THAMES COROMANDEL DISTRICT COUNCIL

ANNUAL REPORT

Comprehensive Stormwater Discharge Consents

2021-2022

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Introduction

Thames-Coromandel District Council (TCDC) holds eight Comprehensive Stormwater Discharge Consents (CSDC's):

- Thames Urban Area (Consent 122521)
- Pauanui Urban Area (Consent 105661)
- Coromandel Urban Area (Consent 105663)
- Tairua Urban Area (Consent 105664)
- Whitianga Urban Area (Consent 105665)
- Onemana Urban Area (Consent 105666)
- Whangamata Urban Area (Consent 105667)
- Thames Coast Urban Area (Consent 105668)

Condition 6 of each individual consent requires an Annual Report for the year ending 30 June by 30 September each year. Along with individual consent conditions, Schedule A (SA) includes conditions that apply to all comprehensive consents.

The numbering convention of this report aligns with the requirements of the Consent condition.

Under Water Reform that is occurring nationally, the Thames-Coromandel District Council water, wastewater and stormwater functions are scheduled to be transferred to Entity B under the proposed new three waters operating regime from 1 July 2024.

The previous stormwater annual report stated that Council will have the stormwater, wastewater, and trade waste bylaws in place by 30 June 2022. Whilst this commitment was made with the best of intentions, staff underestimated the quantum of work required to produce each of these Bylaws. In addition, Council has struggled to attract staff to fill existing vacancies in the water team to carry out this work. Hence, the Bylaws have unfortunately not been produced as planned.

The Water Services Entities Bill that is currently going through parliament is expected to be enacted by end of this year. Once this Act comes into force all New Zealand Territorial Local Authorities (TLA's) are required to obtain approval from the Department of Internal Affairs (DIA) National Transition Unit for any proposed changes to current three waters work programmes. The DIA is currently drafting a policy for TLA's to follow.

Under the above backdrop i.e., Water Reforms, the creation of Water Entities by 1 July 2024, and the above legislation, it would be more prudent to defer the establishment of the above Bylaws to the new Entity. This will negate any abortive work that may occur, as the Entities would have their own policies and procedures for the establishment and implementation of various Bylaws. It may be likely that the Entity will have a single Bylaw for each activity (i.e., water, wastewater, and stormwater) for all three waters operations falling within that Entity. On this basis, it is not proposed to develop any new Bylaws whist awaiting the transfer of all Council three waters activities to the new Entity.

Council has investigated the implementation of RITS and found that it is more suitable for urban areas compared to a district like Thames-Coromandel, and hence no further progress was made to make this change. The transfer of three waters activities to the new Entity also has implications for Council's Engineering Code of Practice for Subdivisions. The Entity will have its own code of practice, and work has commenced on this at a national level. Therefore, it is not proposed to upgrade Council's Engineering Code of Practice for Subdivisions for three waters.

a) Summary of Procedures, Initiatives, and Implementation Methods

Management Initiatives / Implementation Methods 2021-2022

There were no operational procedures, management initiatives and implementation methods adopted by the Stormwater Management Plan during the 2021-2022 period as the Stormwater Network Management Plan has been under review during this period. All management initiatives and implementation methods undertaken during 2021-2022 were in response to actions required by Site Compliance Reports and are reported in Section h) and Appendix 4.

Management Initiatives / Implementation Methods 2022-2023

Management initiatives and implementation methods for 2022-2023 will be determined following approval of the Network Management Plan by Waikato Regional Council. The latest draft (version 4) was submitted to WRC in November 2021.

b) Stormwater Infrastructure Works

Major Works

- Totara Valley Road, Thames - services extension. This multi-year project (2021-2024) has been broken into three stages as follows:
    - Stage 1: Totara Valley Rd / SH Intersection improvement and Waipapa Stream Culvert Upgrade. The Waipapa Stream Culvert upgrade was completed in the 2021-2022 financial year with the intersection improvement proposed to be completed in the 2022-2023 financial year
    - Stage 2: Installation of Wastewater and Stormwater services from the SH intersection to approximately 150m east of Sawmill Road intersection. Works includes the upgrade of the Totara Valley over the same length. This is proposed to be completed in the 2022-2023 financial year.
    - Stage 3: Installation of Wastewater and Stormwater services from approximately 150m east of Sawmill Road intersection to end of Totara Valley Road. Works includes the upgrade of the Totara Valley over the same length. This work is proposed to be completed in 2023-2024 financial year.
- Pauanui Holland Stream Stormwater Improvements (Flooding Mitigation)

  A multi-year project (2021-2023) to mitigate flood risk from the Holland Stream in Pauanui. During the 2021-2022 financial year professional services, survey, scope evaluation and consultation was undertaken. Delays in scope section and stakeholder feedback meant Design, Archaeological Assessment, and Consent Application has been delayed to the 2022-2023 financial year.

Developing Catchments

The current Catchment Management Plans are silent in terms of Developing Catchments. Developing Catchments will be included in future Catchment Management Plans.

Proposed Infrastructure Works

- Port Road Stormwater Improvements: Replacement of the existing pipes and the installation of a stormwater treatment device to collect gross pollutants down to 5 mm. Design and MSQA for this project has been completed by WSP, however construction has been delayed due to COVID restrictions and tender and construction is planned in the 2022-2023 financial year.
- Adams Road upgrade of stormwater pipe across State Highway: Design is in progress and tender / construction is planned for the 2022-2023 financial year.
- Pauanui Nine Development: Stormwater device is being designed and construction will be completed in the 2022-2023 financial year.
- Totara Valley Road, Thames - services extension. See Major Works above for a detailed description of this project. An application for consent of Stage 2 has been submitted to Waikato Regional Council by Kinetic Environmental.
- Pauanui Holland Stream Stormwater Improvements (Flooding Mitigation): Despite the delays in the 2021-2022 financial year, construction of this project is scheduled to be completed during the 2022-2023 financial year.
- Whangamata Stormwater Improvements: This multi-year (2022 – 2026) project initially includes the following:
    - Williamson Avenue: Replacement with larger of the stormwater pipes along the road and extend to Tui Road.
    - Lincoln Road / Lindsay Road: Replacement with larger of the stormwater pipes along the road.

  In the 2022-2023 financial year design, WRC consent application, and tender documentation / evaluation is planned.

c) Monitoring Summary

The updated Stormwater Monitoring Programme, prepared by 4Sight, was initially submitted to Waikato Regional Council in draft for review on 13 September 2021. Amendments were made following feedback and the final draft was submitted on 14 June 2022. As at the writing of this report, the Monitoring Programme has not been approved by Waikato Regional Council.

