

Ministerial Statement 572

Ocean Outlet for Treated Wastewater,
Bunbury Wastewater Treatment Plant

Performance and Compliance Report

July 2019 to June 2020



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1 Introduction

Wastewater disposal at the Bunbury Wastewater Treatment Plant (WWTP) is subject to conditions contained in Statement 572, of 14 September 2001, issued by the Minister for the Environment under the Environmental Protection Act 1986 (EP Act). Condition 5-1 of Statement 572 requires the Water Corporation to submit periodic Performance Compliance Reports (PCR) to the Department of Environmental Protection (now the Department of Water and Environmental Regulation (DWER)).

2 Current Status

The WWTP treats wastewater to a secondary standard and consists of four Sequence Batch Reactors (SBRs). Treated wastewater is discharged into two holding lagoons and then discharged into the ocean via a 1.7 km long pipeline. Waste activated sludge is mechanically dewatered on site and solids are disposed of to landfill. Dewatered filtrate is returned to the treatment process.

Bunbury No. 2 WWTP has a licenced design capacity of 15,000m³/day. During the 2019-20 reporting period the Bunbury WWTP received an annual average daily inflow of 11,025m³, representing a 1% decrease from the 2018-19 reporting period. Up to 5,000 tonnes per year of liquid waste is also accepted at the site in tankers from controlled waste contractors (mainly sewage from pump-outs of the reticulated sewerage system, as other types of waste may disturb the balance of the treatment process).

Major infrastructure works (13 ML/d Optimisation Project) commenced in March 2017 at the Bunbury WWTP and was completed in September 2017. Additionally, a major upgrade of mechanical dewatering process was completed during the 2018-19 reporting year.

A conceptual design of the next possible upgrade is currently being reviewed by the Water Corporation.

3 New Wastewater Resource Recovery Scheme

The State Government announced on 2 September 2020 (see appendix 8) plans to invest \$11.9 million into a wastewater recycling scheme for Bunbury. The Bunbury Water Resource Recovery Scheme will include the construction of a new wastewater recycling facility (adjacent to Bunbury WWTP) and associated infrastructure to supply non-potable water for use on major infrastructure projects and irrigation of public open spaces.

The project is an initiative of AgWest, which will build and operate the new facility. The project will enter the detailed design phase in late 2020 with first water expected to commence in 2021-22.

4 Compliance

4.1 Non-conformances/Non-compliances:

Table 1 provides a summary of compliance against monitored parameters in comparison to the key characteristics for the proposal, as shown in Schedule 1 of Ministerial Statement 572.



Table 1 - Summary of compliance with Schedule 1 treated water quality limits

Schedule 1 Limit	Compliance 19-20	Details
SS <20mg/L (mean)	Y	Mean: 5.4 mg/L
BOD <20mg/L (mean)	Y	Mean: 5.0 mg/L
TN ≤15mg/L (mean)	Y	Mean: 8.7 mg/L
Discharge TN to ocean ≤ 60 T/year	Y	35.11 T/year.

Notes: Compliance has been assessed as per Attachment 2 to Ministerial Statement 572 (dated April 2014), which removes assessment against the water quality limits; Total Phosphorous and Faecal coliform bacteria counts, as these are managed under Part V (Licence) of the EP Act.

The operation of the ocean outlet for treated wastewater at Bunbury WWTP has been compliant according to the requirements of M572 during the reporting period, with evidence for the current status provided in Section 6 – Audit Table – status update column.

4.2 Bunbury Ocean Outlet Monitoring Program

There was one exceedance against Environmental Quality Guideline (EQG) ‘Periphyton biomass’ and Environmental Quality Standard (EQS1) seagrass health during the reporting period. Periphyton biomass and seagrass health are indicators used by the Water Corporation to determine if the Environmental Quality Objective ‘Maintenance of Ecosystem Integrity’ has been met.

As a result of the exceedance of the Periphyton biomass EQG, this then triggers a more detailed assessment to better determine marine impacts. In this instance, this requires further assessment against the Environmental Quality Standard (seagrass health EQS1 and EQS2). The monitoring results have recorded an exceedance against Environmental EQS1 for seagrass health. The exceedance can be attributed primarily due to a large standard error in the sample data and therefore suggests that seagrass health is not being compromised. The EQS2 for seagrass health was met during the reporting period. A review of the seagrass monitoring sampling frequency will be undertaken during the next update of the Bunbury Ocean Outfall Marine Impact Monitoring and Management Plan.

It is also worth noting that the nitrogen stable isotope analysis ($\delta^{15}\text{N}$) of the periphyton samples suggest that the treated wastewater plume is not responsible for elevated periphyton biomass (chlorophyll-a) concentrations at the compliance sites.

Although an exceedance of EQS1 for seagrass health was recorded, the overall Environmental Quality Objectives was still assessed to have been met during the 2019-20 reporting period given the exceedance was due to sampling size rather than actual impact to seagrass health. See Appendix 5 for 2019-20 BOOM Annual Report

4.3 Internal/External Audits:

This performance compliance report (PCR) constitutes an internal audit by the proponent against the conditions and commitments of MS572. The audit table provided in section 6 summarises the findings.



Monthly inspections for licence compliance are also undertaken by staff independent to the day to day processing at Bunbury WWTP.

4.4 Complaints Register:

Water Corporation maintains a comprehensive complaints, reporting and management system. There were no complaints received regarding Bunbury WWTP during the 2019-20 reporting year.



5 Environmental Monitoring and Research

Bunbury WWTP has generally performed within the expected design parameters for the 2019-20 reporting period. Full details of environmental monitoring are included in the licence Annual Environmental Report for Bunbury WWTP (see Appendix 4).

There were no exceedances against key characteristics for the proposal, as shown in Schedule 1 of Ministerial Statement 572. Figures 1 to 4 below show compliance against specific conditions as listed in Table 1 – Key Proposal Characteristics (1302) of MS 572 for the 2019 -20 reporting period.

Ministerial Statement MS572 specifies the Bunbury WWTP be operated to achieve a TN load of 60 tonnes or less per annum released through the discharge weir to the ocean outfall. The ocean TN loading limit did not exceed the MS572 limit with 35.11 tonnes being reported in 2019-20.

