# Guide to completing a Water and Wastewater Continuity of Supply & Recovery Plan

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This ‘Guide to Completing a Water and Wastewater Continuity of Supply & Recovery Plan’ contains general advice on planning for a water or wastewater interruption and a complete overview with details on each question asked in the Water and Wastewater Continuity of Supply & Recovery Plan template.

Copies of the latest version of this guide and the template can be downloaded from [**watercorporation.com.au/prepare**](https://www.watercorporation.com.au/prepare)**.**

**Sign up for water supply alerts and stay in the know about outages impacting your water supply:** [**watercorporation.com.au/supplyalerts**](https://www.watercorporation.com.au/supplyalerts)



## How to use this guide

Follow these steps to

1. **Download the ‘Water and Wastewater Continuity of Supply & Recovery Plan Template’** from [watercorporation.com.au/prepare](https://www.watercorporation.com.au/prepare).
2. **Refer to the [*italicised text*] for examples.** The *italicised text* is there to help guide you by providing suggested content and you may want to consider. It is based on a fictional business and you should delete it prior to inputting your own details. ***Please note:*** If a question does not apply to your circumstances it can be ignored and deleted.
3. **Look out for the handy tips in the breakout boxes** as they provide examples of how to complete the tables and advice on where to find further information.

**Tip: You can find handy information here.**

1. **The information regarding Continuity Strategies is general in nature**. You should consider whether the information is appropriate to **your** needs, and where appropriate, **seek** professional **advice** from a plumber of hydraulic consultant.

**[*INSERT YOUR BUSINESS LOGO*]**

[*Your Name*]

[*Your Title*]

[*Business Name*]

[*Main Business Address*]

**ABN:** [*ABN*]

**ACN:** [*ACN*]

[*Business Name*]

# Water and Wastewater Continuity of Supply & Recovery Plan

**Prepared:** [*Date prepared*]

Revision history

|  |  |  |  |
| --- | --- | --- | --- |
| Version Number | Changes made | Person responsible | Date updated |
| *[e.g. Version 1.0]* | *[Description of changes made and what prompted the changes]* | *[e.g. C. Jones]* | *[Day/Month/Year]* |

Communication strategy

|  |  |  |  |
| --- | --- | --- | --- |
| Manager/staff | Type of communication | Person responsible | Frequency |
| *[e.g. CEO]* | *[E.g. Presentation, email]* | *[e.g. C. Jones]* | *[e.g. Monthly and after each change]* |
| *[e.g. CEO]* | *[E.g. Presentation, email]* | *[e.g. C. Jones]* | *[e.g. Monthly and after each change]* |
| *[e.g. CEO]* | *[E.g. Presentation, email]* | *[e.g. C. Jones]* | *[e.g. Monthly and after each change]* |

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## The Continuity Plan

### How much water does your business use?

Understanding your water use profile is the first step to building a Continuity of Supply Plan. It will help you determine how much water you need to source if you wish to continue operating your business during an outage and will help you calculate costs for each option.

To populate the table below in your template, copy the water use information from the back of your Water Corporation bill. If you don’t receive a bill, ask you landlord for an estimate of your water usage.

Table 1: Your business water use

 **Tip: How to calculate ‘Average Daily Water Use’**:

‘Average Daily Water Use’ = ‘volume of water used’ divided by ‘days in reading period.’

E.g. For period 1, ‘Average Daily Water Use’ = $\frac{1446}{66}$ = 21.9kL

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Period** | **Reading** (numbers on dial of meters) | **Volume of water used** | **Reading Date** | **Days in Reading Period** | **Average Daily Water Use** |
| *1* | *4351* | *1446* | *23/08/2019* | *66* | *21.9 kL* |
| *2* | *8149* | *3798* | *24/10/2019* | *62* | *61.2 kL* |
| *3* | *11508* | *3431* | *19/12/2019* | *56* | *61.2 kL* |
| *4* | *17416* | *5836* | *20/02/2020* | *63* | *92.6 kL* |
| *5* | *22679* | *5281* | *23/04/2020* | *62* | *85.2 kL* |
| *6* | *24500* | *1821* | *18/06/2020* | *56* | *32.5 kL* |
| ***TOTAL*** | ***NA*** | ***21,613 kL*** | ***NA*** | ***365*** | ***59.1 KL*** |

### Water Use Profile

Using the TOTAL volume of water figure in Table 1, determine your category of water use based on the guide in Table 2. Consider this category when reviewing the Continuity Strategies section.

