## Investigating Aquatic Macroinvertebrates

**Notes:**

* Where a [CARA activity guideline](http://education.qld.gov.au/curriculum/carmg/activity-guidelines.html) exists for the activity and the minimum requirements outlined cannot be met the activity must be modified or alternative controls implemented to ensure an equivalent level of safety for staff, students and others involved.
* Where a CARA activity guideline does not exist, and when considering any other risks relevant to an activity, the [Curriculum activity risk planner](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/Managing%20Risks%20in%20School%20Curriculum%20Activities/Curriculum%20Activity%20Risk%20Planner.DOC) is to be used.

|  |  |
| --- | --- |
| Activity Description: Investigating aquatic macroinvertebrates | |
| Teachers/Leaders: Somone Boston | |
| Class groups: | Number of students: |
| Start date: 30/01/2018 | End date: 08/12/2018 |

*Use this risk assessment matrix as a guide to assess the* [*inherent risk level*](http://ppr.det.qld.gov.au/education/management/Pages/Managing-Risks-in-School-Curriculum-Activities.aspx)*. Refer to the* [*Curriculum activity risk planner*](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/Managing%20Risks%20in%20School%20Curriculum%20Activities/Curriculum%20Activity%20Risk%20Planner.DOC) *for further details.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Likelihood** | **Consequence** | | | | |
| 1 - Insignificant | 2 - Minor | 3 - Moderate | 4 - Major | 5 - Critical |
| 5 - Almost Certain | Medium | Medium | High | Extreme | Extreme |
| 4 - Likely | Low | Medium | High | High | Extreme |
| 3 - Possible | Low | Medium | High | High | High |
| 2 - Unlikely | Low | Low | Medium | Medium | High |
| 1 - Rare | Low | Low | Low | Low | Medium |

*Indicate the assessed risk level and undertake the actions required for that level of risk.*

| **Inherent risk level** | | | **Action required** |
| --- | --- | --- | --- |
|  | **Low** | Little chance of incident or injury | * Manage risk through regular planning processes. |
|  | **Medium** | Some chance of an incident and injury requiring first aid | * Document risks and controls in regular planning documents. * Manage risk through regular planning processes OR complete this *Curriculum Activity Risk Assessment*. |
|  | **High** | Likely chance of a significant incident and injury requiring medical treatment | * A *Curriculum Activity Risk Assessment* is required to be completed. * Principal or head of program (i.e. DP, HOD, HOSES) approval is required prior to conducting this activity. * Parent/carer consent is recommended. * Once approved, activity details are to be entered into the [School curriculum activity register](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/Managing%20Risks%20in%20School%20Curriculum%20Activities/School-curriculum-activity-register.docx). |
|  | **Extreme** | High chance of a serious incident resulting in highly debilitating injury | * Consider conducting an alternative activity or modifications to the activity that could achieve comparable learning outcomes. * A *Curriculum Activity Risk Assessment* must be completed. * Principal approval is required prior to conducting this activity. * [Parent/carer](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/School%20Excursions/Permission%20form%20template.DOC) consent must be obtained for student participation. * Once approved, activity details are to be entered into the  [School curriculum activity register](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/Managing%20Risks%20in%20School%20Curriculum%20Activities/School-curriculum-activity-register.docx). |

**NOTE:** If the activity is to be held off-site, parent/carer consent is required irrespective of the inherent risk level. Refer to the [School Excursions](http://ppr.det.qld.gov.au/education/management/Pages/School-Excursions.aspx) procedure for the Excursion planner template.

Planning considerations

*Incorporate the following factors when planning risk management strategies for this activity.*

**Which students will be involved?**

* The number of participants, size of student groups and students' capabilities is considered e.g. age, experience, competence, fitness, maturity.
* Any individual participant needs e.g. personalised learning, support provisions is considered (including behaviour support plans), health management (including health plans and prescribed medication requirements) that may require additional supervision ratios or identification (including uniforms, hats and/or high visibility wrist bands).

**Where will the students be?**

* The location of the activity is considered e.g. remote/easily accessible, public /private, school/classroom/workshop or other.
* The number of participants is appropriate for the available space.
* If outdoors – sunsafe strategies are implemented; weather and environmental conditions are assessed before and during activity (e.g. temperature, storms, water currents, tides); and strategies to reduce the likelihood of viruses, allergies and skin infections caused by insects (e.g. ticks, mosquitoes, spiders) and other animals are applied.
* The site is checked for hazards (e.g. poisonous plants, dangerous animals, uneven terrain, barbed wire) and necessary controls implemented.
* The nature of the activity is considered to ascertain whether safety/exclusion zones or spectator zones are appropriate.
* Activities are appropriately situated in relation to buildings, pedestrians, members of the public, vehicles and other activities e.g. designated areas for activity, spectators and vehicles are established.

**What will the students be doing?**

* The nature and duration of the activity is considered i.e. need for drinking water, food, rest, appropriate clothing, warm-up and warm-down.
* Instruction in rules, pre-requisite skills and safety procedures is provided to participants.
* Student skills are developed in a progressive and sequential manner.
* First aid and emergency medical treatment provisions are appropriate for the type of activity and location e.g. first aid kit, first aid trained personnel, Ventolin®, Epipen®, and students' personal prescribed medications as required in health plans are available.
* Emergency response strategies are in place that include, but not limited to, communication plans (e.g. mobile phone, walkie talkie), safety induction, evacuation plans.
* Hair, clothing, footwear and jewellery are worn in a manner that is appropriate and safe for the activity.
* Personal items, e.g. drink bottles, towels and mouthguards, are not shared between participants.

