

Drinking Water Quality

Annual Report 2019-20



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Authorisation

I authorise the use of this report in the Department of Health and Human Services Annual Report and made freely available on Westernport Water's website – www.westernportwater.com.au



Paul Donohue
General Manager Assets & Operations

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Introduction

Westernport Water Overview

Westernport Region Water Corporation (WPW) provides water and wastewater services in an economically, environmentally and socially sustainable manner to customers within its service area.

WPW services Phillip Island and an area of the mainland from The Gurdies to Archies Creek. Individual towns that are provided with drinking water include Bass, Grantville, Corinella, Kilcunda, Dalyston, San Remo, Cape Woolamai, Rhyll, Cowes and Ventnor. A map of the service area is included in this report as Figure 1.

Aims and Objectives of this Report

Under section 26 of the Safe Drinking Water Act 2003 (SDWA), WPW is required to provide the Department of Health and Human Services (DHHS) with an annual report on the quality of drinking water supplied to its customers.

The aim of this report is to provide all stakeholders, including the community, with water quality information compliant with Section 26 of the SDWA. The report covers the period of 1 July 2019 to June 30 2020 and covers issues relating to the quality and management of drinking water.

Westernport Water's Commitment to Drinking Water Quality

WPW is committed to a comprehensive risk management approach to the safe provision of drinking water to its customers. This is achieved through the adoption of the framework for the management of drinking water quality outlined in the Australian Drinking Water Guidelines 2011, (ADWG) and implemented through continual review and improvement of WPW's Water Quality Risk Management Plan (WQRMP).

WPW's commitment to drinking water quality is supported by its drinking water quality policy (endorsed by the Executive and Board). The policy demonstrates WPW's long-term commitment to the development and implementation of an effective system for drinking water quality management.

2019-20 Performance

WPW met all its obligations to provide water compliant with the *Safe Drinking Water Act 2003* and *Safe Drinking Water Regulation 2015* throughout 2019-20.

Performance against drinking water quality standards outlined in the *Safe Drinking Water Regulations 2015* (SDWR) are presented in Analysis of Results.

Major changes to the arrangements for water supply

There were no major changes to the arrangements for water supply in 2019-20.

