakage, or residual current, devices is inspected and tested by a suitably qualified person and labelled with a tag of currency before being used on site.

Electrical equipment register

Equipment Description	Plant / Serial No.	Date of Inspection/ Test	Date of next Inspection/Test
University of Canberra - SmithRoot backpack electrofisher	F00213	March 2019	March 2020
University of Canberra - SmithRoot boat mounted electrofisher	29821	March 2019	March 2020
NSW DPI: Electrofishing vessel "AC/DC", 7.5GPP	305470	18 February 2019	18 February 2020
NSW DPI: Electrofishing vessel "Fish Magnet", 7.5GPP	AU-WWA135510 DF7	18 February 2019	18 February 2020
NSW DPI: Electrofishing vessel "ASP", 2.5GPP	A\WWWA-128683	18 February 2019	18 February 2020
NSW DPI: Backpack Electrofisher, Smith-Root LR 24	SRI07229	18 February 2019	18 February 2020

12. Hazard and Incident Reporting and Investigation

12.1. Hazards

University of Canberra and project team institutions require all team members to report hazards immediately to the Project supervisor (Fiona Dyer – University of Canberra). Where the hazard cannot be corrected immediately, University of Canberra and project team institutions will record the details of the hazard in the Hazard Register. University of Canberra and project team institutions will investigate all reported hazards and implements control measures to eliminate and/or minimise the likelihood of an incident or injury. University of Canberra and project team institutions will regularly review and evaluate the effectiveness of control measures until the hazard is addressed and/or all risks have been mitigated or reduced. University of Canberra will issue a copy of any completed Hazard Report form to the Commonwealth Environmental Water Office, as required.

12.2. Incidents

All injuries to, or disease in any person that is caused as a result of operations that arose from any undertaking of the University of Canberra and project team institutions, including traveling between a person's residence and work must be reported. This includes:

- Any workplace incident
- Any workplace incident where the safety of a person (including an employee, student, contractor or visitor) was placed at risk
- The occurrence of any injury (psychological or physical)
- Hazards or near misses (i.e. events which have the potential to cause any of the above outcomes).

12.3. Incident Investigations

University of Canberra will complete an Incident Investigation Report in the event of any injury involving medical attention or off site treatment or in the event of any incidents involving a near miss, property/plant damage or injury to the public or the environment.

The Commonwealth Environmental Water Office will be informed immediately in the event of the above. Following discussions with the Commonwealth Environmental Water Office, a decision will be made as to who will conduct the incident investigation. The Commonwealth Environmental Water Office will be provided with a copy of the completed Incident Investigation Report.

12.4. Notifiable Incidents

University of Canberra and project team institutions will report all notifiable incidents to the relevant Authority.

Where such an incident has occurred, University of Canberra and project team institutions will consider whether the site needs to be preserved for investigation by the relevant Authority.

12.5. Record Keeping

University of Canberra will keep records of incidents and injuries in accordance with statutory requirements.

13. **Reference Documents** (held at University of Canberra and can be provided upon request)

Document #	Document Name:
n/a	<u>University of Canberra:</u> Workplace Health and Safety Policy
n/a	<u>University of Canberra:</u> Job Safety Analysis: Larval fish sampling
n/a	<u>University of Canberra:</u> Job Safety Analysis: Boat electrofishing
n/a	<u>University of Canberra:</u> Job Safety Analysis: Fish netting
n/a	<u>University of Canberra:</u> Job Safety Analysis: Vegetation survey and stream metabolism download
SCI-BEES-RMF-2910	<u>University of New South Wales:</u> Risk Management form – Wetland Survey of Waterbirds
n/a	<u>University of New South Wales:</u> Safety Management Plan
n/a	<u>Charles Sturt University:</u> Institute of land, Water and Society - Fieldwork Risk Assessment: Frog and Tadpole surveys
n/a	<u>NSW DPI Fisheries:</u> Document - Health, safety and environment systems overview
n/a	<u>NSW DPI Fisheries:</u> SWMS - Driving a motor vehicle
n/a	<u>NSW DPI Fisheries:</u> SWMS - Refuelling
n/a	<u>NSW DPI Fisheries:</u> SWMS - Operation of canoe, kayak or rooftop dinghy
n/a	<u>NSW DPI Fisheries:</u> SWMS - Operation of watercraft less than six metres
n/a	<u>NSW DPI Fisheries:</u> SWMS – Trailer towing

