

7. Bridport STP

7.1 Activity and report details

Activity name	Bridport STP		
Activity address	Off Charles Street, Bridport		
Permit number	Permit Conditions Environmental - 6154	Date of issue	20/03/2002
EPN	10478/1	Date of issue	2/02/2021
Treatment level	Secondary Treatment		
Authorised Dry Weather Flows	1400 kL/day		
Key Influent Source	Residential		
Contact person	Kate Westgate		
Report author	Luisa Romero (Environmental Scientist)		
Contact details	Environment@taswater.com.au		
Date of submission	September 30, 2025		

Figure 7-1: Bridport Sewage Treatment Plant



7.2 Monitoring and compliance summary

7.2.1 Flow data

Table 7-A: Flow monitoring summary

	Influent	Effluent	Reuse
Location Name	Inlet	Andersons Bay – Granite Point	Bridport Golf Course
Coordinates	E 532795 N 5462266	E 532008 N 5462708	E 531995 N 5462719
Method of Measurement	Inline meter	Influent less Reuse	Inline meter
Date of last Calibration/Validation (if applicable).	13/09/2024	NA – meter to be installed	13/07/2025

Table 7-B: Annual flow and rainfall data

Month	Average Daily Influent Volume (kL/day)	Rainfall (mm/month) BOM Station ID 91320	Discharge to Waters Total Effluent Volume (ML)	Discharge to Reuse Total Effluent Volume (ML)
July 2024	326	134.8	9.78	0.33
August 2024	337	82.1	10.46	0.00
September 2024	406	150.2	12.18	0.00
October 2024	337	86.2	10.45	0.00
November 2024	306	-	9.17	0.00
December 2024	351	84.6	9.42	0.25
January 2025	361	24.2	6.15	2.04
February 2025	261	6.6	6.50	0.80
March 2025	269	39.6	8.03	0.30
April 2025	270	27.4	7.91	0.20
May 2025	233	39.2	7.06	0.18
June 2025	247	107.6	7.27	0.15
Annual 2024-25	309	782.5	104.36	4.25
% of total discharge	--	--	96.1%	3.9%

2024-25 monthly flow data was submitted directly to the EPA.

7.3 Bypass events

There were no bypass events associated with the STP during the reporting period.

7.4 Discharge compliance with permit limits

Table 7-C: Discharge compliance with permit limits

	Ammonia as N	BOD5	Chlorine	Nitrogen	Oil and Grease	pH	Phosphorus	E coli	Total suspended solids
Permit/EPN limit	mg/L	mg/L	mg/L	mg/L	mg/L	Units	mg/L	MPN/100mL	mg/L
Maximum	33	40	--	40	10	8.5	10	750	40
90th Percentile	--	--	--	--	--	--	--	--	--
50th Percentile	--	--	--	--	--	--	--	--	--
Minimum	--	--	--	--	--	6.5	--	--	--
Samples analysed									
Number required	12	12	--	12	12	12	12	12	12
Number analysed	11	11	--	11	11	11	11	11	11
Statistical summary									
Max	27.4	102.0	1.7	37.2	2.3	8.5	10.2	4914.0	86.0
90th percentile	22.4	101.0	0.9	35.5	2.0	8.0	8.2	3255.0	82.0
50th percentile	0.3	57.0	0.4	29.1	1.6	7.5	7.3	279.0	51.0
Min	0.1	27.0	0.0	16.2	1.0	7.0	5.8	10.0	16.9
EPN Limit Compliance									
% compliance with Maximum	100%	18%	--	100%	100%	100%	91%	55%	45%
% compliance with 90th percentile	--	--	--	--	--	--	--	--	--
% compliance with 50th percentile	--	--	--	--	--	--	--	--	--
% compliance with pH range	--	--	--	--	--	100%	--	--	--

Table 7-D: Mass loads to the environment

Mass Loads	EPN Limit	Frequency	2024-25 result
Nitrogen (kg)	5400	Annual	2940.7
Phosphorous (kg)	1200	Annual	756.1
Method	Time weighted/Grab sample method		

Table 7-E: Performance Analysis (Discharge to environment)

Reuse Compliance Parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
Chlorine	17/09/2024		The recent desludging of all the lagoons will increase hydraulic residence, which should improve disinfection.
E. coli	29/07/2024 21/08/2024 26/11/2024	8/01/2025 16/06/2025 26/11/2024 - Loss of containment in L3 resulting in solids wash out and decreased disinfection capacity.	
BOD	21/08/2024 17/09/2024 3/10/2024 26/11/2024 8/01/2025	20/02/2025 4/03/2025 2/04/2025 16/06/2025 Overloaded treatment plant due to catchment growth and contribution from algae. 17/07/2024 - Potential aeration issues - Lagoon 1 had low DO and ORP likely suggesting an aeration issue. This would lead to elevated effluent BOD 26/11/2024 Loss of containment in L3 - resulting in solids wash out and decreased disinfection capacity.	Desludging of Lagoon 3 was completed in December 2024 and Lagoons 1 and 2 desludging to be completed in August 2025.