For example, using the data from the table above, 21,613kL is considered ‘very high’.

Note: 1000 litres is equivalent to 1 kilolitre (1 kL)

Table 2: Water use category

|  |  |
| --- | --- |
| **Water use volume per year** | **Category of use** |
| 0 – 2000 kL | Low |
| 2000 – 10,000 kL | Medium |
| 10,000 – 20,000 kL | High |
| 20,000 kL + | Very High |

### Asset Overview

Knowing where your water meter is located is useful during an outage, as you may need to access the meter to connect a water tanker or isolate it to protect your internal plumbing. Identify the location of your water meter/s and record the meter number written on the meter casing.

Table 3: Asset location

 **Tip: How to locate your water meter.**

If you are having trouble locating your meter, visit [mywater.com.au/css-web-external/pub/propertySearch](https://www.mywater.com.au/css-web-external/pub/propertySearch) and enter your property address and click ‘details’.

|  |  |
| --- | --- |
| **Water Meter number** | **Location** |
| *[Found on the face of the water meter, usually a combination of numbers and letters.]* | *[Describe where the meter is located, using roads or physical landmarks.]* |
| *e.g. CK14006999* | *e.g. Meter is in a green box, on the right-hand side of the driveway on May Street, across from house number 24.*  |

### Onsite Storage

Having water stored on your property will reduce the impact of an outage on your business and may enable to continue operating without interruption. Using the table below, list any water or wastewater storage available. This may include waste/water tanks, or bottled water kept on site.

Table 4: onsite storage details

|  |  |
| --- | --- |
| **Onsite Storage Type** | **Availability, location, duration, size** |
| *[e.g. Water tank]* | *[e.g. 25 kilolitre tank located next to boundary fence on the north side of the property. Sufficient supply for 8 hours.]* |

### Minimum Operating Requirements

Knowing the minimum amount of water your business needs to operate each day may help you manage during periods of interrupted or reduced supply. Some sites may have the ability to restrict water supply to business-critical areas only, and isolate areas that are less critical, such as garden irrigation.

Table 5: Minimum water requirements

|  |  |
| --- | --- |
| **Minimum Daily Usage** | **Minimum flow rate** |
| *[Enter minimum volume of water use per day]* | *[Enter minimum flow rate in litres per minute.]* |
| *17 kL per day* | *36 litres / minute* |

 **Tip: How to calculate Minimum Operating requirements.**

Identify the water using devices that are critical to your business and note the flow rate for each device. For example, if basins are critical to your business, use the tap flow rate and multiply by the number of basins that are likely to be operating at the same time.

* **Critical device: basin with a 3-star tap that flows at 9L/min.**
* **4 basins x 9 L/min = 36 litres / minute.**
* **36 litres / min x 8 hours a day = 17 kL / day**

**More information about flow rates for devices can be found at** [**smartwatermark.org/WELS/**](https://www.smartwatermark.org/WELS/)

### Hazard Register

List any known safety hazards which may be encountered around the water or wastewater services.

 **Tip: Time to take some photos!**

Take a snap of your water meter and any hazards nearby. This will help reduce the stress of finding the meter when you are trying to implement your contingency plan during an outage. You can add the photos in to this document as supporting information.

Table 6: Risk and Hazard register

|  |  |
| --- | --- |
| **Risk or Hazard** | **Description & Potential Mitigation** |
| *[E.g. Meter pit]* | *[E.g. Meter located in deep pit – excavation required to allow replacement. ]* |
| *[e.g. heavy traffic/carpark/driveway.]* | *[e.g. meter located in heavy traffic area, traffic management required to enable works to be undertaken.]* |
| *[e.g. heavy pit lid]* | *[e.g. the lid on the meter pit is made from heavy metal, ergonomic lifting required to prevent injury.]* |

###

### Critical business area analysis

Identify the critical areas of your business that require water (e.g. mechanical, plumbing, hair/eye wash basins, hygiene stations and fire protection systems) and any protection strategies.