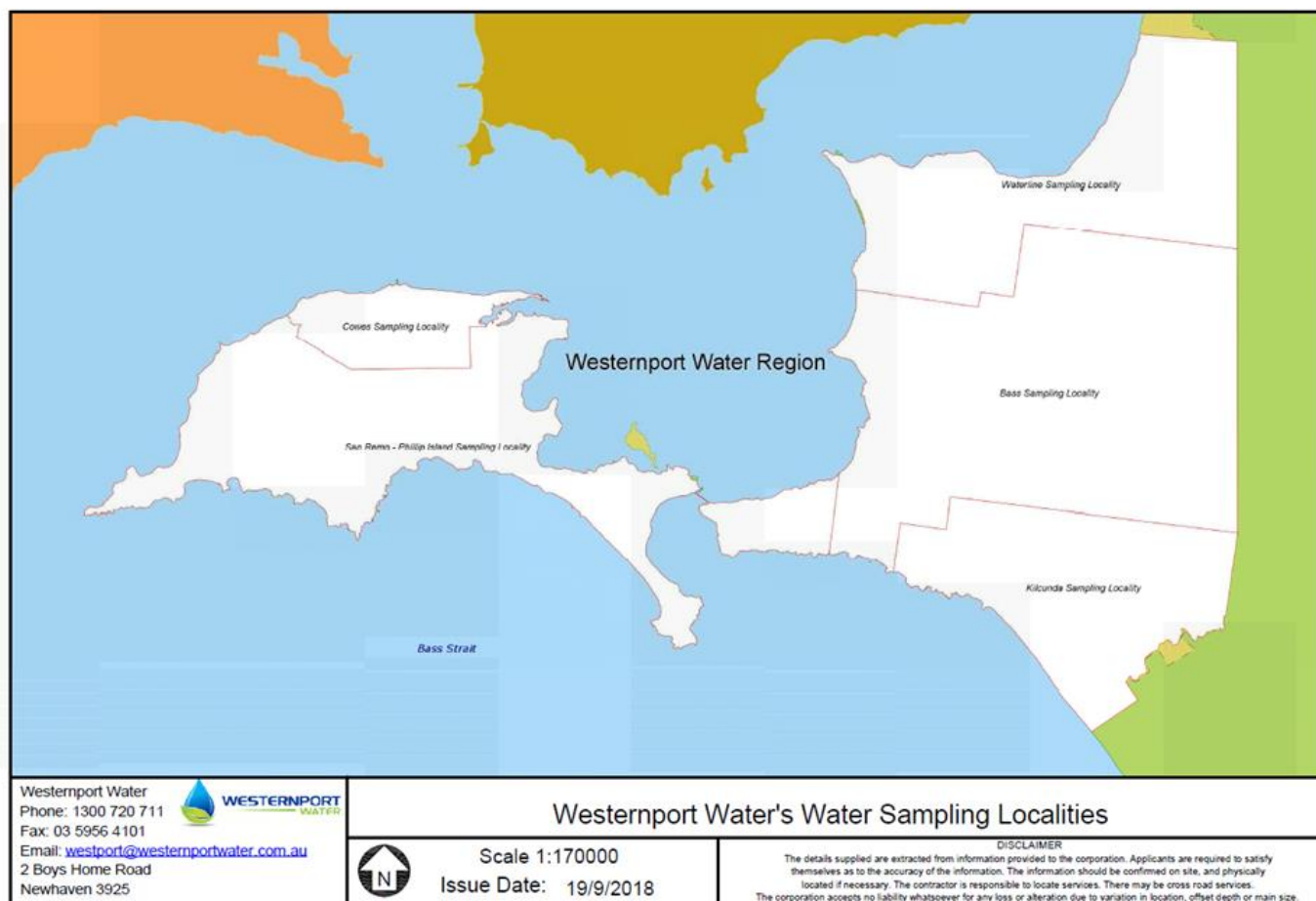


Figure 1 WPW region by water sampling localities

Characterisation of Westernport Water's Supply System

System Overview

WPW has a single water supply storage (Candowie Reservoir), which is an on-stream storage on Tennant Creek, located in the Bass Hills near Glen Forbes.

Water is treated at the Ian Bartlett Water Purification Plant (IBWPP) and then reticulated to communities through a single main supply line, with a number of smaller offtakes servicing each of the residential communities within WPW's area of supply.

Raw water quality is typical of water that is sourced from an unprotected catchment. Water quality is impacted by farming activities and runoff from cleared land within the catchment area. Before treatment, the raw water is high in nutrients and organics. Following treatment, the water complies with the ADWG and standards outlined in regulation 12 of SDWR.

Table 1 is a summary of the localities and population supplied treated water by WPW. Table 2 is a summary of water sources and treatment process utilised by WPW.

Water Sources

Other sources of water are available to supplement Candowie Reservoir during low rainfall periods. These alternative sources are surface water from the Bass River and groundwater from bores constructed in the Corinella Groundwater Management Unit (GMU). Water from these alternative sources is pumped via a pipeline to Candowie Reservoir for centralised storage and treatment at the IBWPP. Table 2 also lists where raw water is sourced and the treatment processes used to produce potable water to customers. WPW holds a Bulk Entitlement (BE) to the Greater Yarra system – Thompson River (Desalination and Cardinia Reservoir) pool which can supply potable water from a delivery point to our distribution network.

Bass River

Westernport Water's pump station, located along the banks of the Bass River, is used to transfer water into Candowie Reservoir. This is licenced under the Bass River Bulk Entitlement. 243 Mega Litres (ML) of water was extracted from the river during the 2019-20 reporting period.

