

# **SEQ Water Supply and Sewerage Design & Construction Code (SEQ WS&S D&C Code)**

# **OVERVIEW DOCUMENT**

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## Executive Summary

The *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*, Chapter 4A, required the regional Water Service Providers (SEQ-SPs) to develop a common set of Design and Construction standards for water supply and sewerage infrastructure (**SEQ WS&S D&C Code**). This Code has been developed as a cooperative venture involving all five (5) SEQ Water Service Providers (Queensland Urban Utilities, Unitywater, City of Gold Coast, Logan City Council and Redland City Council), the State and the Water Services Association of Australia (WSAA)

### **Scope of the Code:**

This overview document contains all components of the SEQ WS&S D&C Code including the following:

- A listing of accepted infrastructure products and materials (IPAM) for use within the SEQ water industry;
- Consistent Design Criteria for water supply and sewerage within SEQ;
- Separate codes<sup>1</sup> for:
  - Water Supply
  - Sewerage
  - Sewage Pumping Stations
  - Vacuum Sewerage
  - Pressure Sewerage; and
- Asset Information Specification.

The Code will prevail over those existing provisions within the Councils' Planning Schemes which currently determine water services infrastructure outcomes.

### **Anticipated Benefits of the Code:**

An integrated SEQ WS&S D&C Code will provide benefit to:

- The **development and construction industry** by providing greater consistency in Water and Sewerage design and construction standards across the region;
- The **Water Service Providers**, through greater standardisation of processes (including development assessment) and consistency in standards for their asset networks;
- **Regulators** by providing a common reference point for construction standards (which reflect national standards); and
- **Customers** who should be the ultimate beneficiary through better service and lower long term costs.

### **Purpose of this overview:**

The purpose of this overview is to provide a succinct summary of the scope of the SEQ WS&S D&C Code, highlight key aspects of the Code and provide a framework for efficient management of the various code elements.

As the SEQ WS&S D&C Code may be subject to periodic review and update it is important that parties have access to the current documents. The current version of each element of the SEQ WS&S D&C Code is the version that is published on the SEQ Code website ([www.seqcode.com.au](http://www.seqcode.com.au)).

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<sup>1</sup> Codes have been developed based on the nationally recognised WSAA Codes. The SEQ WS&S D&C Code details changes required to the WSAA Codes to reflect issues specific to the SEQ water industry.

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## 1. Purpose of this document

The *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*, Chapter 4A, required all water service providers operating within SE Queensland (SEQ-SPs) to develop a common set of Design and Construction standards for water services infrastructure (**the SEQ WS&S D&C Code**). The development of this Code will change the way that water services infrastructure is designed, constructed and handed over for years to come.

The **purpose of this document** is to provide an overview of the Code and a useable framework for management of the various components of the document.

## 2. Scope of the Code

The SEQ WS&S D&C Code has been designed to assist users to collate the key documentation relevant to the development of reticulation water supply and sewerage service networks within SEQ. This overview provides a broad summary of the scope of the SEQ WS&S D&C Code, its objectives, the process followed in its development and the hierarchy of documentation. This section of the overview is designed to provide a succinct “road map” which identifies and briefly describes each element of the code.

**The SEQ WS&S D&C Code includes the following elements:**

Code Element	Brief Description	Location in this Overview
<b>Accepted Infrastructure Products and Materials Lists</b>	The Accepted Infrastructure Products and Materials Lists provide a list of those products and materials accepted for use within the SEQ Water industry. Each of the Water Service Providers will maintain a separate Accepted Infrastructure Products and Materials List	Appendix A
<b>SEQ WS&amp;S D&amp;C Design Criteria</b>	The SEQ WS&S D&C Design Criteria element provides a succinct summary of key parameters which will be relevant to the development of future water supply, recycled water and sewerage networks within SEQ.  The SEQ WS&S D&C Design Criteria has been designed to align with the State Governments “Planning Guidelines for Water Supply and Sewerage”. The States guidelines provide the generic framework for all of Queensland, while the SEQ W&S D&C Design Criteria provides more detailed advice on the specific parameters to be applied in the design and construction of the SEQ water and sewerage reticulation networks.	Appendix B
<b>Water Supply Code</b>	To ensure consistency with national standards, the existing WSAA codes have been used as the foundation for development of the SEQ WS&S D&C Code. The WSAA codes have been amended as required to reflect the issues specific to the SEQ water industry. In some instances, amendments relate to individual water agencies. These are clearly identified as “Exception” items. To ensure as much consistency across the region as possible, the number of individual exceptions was kept to a minimum	Appendix C
<b>Sewerage Code</b>		Appendix D
<b>Sewerage Pumping Stations Code</b>		Appendix E
<b>Vacuum Sewerage Code</b>		Appendix F
<b>Pressure Sewerage Code</b>		Appendix G
<b>Asset Information Specification</b>	The Asset Information Specification outlines the SEQ-SPs requirements across the following key elements of asset information including: <ul style="list-style-type: none"> <li>• A Standard drawing format for SEQ;</li> <li>• A Template of handover documentation for active assets (pump stations etc.) ; and</li> <li>• An ADAC schema to ensure greater standardisation of asset data across the region and facilitate Development Assessment(DA)</li> </ul>	Appendix H
<b>Glossary &amp; Abbreviations</b>	Contains the definition of a wide range of terms used throughout the SEQ WS&S D&C Code.	Appendix I
<b>Schedule of Changes</b>	A succinct tabular summary of changes to key elements of the SEQ WS&S D&C Code.	Appendix J

