IPART Independent Pricing and Regulatory Tribunal | NSW

Guidelines for infrastructure design capacity under the *Water Industry Competition Act 2006*

Design Capacity Guidelines

March 2024

Water

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders, past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

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The Independent Pricing and Regulatory Tribunal (IPART)

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

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1 Introduction

This Guide provides the method to determine the design capacity of water industry infrastructure to determine whether the *Water Industry Competition Act 2006* (the WIC Act) applies.[1]

Applicants for scheme approvals are also required to provide details of the design capacity of their proposed water industry infrastructure in their application, as this must be specified in the scheme approval if granted.[2]

1.1 Purpose

This Guide must be used to determine design capacity for water industry infrastructure used or to be used for the:

- **Production of drinking water** with a design capacity of more than 500 kilolitres (kL)/day.
- **Treatment of sewage, stormwater or recycled water** with a design capacity of more than 750 kL/day.[3]

This Guide should also be used to specify the design capacity of water industry infrastructure in an application for a scheme approval.

1.2 Who should use this Guide?

This Guide applies to any person seeking to determine whether the WIC Act applies to water industry infrastructure they are proposing to construct or operate or are currently operating.

This Guide also applies to any person seeking a scheme approval who needs to specify the design capacity of its infrastructure in its application.

2 Determining design capacity

The following method should be used to determine the design capacity for each applicable class of water industry infrastructure.

You can contact us via wica@ipart.nsw.gov.au if you have any queries about how to apply this guide to your proposed scheme.

2.1 Drinking water infrastructure (production or supply)

Applies to

Water industry infrastructure used to produce drinking water, including a filtration, treatment or desalination facility.

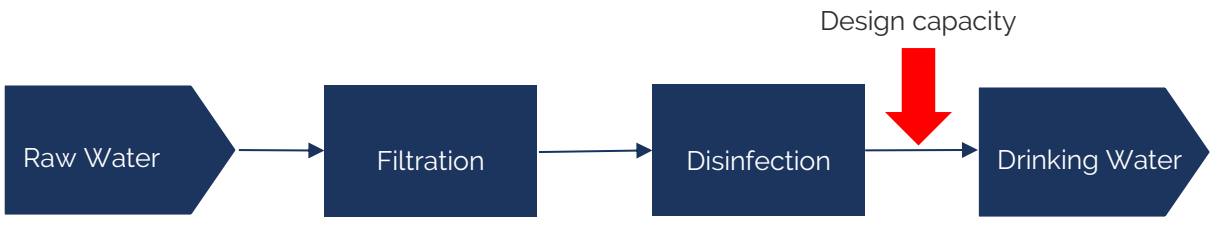
How to determine design capacity for production of drinking water

- The design capacity of the infrastructure for producing drinking water should be determined in kL/day for the fully developed scheme.
- Drinking water infrastructure design capacity is based on the production design capacity of the treatment plant at the average full capacity production rate for the plant.
- The average full capacity production rate should be based on the maximum volume that the treatment infrastructure can sustainably produce under normal operating conditions.

If the drinking water treatment plant **has a design capacity of more than 500 kilolitres each day** it will be infrastructure to which the WIC Act applies under section 5(1)(b) and will require approvals and licences under the WIC Act.

The design capacity in kL/day should be specified in the application for the scheme approval.

Figure 2.1 An example diagram showing where design capacity should be determined for producing drinking water



2.2 Drinking water infrastructure (on-selling)

Applies to

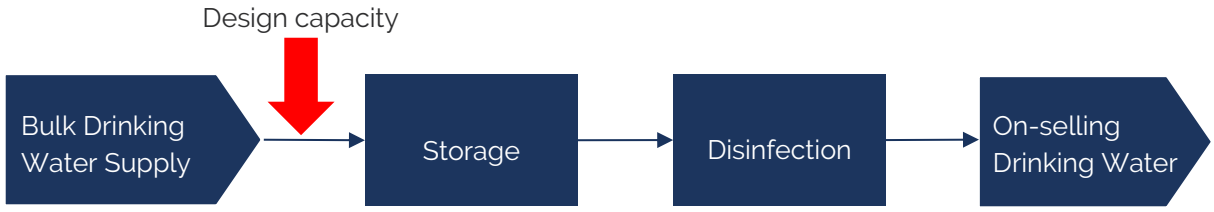
Water industry infrastructure used to supply drinking water to customers which is provided by another utility.

How to determine design capacity for on-selling of drinking water

- The design capacity of the infrastructure for the on-selling of drinking water should be determined in kL/day for the fully developed scheme.
- Drinking water infrastructure design capacity is based on the design capacity of the bulk water connection to the other utility's drinking water supply, before any further treatment, storage or reticulation of the drinking water.
- The design capacity of the bulk water connection should be based on the maximum volume that can be sustainably supplied by the other utility under normal operating conditions.

The design capacity in kL/day should be specified in the application for the scheme approval.

Figure 2.2 An example diagram showing where design capacity should be determined for the on-selling of drinking water



2.3 Sewage treatment infrastructure for disposal only

Applies to

Water industry infrastructure for treating sewage for disposal only.

How to determine design capacity

- The design capacity of the infrastructure for treating sewage should be determined in kL/day for the fully developed scheme.
- Sewage treatment infrastructure design capacity is based on the processing capacity of the primary treatment plant to treat the influent.