Figure 1 – Biochemical Oxygen Demand schedule 1 limit

(Note: Samples with results below level of detection (LOD) are represented as ½ LOD (eg where LOD is 5mg/L, it is taken as being 2.5mg/L)

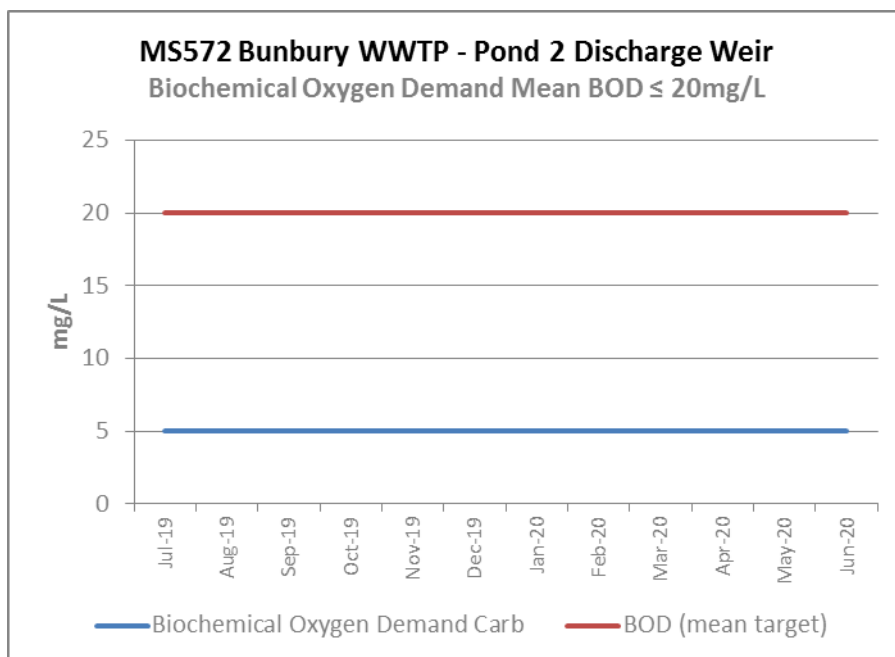




Figure 2 – Suspended Solids schedule 1 limit

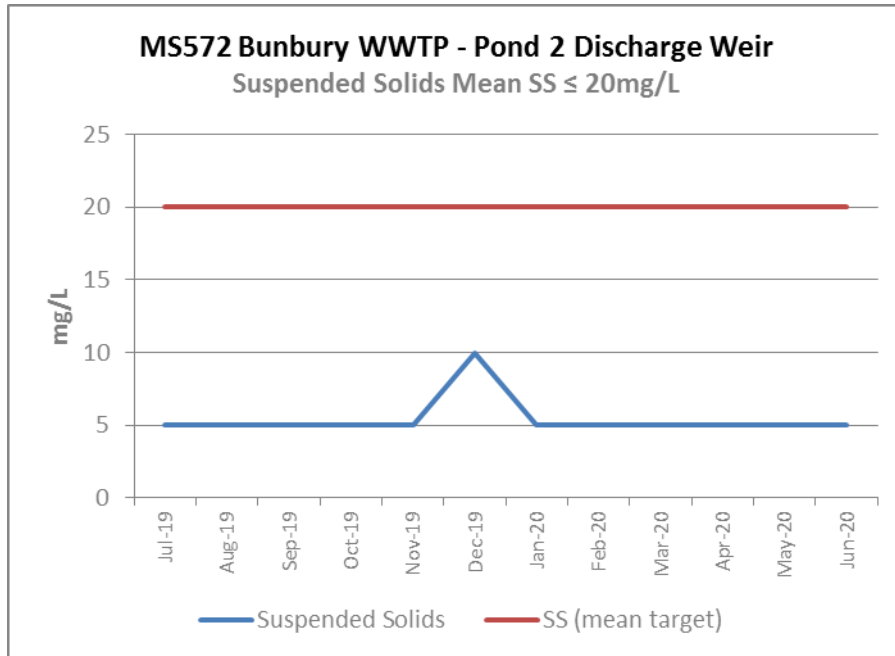


Figure 3 – Nitrogen schedule 1 limit

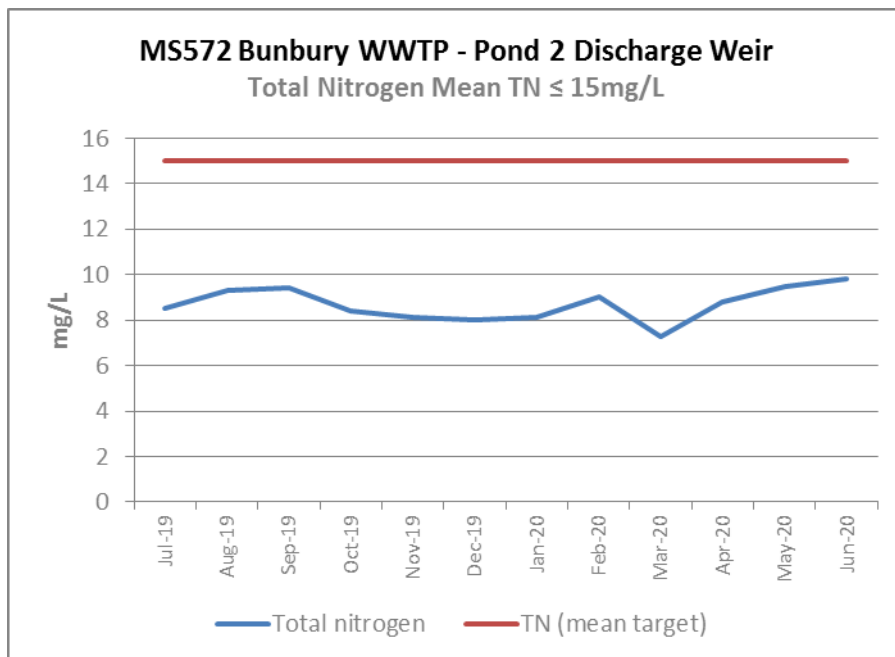




Figure 4 – Nitrogen load at ocean outfall schedule 1 limit

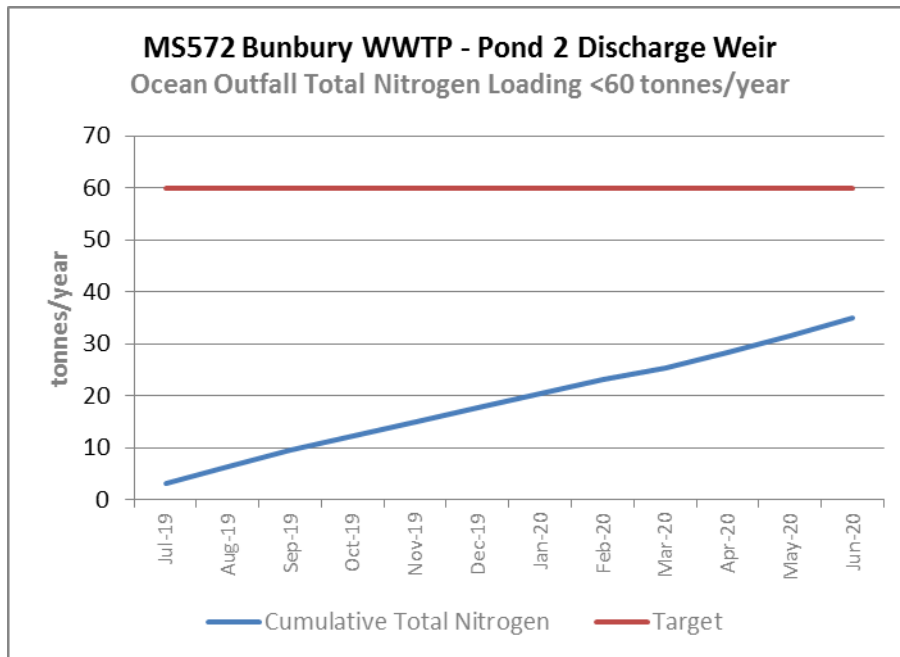


Table 2 – Monthly Monitoring Results for treated wastewater.

	Biochemical Oxygen Demand Carb mg/L	Suspended Solids mg/L	Total nitrogen mg/L
Jul-19	5.0	5	8.5
Aug-19	5.0	5	9.3
Sep-19	5.0	5	9.4
Oct-19	5.0	5	8.4
Nov-19	5.0	5	8.1
Dec-19	5.0	10	8.0
Jan-20	5.0	5	8.1
Feb-20	5.0	5	9.0
Mar-20	5.0	5	7.3
Apr-20	5.0	5	8.8
May-20	5.0	5	9.5
Jun-20	5.0	5	9.8
Mean	5.0	5.4	8.7

Notes:

- The data presented in this table consists of the regulatory monthly sample required under licence L5972/1992/14.
- (Note: Samples with results below level of detection (LOD) are represented as ½ LOD (eg where LOD is 5mg/L, it is taken as being 2.5mg/L)



Table 3 – Nitrogen load cumulative discharge ocean outfall

	Monthly Flow	Total Nitrogen	Cumulative Total Nitrogen	Target
	ML	T/month	Tonnes	t/yr
Jul-19	369.92	3.144	3.14	60
Aug-19	351.31	3.267	6.41	60
Sep-19	332.22	3.123	9.53	60
Oct-19	343.11	2.882	12.42	60
Nov-19	329.81	2.671	15.09	60
Dec-19	337.32	2.699	17.79	60
Jan-20	336.48	2.726	20.51	60
Feb-20	310.07	2.791	23.30	60
Mar-20	302.14	2.206	25.51	60
Apr-20	318.63	2.804	28.31	60
May-20	347.46	3.301	31.61	60
Jun-20	356.72	3.496	35.11	60
TOTAL		35.11		
Average		2.93		

6 Stakeholder Consultation

As required, Water Corporation engages with stakeholders in a timely and meaningful way, and consults with them on matters of mutual interest. Associated comment relating to reuse consultation has been provided in the Audit Table – Table 4.

7 Audit Table

The following audit table is based on the most recent Ministerial Statement 572 Audit Table received from the OEPA. The status field of the audit table has been updated and describes the current stage of implementation for each action. The relevant codes are listed as: OEPA audit table with updated status for each Ministerial condition, i.e.

- Compliant (C)
- Non-Compliant (NC)
- Completed (CLD)
- Not Required at this Stage (NR)
- Not Audited (NA)
- In Process (IP)

Audit Table

Table 4 – Audit Table

Note:

- Phases that apply in this table = **Pre-Construction, Construction, Operation, Decommissioning, Overall (several phases)**
- This audit table is a summary and timetable of conditions and commitments applying to this project. Refer to the Minister’s Statement for full detail/precise wording of individual elements.