Melbourne Pool

WPW holds a BE to the Greater Yarra system – Thompson River pool. In 2018 the Retailers' Bulk Entitlement (Desalinated Water) Orders 2014 were amended to support WPW's access to water under its BE through the delivery point.

In 2019-20, South East Water and WPW undertook reciprocal trades of 184.3 ML of water allocation. This is part of an ongoing administrative process to enable WPW to continue to access, by substitution, its water from the Melbourne surface water system. This happens via its offtake on the transfer pipeline while the transfer pipeline is pumping desalinated water from the Victorian Desalination Plant to Cardinia Reservoir. South East Water trades the required volume of desalinated water allocation to WPW and WPW trades the same volume of Melbourne surface water allocation (under its Greater Yarra System – Thomson River Pool bulk entitlement) back to South East Water resulting in a net 0 ML trade. This is required because WPW does not hold an entitlement to desalinated water. This ongoing administrative process was agreed between South East Water, South Gippsland Water, Melbourne Water, Westernport Water and DELWP. Westernport Water extracted 0.7 ML of water from the Greater Yarra System whilst the Victorian Desalination Plant was off during June 2019. This allowed for Westernport Water to finalise commissioning of the connection to the pipeline. A total of 185 ML was extracted from the Greater Yarra System in 2019-20.

Ground Water

WPW have four bores licenced to take and use groundwater within the Corinella GMU. WPW has an entitlement of 490 ML/year. No groundwater was extracted during 2019-20 reporting period.

Source Water Protection

WPW is committed to supplying safe, high quality drinking water. Aligned with the framework for the management of drinking water quality is the catchment to tap approach. To demonstrate this approach for the catchment, WPW builds our understanding of the source water risks by:

- I. Undertaking sanitary surveys of the catchment. A survey was undertaken in 2014.
- II. A comprehensive raw water monitoring program for pathogens, blue green algae, organic chemicals and radiological parameters.
- III. Continuous performance monitoring at the treatment plant.
- IV. Ongoing contractual partnership with Bass Coast Landcare and Melbourne Water on improving catchment health.

Water treatment and quality management systems

WPW operates a comprehensive water quality management system that complies with the *SDWA 2003* and *SDWR 2015*. The system is designed to ensure that customers receive drinking water that is safe and of good quality.

Water treatment

Raw water from Candowie Reservoir is treated using a combination of oxidation, adsorption, coagulation, flocculation, dissolved air flotation, filtration, pH correction, fluoridation and disinfection at the IBWPP. The following sections highlight the treatment process used at IBWPP. Table 2 summarises the treatment processes used from different water sources which can be accessed by WPW.

Oxidation

Oxidation is used to remove iron and manganese from the water. Potassium permanganate is added to aid the removal process.

Adsorption

Adsorption is a process where a solid is used to remove a soluble substance from the water. WPW uses Powdered Activated Carbon (PAC) as the solid in water. Water is pumped through PAC and accumulates the soluble substances in the filter. The PAC is then removed from the process, subsequently removing the substance from the water. Adsorption is used to control potential taste and odour issues, and to remove algal toxins from the water.

Coagulation/flocculation

Coagulation is the process to remove fine suspended particles to aid the removal of colour and turbidity. Particles have a negative charge, repelling each other and allowing them to remain suspended in water as they will not clump together and settle out. Coagulation involves the addition of a coagulant (aluminium sulphate) with a positive charge that neutralises the negative charge enabling the fine particles to merge to create larger particles. Flocculation involves gentle mixing of the water which causes the particles to collide increasing their size to visible suspended solids. The visible particles are called a 'floc'.

Dissolved air floatation and filtration (DAFF)

DAFF is a process of injecting air particles into water causing the floc to float to the surface. The floc is then removed to waste and the clear water is filtered through graded filter media. The purpose of DAFF is to produce water low in turbidity.

Over time filters become blocked with particles from the floc. To overcome the blockage, the filters are backwashed periodically to allow optimum production in the filters to produce consistently low turbidity results.