Monitoring under the old monitoring programme was not carried out in 2021/2022 as the complete picture of requirements was not yet available. As part of the lump sum of the C15/05 Operations and Maintenance Contract, visual monitoring did go ahead and is included in **Appendix 3**.

d) Non-Routine Contaminant Discharge Incidents

During the 2021-2022 year there were five instances of pollution reported:

- Veolia identified a potential cross-contamination of sewer entering stormwater at 3 Summer Lane, Tairua. Further investigation using pushcam and environmental sampling confirmed an illegal connection. Waikato Regional Council, the District Health Board, and the customer were notified. The wastewater connection was disconnected from stormwater. A wastewater overflow form was submitted to Waikato Regional Council on 30 August 2021
- A member of the public reported “something white” down the drain at the end of Casement Road, Whangamata. Veolia attended and “investigated both upstream and downstream and found the area was clear with no evidence of substance”. Samples were taken and sent to Watercare; the results were clear.
- A Parks and Facilities team member noted the discharge from the stormwater system into the mangroves in Brown Street, Thames looked like it contained oil or some other industrial waste product. Veolia attended and confirmed the discharge looked oily. Samples were sent to Watercare for analysis, and the results showed signs of Nitrogen only.
- A TCDC Environmental Health Officer identified paint running down the stormwater drains outside of Oliver’s Bakery, 100 Aickin Road, Whangamata. She reported this to Waikato Regional Council. Veolia attended and used soakage socks as bunds to stop further paint entering the cesspit. As the cesspit, and a downstream manhole was found to contain watered down paint this was sucked out and a hydrant was used to flush the line between the cesspit and the manhole while sucking out of the manhole. Further downstream manholes were checked with no evidence of paint reaching the waterways.
- Waikato Regional Council notified Veolia of a report that someone had washed paint brushes into the kerb and channel in Surf Street, Whitianga. Upon attending, the person washing the paint brushes could not be located and the paint was mostly gone from the kerb and channel.

e) Summary of Level of Compliance with Conditions of Consent

The summary of the level of compliance with the conditions of this consent for the 2021-2022 period can be found in Appendix 1.

f) Summary of Formal Complaints

The summary of formal complaints for 2021-2022 is found in Appendix 2.

g) Updated Catchment Drawings

There have been no new stormwater diversion and discharge activities which have been certified as authorised by the Waikato Regional Council in accordance with Condition 4 in Schedule A of this consent during the 2021-2022 financial year.

h) Summary of Actions / Management Measures to be Implemented to remedy any non-compliance with the conditions of this consent

The Site Compliance Reporting relating to 2020-2021 was received on 19 August 2022. The following table also includes actions taken in relation to the 2019-2020 Site Compliance Report (received 28 June 2021) along with future initiatives / actions:

Condition	Action	Update
SA22	Complete draft SOPs following detailed review inputs as part of the SMP review (Condition 30) due by 30 November 2022	Requirement forwarded to Te Miro Water. TCDC will work with Te Miro Water to complete this requirement.
SA22	The TCDC Stormwater Bylaw to be submitted with the 2021/22 Annual Report due by 30 September 2022	See comments in Introduction
SA23	The consent holder to report on all stormwater quality improvement initiatives and future actions, including those which have been allocated funding in the TCDC LTP. This report shall be submitted with the 2021/22 Annual Report, due by 30 September 2022.	See Appendix 4
SA23	The stormwater quality improvement initiatives and future actions to be included in the SMP review (Condition 30), due by 30 November 2022.	Requirement forwarded to Te Miro Water. TCDC will work with Te Miro Water to complete this requirement.
SA28	Report on progress, specifically how far along it is in adopting the RITS. This report can be submitted with the 2021/22 Annual Report, due by 30 September 2022.	See comments in Introduction
SA29	The consent holder to further develop and maintain its register of stormwater management devices in accordance with Condition 29. This shall be undertaken as part of the SMP review (Condition 30), due by 30 November 2022. Note: provided the register is further developed and maintained within TCDC's asset management system(s), it does not need to be fully duplicated in the SMP.	The Stormwater device register has been updated to include catchment area (attached as Appendix 5) Operational procedures and maintenance requirements will be included in the SNMP.

Condition	Action	Update
SA30	In consultation with WRC, the consent holder to complete the Draft SMP and resubmit it for final review/approval by 30 November 2022.	Review comments not received from WRC at the time of submission. Rob Hart (in email of 18 October) advised extended timeframe will be finalised once review comments received. 30 November deadline no longer relevant.
5	The consent holder has reported on the monitoring required by Condition 4(b), however, there appears to be no information for the monitoring undertaken in relation to Condition 4(c) – (i). The consent holder to undertake all monitoring and reporting requirements each year.	See Section c)
5	The next reporting round is due with the 2021/22 Annual Report, due by 30 September 2022.	See Section c) and Appendix 3

Appendix 1: Summary of Level of Compliance

Each of the individual Comprehensive Stormwater Discharge Consents has Conditions as follows:

1) Schedule A
2) Stormwater diversion and discharge activities
3) Scope of the stormwater diversion and discharge activities authorised
4) Monitoring Programme (a – i)
5) Monitoring Results
6) Annual Report (a – i)

The first three are covered by other conditions within Schedule A (SA) and are therefore not reported on individually below. The Compliance columns incorporate a traffic light system as described below. Commentary is provided where required for clarification. Within Schedule A, the following conditions are statements and are covered by other condition(s), or are administrative and therefore not reported on individually below:

1) Design, structural integrity and maintenance of the stormwater network
2) Changes to the stormwater network
3) Best Practicable Option

20) Routine contaminant discharges into the stormwater network

32) Consent Holder's Representative

33) Review Clause

34) Administrative charges

Compliance for the following Conditions within Schedule A is "determined through the establishment and implementation of best practicable stormwater management measures that are adopted by, and implemented through, the Stormwater Management Plan required by Condition 30 of this consent" (Advice Note) and are therefore not reported on individually below:

6) Adverse stormwater quantity effects

11) Floatable contaminants

12) Suspended solids

13) Hazardous substances

14) Micro-organisms

15) Adverse effects on aquatic ecosystems

As historically, the difficulties in achieving compliance have once again been due to constraints on resources, staff turnover, and budget, as well as ongoing complications from COVID-19, including availability of contractors.

#	Condition	Compliance 2021-2022	Commentary
4	Monitoring Programme		The final draft of the updated Monitoring Programme was submitted for review / approval on 14 June 2022.
5	Monitoring Results		See Section c)
6	Annual Report		Annual Report submitted on revised agreed timeframe
SA4	Technical Certification		No subdivisions > 1 hectare were completed during the period 1 July 2021 – 30 June 2022.
SA5	Asset Management Activities		As TCDC is short-staffed and team members are working from home more frequently it was decided to email the education presentation to relevant team members rather than attempting to run in-person workshops NTC82 has been sent to Recreational Services, the new Parks & Reserves Contractor attaching the Stormwater Comprehensive Resource Consent Certificates
SA7	Addressing Adverse Stormwater Quantity Effects		No adverse quantity effects have been reported
SA8	Fish Passage		See Section c)
SA9	Stormwater Management Devices (Control Volume and / or peak rates of discharge)		Operations and Maintenance procedures are in place; however, are in the process of being expanded
SA10	Stream Channel Works		See Section 4.4 of Draft SNMP (v4). NB/ Te Miro Water has been instructed to ensure this section remains in the SNMP.
SA16	Street and Stormwater catchpit cleaning operations		See Section 3.1 of Draft SNMP (v4)

#	Condition	Compliance 2021-2022	Commentary
SA17	Stormwater Catchpits		TCDC's view is existing catchpits are capable of retaining the majority of gross pollutants. Floating contaminants are considered during capital works projects
SA18	Stormwater Management Devices (treat contaminated stormwater)		Operations and Maintenance procedures are in place; however, are in the process of being expanded.
SA19	Illicit wastewater connections		Please refer to the draft Stormwater Network Management Plan
SA21	Non-routine contaminant discharges to / from the stormwater network		See Stormwater Complaints Appendix 2.
SA22	New or replacement connections to the stormwater network		A procedure is in the process of being finalised and will be included in the Stormwater Network Management Plan
SA23	Stormwater Quality Improvement Programme		See Draft SNMP (v4) and Section h)
SA24	Complaints Register		Complaints Register collated live in Pathway. See summary Appendix 2
SA25	Catchment Management Plans		2020-2021 Site Compliance Report states "…CMPs must be supported by robust technical investigations and assessments. Hence prioritising CMPs when TCDC has sufficient funding to resource their development.".