Table 7: Critical water using areas

| Rank | Critical business areas | Impact if failed | Protection strategies |
| --- | --- | --- | --- |
|  | *[Description of processes, tools, or business areas that cannot function without water or wastewater services].* | *[Describe the potential impact on your business if this critical area fails.]* | *[Describe any systems in place to protect critical areas of your business.]* |
| 1 | *[e.g. Eyewash stations]* | *[Site cannot operate without eye basins].* | *[Backup supplies of saline eyewash are stored in the administration room. [* |
| 2 | *[e.g. Cooling towers]* | *[Building air conditioning system will not work without water, can operate for 4 hours before building needs to be evacuated.]*  | *[Cooling towers will automatically shutdown after 3 hours of no water supply to prevent overheating.]* |
| 3 | *[e.g. fire protection system]* | *[Immediate closure of site].* | *[Fire water tank storage on roof.]* |

### Continuity Strategies

The information below outlines some options for how water and/or wastewater flows may be able to be maintained at the property. However, not all options will be appropriate or relevant for all sites, further research may be required to determine the costs and options that are suitable for your site.

1. **Water Supply Continuity Options**

Table 8 provides examples of what you could implement based on how much water your business uses and the impact of an unplanned outage on your business activities.

Refer to the guide in Table 2 to determine if your business water use is considered low, medium, or high. Not all options may be relevant or appropriate for your business activities and should be reviewed based on the level of risk and investment required as determined by you.

Table 8: Example water continuity strategies based on volume of water use and impact of an outage on business activities.

|  |  |  |
| --- | --- | --- |
|  |  | **Water use volume** |
|  |  | **Low Water Use** | **Medium Water Use** | **High Water use** |
| **Outage Impact** | **Low**  | Tap water storage | Maintain a supply of bottled water on your premises | Hire a water carter |
| **Medium**  | Maintain a supply of bottled water on your premises | Install a water tank | Install a ‘back up’ connection point |
| **High**  | Install a water tank | Hire a water carter | Alternate scheme connection |

Table 9 provides further detail on the water continuity options for you to consider. You can cut and paste these directly into the template document and add your own ideas to ensure they are suited your business needs.

Table 9: Considerations for water continuity options

|  |  |  |  |
| --- | --- | --- | --- |
| **Option** | **Description** | **Requirements / Considerations** | **Cost (if relevant)** |
| *1* | *[e.g. Tap water storage]* | *[Fill water bottles or sinks with tap water.]* |  |
| *2* | *[e.g. Maintain a supply of bottled water on your premises.]* | *[If purchasing bottled water, document the required quantities, closest purchasing location and specify how much prior notice is needed to obtain the required quantities.]* |  |
| *3* | *[e.g. Install a water tank]* | *[Considerations include the space required for installation of a tank, plumbing required to connect to the mains, and whether it will also be used to collect rainwater. Refer to the Australian Drinking Water Guidelines for advice about treatment and safe storage of water.]* |  |
| *4* | *[e.g. Hire a water carter]* | *[A water cartage business may be able to tanker water to your property to maintain a supply of water. They will determine if there is a suitable point for the tanker to connect to your internal plumbing and it is safe to so.]* |  |
| *5* | *[e.g. Install a ‘back up’ connection point]*  | *[If there is no suitable connection point for a water carter, consider engaging a plumber to install a permanent back-up connection point with a camlock fitting attachment. A camlock fitting, also called a cam and groove coupling, is used to connect two hoses and or pipes together, allowing the water to flow from water carter into the internal plumbing of your business.]* |  |
| *6* | *[e.g. Alternate scheme connection]* | *[Request Water Corporation to install of a new water meter connection to your property from an alternate water main. This may reduce the chances of a water supply interruption however it cannot be guaranteed. This option is usually only available in built up areas such as the CBD, or where the property is street facing on more than one boundary (i.e. a corner lot). This option will require significant investment due to the requirement to pay infrastructure contributions (headworks charges) and ongoing service and usage charges.]* |  |

1. **Wastewater Supply Continuity Options**

The Wastewater Supply Continuity Options are listed based on ease of implementation, from simple to complex. Option 1 will be suitable for businesses that produce only domestic (bathroom) wastewater. Option 2 is complex and may require investment in infrastructure to be viable.

**Simple**

1. Hire port-a-loo: This is useful for prolonged outages where notification is provided.

**Complex**

1. Hire a company to tanker wastewater from the property and dispose of it safely. Further advice is required from a tanking company to determine if this is a viable option based on wastewater volumes and quality, and access to a sewer connection point.