On completion, the SEQ WS&S D&C Code will replace those existing provisions within the Councils’ Planning Schemes which currently determine water services infrastructure outcomes.

## 3. Anticipated Benefits of the Code

An integrated SEQ WS&S D&C Code is intended to provide a broad range of benefits to all stakeholders in the SEQ Water industry. This includes:

- The **development and construction industry** for whom the code will provide greater consistency in design, construction and asset information specifications across the region;

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- The **SEQ Water Service Providers** who will benefit from greater standardisation of processes (including development assessment) and consistency in standards for their water service reticulation networks;
- **Regulators** who will benefit through providing a common reference point for construction standards (which reflect national standards); and
- **Customers** who will be the ultimate beneficiary through better service and lower long term costs.

## 4. Development of the Code:

The SEQ WS&S D&C Code has been developed as a joint initiative of the five (5) SEQ Water Service Providers (Queensland Urban Utilities, Unitywater, City of Gold Coast, Redland City Council and Logan City Council) together with assistance from the Queensland State Government.

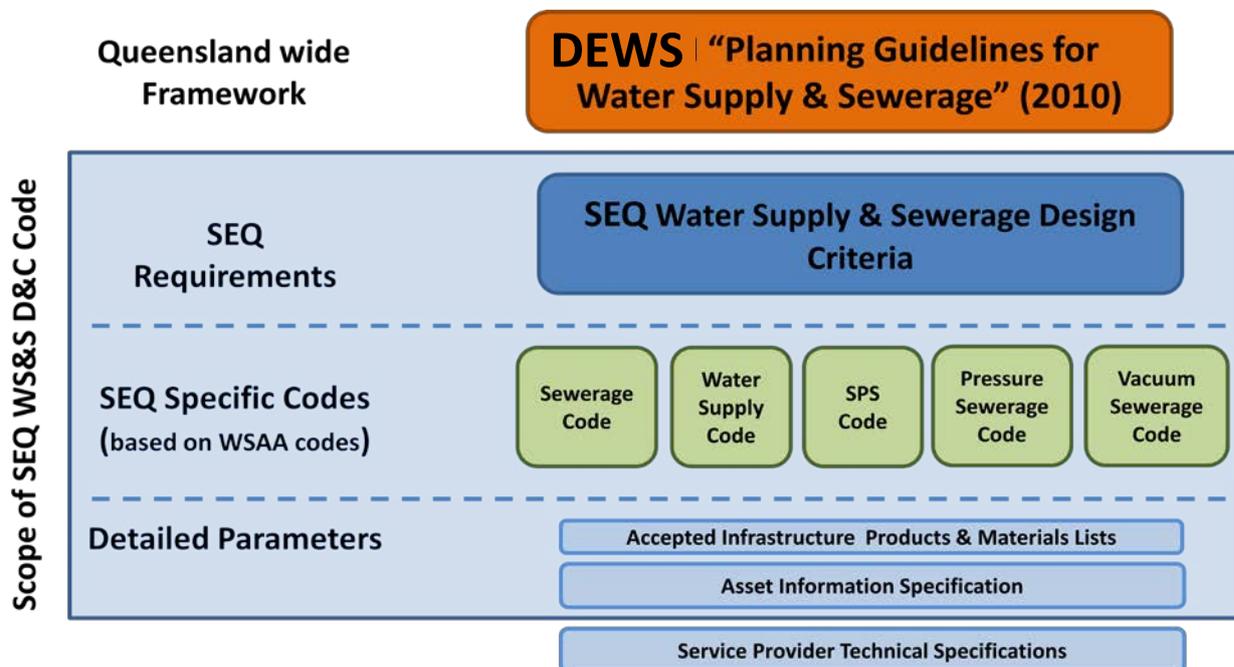
The draft SEQ WS&S D&C Code was subject to extended public consultation which was supported by a significant marketing and awareness campaign. Responses received from the consultation were discussed in detail and further refinements have been made to elements of the SEQ WS&S D&C Code.

