

1. Purpose

To describe how to work safely in proximity to water.

2. Scope

This procedure applies to all assets and premises owned, leased or occupied by Melbourne Water employees and contractors. It covers all types of work where there is a potential for a person(s) to fall into, or drown in, a body of water.

3. Planning

Working in proximity to water may be required for the collection of samples, investigative and maintenance works and various community engagement activities. When the need to work in proximity to water has been identified, consider alternative methods to complete the work to reduce or eliminate exposure eg:

- Submersible remote operated vehicle (ROV)
- Remotely operated bathymetric survey boats
- Floating monitoring vessels
- Auto samplers

4. Hazard and Threat Management

Whenever work is conducted in proximity to water, an assessment of hazards and threats must be completed by the person doing the work using [Good to Go](#) (or equivalent).

The assessment must cover the full scope of works being undertaken and consider:

- any potential emergency response requirements including specific rescue equipment
- the location of the work (i.e. remote or isolated)
- condition of the environment
- simultaneous operations (SIMOPS)
- the placement, movement, access and egress of plant and equipment
- the loading and retrieval of vessels

Threats to consider include, but are not limited to:

- Steep/challenging terrain
- Slippery surfaces and unstable ground (soil, rocks, mud, rock, silt, sand etc.)
- Thick vegetation, fallen trees/logs, Hanging branches/tree limbs, Unstable trees
- Fast running water and currents, discoloured water (making depth difficult to judge)
- Wildlife (snakes, stock, feral animals, wasps and other insects)
- Use of equipment (including mobile plant) and vessels
- Working at heights
- Storm or flood conditions

- Discarded syringes and other debris, water contamination
- Sewerage
- Aerated water (reduced buoyancy)
- Spray or aerosols from sewerage tanks/ponds
- Low water temperature
- Depth of waterway or water body
- Proximity to operating assets (e.g.: stormwater outlet, pump suction inlet etc.)

5. Entering Water on Foot

Before entering water on foot:

- Verify the speed of water is less than 1m/sec*. Do not enter the water if > 1m/sec
- Ensure an emergency rescue plan is in place
- Wear waders with a wader belt if the water is higher than calf deep
- Wear a Personal Floatation Device (PFD) or life jacket
- Only enter the water up to hip-depth
- Visually inspect all operational and rescue equipment prior to use to ensure it is in good condition

*1m/sec - Use something that floats throw it in the water and time it over two reference points of a known distance. Reference points could be two rocks, trees anything as long as you know the distance. This technique is used to provide a rough guide.

6. Entering Water using a Vessel

Before entering water in a vessel (boats, barges, canoes, kayaks, etc.):

- Consider the most appropriate vessel for the task taking into account water depth, access, vessel condition and crew experience and competency
- Consider site and upstream environmental conditions prior to using the vessel
- Review the Bureau of Meteorology website for flood, strong wind, gale or storm warnings

When operating a vessel:

- A minimum of two people are required to undertake all work from a powered vessel. However, one person/operator on the vessel is acceptable whilst launching or retrieving the vessel.
- The person in control of a powered boat must have as a minimum requirement - Coxswains Exemption 38 (Low Complexity Duties)
- Vessels need a:
 - certificate of survey
 - certificate of operation (or exemption)
 - safety management system
 - [Refer to AMSA for more details](#)

- When working from a non-powered vessel (ie: canoe or kayak) work should be done in pairs of vessels and each vessel must remain within eye site/verbal communication distance.

7. Working Adjacent to or Above Water

- Ensure all walkways over water have adequate edge protection fitted in accordance with [Access Covers Platforms and Walkways Standard](#)
- Where edge protection is not available then other means of fall prevention shall be used
- Where necessary, isolate operating assets in and around water or install an exclusion zone
- Only use structures specifically designed or intended for human access as walkways or work platforms
- Ensure appropriate signage and barricading is in place when platforms and walkways above water can normally be accessed by the public

8. Working in or Adjacent to Water with Mobile Plant

When using mobile plant (bulldozer, loader, excavator, truck, compactor, dumper, grader, crane etc) in or adjacent to water ensure:

- Operators of mobile plant on vessels are authorised by the master or owner of the vessel before carrying out any work.
- Mobile plant on vessels is fixed, balanced and securely anchored
- Zones where mobile plant is operating are assessed for structural stability, clearly demarcated and properly fenced off
- Anyone working in an Elevated Work Platform over water wears a PFD in addition to a safety harness or uses a safety harness that has floatation capabilities

9. Diving

- Only use diving contractors with appropriate qualifications and certification
- Where possible, a survey of the dive location shall be undertaken using a submersible ROV to aid in dive planning and reduce dive time
- A Diving Project Plan (DPP) must be prepared by the diving contractor prior to commencing all dives which contains as a minimum:
 - the method for carrying out the diving work
 - the tasks and duties of each person involved in the dive
 - the diving equipment, breathing gases and procedures to be used in the dive
 - dive times, bottom times and decompression profiles
 - emergency procedures
- Where diving is being conducted by emergency services within our assets, the manager of the area where the dive will take place must:
 - Be notified of the dive
 - Communicate any lessons learned from previous dives within the asset

- inform them of any operational hazards that may be present within the dive zone

10. Definitions

Reference	Definition
Proximity	In, immediately next to and within 1 metre of water.
Vessel	Boat (powered or not), canoe (powered or not), barge or other watercraft
Water	For the purpose of this procedure the locations in which water is found includes (but is not limited to):
Boat	Natural Waterways – streams, creeks, rivers, bays, wetlands, retarding basins, sediment pond

11. Document History

Date	Reviewed/ Actioned By	Version	Action
August 2020	SHEQ Manager Service Delivery	8	Document revised and simplified Updated into new template
September 2020	Records Administrator	9	Document reformatted into new template. No content change