Reuse Compliance Parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
TSS	21/08/2024 8/01/2025 20/02/2025	4/03/2025 2/04/2025 1/05/2025	Overloaded treatment plant due to catchment growth. Insufficient hydraulic residence time to achieve solids settling. TSS further increased by lagoon sludge accumulation and high algae concentrations.
Phosphorus	20/02/2025	The STP is not designed to remove phosphorus.	No specific actions.

Note: Non-compliances only identified for the times STP has discharged to water

No other parameters had exceedances in the reporting period.

7.5 Reuse annual reporting

The Bridport STP supplies treated effluent to the Bridport Golf Club recycled water scheme. A partial scheme, the recycled water is stored in two recycled water tanks for use to irrigate the golf course/greens.

Table 7-F: Reuse compliance summary

	BOD5	pH	E coli
Permit/EPN limit	mg/L	Units	MPN/100ml
Maximum	50	9.0	10000
90th Percentile	--	--	--
50th Percentile	--	--	1000
Minimum	--	5.5	--
Samples analysed			
Number required	12	12	12
Number analysed	5	5	5
Statistical summary			
Maximum	34.0	7.7	63
90th percentile	27.2	7.5	54
50th percentile	11.0	7.2	10
Minimum	5.0	5.0	10
EPN Limit Compliance			
% compliance with Maximum	100%	--	100%
% compliance with 90th percentile	--	--	--
% compliance with 50th percentile	--	--	100%
% compliance with pH range	--	80%	--

Note: Percentages reflective of complete data set for the year

Table 7-G: Performance analysis (discharge to reuse)

Reuse Compliance Parameter	Date(s) of non-compliance	Reasons for non-compliance	Actions to improve performance
pH	08/01/2025	<p>Algae is believed to be the primary reason for elevated pH due to CO₂ uptake during photosynthesis. The non-compliance result occurred in summer during a likely algal bloom.</p> <p>Algae is a source of oxygen and is fundamental to lagoon treatment.</p>	<p>No specific action taken.</p> <p>See Section 7.4.</p>

*Non-compliances only identified for the times STP has discharged to reuse

Annual soil sampling was completed at the three long-term monitoring sites (ID’s BT1-3) at the recycled water scheme in May 2025. The field component of the annual compliance audit was completed in conjunction with the soil monitoring. A summary of the findings is provided in the below table. No groundwater monitoring is completed at the RWS.

Table 7-H: Annual recycled water scheme compliance audit and soil monitoring summary

Program	Compliance audit	Soil monitoring
Compliance status	Non-compliant Recycled water irrigation during the day and within 50 metres buffer zone.	Soil salinity and sodicity levels remain stable at sites BT1 and BT3 and within the recommended ranges. Site BP2 levels have increased and above recommended ranges.
Comments	Irrigation area (with mobile sprinklers) continues within buffer zone of club house and daytime sprinklers outside environment management plan. The area is demarcated with temporary fencing and signage and manually controlled to manage public awareness and risk.	Slightly elevated levels of more than one key nutrient were recorded which have been noted to be likely due to sources other than recycled water.

7.6 Ambient monitoring program

Table 7-I: Program details

Program	Bridport Ambient Monitoring Program
Status	To be conducted every 2 years (biennially) for water quality, biological and sediment quality.
Update	Monitoring conducted in spring 2024 and autumn 2025.
Comments	An ambient monitoring report for the Bridport 2024-2025 surveys has been submitted separately to this AER. Notable findings of the study include: Bridport STP effluent is having minimal influence on water quality and biological communities in the Anderson Bay receiving environment. This is consistent with findings from previous investigations conducted in 2021-2022. At the time of sampling, there was no detected impact beyond the immediate location of the outfall.

7.7 Groundwater monitoring

Site Status: Red

Bridport groundwater monitoring network consists of eight groundwater monitoring bores; ID numbers: BRDGW1, BRDGW4-7 and BRDGW11-13. Bore ID’s BRDGW4-5 are located immediately west adjacent to the STP lagoons with the remaining six bores located north and downgradient of the lagoons.

Bi-annual sampling was completed at across the network in November 2024 and April 2025 as scheduled.