If the primary treatment plant **has a design capacity of more than 750 kilolitres each day** it will be infrastructure to which the WIC Act applies under section 5(1)(c) and will require approvals and licences under the WIC Act.

The design capacity in kL/day should be specified in the application for the scheme approval.

Figure 2.3 An example diagram showing where design capacity should be determined for treating sewage for disposal only

2.4 Sewage, stormwater or recycled water treatment infrastructure to produce recycled water

Applies to

Water industry infrastructure for treating sewage, stormwater or recycled water to produce recycled water. Also applies if treated effluent is disposed of in addition to the production of recycled water.

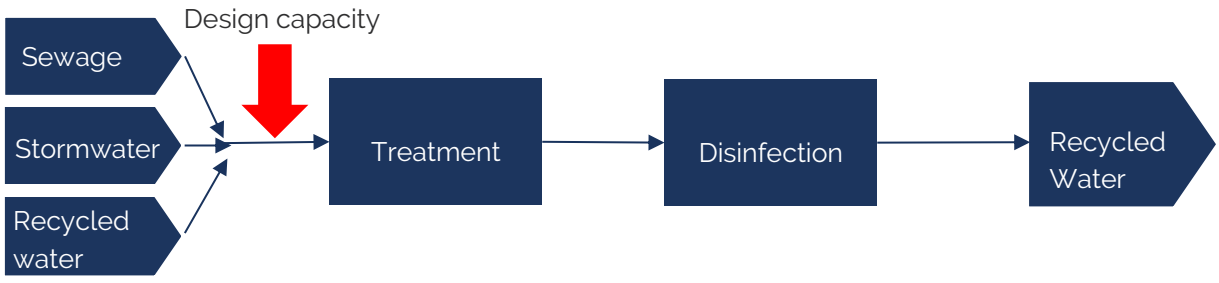
How to determine design capacity

- The design capacity of the infrastructure for treating sewage, stormwater or recycled water should be determined in kL/day for the fully developed scheme.
- Sewage, stormwater treatment or recycled water treatment infrastructure design capacity is based on the processing capacity of the treatment plant to treat the influent.
- If there is a mixture of sewage, stormwater and/or recycled water being treated, the design capacity is determined as above using the combined influent.

If the sewage, stormwater and/or recycled water treatment plant **has a design capacity of more than 750 kilolitres each day** it will be infrastructure to which the WIC Act applies under section 5(1)(c) and will require approvals and licences under the WIC Act.

The design capacity in kL/day should be specified in the application for the scheme approval.

Figure 2.4 An example diagram showing where design capacity should be determined for treating sewage, stormwater and/or recycled water to produce recycled water



2.5 Groundwater or wastewater (other than sewage, stormwater or recycled water) treatment infrastructure to produce non-potable water

Applies to

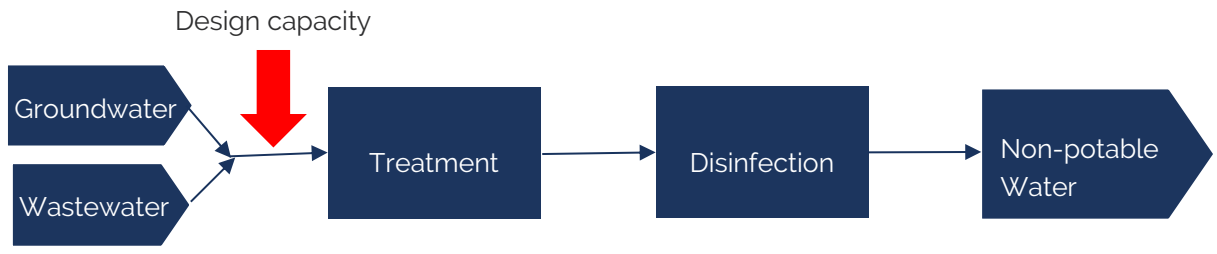
Water industry infrastructure for treating groundwater or wastewater (other than sewage, stormwater or recycled water) to which section 5(1)(a) of the WIC Act applies.

How to determine design capacity

- The design capacity of the infrastructure for treating groundwater or wastewater should be determined in kL/day for the fully developed scheme.
- Groundwater or wastewater treatment infrastructure design capacity is based on the processing capacity of the treatment plant to treat the influent.
- If there is a mixture of groundwater and/or wastewater being treated, the design capacity is determined as above using the combined influent.

The design capacity in kL/day should be specified in the application for the scheme approval.

Figure 2.5 An example diagram showing where design capacity should be determined for treating groundwater and/or wastewater for non-potable water use



2.6 Other infrastructure that treats a combined influent stream to produce non-potable water

For the purposes of specifying the design capacity in a scheme approval application for water industry infrastructure, the design capacity will be based on the processing capacity of the treatment plant for the combined influent. This is provided the infrastructure both:

- treats a combined influent stream, and
- falls under section 5(1)(a) of the WIC Act (e.g., stormwater and groundwater or industrial wastewater and sewage to produce non-potable water).

[1] Section 5(3)(b) of the WIC Act stipulates that for the purposes of determining whether the WIC Act applies to water industry infrastructure by operation of section 5(1), the design capacity of the infrastructure must be determined in accordance with IPART issued guidelines that are published in the Gazette and on IPART's website.
[2] See section 7F of the WIC Act.
[3] See sections 5(1)(b) and (c) of the WIC Act.

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