- Code prefixes: M = Minister’s condition; P = Proponent’s commitment; A = Audit specification; N = Procedure.
- Any elements with status = “Audited by proponent only” are legally binding but are not required to be addressed specifically in compliance reports, if complied with.
- Acronyms list:- Minister for the Environment - Min for Env; Chief Executive Officer - CEO; Department of Environment - DoE; Evaluation Division - Part IV; Pollution Prevention Division - Part V; Waste Management Division - WMD; Department of Conservation and Land Management - CALM; Department of Minerals and Energy - DME; Environmental Protection Authority - EPA; Health Department of WA - HDWA; Water and Rivers Commission - WRC; Bush Fires Board - BFB.

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
572:M1.1	Implementation	Implement the proposal as documented in Schedule 1 of Statement 572, subject to these conditions and procedures.	The manner of detailed implementation of the proposal shall conform in substance with that set out in any designs specifications, plans or other technical material submitted by the proponent to the EPA initially with the proposal and subsequently, as part of further consideration under Section 46 of the EP Act 1986	As required by M5.1	EPA		Overall	Throughout the life of the project	C	The project has been constructed with design specifications as outlined in Schedule 1 of the Ministerial Statement. Assessment against the wastewater quality criteria limits are provided in Section 3 (Table 1).
572:M1.2	Change to proposal	Refer any change to the proposal, as documented in Schedule 1, to the EPA, if the Min for Env & Her determines it is substantial		Document describing changes to the proposal and possible impacts of proposed changes	Min for Env & Her	EPA	Overall	Prior to any substantial changes to the proposal being made	C	N/A
572:M1.3	Change to proposal	Changes to the proposal, as documented in Schedule 1, may be effected where the Min for Env & Her, on advice from the EPA, determines that those changes are not substantial	The criteria are that the proposed change: 1) has no additional, significant environmental impacts; 2) is not a significant and environmentally adverse change to a key proposal characteristic as shown in Schedule 1; 3) has addressed any justifiable environmental concerns of	Document describing changes to the proposal and possible impacts of proposed changes	Min for Env & Her	EPA	Overall	Prior to any substantial changes to the proposal being made	C	There have been no changes during the current reporting period to any aspect of the proposal as documented in Schedule 1. Previous changes: Refer to Attachment 2 to Ministerial Statement 572 [signed 22 April 2014] which details the following change to