n/a	<u>NSW DPI Fisheries:</u> SWMS - Manual Handling
n/a	<u>NSW DPI Fisheries:</u> SWMS - Field Work
n/a	<u>NSW DPI Fisheries:</u> SWMS – Fishway trapping and working around weirs
n/a	<u>NSW DPI Fisheries:</u> SWMS - Backpack Electrofishing
n/a	<u>NSW DPI Fisheries:</u> SWMS - Boat Electrofishing
n/a	<u>NSW DPI Fisheries:</u> SWMS - Using netting equipment
n/a	<u>NSW DPI Fisheries:</u> SWMS – Chainsaw operation
n/a	<u>NSW DPI Fisheries:</u> SWMS - Laboratory work
n/a	<u>NSW DPI Fisheries:</u> SWMS - Use of hazardous chemicals
n/a	<u>NSW DPI Fisheries:</u> SWMS – safe handling of fish including tagging, preservation of samples and euthanasia
n/a	<u>NSW DPI Fisheries:</u> SWMS – Safe operation of gantry crane and electric hoist
n/a	<u>NSW DPI Fisheries:</u> SWMS – Safe operation of power tools
n/a	<u>NSW DPI Fisheries:</u> SWMS – Recharging batteries
n/a	<u>NSW DPI Fisheries:</u> T&I Work health and safety Policy
n/a	<u>NSW DPI Fisheries:</u> T&I WHS framework_ Standard-1-Leadership-and-Accountability
n/a	<u>NSW DPI Fisheries:</u>

	T&I WHS Framework_Standard-2-Legal-Requirements
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-3-Strategy,-Objective-and-Targets
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-4-Risk-Management
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-5-Communication,-Consultation-and-Engagement
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-6-Incident-Management
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Safety-Standard-11-Document-Control-and-Records-Management
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-12-Health-and-Wellbeing
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-13-Monitoring,-Audit-and-Reporting
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-14-Preventive-and-Corrective-Actions
n/a	<u>NSW DPI Fisheries:</u> T&I WHS Framework_Standard-15-Measurement,-Verification-and-Review
n/a	<u>NSW DPI Fisheries:</u> Critical-Risk-Control-Driving
n/a	<u>NSW DPI Fisheries:</u> Critical-Risk-Control-Fatigue
n/a	<u>NSW DPI Fisheries:</u> Biosecurity
n/a	<u>NSW DPI Fisheries:</u> Aquatic fieldwork hygiene – standard procedure PRO-20129
n/a	<u>NSW DPI Fisheries:</u> Electrofishing procedures
n/a	<u>NSW DPI Fisheries:</u> Electrofishing training schedule

n/a	<u>NSW DPI Fisheries:</u> Fact sheet watercraft safety induction
n/a	<u>NSW DPI Fisheries:</u> Watercraft log
n/a	<u>NSW DPI Fisheries:</u> Watercraft safety checklist
n/a	<u>NSW DPI Fisheries:</u> Watercraft safety emergency preparedness
n/a	<u>NSW DPI Fisheries:</u> Safe operation of watercraft 06
n/a	<u>NSW DPI Fisheries:</u> Critical-Risk-Control-Working-on-watercraft
n/a	<u>NSW DPI Fisheries:</u> Risk Register
n/a	<u>NSW DPI Fisheries:</u> NSW DPI Aquatic Fieldwork Hygiene SOP
n/a	<u>NSW DPI Fisheries:</u> NSW DPI Electrofishing Procedure
n/a	<u>NSW DPI Fisheries:</u> NSW DPI Electrofishing Training Schedule
n/a	<u>NSW DPI Fisheries:</u> NSW T&I Work health and safety strategy
n/a	SDS Diesel
n/a	SDS Ethanol 70-100%
n/a	SDS Outboard oil
n/a	SDS Petroleum
n/a	SDS Generator oil

Supporting reference documents