#	Condition	Compliance 2021-2022	Commentary
SA26	Implementation of Catchment Management Plans		The only requirement within the current Catchment Management Plans that can be implemented is monitoring (see Condition 5)
SA27	Waikato Regional Council guidelines for sustainable subdivision development		The concepts within the document are promoted however the document itself is not referred to (and is now out of date).
SA28	Low Impact Urban Design measures and stormwater management devices		Council have promoted hydraulic neutrality as a LIUD measure.
SA29	Register of stormwater management devices		See Section h) and Appendix 5
SA30	Stormwater Management Plan		Version 4 of the Stormwater Network Management Plan was submitted in November 2021.
SA31	Implementation of the Stormwater Management Plan		As the Stormwater Management Plan is yet to be approved by WRC, it has not been implemented.

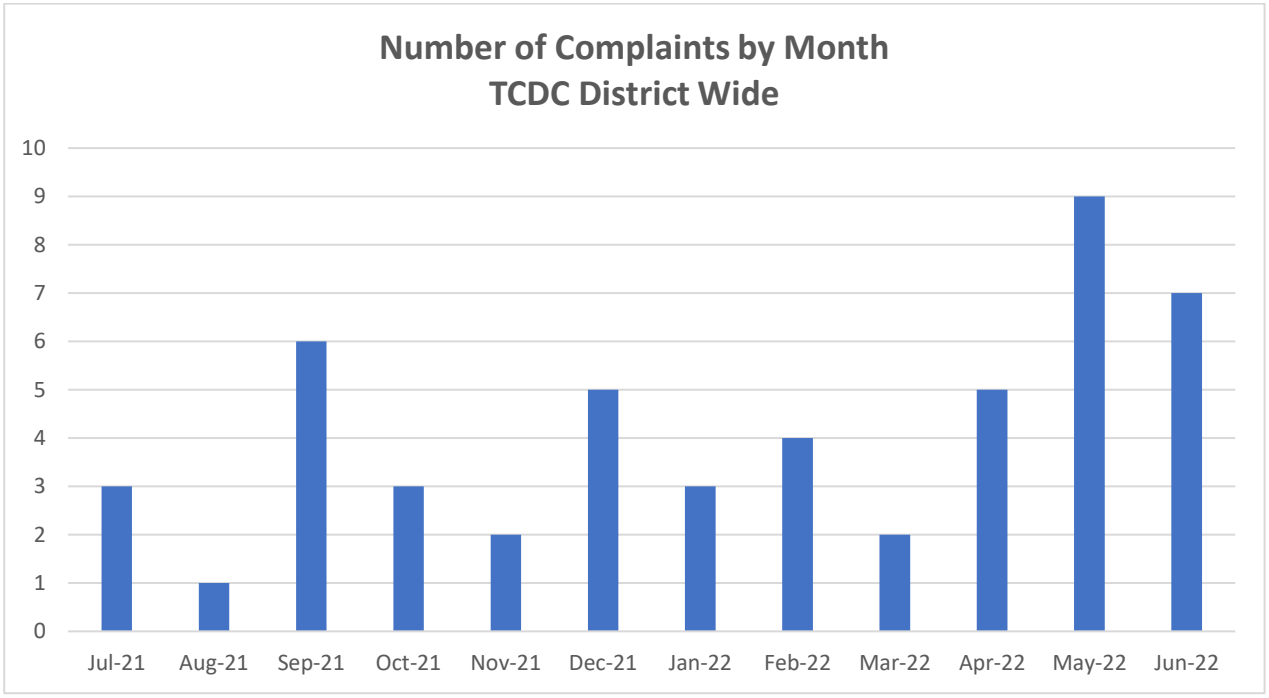
Appendix 2: Stormwater Complaints Summary

Section 24 of Schedule A (General Conditions of Comprehensive Stormwater Discharge Consents) requires all formal complaints received about stormwater diversion and discharge activities authorised by these consents to be held in a register. Thames-Coromandel District Council's system for recording all complaints, notifications, and requests is the Request for Service (RFS) module in Pathway. The report below includes all requests for service that come to Council regarding Stormwater even though not all are formal complaints.

During the 2021-2022 year there were a total of 51 requests for service relating to stormwater within the Thames-Coromandel District Council urban areas serviced by Comprehensive Stormwater Discharge Consents. This is a decrease of nine compared to the 2020-2021 year.

Requests are categorised as follows:

Category	Number of Complaints
Clear Stormwater Asset Request	23
Stormwater Asset Leak	0
Pollution Report	4
Ponding / Flooding Private Land	6
Ponding / Flooding Public Land	5
Stormwater Asset Issue (e.g., re-haunch manhole lid, tree grown through line etc.)	12
Third Party Damage	1

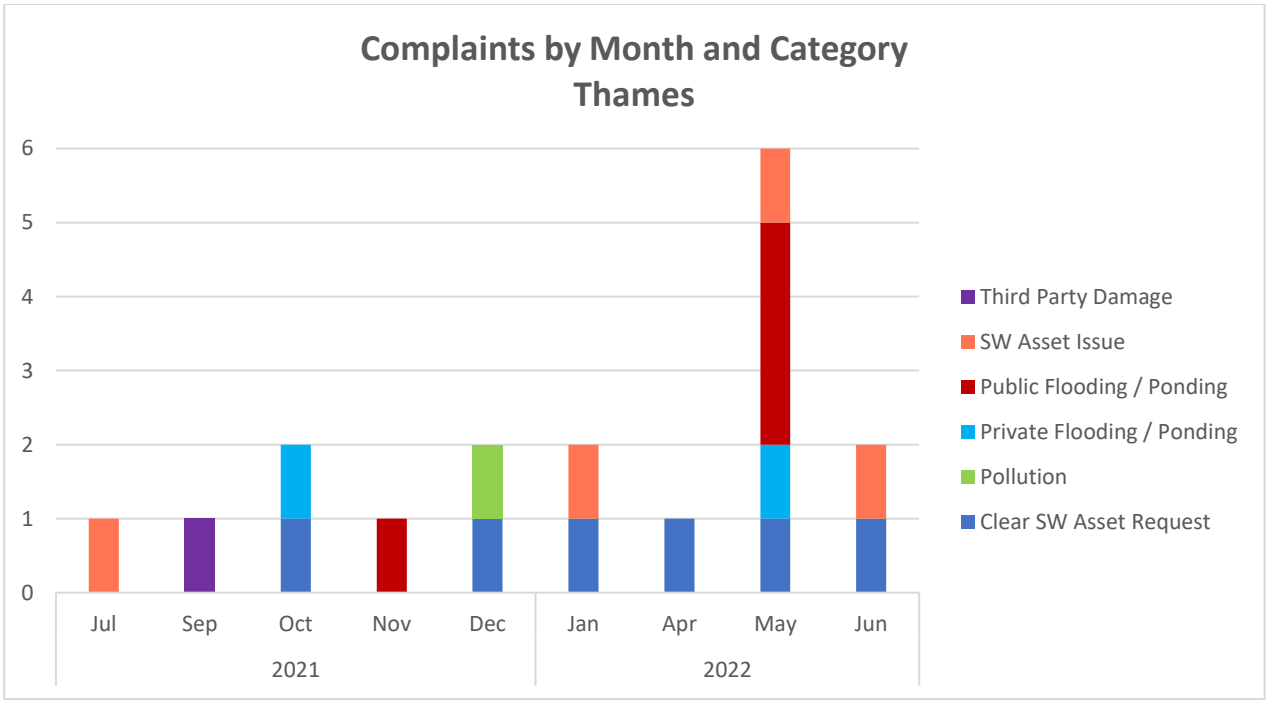


Comprehensive Stormwater Discharge Consent 122521 – Thames Urban Area

During the 2021-2022 year there were a total of 18 requests for service relating to stormwater within the Thames urban area, a reduction of four from 2020-2021.

