

---

Department of Planning and Environment

[dpie.nsw.gov.au](http://dpie.nsw.gov.au)



# Guidance on strategic planning outcome – Understanding water quality

Regulatory and assurance framework for local water utilities

October 2022



# Acknowledgement of Country

The Department of Planning and Environment acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

---

Published by NSW Department of Planning and Environment

[dpie.nsw.gov.au](http://dpie.nsw.gov.au)

Guidance on strategic planning outcome – Understanding water quality

First published: October 2022

Department reference number: PUB22/933

## Acknowledgements

This guidance was developed by NSW Health and the Department of Planning and Environment.

## Copyright and disclaimer

© State of New South Wales through Department of Planning and Environment 2022. Information contained in this publication is based on knowledge and understanding at the time of writing, October 2022, and is subject to change. For more information, please visit [dpie.nsw.gov.au/copyright](http://dpie.nsw.gov.au/copyright)

# Contents

<b>1. Introduction.....</b>	<b>4</b>
1.1. Purpose of this document.....	4
1.2. Review of this guidance.....	5
<b>2. Oversight of local water utility strategic planning .....</b>	<b>6</b>
<b>3. Guidance on understanding water quality .....</b>	<b>8</b>
3.1. Understanding water quality .....	8
3.2. How will the local water utility address current and future water quality risks?.....	9
3.3. How will the local water utility meet relevant regulatory standards, such as on drinking water quality management and fluoridation?.....	11

# 1.Introduction

Local water utilities can best meet the needs of their customers, and manage key risks, when their decisions and activities are based on effective, evidence-based strategic planning.

The NSW Department of Planning and Environment is committed that all local water utilities should have in place effective, evidence-based strategic planning. This will ensure utilities deliver safe, secure, accessible, and affordable water supply and sewerage services to customers. It will also ensure they can manage keys risks now and into the future, and in the event of significant shocks. Local water utilities remain responsible for conducting strategic planning.

The department gives assurance of effective, evidence-based strategic planning. Local water utilities not making dividend payments<sup>1</sup> are encouraged, but not compelled, to use the department's assurance framework, experience and capacity to support effective strategic planning.

Through the department's assurance role under section 3 of the [Regulatory and assurance framework for local water utilities \(PDF, 1613.11 KB\)](#) - Regulatory and Assurance Framework - we establish what outcomes we expect effective, evidence-based strategic planning to achieve (see section 3.2 of the Regulatory and Assurance Framework) and assess if a utility's strategic planning achieves these outcomes to a reasonable standard (see sections 3.3 and 3.4 of the Regulatory and Assurance Framework).

We give separate, optional guidance in the department's guidance [Using the Integrated Planning and Reporting framework for local water utility strategic planning \(PDF, 573.33 KB\)](#) to explain how utilities can achieve the strategic planning outcomes to a reasonable standard using the *Integrated Planning and Reporting Framework* for councils under the *Local Government Act 1993*.

---

## 1.1. Purpose of this document

This document supplements the Regulatory and Assurance Framework and gives guidance on achieving the outcome of understanding water quality to a reasonable standard.

This guidance is consistent with the objectives and principles established under the Regulatory and Assurance Framework, including being outcomes focused and risk-based.

This document sets out good practice for all local water utilities to apply when doing strategic planning to achieve the outcome of understanding water quality.

---

<sup>1</sup> Sections 3 and 4 of the Regulatory and Assurance Framework, are also the Guidelines for council dividend payments for water supply or sewerage services, under section 409(6) of the *Local Government Act 1993*. Before taking a dividend payment from a surplus of the council's water supply and/or sewerage business, a council must have in place effective, evidence-based strategic planning in accordance with section 3 of the Regulatory and Assurance Framework.

---

## 1.2. Review of this guidance

As part of our commitment to continuous improvement, we will review the performance of the Regulatory and Assurance Framework within 2 years from finalisation. There will also be periodic reviews of the full suite of relevant regulatory and assurance documents, which will happen at least every 5 years.