Fluoridation

Fluoride is added to treated water at a level that helps protect teeth against decay. Fluoride does not alter the taste or smell of water. Fluoridated water is delivered to all localities in WPW distribution system.

pH correction

To ensure treated water is within the ADWG desired range, caustic soda is added to raise pH.

Disinfection

a) Ultraviolet (UV)

UV light inactivates microorganisms by damaging their nucleic acid, thereby preventing them from replicating and disrupting their ability to infect hosts. UV disinfection can be used for the inactivation of chlorine resistant pathogens (e.g. *Cryptosporidium* and *Giardia*).

b) Chlorination

The final stage of treatment at IBWPP is chlorine disinfection. Disinfection is required to prevent the spread of waterborne pathogens and to retain an appropriate chlorine residual throughout the system.

c) Chloramination

WPW adopt the method of chloramination to address taste & odour issues and total chlorine residuals to the extremities of the distribution system. Chloramination is the process of adding chlorine to a small amount of ammonia. All localities (except Bass) receive chloraminated water.

website. <https://www.water.vic.gov.au/water-grid-and-markets/desalination>

Desalination

During 2019/20 Westernport Water commissioned it's connection to the Melbourne Pool. This provides another valuable source of water that WPW can access when needed. Information on the desalination plant and process can be found on the DELWP

Table 1 Localities supplied

Water Sampling Locality	Population supplied	Towns supplied
Bass	560	Bass and Woolamai
Cowes	5050	Cowes and Silverleaves
Kilcunda	1000	Kilcunda, Dalyston and Archies Creek
San Remo/Phillip Island	13200	San Remo, Newhaven, Cape Woolamai, Rhyll, Smiths Beach, Sunderland Bay, Sunset Strip, Ventnor, Wimbledon Heights, the penguin parade and the Nobbies tourist attractions
Waterline	2200	Corinella, Coronet Bay, Tenby Point, Grantville and Pioneer Bay

Population sourced from 2016 census data

Table 2 Source Water and treatment processes to all localities

Source	Treatment process	Added substances	Frequency
Tennant Creek/ Bass River IBWPP	Coagulation and flocculation Dissolved air flotation Granular Media Filter Chlorination Chloramination Ultraviolet (UV)	Potassium permanganate powdered activated carbon (PAC) Aluminium sulphate Caustic soda Sodium Hypochlorite Ammonia Sodium fluoride	■
Desalination Plant	Coagulation Filtration Reverse osmosis Remineralisation Fluoridation Disinfection Sludge thickening Membrane preservation	Ferric sulphate Sulfuric acid PolyDADMAC Antiscalant Caustic soda Hydrated lime Carbon dioxide Fluorosilicic acid Sodium bisulfite Sodium hypochlorite Ferric sulphate Polyacrylamide	□
Cardinia Reservoir	Primary disinfection Fluoridation pH correction	Gaseous chlorine Fluorosilicic acid Lime	□

■ Treatment/Substance was applied regularly in 2019-20

□ Treatment/Substance was applied intermittently in 2019-20

Water quality improvements in 2019-20

Water quality improvements during 2019-20 were:

- Commenced construction of a clear water storage tank at Wimbledon Heights.
- Commissioned the connection to the Melbourne Pool Supply.
- Turbidity filter performance met the Health Based Target guideline of <0.2 NTU 95% of the time and not >0.5 NTU for 15 consecutive minutes throughout 2019-20.
- Continuation of a backflow prevention project. This project will provide protection of the distribution system against contamination from private supplies.
- Continuation of the implementation of the 5C's principle to ensure best practice is followed during repairs in the distribution system.
- Improvements to data management via the ongoing implementation of a water quality database.

Issues

There were no issues during the 2019-20 reporting period that affected water treatment processes which may lead to potential or actual exceedances of drinking water quality standards.

Emergency, incident and event management

No Section 22 notifications or treatment issues occurred during 2019-20.