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
			relevant stakeholders; 4) is manageable under the existing conditions of this statement and 5) status of compliance reporting is satisfactory.							the proposal under S45C of the <i>Environmental Protection Act 1986</i> : Removal of the Total Phosphorous (TP) limit of 10 mg/L and the faecal coliform limit of <10,000 cfu/100mL.
572:M2.1	Proponent Commitments	Implement the consolidated environmental management commitments documented in Schedule 2 of Statement 572		As appropriate	EPA		Overall		C	Refer to rows below which provide details of compliance for each of the environmental management commitments.
572:M2.2	Proponent Commitments	Implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of conditions and procedures in Statement 572		Compliance reports to verify that subsequently approved management plans have been properly implemented	EPA		Overall		C	A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. This condition was listed as not requiring auditing according to the OEPA letter dated 11 October 2010 because there were no subsequent commitments (Appendix E of 2008/09 – 2013/14 PRR). This report and the licence Annual Environment Report provide evidence of activities implemented to meet conditions of MS572.
572:M3.1	Nominated Proponent	The proponent nominated by the Minister for the Environment & Heritage, under S38(6) or (7) of the EP Act is responsible for the implementation of the project until the Minister has revoked this nomination and nominated another person in respect of the proposal under			Min for Env & Her	DEP	Overall		C	The proponent has not changed for implementation of the proposal approved under MS 572.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
		S38(7) of the EP Act								
572:M3.2	Change in Proponent	Any request for a change in proponent shall be accompanied by a copy of the Minister's statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in Statement 572		Statement endorsed by the proposed replacement proponent	Min for Env & Her	DEP	Overall	Before transfer of ownership of the proposal	C	The proponent has not changed for implementation of the proposal approved under MS 572.
572:M3.3	Proponent	Notify the DEP of any change of proponent contact name and address			EPA		Overall	Within 30 days of any change of address	C	The proponent has not changed for implementation of the proposal approved under MS 572.
572:M4.1	Commencement	Provide evidence to the Minister for the Environment within five years of the date of Statement 572 that the proposal has been substantially commenced		As required by M4.1	Min for Env & Her	DEP	Overall	By 14 Sept 2006	CLD	The proposal has substantially commenced, as evidenced by this report and previous PCRs. Ministerial Statement 572 was issued to the Water Corporation on 14 September 2001. The Bunbury WWTP was commissioned in July 2002, indicating that the proposal had been substantially commenced within five years of the date when the Statement was issued. The Office of the Environmental Protection Authority (OEPA) determined that this condition was completed during a desktop audit dated 11 October 2010 (Appendix E of PRR).
572:M4.2	Commencement	If the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in Statement 572	The Minister will determine any question as to whether the proposal has been substantially commenced		EPA		Overall		NR	This item is no longer relevant as the proposal has substantially commenced.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
		shall lapse and be void								
572:M4.3	Commencement	Make an application to the Minister for the Environment and Heritage for any extension of approval for the substantial commencement of the proposal beyond five years from the date of Statement 572		Letter regarding extension required, stating that the proposal is to be implemented as approved.	EPA		Overall	At least six months prior to the expiration date of the five year period (14 March 2006)	NR	This item is no longer relevant as the proposal has substantially commenced.
572:M4.4	Approval Period	The Minister may grant an extension of approval not exceeding five years	If the proponent demonstrates to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly	Letter regarding extension required, stating that the proposal is to be implemented as approved	Min for Env & Her	EPA	Overall		NR	This item is no longer relevant as the proposal has substantially commenced.
572:M5.1	Compliance Auditing	Submit periodic Compliance Reports	In accordance with the audit programme prepared in consultation between the proponent and the DEP	Compliance report providing evidence of compliance for each audit element in the audit table.	EPA		Overall	Prior to commencement of construction and annually thereafter until further notice	C	This report
572:M5.2	Compliance Auditing	The CEO of the DEP, unless otherwise specified, will assess compliance with the conditions, procedures and commitments of Statement 572 and will issue formal, written advice when satisfied that each audit element has been complied with.		Written request for clearance of conditions procedures and commitments where the Compliance Report Provides evidence of having met the requirements.	CEO	DEP	Overall		NR	This condition as such cannot be implemented by Water Corporation but provides the pathway for Water Corporation to obtain clearance for commitments and conditions where evidence is available to show completed.
572:M5.3	Compliance Auditing	The Min for Env & Her will determine any dispute over compliance with any			Min for Env & Her	DEP	Overall		NR	No advice of non-compliance has been received from the OEPA.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
		condition, procedure or commitment of Statement 572								
572:M6.1	Marine Management	The proponent shall manage the discharge of effluent from the ocean outlet	This is to achieve simultaneously: 1) the ecosystem health objective (Environmental Quality Objective 1), as defined in the Environmental Protection Authority document Perth's Coastal Waters, Environment Values and Objectives in the zones delineated in figure 2 of schedule 1; 2) the fishing and aquaculture objective (Environmental Quality Objective 2) in the zones delineated in figure 2 of schedule 1; and 3) the recreational and aesthetic objectives (Environmental Quality Objectives 3 and 4 respectively) in the zones delineated in figure 2 of schedule 1. NOTE: The above Environmental Quality Objective zone are subject to review in both extent and the guideline values and standard criteria applying to them, and may be varied from time to time on advice of the EPA		EPA		Overall		C	<p>The Environmental Quality Objectives were all met during the 2019-20 reporting period, however two exceedances of environmental quality criteria used to assess the EQO – Maintenance of Ecosystem Integrity has been noted. These exceedances included;</p> <ul style="list-style-type: none"> a) Environmental Quality Guideline (EQG) 'Periphyton biomass' and, b) Seagrass health EQS1. Monitoring results have recorded an exceedance against Environmental EQS1 for seagrass health. However, the exceedance is attributed due to a large standard error in the sample data which suggests that seagrass health is not being compromised. The EQS2 for seagrass health was met during the reporting period. <p>Although an exceedance of EQS1 for seagrass health was recorded, the overall Environmental Quality Objectives - Maintenance of Ecosystem Integrity was still assessed to have been met during the 2019-20 reporting period given the exceedance was due to sampling size rather than actual impact to seagrass health.</p> <p>Refer to BOOM 2019-20 annual</p>