We welcome feedback on this guidance and will update it when needed based on feedback or a 'lessons learned' review following our assessment of strategic planning by local water utilities.

## 2. Oversight of local water utility strategic planning

Under section 3 of the [Regulatory and assurance framework for local water utilities \(PDF, 1613.11 KB\)](#), the department establishes what outcomes it expects effective, evidence-based strategic planning to achieve (see section 3.2) and assesses whether a local water utility's strategic planning achieves these outcomes to a reasonable standard (see sections 3.3 and 3.4).

Councils making a dividend payment from a surplus of their water and/or sewerage business must meet the expectations set out in section 3 and section 4 of the Regulatory and Assurance Framework.<sup>2</sup> Local water utilities not making dividend payments are encouraged, but not compelled, to utilise the department's assurance framework, experience and capacity to support effective strategic planning.

For effective, evidence-based strategic planning to occur, the department expects strategic planning to achieve the following outcomes to a reasonable standard:

- Understanding service needs
- Understanding water security
- Understanding water quality (**this guidance**)
- Understanding environmental impacts
- Understanding system capacity, capability and efficiency
- Understanding other key risks and challenges
- Understanding solutions to deliver services
- Understanding resourcing needs
- Understanding revenue sources
- Make and implement sound strategic decisions
- Implement sound pricing and prudent financial management
- Promote integrated water cycle management

A **reasonable standard** is met if the utility considers and addresses an outcome in a way that is:

- **sufficient:** underpinned by evidence-based analysis that supports the conclusions reached
- **appropriate:** underpinned by relevant departmental guidance and industry standard approaches to conduct planning and reach conclusions

---

<sup>2</sup> Sections 3 and 4 of the Regulatory and Assurance Framework, are also the Guidelines for council dividend payments for water supply or sewerage services, under section 409(6) of the *Local Government Act 1993*. Before taking a dividend payment from a surplus of the council's water supply and/or sewerage business, a council must have in place effective, evidence-based strategic planning in accordance with section 3 of the Regulatory and Assurance Framework.

- **robust:** underpinned by evidence that draws on appropriate sources and recognises and rebuts potential alternative interpretations.

The assessment considerations the department will apply and how these may be addressed are set out in more detail in the Regulatory and Assurance Framework.

# 3. Guidance on understanding water quality

Under section 3.2 of the Regulatory and Assurance Framework, the department expects utilities to achieve the strategic planning outcome understanding water quality to a reasonable standard. This includes considering:

- How will the local water utility address current and future water quality risks in its supply systems?
- How will the local water utility meet relevant regulatory standards, such as on drinking water quality management?

---

## 3.1. Understanding water quality

Water utilities should have a sound understanding of water quality risks, and the requirements for managing these risks, associated with the provision of drinking water. This understanding should provide a solid basis for strategic planning and service delivery.

This understanding should be based on the local water utility's response to the requirements of the *Public Health Act 2010* and Regulation 2022. Specifically this includes:

- understanding of potential health risks associated with the supply of drinking water
- the application of the Framework for Management of Drinking Water Quality (as set out in the *Australian Drinking Water Guidelines*)
- the local water utility's drinking water management system and a review of its implementation.

Guidance on the development and implementation of drinking water management systems is provided in NSW Guidelines for *Drinking Water Management Systems 2013*.

In the following sections we set out **what** the department's expectations are for **understanding water quality** to a reasonable standard.

---

## 3.2. How will the local water utility address current and future water quality risks?

**A local water utility should understand and address water quality risks based on and through the implementation of its drinking water management system, as required by the *Public Health Act 2010* and *Public Health Regulation 2022***

Meeting this expectation to a reasonable standard means that the utility's drinking water management system meets the following requirements of the *Public Health Act 2010* and *Regulation 2022*:

- having undertaken a recent external review or audit of the drinking water management system in consultation with NSW Health, and following the process set out in guidance published by NSW Health
- having undertaken a revision of the drinking water improvement plan in consultation with NSW Health, incorporating recommendations and findings arising from the audit or review.