Analysis of Results

The quality of drinking water supplied to our customers was of good quality and met water quality standards detailed in regulation 12 of the SDWR 2015.

During 2019-20 samples were collected in accordance with WPW's sampling program, compliance with regulation 13(1) of the SDWR 2015 was met.

Achieving 100% compliance this year continues the 100% compliance in the previous 2 annual reports. For more information on the previous reporting periods please visit our publications page on our website:

<http://www.westernportwater.com.au/learning-centre/resources-support/forms-publications/>

The following tables depict the performance for 1 July 2019 to 30 June 2020.

Drinking Water Quality Standards

Table 3 E.coli

SDWR 2015 water quality standard: All samples of drinking water collected are found to contain no *Escherichia coli* per 100mL of drinking water, with the exception of any false positive sample.

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum Detected (orgs/100mL)	Number of detections and investigations conducted (s.22)	Number of samples where standard was not met (s. 18)
Bass	Weekly	53	0	0	0
Cowes	Weekly	110	0	0	0
Kilcunda	Weekly	106	0	0	0
San Remo - Phillip	Weekly	173	0	0	0
Waterline	Weekly	159	0	0	0

Cowes, Kilcunda, San Remo – Phillip Island and Water Line include additional samples of clear water storages.

Cowes and San Remo-Phillip Island include additional samples due to population.

Table 4 Trihalomethanes (THM's)

SDWR 2015 water quality standard: 0.25mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Monthly	12	0.12	0.07	0
Cowes	Monthly	12	0.13	0.10	0
Kilcunda	Monthly	12	0.11	0.09	0
San Remo - Phillip	Monthly	12	0.13	0.10	0
Waterline	Monthly	12	0.12	0.08	0

Table 5 TurbiditySDWR 2015 water quality standard: the 95th percentile of results for samples in any 12 month period must be ≤ 5.0 NTU

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum turbidity in a sample (NTU)	Maximum 95th percentile of turbidity results in any 12 months (NTU)	Number of samples where standard was not met (s. 18)
Bass	Weekly	53	0.2	0.1	0
Cowes	Weekly	53	0.4	0.2	0
Kilcunda	Weekly	53	0.1	0.1	0
San Remo - Phillip	Weekly	53	2.1	0.2	0
Waterline	Weekly	53	0.2	0.1	0

Other algae, pathogen, chemical or substance not specified above that may pose a risk to human health

WPW regularly tests for other substances in the drinking water they supply to customers. The following sections detail the results for the 2019/20 reporting period.

Table 6 Cadmium

The ADWG health value is 0.002mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Annually	1	<0.0002	<0.0002	0
Cowes	Annually	1	<0.0002	<0.0002	0
Kilcunda	Annually	1	<0.0002	<0.0002	0
San Remo - Phillip	Annually	1	<0.0002	<0.0002	0
Waterline	Annually	1	<0.0002	<0.0002	0

Results with a less than qualifier (<) are below the laboratory detection limit.

Table 7 Copper

The ADWG health value is 2mg/L

The ADWG aesthetic value is 1mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Quarterly	4	0.02	0.01	0
Cowes	Quarterly	4	0.01	0.01	0
Kilcunda	Quarterly	4	0.01	0.01	0
San Remo - Phillip	Quarterly	4	0.01	0.01	0
Waterline	Quarterly	4	0.04	0.02	0

Table 8 Cyanide

The ADWG health value is 0.08mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Annually	1	<0.005	<0.005	0
Cowes	Annually	1	<0.005	<0.005	0
Kilcunda	Annually	1	<0.005	<0.005	0
San Remo - Phillip	Annually	1	<0.005	<0.005	0
Waterline	Annually	1	<0.005	<0.005	0

Results with a less than qualifier (<) are below the laboratory detection limit.