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
										report (Appendix 5) for full details.
572:M6.2	Marine Management	In meeting condition 6.1, the proponent shall address the following which are not included in commitment no 19 (operations Environmental Management Program): 1) the identification of ecosystem health indicators appropriate to the discharge site; and 2) site specific guideline values and standard criteria for the indicators, if generic criteria are not appropriate, to the requirements of the EPA on advice from the DEP		Appropriate documentation	EPA	DEP	Overall		C	Refer to BOOM 2019-20 annual report at Appendix 5 for evidence of compliance.
572:M7.1	Decommissioning Plans	Prepare a Preliminary decommissioning plan	The preliminary Decommissioning Plan shall address: 1) rationale for the siting and design of plant and infrastructure and conceptual plans for its/ their removal or, if appropriate, retention; 2) conceptual rehabilitation plans for all disturbed areas and a process to agree on the end land use(s); and 3) management of noxious materials to avoid the creation of contaminated areas.	Preliminary Decommissioning Plan	EPA	DEP	Pre-construction		CLD	Updated audit table shows this commitment as cleared.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
572:M7.2	Decommissioning Plans	Prepare a Final Decommissioning Plan	The Final Decommissioning Plan shall address: 1) removal or, if appropriate, retention of plant and infrastructure; 2) rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and 3) identification of contaminated areas, including provision of evidence of notification to relevant statutory authorities.	Final decommissioning Plan	EPA	DEP	Post-construction	At least six months prior to the anticipated date of decommissioning, or at a time agreed with the DEP	NR	
572:M7.3	Decommissioning Plans	Implement the Final Decommissioning Plan required by condition 7.2 until such a time as the Min for Env & Her determines that decommissioning is complete			Min for Env & Her		Post-construction		NR	
572:M7.4	Decommissioning Plans	Make the Final Decommissioning Plan publicly available			EPA		Post-construction		NR	
572:M8.1	Work Practices	Prepare a written prescription for contractor work practices covering pipeline installation and support vessel operation			EPA	DEP	Pre-construction		CLD	Updated audit table shows this commitment as cleared.
572:M8.2	Work Practices	Ensure that all pipeline works and support vessel operations comply with the prescription referred to in condition 8.1			EPA		Overall		CLD	A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR and information previously submitted by the Water Corporation. Following the audit this condition was completed according to the OEPA letter dated 11 October 2010 (Appendix E of PRR).

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
572:M9.1	Performance Review	The proponent shall submit a Performance Review Report to the DEP	The report should be relevant to the following: 1) environmental objectives reported on in Environmental Protection Authority Bulletin 1021; 2) proponent's consolidated environmental management commitments documented in schedule 2 of this statement and those arising from the fulfilment of conditions and procedures in this statement; 3) environmental performance targets; 4) environment management programs and plans; and/or 5) environmental performance indicators NOTE: The EPA may recommend changes and actions to the Min for the Env and Her following consideration of the Performance Review Report.	Performance Review Report	EPA	DEP	Construction	Each six years following the commencement of construction	C	Refer to Appendix 3, Bunbury Wastewater Treatment Plant, Six Year Performance Review 2008/09-2013/14 (July 2015), Oceanica Consulting Aqua Doc No. 13250162. The next six-year performance review is due for the period 2014/15 – 2019/2020. This will be submitted to DWER by April 30 2021.
572:P1.1	Wastewater management	Continue to investigate options for viable wastewater re-use at Bunbury			EPA	City of Bunbury, Shire of Capel and community interest groups	Overall	On-going	C	The State Government announced on 2 September 2020 plans to invest \$11.9 million into a wastewater recycling scheme for Bunbury. The Bunbury Water Resource Recovery Scheme will include the construction of a new wastewater recycling facility (adjacent to Bunbury WWTP) and associated infrastructure to supply non-potable water for use on major infrastructure projects and irrigation of public open spaces.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
										Refer to Section 4.
572:P1.2	Wastewater management	Provide a triennial report to community and DEP	This needs to detail options investigated during the previous three years and plans for the next three years		EPA	City of Bunbury, Shire of Capel and community interest groups	Overall	Every 3 years	C	<p>A triennial report on reuse proceedings for the period up to July 2018 was submitted as part of the 2017/18 PCR (refer to Appendix 6).</p> <p>The Corporation continues to investigate options for viable wastewater re-use at Bunbury, but no significant developments have progressed in this area since the previous submission.</p> <p>The next triennial report will be submitted in the 2020/21 PCR for the period 2017/18 to 2020/21.</p>
572:P1.3	Wastewater Management	Review requirement after each triennial report			EPA	City of Bunbury, Shire of Capel and community interest groups	Overall	Every 3 years	C	Refer to comments in this column under P1.2.
572:P2	Construction Environment Management Program (EMP)	Prepare EMP for construction phase	EMP should include management plans for: 1) Dune rehabilitation and revegetation; 2) Beach rehabilitation; 3) Marine construction; 4) Underwater blasting (if required); 5) Protection of terrestrial vegetation; 6) Public safety; 7) Aboriginal Heritage; and 8) Construction traffic		EPA	CALM, City of Bunbury, Shire of Capel (Local Authorities), and DPI (Marine Division)	Pre-construction		CLD	Updated audit table shows this commitment as cleared.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
572:P3	Construction EMP: Dune management plan	Prepare Dune Management Plan	The plan should address: 1) Minimisation of construction impacts on dune erosion; and 2) Stabilisation and revegetation of the foredune area and areas impacted by construction		EPA	Local Authorities and DPI (Maritime Division)	Pre-construction		CLD	Updated audit table shows this commitment as cleared.
572:P4	Construction EMP: Dune management plan	Implement Dune Management Plan			EPA	Local Authorities and DPI (Maritime Division)	Post-construction	Complete within 12 months following the completion of construction	CLD	The implementation of the DMP was to be completed within 12 months following the completion of construction. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. Following the audit this commitment was completed according to the letter from OEPA dated 11 October 2010 (Appendix E of PRR).
572:P5	Construction EMP: Beach Rehabilitation Plan	Prepare a Beach Rehabilitation Plan which addresses the rehabilitation of the beach after construction			EPA	Local Authorities and DPI (Maritime Division)	Pre-construction		CLD	Updated audit table shows this commitment as cleared.
572:P6	Construction EMP: Beach Rehabilitation Plan	Implement Beach Rehabilitation Plan			EPA	Local Authorities and DPI (Maritime Division)	Post-construction	Within 1 month following completion of construction	CLD	The implementation of the BRP was to be completed within one month following the completion of construction. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. Following the audit this commitment was completed according to the letter from OEPA dated 11 October 2010 (Appendix E of PRR).