Specific requirements of drinking water management systems that are key to understanding water quality for strategic planning are listed below.

### **Drinking water management system external review and audit**

A local water utility is required to document scheduling and processes for evaluation and audit of its drinking water management system, including internal and external reviews and audits. Further specific guidance on reviews and audits is published by NSW Health, including published review/audit criteria. These reviews and audits will document specific recommendations and improvement actions against these criteria. A local water utility should ensure that findings of reviews and audits are reflected in an update of the water utilities drinking water improvement plan.

### **Drinking water improvement plan**

A local water utility is required to document actions to improve the drinking water supply system in a drinking water improvement plan that is reviewed annually. The review is informed by risk assessments, reviews, audits, water quality studies or other aspect of assessments of water quality management.

A local water utility should ensure recommendations and findings from a review or audit are reflected as specific actions in the drinking water improvement plan.

### **Drinking water quality policy**

A local water utility is required to document its commitment to drinking water quality management. This is often demonstrated through the development and communication of a drinking water quality policy, either as a standalone document or as part of a broader policy on levels of service for drinking water.

The policy should include a commitment by the supplier to drinking water quality management, and a description of how the commitment is communicated to staff.

## **Drinking water risk assessments**

A local water utility is required to assess risks to the drinking water supply, including identification of water quality hazards, preventive measures, assessment of maximum and residual risks, management of identified risks, and required improvement actions. This assessment is required to be documented and communicated to relevant staff within the local water utility.

## **Inspection and maintenance program for drinking water assets**

A local water utility is required to document its processes and procedures on the calibration, operation, and maintenance of critical treatment equipment.

## **Resourcing and employee training**

A local water utility is required to document its processes for managing the training and awareness of employees about issues related to drinking water quality. This includes identifying and ensuring the skills and competency of employees responsible for aspects of water quality risk management in providing drinking water services.

## **Engagement with the local community**

A local water utility is required to document its processes for engaging and raising awareness in the local community about the quality of drinking water and considering local community and consumer objectives in managing the drinking water system.

A local water utility could achieve this by including drinking water quality issues in community consultation on drinking water services, including the development of objectives and levels of service.

## **Outcomes of any water quality studies**

From time to time a local water utility may investigate specific water quality issues, such as water quality sampling investigations and treatment process verification/validation. Outcomes from these studies should be documented and used to inform drinking water risk management.

## **A local water utility should consider water quality risks for any future sources of drinking water consistent with drinking water management**

Any strategic consideration of a new source of water should include an understanding of potential water quality risks, and how to manage these risks.

To be of a reasonable standard, this understanding should include a risk assessment of the proposed new water source that considers the drinking water management implications of the new source consistent with how drinking water is managed as set out in the section above. This should include consultation with NSW Health.

A local water utility may investigate new sources of water for drinking water supplies, such as new dams, bore fields and purified recycled water. These sources would not yet be included in a local water utility's drinking water management system.

---

### 3.3. How will the local water utility meet relevant regulatory standards, such as on drinking water quality management and fluoridation?

#### **A local water utility should ensure that relevant legislative requirements relating to water quality are identified and addressed**

Relevant legislation includes the *Public Health Act 2010* and *Public Health Regulation 2022*, the *Fluoridation of Public Water Supplies Act 1957* and *Fluoridation of Public Water Supplies Regulation 2022*, and the *NSW Code of Practice for Fluoridation of Public Water Supplies*.

The *Fluoridation of Public Water Supplies Regulation 2022* section 7 requires that a local water utility seeks approval from the Secretary of NSW Health for alterations to any fluoridation plant. A fluoridation plant may need to be altered as the result of changes to a water supply, particularly a water treatment plant. A local water utility should assess and identify whether any proposed changes to water supply infrastructure could impact a fluoridation plant.