Requests are categorised as follows:

- Clear Stormwater Asset Request 6
- Pollution 1
- Ponding / Flooding Private Land 2
- Ponding / Flooding Public Land 4
- Stormwater Asset Issue 4
- Third Party Damage 1

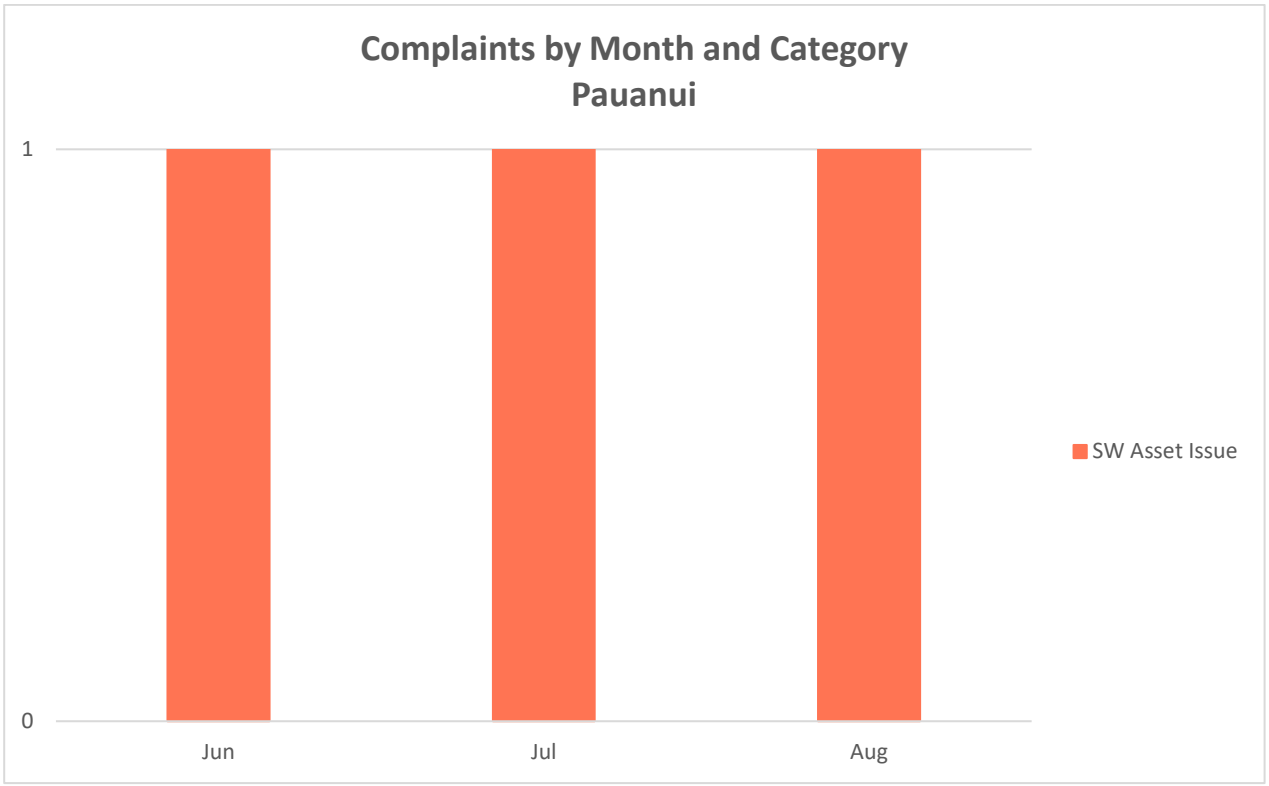


Comprehensive Stormwater Discharge Consent 105661 – Pauanui

During the 2021-2022 year there were a total of three requests for service relating to stormwater within the Pauanui urban area. This is a decrease of two from the 2020-2021 year.

Requests are categorised as follows:

- Stormwater Asset Issue 3

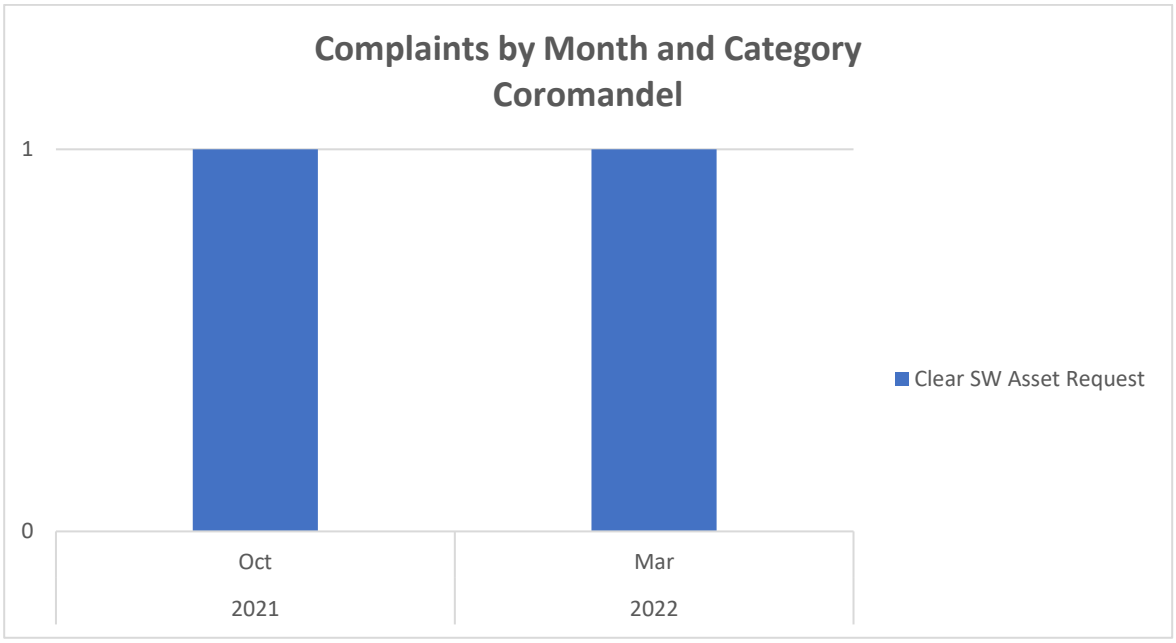


Comprehensive Stormwater Discharge Consent 105663 – Coromandel

During the 2021-2022 year there were a total of two requests for service relating to stormwater within the Coromandel urban area, decrease of seven from the 2020-2021 year

Requests are categorised as follows:

- Clear Stormwater Asset Request 2

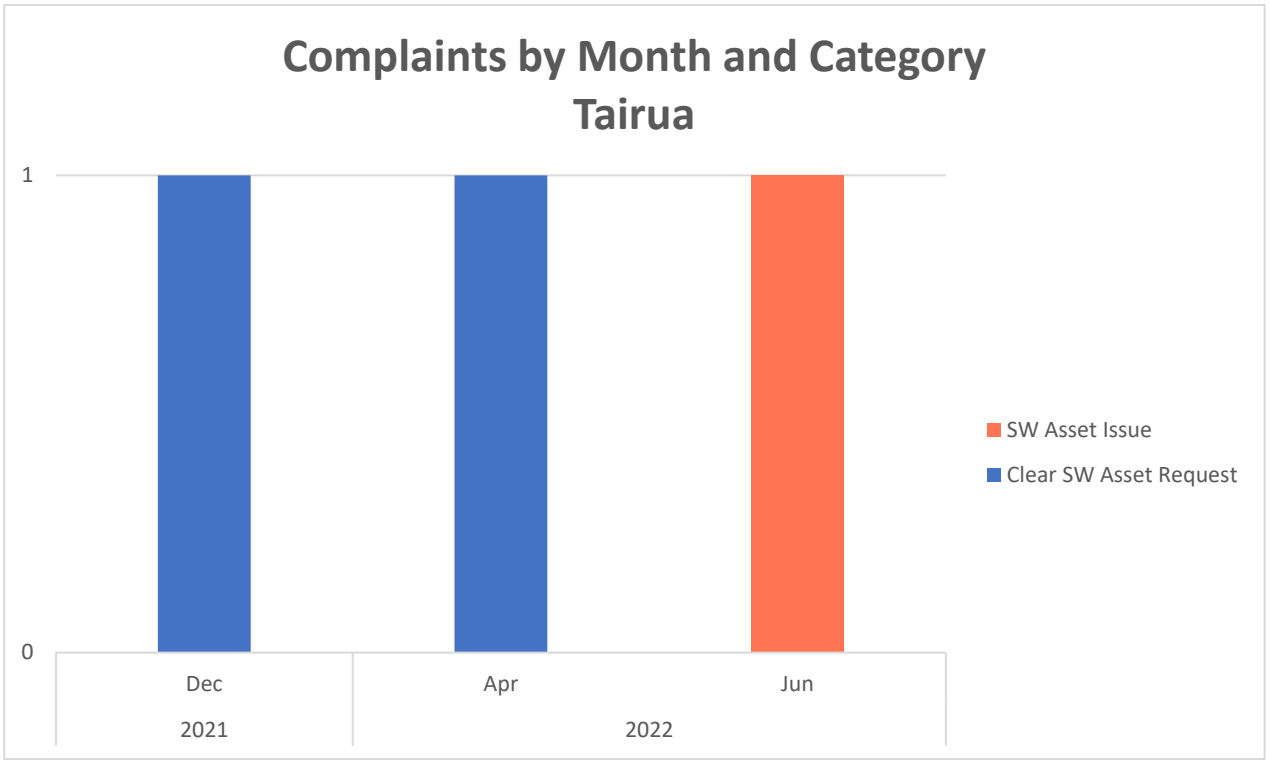


Comprehensive Stormwater Discharge Consent 105664 – Tairua

During the 2021-2022 year there were a total of three requests for service relating to stormwater within the Tairua urban area, an increase of one from the 2020-2021 year.

Requests are categorised as follows:

- Clear Stormwater Asset Request 2
- Stormwater Asset Issue 1

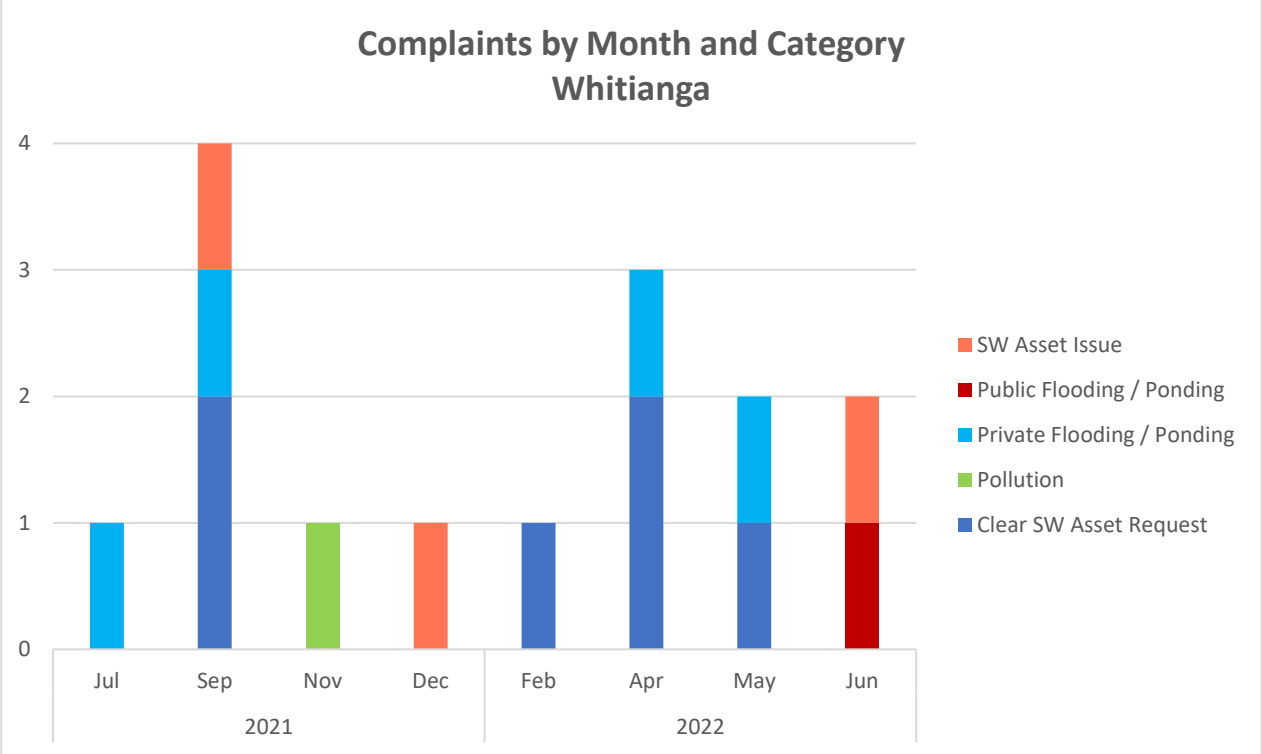


Comprehensive Stormwater Discharge Consent 105665 – Whitianga

During the 2021-2022 year there were a total of 15 requests for service relating to stormwater within the Whitianga urban area, an increase of five from the 2020-2021 year.

Requests are categorised as follows:

- Clear Stormwater Asset Request 6
- Pollution Report 1
- Ponding / Flooding Private Land 4
- Ponding / Flooding Public Land 1
- Stormwater Asset Issue 3