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
572:P7	Construction EMP:Terrestrial flora management plan	Prepare Terrestrial Flora management plan (including Declared Rare and Priority Flora)	The plan should address the issues: 1) That changes in local groundwater levels do not result in the loss of nearby Tuarts and other significant flora; 2) That construction results in minimal and reversible impact on dune vegetation; and 3) That weeds are not introduced or spread		EPA	CALM	Pre-construction		CLD	The TFMP was cleared by the DEC audit branch on 30 January 2002. The OEPA determined that this condition was completed during a desktop audit dated 11 October 2010 (Appendix E of PRR). Updated audit table shows this commitment as cleared.
572:P8	Construction EMP:Terrestrial flora management plan	Implement Terrestrial Flora Management Plan (including Declared Rare and Priority Flora)			EPA	CALM	Post-construction	Complete within 12 months of completion of construction	CLD	The implementation of the TFMP was to be completed within 12 months following the completion of construction. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. Following the audit this commitment was completed according to the letter from OEPA dated 11 October 2010 (Appendix E of PRR).
572:P9	Construction EMP: Marine construction management plan	Prepare a Marine Construction Management Plan	The plan should outline procedures to minimise impacts of marine construction on:1) Marine flora and fauna; and 2) Marine water quality		EPA	CALM	Pre-construction		CLD	The MCMP was cleared by the DEC audit branch on 30 January 2002. The OEPA determined that this condition was completed during a desktop audit dated 11 October 2010 (Appendix E of PRR).
572:P10	Construction EMP: Marine construction management plan	Implement Marine Construction Management Plan			EPA	CALM	Construction		CLD	The MCMP was to be implemented during construction. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. Following the audit this commitment was completed

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
										according to the letter from OEPA dated 11 October 2010 (Appendix E of PRR).
572:P11	Construction EMP: Underwater blasting management plan	Prepare an Underwater Blasting Management Plan - if blasting is used	The plan will specifically address issues associated with the protection of marine mammals		EPA	CALM	Pre-construction		CLD	The UBMP was cleared by the DEC audit branch on 30 January 2002. The OEPA determined that this commitment was completed during a desktop audit dated 11 October 2010 (Appendix E of PRR).
572:P12	Construction EMP: Underground blasting management plan	Implement Underwater blasting management plan			EPA	CALM	Construction		CLD	The UBMP was to be implemented during construction. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. Following the audit this commitment was listed as completed according to the letter from OEPA dated 11 October 2010 (Appendix E).
572:P13	Construction EMP: Public safety plan	Prepare Public Safety Plan	This should address the issues of: 1) Restriction of public access to the construction site; 2) Marine equipment complying with Department of Transport regulations; and 3) Public notification of any restrictions		EPA	Local Authorities	Pre-construction		CLD	Updated audit table shows this commitment as cleared
572:P14	Construction EMP: Public safety plan	Implement Public Safety Plan			EPA	Local Authorities	Construction		CLD	The PSP was cleared by the DEC audit branch on 30 January 2002. The OEPA determined that this commitment was completed during a desktop audit dated 11 October 2010 (Appendix E of PRR).
572:P15	Construction EMP: Aboriginal	Prepare an Aboriginal Heritage Plan	The plan should address the issues of: 1)		EPA	Local Aboriginal	Pre-construction		CLD	Prior to construction, the Water Corporation was required to

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
	Heritage		Consultation with local Aboriginal groups; and 2) Obtaining advice from the Department of Indigenous Affairs on work practices			groups and DIA				prepare an AHP. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. The audit referred to a letter dated 30 January 2002 which indicates that this commitment had been complied with, therefore this commitment was considered complete (OEPA letter dated 11 October 2010 Appendix E of PRR).
572:P16	Construction EMP; Aboriginal Heritage	Implement Aboriginal Heritage Plan			EPA	Local Aboriginal groups and DIA	Pre-construction		CLD	This item is complete and requires acknowledgement as such by DWER-EPS.
572:P17	Construction EMP: Construction traffic plan	Prepare a construction traffic plan to minimise impacts of construction traffic on local residents			EPA	Local Authorities	Pre-construction		CLD	The CTP was required to be prepared prior to construction commencing. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously submitted by the Water Corporation. The audit referred to a letter dated 30 January 2002 which indicates that this commitment had been complied with, therefore this commitment was considered complete (OEPA letter dated 11 October 2010, Appendix E of PRR).
572:P18	Construction EMP: Construction Traffic Plan	Implement Construction Traffic Plan			EPA	Local Authorities	Construction		CLD	The CTP was to be implemented during construction. A desktop audit was conducted by the OEPA in August 2010, based on the 2008/09 PCR (Water Corporation 2009) and information previously

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
										submitted by the Water Corporation. The audit referred to the previous six yearly performance review (Oceanica 2009a) which indicates that this commitment had been complied with and the fact that the WWTP was now in operation and was only required during construction. Therefore, this commitment was considered complete (OEPA letter dated 11 October 2010, Appendix E of PRR).
572:P19	Operations Environmental Management Program	Prepare EMP for the operations phase	This should include plans for: 1) Marine biota, sediment and water quality; 2) Recreational water quality; and 3) Wastewater treatment management		EPA	CALM, Local Authorities and DPI (Maritime Division)	Pre-construction	Prior to commissioning	CLD	The Operations EMP includes a Marine Impacts Monitoring and Management Plan (MIMMP, DALSE 2002b; refer Section 4.2). The MIMMP was revised two more times: an interim plan (Water Corporation 2001b); and a final revised MIMMP (Water Corporation 2012a). The interim and revised versions of the MIMMP were approved by the OEPA (Appendix G of PRR).
572:P20	Operations EMP: Marine biota, sediment and water quality management plan	Prepare Marine Biota, Sediment and Water Quality Management Plan	The plan should address the following issues: 1) Derive site specific trigger levels for waters in the vicinity of the outlet for indicators other than toxicants, where appropriate (ANZECC, 2000); 2) Design appropriate study to differentiate between natural and anthropogenic sources of nitrogen currently existing and due to future discharge from the outfall; 3) Design monitoring programs for the sediments in the vicinity of the outlet; 4) Design of water quality		EPA	CALM	Pre-construction	Prior to commissioning of the outlet	CLD	The MBSWMP was prepared as part of the Operations EMP required under P19 (see above). The MBSWMP was cleared by the DEC audit branch on 26 July 2002 and the OEPA determined that this commitment was listed as completed during a desktop audit dated 11 October 2010 (Appendix E of PRR).