The 2024-25 groundwater monitoring event recorded elevated concentrations of several key analytes across the network. Consistent with previous years the is evidence

that highly likely STP impacting groundwater quality along the western edge (bore ID's BRDGE4 and BRDGW7) of the STP.

Bi-annual sampling at the extended suite is scheduled to continue at all eight groundwater monitoring bores during the 2025–26 sampling program.

7.8 Inflow and infiltration (I&I)

The latest revision to the TasWater Inflow and Infiltration Management Plan includes full details of the actions undertaken during the reporting period.

A Multi Criteria Assessment was undertaken by TasWater in 2024 to prioritise I&I investigation and works state-wide. This catchment was ranked 92 out of 108 in priority.

7.9 Sludge and biosolids

The latest revision to the Sewage Sludge Management Plan (SSMP) includes full details of the actions undertaken during the reporting period, the most recent sludge profiling results, and upcoming annual desludging program. This STP was fully compliant with the 2024–25 SSMP.

Sludge at this STP is captured within the three treatment lagoons, which will be periodically desludged as required.

Bridport Lagoon 3 was desludged during the FY2024–25 reporting period, with an estimated 1200m³ of sludge transferred to the onsite drying bed. Once suitably dried, this sludge will be tested, classified and applied to suitable farmland – provided biosolid Class 2 requirements are met.

Table 7-J: Desludging status and comments

Desludging status	Comments
High Priority	Desludging of Lagoon 3 was completed in December 2024. Desludging of Lagoons 1 and 2 will be completed in August 2025.

Table 7-K: Stockpile comments

Stockpile onsite	Volume of stockpile
Sludge from Lagoon 3	Approximately 1200m ³ of sludge from Lagoon 3 is currently contained within the onsite drying bed. Once suitably dried, sludge will be tested, classified and applied to suitable farmland – provided biosolid Class 2 requirements are met.

7.10 Non-compliance with other permit requirements

Table 7-L: EPN Non-compliances

EPN condition	Description of non-conformance	Future actions to be taken
G8 Wastewater Reuse EMP review	Wastewater reuse EMP was due in February 2023.	TasWater acknowledged the non-compliance due to the outdated EMP and will work with the customer to address the requirements.

EPN condition	Description of non-conformance	Future actions to be taken
EF2 Effluent quality limits for discharge to Anderson Bay	Discharge compliance with permit limits.	See section 7.4 Discharge Compliance with Permit Limits.
EF3 Discharge Effluent quality limits for Reuse	Discharge compliance with reuse permit limits.	See section 7.5 Reuse Compliance and Performance Analysis.
EM2 Effluent Reuse Feasibility Study	Effluent Reuse Feasibility Study overdue.	A Strategic Options Report is complete. The report considered the preferred outcome for the Bridport STP including rationalisation, upgrade and disposal options and a recycled water scheme (RWS). It does not fulfill the requirement for EM2 but allows for TasWater to plan and prioritise any works for Bridport STP.
EM3 Effluent Management	Discharge Management Plan (DMP) overdue.	TasWater acknowledges the non-compliance associated with the DMP condition. We are working towards the intent of the EPN condition to prioritise discharge risk reduction projects in line with our EPA endorsed Wastewater Risk Management Plan and Price and Service Plan process.
EM4 Discharge Management Plan	Discharge Management Plan (DMP) overdue.	
OP5 Groundwater Contamination Abatement Plan	Groundwater Contamination Abatement Plan overdue.	Submission timeframe to be confirmed during FY2026
G6 Annual Environmental Review	Found to be non-compliant due to complaints received not reported	All complaints detail to be included in AER 2024-2025

7.11 Complaints and incident reporting

No complaints reported during the FY2024-25 reporting period.

Table 7-M: Incident reporting

Date	Category	Details	Mitigation actions
25/11/2024	Mechanical	Lagoon 3 discharged to environment due to a hole in weired board	Diverted the flow from Lagoon #2 to bypass Lagoon #3 entirely to remove the damaged weir configuration and proceeded with a newly fabricated weired board replacement.

7.12 Any other relevant information

Table 7-N: Projects or significant operational events that occurred in FY 2024-2025

Project or significant operational event	Progress
Northeast Region Sewerage Regional Master Plan	The Northeast Region Sewerage Regional Master Plan has been completed and outlines both short- and long-term considerations for the Bridport STP. Potential environmental improvement options include extension of the outfall and or achieving 100% effluent reuse and planning for future expansion of the STP.
Lagoon desludging works	Lagoon 3 Desludging completed – December 2024. Desludging of Lagoons 1 and 2 will be completed in August 2025.



For further information on the Bridport STP please contact TasWater on 13 6992

www.taswater.com.au