Table 9 Fluoride

Code of practice for fluoridation of drinking water supplies water quality standard: 1.5mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Target optimum operating fluoride concentration (mg/L)	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Monthly	18	0.9	0.81	0.46	0
Cowes	Monthly	13	0.9	0.79	0.46	0
Kilcunda	Monthly	12	0.9	0.83	0.49	0
San Remo - Phillip	Monthly	12	0.9	0.77	0.54	0
Waterline	Monthly	12	0.9	0.82	0.48	0

Table 10 Lead

The ADWG health value is 0.01mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Quarterly	4	<0.001	<0.001	0
Cowes	Quarterly	4	<0.001	<0.001	0
Kilcunda	Quarterly	4	<0.001	<0.001	0
San Remo - Phillip	Quarterly	4	<0.001	<0.001	0
Waterline	Quarterly	4	<0.001	<0.001	0

Results with a less than qualifier (<) are below the laboratory detection limit.

Table 11 Manganese

The ADWG health value is 0.5mg/L

The ADWG aesthetic value is 0.1mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Quarterly	4	0.007	0.002	0
Cowes	Quarterly	4	0.006	0.004	0
Kilcunda	Quarterly	4	0.002	0.001	0
San Remo - Phillip	Quarterly	4	0.003	0.002	0
Waterline	Quarterly	4	0.014	0.009	0

Table 12 Nickel

The ADWG health value is 0.02mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Annually	1	<0.001	<0.001	0
Cowes	Annually	1	<0.001	<0.001	0
Kilcunda	Annually	1	<0.001	<0.001	0
San Remo - Phillip	Annually	1	<0.001	<0.001	0
Waterline	Annually	1	<0.001	<0.001	0

Results with a less than qualifier (<) are below the laboratory detection limit

Table 13 Nitrate

ADWG health value: 50mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Cowes	Fortnightly	56	1.4	0.6	0
Kilcunda	Fortnightly	55	1.3	0.5	0
San Remo - Phillip	Fortnightly	55	1.5	0.5	0
Waterline	Fortnightly	27	1.3	0.5	0

Bass locality not sampled as it is a chlorinated supply.

Distribution system inlets sampled at Kilcunda, San Remo-Phillip Island and Cowes.

Table 14 Nitrite

ADWG health value: 3mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Cowes	Fortnightly	56	0.39	0.05	0
Kilcunda	Fortnightly	56	0.38	0.01	0
San Remo - Phillip	Fortnightly	55	0.21	0.02	0
Waterline	Fortnightly	27	0.26	0.01	0

Bass locality not sampled as it is a chlorinated supply.

Distribution system inlets sampled at Kilcunda, San Remo-Phillip Island and Cowes.

Aesthetic Characteristics

The SDWR 2015 refers to aesthetic water quality and states the annual report must include the steps taken by a water supplier to manage aesthetic characteristics of drinking water supplied. Along with verification monitoring of colour and pH, WPW undertake jar testing for optimum coagulant dosing. Other steps taken to manage aesthetics are reactive maintenance programs: air scouring of the distribution pipe network and reactive flushing. The ADWG sets the aesthetic based guideline values for aluminium, true colour, iron and pH. Those parameters sampled throughout the distribution system, indicating compliance, are presented in tables below.

Table 15 Aluminium, acid soluble

The ADWG aesthetic value is 0.2mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Quarterly	4	0.02	0.02	0
Cowes	Quarterly	4	0.02	0.01	0
Kilcunda	Quarterly	4	0.03	0.02	0
San Remo - Phillip	Quarterly	4	0.02	0.02	0
Waterline	Quarterly	4	0.03	0.02	0

Table 16 Colour, true

The ADWG aesthetic value is 15HU

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum	Average	Number of samples where standard was not met (s. 18)
Bass	Monthly	12	6	3	0
Cowes	Monthly	12	6	3	0
Kilcunda	Monthly	12	4	3	0
San Remo - Phillip	Monthly	12	6	3	0
Waterline	Monthly	12	4	2	0