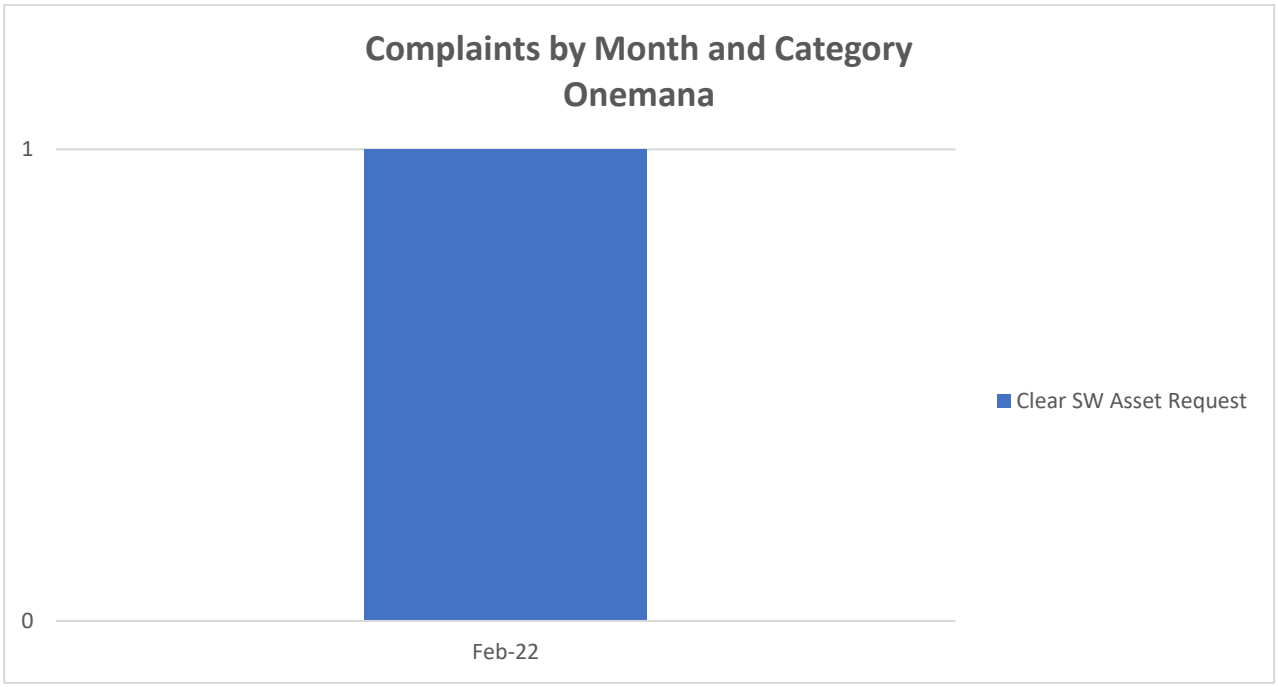


Comprehensive Stormwater Discharge Consent 105666 – Onemana

During the 2021-2022 year there was one request for service relating to stormwater within the Onemana urban area, the same as the 2020-2021 year.

Requests are categorised as follows:

- Clear Stormwater Asset Request 1

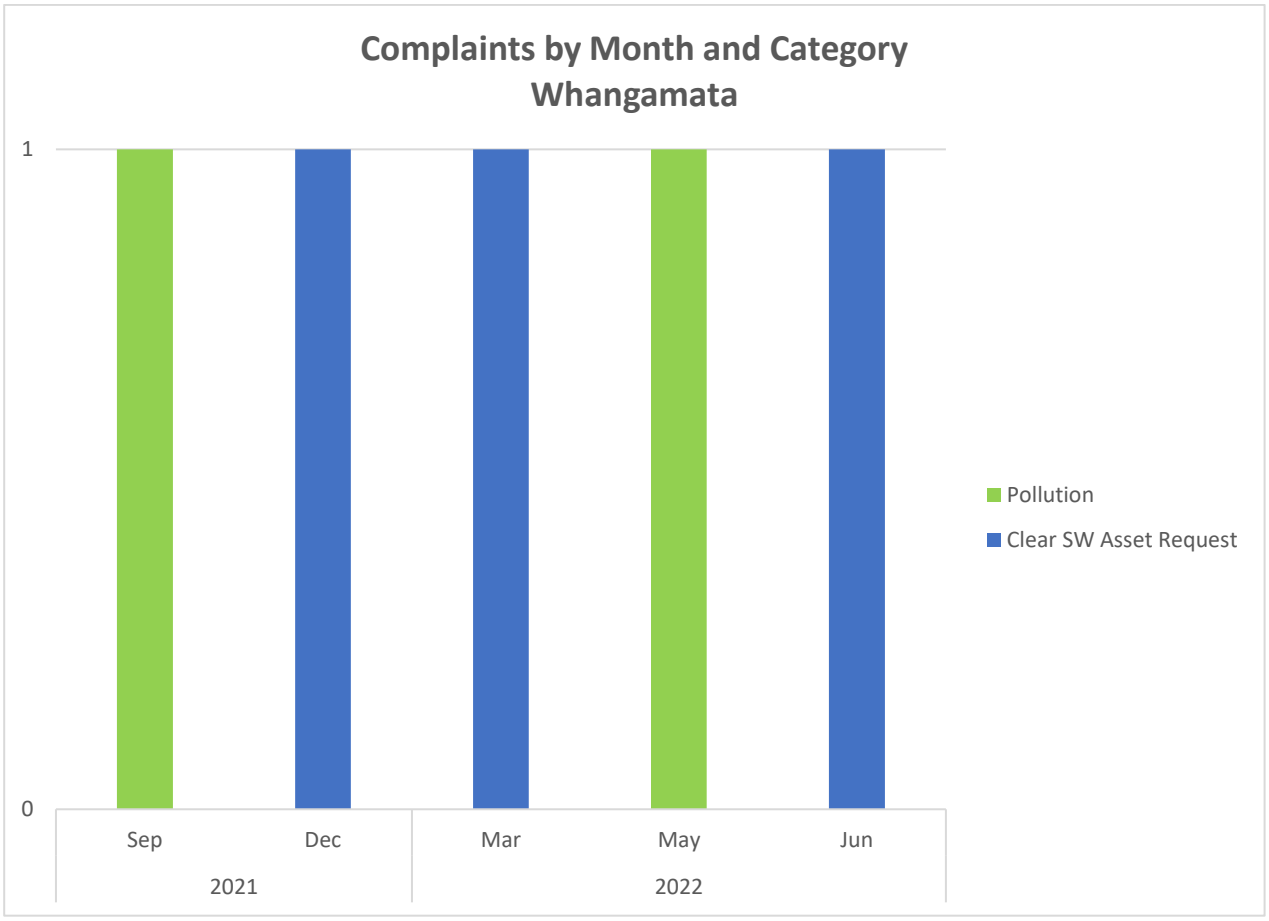


Comprehensive Stormwater Discharge Consent 105667 – Whangamata

During the 2021-2022 year there were five requests for service relating to stormwater within the Whangamata urban area, a decrease of two from the 2020-2021 year.

Requests are categorised as follows:

- Clear Stormwater Asset Request 3
- Pollution Report 2

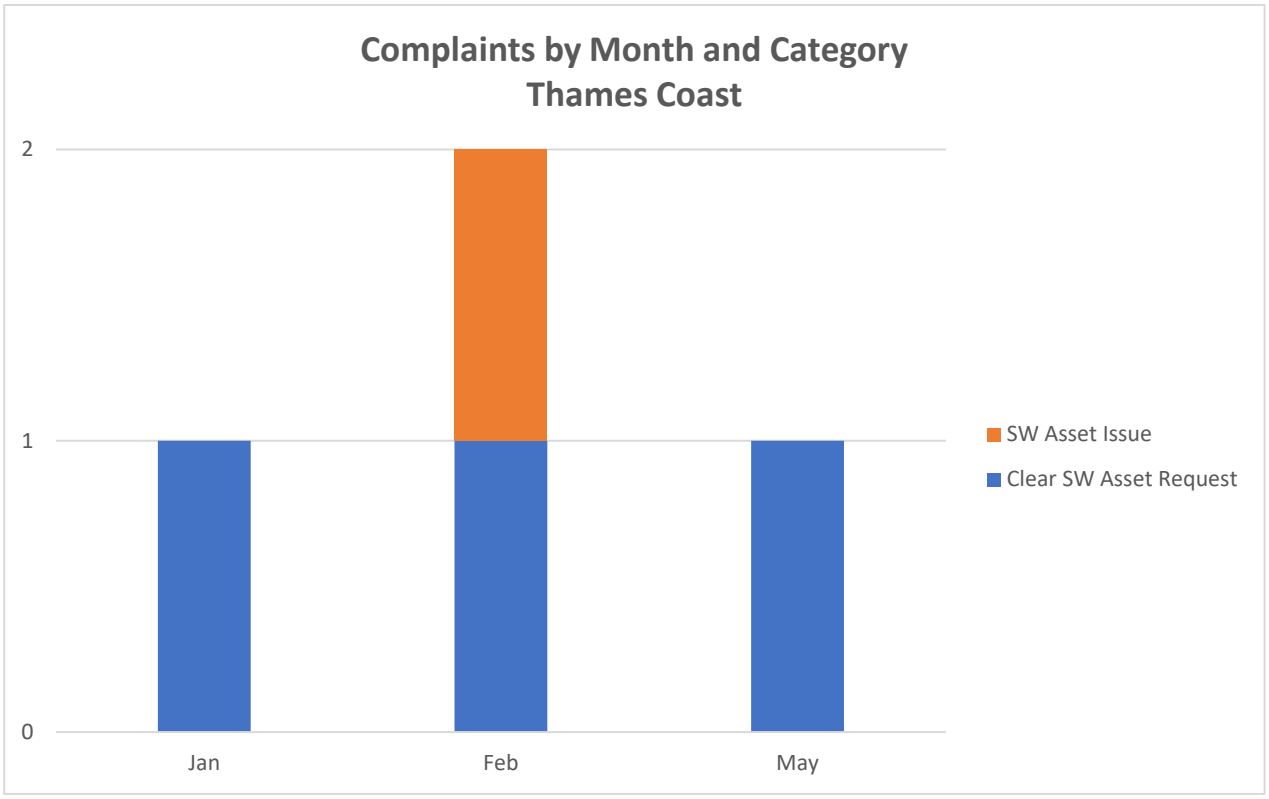


Comprehensive Stormwater Discharge Consent 105668 – Thames Coast

During the 2021-2022 year there were four requests for service relating to stormwater within the Thames Coast urban area, the same as the 2020-2021 year.

Requests are categorised as follows:

- Clear Stormwater Asset Request 3
- Stormwater Asset Issue 1



Appendix 3: Visual Monitoring Results

Ref 01	February 2022, Shortland Wharf, Thames 	June 2022 Shortland Wharf, Thames 

Ref 02	February 2022, Sealey Street, Thames	June 2022, Sealey Street, Thames
		

Ref 03	February 2022, Burke Street Outfall	June 2022 Burke Street Outfall
		
Ref 04	Thames Control Site - No visual inspection required	

Ref 05	February 2022, Shepard Avenue, Pauanui	June 2022, Shepard Avenue, Pauanui
		
Ref 06	Coromandel outfall to Whangarahi Stream	
	No image captured as this outlet is now redundant following SW upgrades on Wharf Road. The outlet has been replaced with a device close to the Wharf Road bridge	

Ref 07	February 2022, Marquet Place Tairua	June 2022, Marquet Place Tairua
		

Ref 08	February 2022, Whitianga Marina	September 2022, Whitianga Marina
		

Ref 09	February 2022, Moewai Road, Whitianga	September 2022, Moewai Road, Whitianga
		

Ref 10	February 2022, Casement Road Whangamata	June 2022 Casement Road, Whangamata
		

Ref 11	February 2022, Hetherington Road Whangamata	June 2022, Hetherington Road Whangamata
		

Ref 12	February 2022, Aicken Road Whangamata	June 2022, Aicken Road Whangamata
		

Ref 13	February 2022, Lindsey Road Whangamata	June 2022, Lindsey Road Whangamata
		

Ref 14	February 2022, Kotuku Street Whangamata	June 2022, Kotuku Street Whangamata
		
Ref 15	Whangamata Control Site - No visual inspection required	

Appendix 4: Stormwater Quality Improvement Initiatives / Actions Report

i. Education Programmes

Internal Education Sessions

As TCDC is short-staffed and team members are working from home more frequently it was decided to email the education presentation to relevant team members rather than attempting to run in-person workshops.

Stormwater Education Brochure

The stormwater education brochure (see Appendix 6) was posted with all rates notices in August 2021.

Stormwater Education Brochure for Businesses

The stormwater education brochure for business (see Appendix 7) has been shared with local businesses via TCDC's business e-newsletter on 9 June 2022 and was also published in the Our Coromandel magazine which had approximately 15,000 copies distributed to ratepayers around the district in June 2022.

Snapper Sign Installation

Snapper sign installation commenced in the 2020-2021 financial year and was completed in June 2022. All stormwater catchpits (that have a suitable place to install them) in the district to aid in raising "the general public's awareness of stormwater quality issues and the ways in which individuals can avoid as far as practicable and otherwise minimise the contamination of stormwater" (Schedule A, Condition 23a). Signage in the shape of a Snapper was selected as this is easily recognisable, the most common fish in the TCDC District, and is designed to elicit emotion when viewed by the general public.

ii. Site Inspections / Contamination Audits

Stormwater Bylaw

See comments under Introduction.

Trade Waste Bylaw

See comments under Introduction.

iii. Illicit Wastewater Connections

Due to budgetary constraints the investigative programme to identify illicit wastewater connections was not funded. It will be requested again as part of the 2024-2034 LTP process.

iv. Stormwater Catchpit Upgrade Programmes

Catchpit Upgrade Programmes

Due to budgetary constraints the activity was not funded. It will be requested again as part of the 2024-2034 LTP process.

Pauanui Nine subdivision upgrade of Catchpits

Storms Contracting have been engaged to install the baffles in all catchpits in the Pauanui Nine subdivision, however despite frequent follow up requests, this has yet to occur. TCDC will continue to follow up frequently with the contractor and will report to WRC when this work has been completed.

v. Retrofitting of Stormwater Management Devices

Due to budgetary constraints the activity was not funded. It will be requested again as part of the 2024-2034 LTP process.

vi. Regulatory Powers

See Section h) SA22.

Appendix 5: Stormwater Treatment Device Register (as at 30 June 2022)

STORMWATER MANAGEMENT DEVICES REGISTER

In addition to a network of swales and open drains, the following stormwater management devices are located within the TCDC network:

Thames Urban Area (Consent 122521)

Device	Location	Catchment
Pump Station	Richmond Street	Thames Central
Pump Station	Fergusson Drive	Thames North

Pauanui Urban Area (Consent 105661)

Device	Location	Catchment
Soakpit (2)	Lowe Park Lane	Pauanui Residential (North)
Soakpit	McCall Avenue	Pauanui Residential (North)
Soakpit (5)	Sheppard Avenue	Pauanui Residential (North)
Soakpit	Parsons Dell	Central Pauanui
Detention Pond	Holland Close	Pauanui Residential (South)
Soakpit	Mount Avenue	Pauanui Residential (South)
Hynds Up-Flo Filter	1 Ian Hopper Way	Pauanui Waterways

Coromandel Urban Area (Consent 105663)

Device	Location	Catchment
Gravel Filled Stormwater Attenuation Basin	2 Victoria Street	Central Coromandel
Gravel Filled Stormwater Attenuation Basin	71 - 93 Golden Shore Place	Central Coromandel
Hynds First Defense High Capacity	Wharf Road	Central Coromandel
Detention Pond	Long Bay Road	Long Bay

Tairua Urban Area (Consent 105664)