Table : Wastewater Supply Continuity Options

|  |  |  |  |
| --- | --- | --- | --- |
| **Option** | **Description** | **Requirements** | **Cost (if relevant)** |
| *1* | *[e.g. hire port-a-loos]* | 1. *[Contact details for port-a-loo supplier]*
 |  |
| *2* | *[e.g. hire a company to tanker wastewater]* | 1. *[Contact details for wastewater carter company]*
2. *Physical space for a wastewater carter to safely access your property.*
 |  |

## The Action Plan

### Emergency contacts

*[List your local emergency services numbers and any additional contacts you will need to contact in the event of a water or wastewater interruption (e.g**. water carting company, bottled water supplier.]*

| Organisation Name | Contact Person | Job Title | Phone number |
| --- | --- | --- | --- |
| Water Corporation  |  | Faults and Emergencies phone line | 13 13 75 |
| Water Corporation |  | Faults and Emergencies website | [watercorporation.com.au/Outages-and-works](https://www.watercorporation.com.au/Outages-and-works) |
| *[Plumber]* |  |  |  |
| *[e.g. water carting company]* |  |  |  |
| *[e.g. bottled water supplier]* |  |  |  |

###

 **Tip: Stay up to date!** Sign up for water supply alerts and stay in the know about outages impacting your water supply: [watercorporation.com.au/supplyalerts](https://www.watercorporation.com.au/supplyalerts)

### Outage procedure instructions

1. **Report**

If you have mains water or wastewater overflowing anywhere on or near your property or any damage is being caused call 13 13 75 immediately. This line is attended 24 hours a day, 7 days a week.

1. **Activate contingency plan**

Identify the appropriate Continuity Strategy you will use and activate it.

1. **Communications**
* Consider informing customers, suppliers or anyone attending your site about the interruption. Water Corporation may be able to provide a time estimate for services to be restored.
* Check [watercorporation.com.au/Outages-and-works](https://www.watercorporation.com.au/Outages-and-works) to check the status of the outage.

## The Recovery

### Business impact assessment

*[Based on your assessment of the damage to your business, complete the table below (in order of severity) or attach your own impact assessment to the back of your plan.]*

| Rank | Damage | Impact to business | Severity | Action | Recovery steps | Resources needed | Actioned by | Estimated date of completion |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | *[List any damage to* *buildings, assets, stock, documents or surrounding area/community.]* | *[Describe any direct or indirect impacts the damage will have on your business' critical functions.]* | [*High, Medium, Low.*] | [*Repair, replace, rebuild.*] | *[List the steps needed to recover the damage.]* | *[List the resources needed to recover* *including any cost estimates, service providers, employees, building materials.]* | *[Assign someone to each task.]* | *[Due date for completion.]* |
| *e.g.* | *Filter in water pump is damaged due to debris in the water supply from the burst* | *Water flow has decreased.* | High | Replace water filter | *Engage plumber to purchase and install filter.* | *~$1000* | *John* | *March 2021* |

### Recovery Awareness

1. **Discoloured water**

Once the water is restored, it may be discoloured or cloudy. This is due to the repairs which may have stirred up sediment, causing it to become suspended in the water. The sediment makes the water look discoloured, but it is harmless, and the water is safe to use.

To clear the sediment, run a garden tap closest to your water meter for 2 minutes and see if this clears the discolouration. If the water doesn’t clear please contact us on 13 13 75 and we will respond within 2 hours, usually by flushing the water mains in your area.

1. **Repair works**

Be aware of areas where repairs have been made or that may have temporary reinstatements in place. There may be traffic management in place to manage the impact on your business and it is important to take care to ensure the safety of all those attending your site.

### Claiming flooding insurance

If you would like to claim flooding on insurance, we recommend that you contact your insurance company as soon as possible, as they will be able to advise you on the best process to follow to recover any loss or damage. We will refund any insurance excess amounts and we will also consider any uninsured losses.

* Your own insurance company will not normally need to establish liability before proceeding with your claim. We would have to establish liability which may be a lengthy process, particularly if a third party is involved.
* Most insurance companies will normally replace or settle on a new for old basis. We will work with you to obtain reasonable recompense for the damage caused.
* If your insurance company is confident that we are liable, they may choose to counter claim us at a later date.

For more information visit [watercorporation.com.au/Help-and-advice/Water-issues/Wastewater/Mains-water-and-wastewater-flooding](https://www.watercorporation.com.au/Help-and-advice/Water-issues/Wastewater/Mains-water-and-wastewater-flooding)

## More information

* Visit [watercorporation.com.au/prepare](https://www.watercorporation.com.au/prepare) for more tips on preparing for an outage.

## Supporting documentation

### Appendices

Attached is my supporting documentation in relation to this Emergency management & recovery plan. The attached documents include:

* [*List all of your attachments here. These may include copies of your floor plan, detailed emergency procedures, impact and market assessments and financial documents*.]