Table 17 Hardness

The ADWG aesthetic value is 60-200mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum	Average	Number of samples where standard was not met (s. 18)
Bass	Quarterly	4	120	58	0
Cowes	Quarterly	4	91	87	0
Kilcunda	Quarterly	4	89	79	0
San Remo - Phillip	Quarterly	4	77	73	0
Waterline	Quarterly	4	80	77	0

Table 18 Iron

The ADWG aesthetic value is 0.3mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Monthly	12	0.03	0.01	0
Cowes	Monthly	12	0.06	0.02	0
Kilcunda	Monthly	12	0.03	0.01	0
San Remo - Phillip	Monthly	12	0.03	0.01	0
Waterline	Monthly	12	0.05	0.02	0

Table 19 pH

The ADWG aesthetic range is 6.5-8.5pH

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum	Minimun	Aesthetic operating range
Bass	Weekly	59	7.6	7.0	6.5-8.5
Cowes	Weekly	113	8.0	7.1	6.5-8.5
Kilcunda	Weekly	110	8.4	7.0	6.5-8.5
San Remo - Phillip	Weekly	178	7.9	7.0	6.5-8.5
Waterline	Weekly	163	8.0	6.8	6.5-8.5

Cowes, Kilcunda, San Remo – Phillip Island and Water Line include additional samples of clear water storages.
Cowes and San Remo-Phillip Island include additional samples due to population.

Table 20 Zinc

The ADWG aesthetic value is 3mg/L

Water Sampling Locality	Frequency of Sampling	Number of Samples	Maximum (mg/L)	Average (mg/L)	Number of samples where standard was not met (s. 18)
Bass	Quarterly	4	0.009	0.006	0
Cowes	Quarterly	4	0.018	0.002	0
Kilcunda	Quarterly	4	0.008	0.001	0
San Remo - Phillip	Quarterly	4	0.005	0.004	0
Waterline	Quarterly	4	0.033	0.003	0

Complaints relating to water quality

Summary of complaints

The number of customer complaints to WPW regarding drinking water totalled 14 for 2019/20. This was a decrease of 23 from 2018/19. Table 21 details the type of customer complaints. Table 22 details water quality complaints by sampling locality.

Table 21 Customer^ complaints relating to water quality

Type of Complaint	Number of complaints			Comparison with previous reporting periods	Comments
	2019-20	2018-19	2017-18		
Discoloured water	6	12	15	Decrease from previous year	On going air scouring and flushing programs to maintain system cleanliness and quick response to bursts and leaks can be attributed to the reduction from previous years.
Taste/odour	4	21	8	Decrease from previous year	On going work to maintain a consistent chlorine residual are seeing improvements from previous years.
Other*	4	4	7	Same as previous year	Nil
Total	14	37	30	62% decrease from previous year	The decrease in complaints is representative of the projects undertaken over several years to improve the aesthetics over water supplied.

Table 22 Complaints by water sampling locality

Locality	Type of complaint			Total complaints
	Discoloured water	Taste/odour	Other*	
Bass	0	0	0	0
Cowes	0	0	1	1
Kilcunda	2	0	1	3
San Remo - Phillip Island	3	2	2	7
Water Line	0	2	0	2

^for the purposes of this section, the term 'customer' has the same meaning as that used by the Essential Services Commission, that is, a customer = a connection.

*includes any contact related to alleged illness.

43% of complaints were for discoloured water, 28% were for both taste/odour and other.

The majority of complaints were for discoloured water. These complaints were isolated incidents and were resolved with flushing. Although there were a higher number of complaints in the San Remo/Phillip Island locality this locality has the highest population density of all the localities. There was no correlation between complaints. The complaints were most often the result of scheduled or emergency works occurring in the area at the time which caused air in the water.

Response to complaints

WPW is committed to providing its customers with high quality water and customer service. Our Customer & Community Division manages customer complaints and each complaint is lodged using an entry form in WPW customer request management (CRM) system. Depending on the nature of the complaint, the details are electronically forwarded to either the Water Quality and Sustainability Officer for water quality complaints or the Network Operations & Maintenance Coordinator for water main bursts and leaks.