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
			<p>monitoring programs which have the ability to measure long term changes in water quality, including changes in productivity, biodiversity and ecosystem processes. Include reference site for comparison; 5) Contingency planning to improve water quality or reduce loads of contaminants and nutrients discharged if monitoring shows that agreed criteria are not met; 6) Reporting procedures to DEP; 7) Monitoring of contaminant levels in treated wastewater at Bunbury WWTP; and 8) Quality assurance procedures for monitoring programmes.</p>							
572:P21	Operations EMP:Marine biota, sediment and water quality management plan	Implement Marine Biota, Sediment and Water Quality Management Plan for five years after completion of construction, after which time it will be reviewed in consultation with DEP			EPA	CALM	Post-construction	For 5 years after completion of construction, after which time the program will be reviewed	C	<p>Refer to BOOM 2019/20 annual report for evidence of compliance (Appendix 5).</p> <p>Refer to 5-Yearly Sediment BOOM Sediment Sampling Report May 2019 (Appendix 7).</p> <p>The EMP (2012) (Appendix 2) contains a review history for the EMP, done in consultation with the Regulator.</p>
572:P22	Operations EMP:Recreational water quality management plan	Prepare a Recreational Water Quality Management Plan	The plan should address the following issues: 1) Design a bacterial monitoring program which will establish whether primary contact criteria are met within 100m of the diffuser and whether		EPA	Department of Health and Local Authorities	Pre-construction	Prior to commissioning of the outlet	CLD	Updated audit table shows this commitment as cleared.

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
			shellfish harvesting criteria within 500m of the diffuser; and 2) Contingency planning to improve water quality if monitoring shows that agreed criteria are not met							
572:P23	Operations EMP:Recreational water quality management plan	Implement Water Quality Management Plan			EPA	DEP, Department of Health and Local Authorities	Post-construction	For five years after completion of construction after which time it will be reviewed in consultation with the DEP	CLD	Refer to BOOM 2019/20 annual report for evidence of compliance (Appendix 5). The EMP (2012) (Appendix 2) contains a review history for the EMP, done in consultation with the Regulator.
572:P24	Recreation (land based)	Maintain legitimate recreational uses of the beach and dune areas	*No plan required		EPA	Relevant Local Authorities	Overall		Only proponent to audit	The beach and foredune remain open to public access. Water Corporation has received no reports that the recreational value of the beach or dune areas have diminished since the construction of the Bunbury Wastewater Treatment Plant.
572:P25	Operations EMP:Wastewater treatment management plan	Prepare a Wastewater Treatment Management Plan	The plan should address the following issues: 1) Operate WWTP such that national guidelines for toxicant concentrations in marine waters are met; 2) Bring forward upgrade of wastewater treatment system if monitoring shows unacceptable environmental impacts; 3) Operate WWTP such that agreed EQO's and EQC are met to 95% confidence; 4) Discontinue the current practice of discharging treated wastewater to unlined lagoons, except where flows are required		EPA		Pre-construction	Prior to the commissioning of the outlet	CLD	Updated audit table shows this commitment as cleared

Audit Table

Number	Issue	Action	How	Report	Satisfy	Advice	Phase	When	WC Status	Evidence provided in this PCR
			to reduce stress on nearby trees; 5) Ensure maximum annual average nitrogen load to the ocean from the outlet is less than 60tpa; and 6) Contingency plans for non-standard operation of the WWTP							
572:P26	Operations EMP :Wastewater treatment management plan	Implement Wastewater Treatment Management Plan			EPA		Pre-construction	For five years after completion of construction, after which time it will be reviewed in consultation with DEP	CLD	Refer to BOOM 2019/20 annual report for evidence of compliance (Appendix 5). The EMP (2012) (Appendix 2) contains a review history for the EMP, done in consultation with the Regulator.
572:P27	Community Consultation	Provide information during construction of outlet and monitoring of operations to community groups and Consider community objectives			EPA	City of Bunbury, Shire of Capel and interest groups	Overall		C	Refer section 5



APPENDIX 1

Bunbury Ocean Outfall Environmental Management Programme for Operations – August 2002

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/49503192>



APPENDIX 2

Bunbury Ocean Outlet Operations EMP – Marine Impacts Monitoring and Management Plan June 2012

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/49491479>



APPENDIX 3

Bunbury Ocean Outlet Monitoring (BOOM) 6 yearly Performance Review Report (PRR) 2008/09–2013/14

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/49590279>



APPENDIX 4

Bunbury WWTP Annual Licence Monitoring Report 2019-2020

Bunbury No. 2 WWTP - L5972 - AER 2019-2020.pdf
(<https://nexus.watercorporation.com.au/otcs/cs.exe/link/101500421>)



APPENDIX 5

Bunbury Ocean Outlet Monitoring Annual Report 2019 – 2020

(<https://nexus.watercorporation.com.au/otcs/cs.exe/link/103875895>)



APPENDIX 6

MS572 Triennial Reuse Report 2018

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/49149425>



APPENDIX 7

5-Yearly BOOM Sediment Sampling Report May 2019

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/82223944>



Appendix 8

State Government Media Release New Bunbury Water Recycling Scheme Sept 2020

<https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/09/11-point-9-million-dollar-investment-in-new-water-recycling-scheme-for-Bunbury.aspx>



APPENDIX 9

Statement of Compliance 2019-20

<https://nexus.watercorporation.com.au/otcs/cs.exe/app/nodes/105466813>

Statement of Compliance

1. Proposal and Proponent Details

Proposal Title	<i>Ocean Outlet for Treated Wastewater, Bunbury Wastewater Treatment Plant</i>
Statement Number	572
Proponent Name	<i>Water Corporation</i>
Proponent's Australian Company Number (where relevant)	28 003 434 917

2. Statement of Compliance Details

Reporting Period	1/07/19 to 30/06/20
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Implementation phase(s) during reporting period (please tick ✓ relevant phase(s))			
Pre-construction	<input type="checkbox"/>	Construction	<input type="checkbox"/>
Operation	<input checked="" type="checkbox"/>	Decommissioning	<input type="checkbox"/>