Development of the SEQ WS&S D&C Code has been accomplished through numerous cooperative workshops. The objective of these workshops has been to accommodate the needs of all industry stakeholders and minimise the extent of variance across the region. Subsequently, the SEQ WS&S D&C Code reflects a high degree of alignment in the design, construction, commissioning and handover processes across the SEQ region.

## 5. Document Hierarchy

As far as practical, the SEQ WS&S D&C Code has been developed to leverage off existing guidelines and standards within the industry. For example, the SEQ Water and Sewerage Design Criteria developed under this project have been designed to fit within the broader framework of the Queensland wide Planning Guidelines for Water Supply and Sewerage. Similarly, each of the five (5) Technical Codes have been developed from the nationally accepted WSAA Code documents. The relationship between various key documents is summarised in Figure 1.

Figure 1 – Hierarchy of Planning Documentation



In the event of contradiction between these four (4) levels of documentation, the provisions of the SEQ Design Criteria will override the States Guidelines and Specific Codes. Detailed technical specifications should be consistent with the Codes. However, project specific variance in the technical specifications

may reflect particular aspects of an individual project and may therefore override other Code requirements.

Drawing references are added throughout the Code. In the event of a clash between the individual drawings and the figures in the specification – details shown on the individual standard drawings take precedence.

## 6. Conditions of Supply of the SEQ WS&S D&C Code

SEQ WS&S D&C Code is supplied subject to the following understandings and conditions:

- SEQ WS&S D&C Code is copyright and apart from any use as permitted under the Copyright Act 1968, no parts of the documents may be sold, reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission in writing of the SEQ-SPs;
- SEQ WS&S D&C Code is intended for use in connection with SEQ-SPs related projects only;
- SEQ-SPs do not warrant the applicability of SEQ WS&S D&C Code to climates, topography, soil types, water and sewage characteristics and other local conditions and factors that may be encountered outside SEQ-SPs area of operations.
- The SEQ WS&S D&C Code provides general guidance and the holder of the Code acknowledges that they may contain errors and/or omissions;
- SEQ-SPs accept no responsibility for any works or parts thereof which may contain design and/or construction defects due to errors or omissions in any part of a SEQ WS&S D&C Code which has not been prepared or formatted by SEQ-SPs; and
- SEQ-SPs accept no responsibility for the incorrect application of SEQ WS&S D&C Code by the holder or any other party.

## 7. Amending the Code

Section 99BF of the SEQ Water (Distribution/Retail Restructuring Act) makes provision for the following types of changes to the Code:

- Minor corrections or a change which does not represent a “Change of Substance”;
- Amendments that are of a type that is already identified within the Code as being permitted without undertaking a public consultation process.

Minor Corrections to the Code or an amendment that has already been identified within the Code as allowed do not require formal “public notification” of the Code. Such amendments will be undertaken on a needs basis. The scope of **“changes identified within the Code as being allowed or permitted”** includes the following:

Element	Description/ Rationale
<b>Accepted Infrastructure Products and Materials Lists</b>	These lists may be subject to periodic review by the relevant SEQ-SPs. The flexibility to change this element of the Code is required to ensure that new products and innovation can be adopted quickly and efficiently. Changes to the Accepted Infrastructure Products and Materials Lists are governed by processes developed by each of the SEQ-SPs.
<b>Technical Specifications</b>	Each SEQ-SP may have detailed technical specifications which reside outside the SEQ WS&S D&C Code. As such, these can be updated at any time by the relevant SEQ-SP
<b>Asset Information Specification</b>	The requirements of the SEQ WS&S D&C Code Asset Information Specification (including Drawing Specification, ADAC schema and handover requirements) may change over time.

The third category (i.e. any “change of substance” not otherwise allowed or permitted within the Code) will be assessed against criteria agreed with the State and subject to public notification.

## 8. Document Control

The current version of each element of the SEQ WS&S D&C Code is the version that is published on the SEQ Code website.

## **Appendix A – Accepted Infrastructure Products and Materials Listing (Accepted IPAM)**

## Appendix B – SEQ WS&S D&C Code Design Criteria

## Appendix C – Water Supply Code (Amendments to WSAA Code)

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## Appendix D – Sewerage Code (Amendments to WSAA Code)

## **Appendix E – Sewerage Pumping Station Code (Amendments to WSAA Code)**

## **Appendix F – Vacuum Sewerage Code (Amendments to WSAA Code)**

## **Appendix G – Pressure Sewer Code (Amendments to WSAA Code)**

## Appendix H – Asset Information Specification

## Appendix I – Glossary and Abbreviations