After a complaint is lodged, depending on the nature of the complaint, one or a combination of the following actions may be performed:

- Contact the customer who lodged the complaint to determine the seriousness of the issue.
- Discuss with the complainant the possible causes of the poor water quality i.e. temporary changes to normal operation or high manganese and/or iron in raw water.
- Explain to the complainant the multiple barriers and rigorous sampling and testing regime employed to provide a safe and aesthetically acceptable water.
- Proceed with remedial action such as water sample testing, mains flushing and occasionally water sampling testing after flushing.
- Give feedback to customer in terms of water quality information and links to further information regarding regulatory obligations.

Findings of the most recent risk management plan audit

There were no regulatory risk management plan audits conducted in the reporting period. An audit was scheduled for May 2020 however due to the COVID-19 pandemic DHHS extended the audit period to 28 August 2020. The audit was conducted on 30-31 July 2020. This will be reported on in the 2020-21 annual drinking water quality DWQ report. The most recent audit was held in May 2018 and WPW was fully compliant with obligations under the SDWA, SDWR and audit guidelines. The progress of the Opportunities for Improvements (OFI) identified from the 2018 audit are listed in Table 23.

Table 23 Status of OFI's from 2018 audit.

OFI	Status
Over the longer term, consider committing to installing two or more conventional fixed roof water tanks in place of the single San Remo Basin with its floating cover.	Investigation was undertaken on the viability of installing tanks. Based on a number of factors including cost and water quality tanks will not be installed at this time and the liner and cover will be replaced.
Complete the roll-out of monochloramine and free ammonia analysers to cover the remaining Grantville Tank. To provide full coverage for this best practice monitoring program to help inform the challenging task of managing chloramine residuals.	Completed
In continuing with its backflow prevention program, WPW is encouraged to consider the ongoing workload that this creates and resource that workload. Any backflow prevention role could be linked to recycled water and trade waste management roles. The role could link to the trend for more proactive involvement by water utilities in oversighting plumbing to help fill a regulatory weakness.	Project underway and will continue over several years
WPW is encouraged to look at better formalising an obligation on its materials suppliers to only supply pipes, parts, fittings, coatings, etc., that are fit-for-purpose as materials in contact with drinking water, where relevant.	Completed
WPW is encouraged to progress with its plans to create a suitably sized and outfitted storage depot that permits chemicals, parts, and fittings to be stored undercover, off the ground, in clean, sanitary conditions, out of sunlight and at suitable temperatures.	Project underway to increase storage within the depot to store equipment undercover.

Undertakings under section 30 of the Act

WPW currently has no section 30 undertakings.

Regulated Water under section 6 of the Act

No regulated water was supplied during the reporting period.

Exemption under section 20 of the Act

WPW has no exemptions under section 20.

Variations of aesthetic standards under section 19 of the Act

No variations of aesthetic standards in place under section 19.

Glossary of Terms

Term	Meaning
ADWG	Australian Drinking Water Guidelines
CRM	Customer Request Management System
DAFF	Dissolved Air Floatation and Filtration
DHHS	Department of Health and Human Services
<i>E.coli</i>	<i>Escherichia coli</i>
GMU	Groundwater Management Unit
IBWPP	Ian Bartlett Water Purification Plant
mg/L	Milligram per litre
NTU	Nephelometric Turbidity Unit
PAC	Powdered Activated Carbon
SCADA	Supervisory Control and Data Acquisition
SDWA	<i>Safe Drinking Water Act 2003</i>
SDWR	Safe Drinking Water Regulations 2015
THM	Trihalomethanes
WPW	Westernport Water
RMP	Risk Management Plan

Section 23 of the Act requires Westernport Water to make water quality monitoring information publicly available. Customers and members of the public may access drinking water quality data by contacting Westernport Water on the details provided below:

Email: westport@westernportwater.com.au,

Website: www.westernportwater.com.au

Phone: 1300 720 711