**What will the students be using?**

* Instruction in safety procedures and safe handling of equipment is provided.
* All equipment (including protective equipment) is suitable for the activity, properly maintained, appropriately used and complies with the relevant safety standard.
* [Relevant department procedures and guidelines](http://education.qld.gov.au/curriculum/carmg/activity-guidelines.html) are adhered to for the use of equipment, compliance of equipment and appropriate work processes.

**Who will be leading the activity?**

* A registered teacher will have overall responsibility for the activity.
* Sufficient adult supervision is in place to manage the activity safely (including in emergency situations).
* The activity leader has the expertise (formal qualifications) or competence (knowledge and skills) to plan, induct, instruct and manage the activity safely for participants and others.
* There are sufficient supervisors present with current First Aid qualifications (including CPR) or ready access to qualified first aid personnel.
* A safety induction session (including designation of roles) is conducted with all supervisors prior to the commencement of the activity outlining risk management processes and emergency response strategies for the activity.
* Supervisors are active in their supervision, visible and are readily identifiable to participants.
* Blue Card requirements are adhered to for all supervising leaders/volunteers.

**I have incorporated the above factors when planning my risk management strategies for this activity.**

**Additional activity-specific requirements for participants with specialised learning needs are provided in the Other Details box below.**

| Other Details: |
| --- |
| Minimal handling of aquatic organisms will occur with teacher supervised student instruction only collecting macroinvertebrates to visualise with microscopes or magnifying glasses |

*Where a* [*CARA activity guideline*](http://education.qld.gov.au/curriculum/carmg/activity-guidelines.html) *exists, ensure the minimum requirements are met.*

*Check if relevant Codes of Practice/Guidelines exist for each activity.*

*Consider any other information relevant to the safety of staff and students when conducting this activity and document below.*

***Where a CARA activity guideline exists:***

I have met the minimum requirements specified in the attached CARA activity guideline/s;

*OR*

For each minimum requirement not achieved I have modified the activity or provided alternative controls to ensure an equivalent level of safety as the minimum requirements in the attached CARA activity guideline/s. Information relevant to how this will be achieved is provided below in the respective boxes.

***Where a CARA activity guideline does not exist:***

I have identified the hazards and risks relevant to this activity and provided information below in the respective boxes about the risk management strategies that will be implemented to ensure the safety of students and others.

Mandatory/Special Requirements

Where hazardous chemicals are used or generated by the activity (e.g. dust, gas, fumes), complete the [Chemical Hazards in the Curriculum template](http://education.qld.gov.au/curriculum/carmg/doc/chemical-hazards-template.doc) and attach it to this risk assessment.

Note: Where the overall risk level conclusion for the use of a hazardous chemical is extreme, the activity must not proceed, as risks are not effectively controlled.

| Provide information about any mandatory or special requirements for each activity that is to occur: |
| --- |
| Host school to provide parental permission if required. |

Supervision Requirements

| Provide information about supervision for each activity that is to occur: |
| --- |
| Teacher to supervise investigation of aquatic invertebrates and use of iPads. Teacher will supervise any handling of aquatic invertebrates. Supervision ration of approximately 1:20 |

Qualification Requirements

|  |
| --- |
| Provide information about the leader/supervisor’s relevant qualifications and/or competence for each activity that is to occur: |
| Teacher - skill and competent in conducting activity |

Equipment/Facility Requirements

| Provide information about equipment/facilities for each activity that is to occur: |
| --- |
| Shallow dishes of water with natural freshwater organisms.  Microscopes - Field and Digital - used on sturdy surface  Investigation of organisms doune through use of pipettes, tweezers, microscope slides/dishes  Gloves will be available for students to use if required  Communication: at least mobile phone and/or student/adult messenger |

Hazards and Control Measures

Information on managing common hazards and risks in the school environment can be found at [Hazards and Risks](http://education.qld.gov.au/health/safety/hazards.html).

| Provide information about:   * Hazards: | * Planned control measures: |
| --- | --- |
| Shallow water dishes with aquatic organisms  Aquatic organism bites or stings  Water in eyes | Supervised use and regular monirtoring of shallow water dishes to ensure all material stays in dish. Immediate clean up of spills should they occur.  Minimal student contact with aquatic macroinvertebrates. Students instructed to keep hands out of the water and only collect organisms with equipment supplied. If sting/bite occurs apply cold compress, sting relieving solution/cream and monitor. After activity, waste material to be discarded by teacher outdoors and equipment washed.  Students instructed on safe practice around water dish. Flush eye with clean water and monitor. |

| Submitted by: | |
| --- | --- |
| Name: Somone Boston | Position: Teacher |
| Email: sxbos3@eq.edu.au | |
| Signed: | Date: 30-Jan-18 |

| Approval *(only required for high or extreme risk activities)* | | | |
| --- | --- | --- | --- |
|  | Approved as submitted | | |
|  | Approved with the following conditions: | | |
|  | Not approved for the following reasons: | | |
| By: | | Designation: | |
| Signed: | | Date: | |
| Once approved, activity details should be entered into the *School curriculum activity register*. | | | Reference No. |

| Monitoring and Review *(to be completed during and/or after the activity.)* | **Yes** | **No** |
| --- | --- | --- |
| Have additional hazards been identified? |  |  |
| Were the control measures effective? |  |  |
| Are further or different actions required? |  |  |
| Details: | | |

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