Audit Table for Statement addressed in this Statement of Compliance is provided at Attachment:	Included in PCR
<p>An audit table for the Statement addressed in this Statement of Compliance must be provided as Attachment 2 to this Statement of Compliance. The audit table must be prepared and maintained in accordance with the Department of Water and Environmental Regulation (DWER) <i>Post Assessment Guideline for Preparing an Audit Table</i>, as amended from time to time. The 'Status Column' of the audit table must accurately describe the compliance status of each implementation condition and/or procedure for the reporting period of this Statement of Compliance. The terms that may be used by the proponent in the 'Status Column' of the audit table are limited to the Compliance Status Terms listed and defined in Table 1 of Attachment 1.</p>	

Were all implementation conditions and/or procedures of the Statement complied with within the reporting period? (please tick ✓ the appropriate box)	
No (please proceed to Section 3)	<input type="checkbox"/>
Yes (please proceed to Section 4)	<input checked="" type="checkbox"/>

Each page (including Attachment 2) must be initialed by the person who signs Section 4 of this Statement of Compliance.
INITIALS: JE

3. Details of Non-compliance(s) and/or Potential Non-compliance(s)

The information required Section 3 must be provided for each non-compliance or potential non-compliance identified during the reporting period covered by this Statement of Compliance.

Non-compliance/potential non-compliance 3-1

Which implementation condition or procedure was non-compliant or potentially non-compliant?	
Was the implementation condition or procedure non-compliant or potentially non-compliant?	
On what date(s) did the non-compliance or potential non-compliance occur (if applicable)?	
Was this non-compliance or potential non-compliance reported to the Chief Executive Officer, DWER?	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DWER verbally Date _____ <input type="checkbox"/> Reported to DWER in writing Date _____	<input type="checkbox"/> No
What are the details of the non-compliance or potential non-compliance and where relevant, the extent of and impacts associated with the non-compliance or potential non-compliance?	
What is the precise location where the non-compliance or potential non-compliance occurred (if applicable)? (please provide this information as a map or GIS co-ordinates)	
What was the cause(s) of the non-compliance or potential non-compliance?	
What remedial and/or corrective action(s), if any, were taken or are proposed to be taken in response to the non-compliance or potential non-compliance?	
What measures, if any, were in place to prevent the non-compliance or potential non-compliance before it occurred? What, if any, amendments have been made to those measures to prevent re-occurrence?	
Please provide information/documentation collected and recorded in relation to this implementation condition or procedure:	
<ul style="list-style-type: none"> • in the reporting period addressed in this Statement of Compliance; and • as outlined in the approved Compliance Assessment Plan for the Statement addressed in this Statement of Compliance. (the above information may be provided as an attachment to this Statement of Compliance)	

For additional non-compliance or potential non-compliance, please duplicate this page as required.

Each page (including Attachment 2) must be initialed by the person who signs Section 4 of this Statement of Compliance.
 INITIALS: JE

4. Proponent Declaration

I, James Evans - A/Manager - Environment
 declare that I am authorised on behalf of Water Corporation
 (*being the person responsible for the proposal*) to submit this form and that the information
 contained in this form is true and not misleading.

Signature:.....

Date:..... 30-11-2020

Please note that:

- it is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give or cause to be given information that to his knowledge is false or misleading in a material particular; and
- the Chief Executive Officer of the DWER has powers under section 47(2) of the *Environmental Protection Act 1986* to require reports and information about implementation of the proposal to which the statement relates and compliance with the implementation conditions.

5. Submission of Statement of Compliance

One hard copy and one electronic copy (preferably PDF on CD or thumb drive) of the Statement of Compliance are required to be submitted to the Chief Executive Officer, DWER, marked to the attention of Manager, Compliance (Ministerial Statements).

Please note, the DWER has adopted a procedure of providing written acknowledgment of receipt of all Statements of Compliance submitted by the proponent, however, the DWER does not approve Statements of Compliance.

6. Contact Information

Queries regarding Statements of Compliance, or other issues of compliance relevant to a Statement may be directed to Compliance (Ministerial Statements), DWER:

Manager, Compliance (Ministerial Statements)

Department of Water and Environmental Regulation

Postal Address: Locked Bag 10
 Joondalup DC
 WA 6919

Phone: (08) 6364 7000

Email: compliance@dwer.wa.gov.au

7. Post Assessment Guidelines and Forms

Post assessment documents can be found at www.epa.wa.gov.au

Each page (including Attachment 2) must be initialed by the person who signs Section 4 of this Statement of Compliance.

INITIALS: JE

ATTACHMENT 1

Table 1 Compliance Status Terms

Compliance Status Terms	Abbrev	Definition	Notes
Compliant	C	Implementation of the proposal has been carried out in accordance with the requirements of the audit element.	This term applies to audit elements with: <ul style="list-style-type: none"> ongoing requirements that have been met during the reporting period; and requirements with a finite period of application that have been met during the reporting period, but whose status has not yet been classified as 'completed'.
Completed	CLD	A requirement with a finite period of application has been satisfactorily completed.	This term may only be used where: <ul style="list-style-type: none"> audit elements have a finite period of application (e.g. construction activities, development of a document); the action has been satisfactorily completed; and the DWER has provided written acceptance of 'completed' status for the audit element.
Not required at this stage	NR	The requirements of the audit element were not triggered during the reporting period.	This should be consistent with the 'Phase' column of the audit table.
Potentially Non-compliant	PNC	Possible or likely failure to meet the requirements of the audit element.	This term may apply where during the reporting period the proponent has identified a potential non-compliance and has not yet finalized its investigations to determine whether non-compliance has occurred.
Non-compliant	NC	Implementation of the proposal has not been carried out in accordance with the requirements of the audit element.	This term applies where the requirements of the audit element are not "complete" have not been met during the reporting period.
In Process	IP	Where an audit element requires a management or monitoring plan be submitted to the DWER or another government agency for approval, that submission has been made and no further information or changes have been requested by the DWER or the other government agency and assessment by the DWER or other government agency for approval is still pending.	The term 'In Process' may not be used for any purpose other than that stated in the Definition Column. The term 'In Process' may not be used to describe the compliance status of an implementation condition and/or procedure that requires implementation throughout the life of the project (e.g. implementation of a management plan).

Each page (including Attachment 2) must be initialed by the person who signs Section 4 of this Statement of Compliance.

INITIALS: JE