Device	Location	Catchment
Detention Pond	Rewa Rewa Valley	Tairua Heights Residential
Detention Pond	Mason Rise	Azimuth
Hynds First Defense High Capacity	Tairua Marina	Paku Hill

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Whitianga Urban Area (Consent 105665)

Device	Location	Catchment
Wetland	Cook Drive	Buffalo Beach Foreshore
Soakage Cells	Austin Drive	Buffalo Beach Foreshore
Pump Station	Jackman Avenue	Buffalo Beach Foreshore
Pump Station	Cook Drive	Buffalo Beach Foreshore
Rain Garden (5)	Waitotara Way	Central Whitianga
Rain Garden (7)	Arawa Lane	Central Whitianga
Rain Garden (3)	Pelican Place	Central Whitianga
Rain Garden	Kelly Place	Central Whitianga
Rain Garden (22)	Kupe Drive (Northbound)	Central Whitianga
Rain Garden	Little George Place	Central Whitianga
Rain Garden (2)	Sara Way	Central Whitianga
Rain Garden (7)	Aquila Drive	Central Whitianga
Rain Garden (3)	Vanita Drive	Whitianga Waterways
Rain Garden (3)	Mermaid Place	Whitianga Waterways
Rain Garden (14)	Debenham Drive	Central Whitianga
Rain Garden	Tango Way	Central Whitianga
Rain Garden	Bravo Place	Central Whitianga
Rain Garden	Oscar Place	Central Whitianga
Rain Garden (2)	Jackman Avenue	Buffalo Beach Foreshore
Rain Garden (4)	Park Lane	Buffalo Beach Foreshore
Rain Garden (2)	Rena Place	Buffalo Beach Foreshore
Rain Garden	Meadow Drive	Buffalo Beach Foreshore
Rain Garden (4)	Lady Jocelyn Place	Whitianga Waterways
Rain Garden (17)	Leeward Drive	Whitianga Waterways
Rain Garden	Topping Place	Whitianga Waterways
Rain Garden	Kudu Drive	Central Whitianga
Rain Garden (2)	Springbok Avenue	Central Whitianga
Rain Garden (2)	Jacaranda Drive	Central Whitianga
Rain Garden (2)	Onerere Drive	Whitianga Waterways
Rain Garden (7)	Awatea Drive	Whitianga Waterways
Rain Garden	Puawai Street	Whitianga Waterways
Rain Garden	Raumati Lane	Whitianga Waterways
Detention Pond	Discovery Drive	Wharekaho
Wetland (Natural)	Discovery Drive	Wharekaho

Onemana Urban Area (Consent 105666)

Device	Location	Catchment
Detention Pond	Tuna Place	Onemana

Whangamata Urban Area (Consent 105667)

Device	Location	Catchment
Detention Pond	Estuary View	Beverley Hills
Detention Pond	Rangituia Street	Beverley Hills
Detention Pond	Williamson Park	Whangamata Central
Detention Pond	Te Tutu Street	Beverley Hills
Detention Pond	4 Governors Heights	Moana Anu Anu River North
Detention Pond	105B Te Pamahue Drive	Moana Anu Anu River North
Aquacell Soakage Pit	Otahu Road	Whangamata Central
Soakage Cells	Esplanade Drive	Whangamata Central
Soakage Cells	Port Road	Whangamata Industrial Area & CBD
Soakage Cells	Ranfurly Road	Whangamata Industrial Area & CBD
Atlantis Drainage Cell	Tuck Road	Whangamata Central
Soakage Cells	Barbara Avenue	Whangamata Central
Soakage Cells	Service Lane behind TCDC (off Port Road)	Whangamata Industrial Area & CBD
Pump Station	Tangaroa Road	Whangamata South
Pump Station	Otahu Road	Whangamata South
Rain Garden	Widdison Place	Beverley Hills
Rain Garden (5)	Rangituia Street	Beverley Hills
Rain Garden (6)	Te Tutu Street	Beverley Hills
Soakpit (2)	Graham Street	Whangamata Central

Thames Coast Urban Area (Consent 105668)

There are no stormwater management devices in the Thames Coast Urban Area catchment.

Operations and Maintenance of Stormwater Management Devices

Operations and Maintenance Procedures are included in the Stormwater Network Management Plan.

Appendix 6: Stormwater Education Brochure

Landscaping and gardening

Open ground and topsoil piles can easily wash into our waterways and harbours, blocking sunlight and smothering aquatic life.

Garden waste dumping can increase nutrients which can degrade habitats and create algal blooms.

- ✖ Don't leave piles of dirt uncovered near the road
- ✖ Don't dispose of garden chemicals and fertilisers down the drain

- ✔ Cover any exposed ground or stockpiles
- ✔ Take your garden waste and unwanted chemicals to a transfer station
- ✔ Compost your garden waste at home

tcdc.govt.nz/stormwater

Pollution of our waterways can affect our land, plants, native animals, sea life and can also impact safe swimming for our community.

We all have a role to play to protect our beautiful environment – the Coromandel Peninsula.

Remember:

- Outside drains send water straight to our streams, beaches and harbours. Prevent anything other than rain entering this system.
- Many homes have roof gutters that flow straight to our stormwater network.
- Even small quantities of seemingly harmless materials can add up and cause damage to the environment.
- If you see something that doesn't look right, please contact the Council.

THAMES COROMANDEL DISTRICT COUNCIL

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Protect our waterways

Help stop harmful contaminants entering our stormwater drains

tcdc.govt.nz/stormwater

Car washing

Dirty water from washing cars can contain chemicals and other contaminants like oils and heavy metals which pollute our waterways and endanger aquatic species.

Even biodegradable detergents are harmful to wildlife.

- ✖ Avoid washing your car on your driveway where the water can run into the stormwater drains
- ✖ Don't drain oil and antifreeze where it could reach stormwater

- ✔ Take your car to a commercial car wash where water is contained
- ✔ Wash your car on the grass so that it soaks into the ground

Paint, plaster and concrete wash

Wash water from these activities can smother aquatic plants and creatures.

- ✖ Don't tip paint or plaster wash down outside drains
- ✖ Don't let concrete wash or cutting water run into stormwater drains
  - Concrete wash is harmful to aquatic life
  - Concrete wash from one driveway killed more than 200 eels

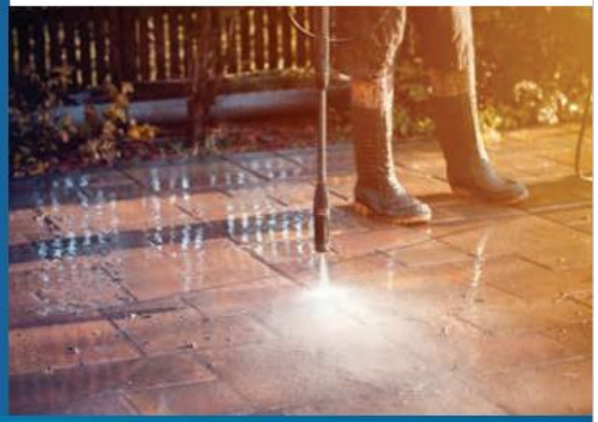
- ✔ Use buckets to wash brushes, rollers and other equipment. Empty wash water onto soil where it will soak away
- ✔ Take unwanted paint back to the store

Exterior washing and water blasting

Run-off from exterior cleaning and water blasting is much more harmful than run-off caused by rain. Detergents like moss and mould remover contain chemicals that can harm aquatic life if they reach waterways.

- ✖ Don't let the water from any exterior washing or water blasting flow to the road and enter the stormwater network

- ✔ Disconnect your down pipes prior to cleaning your roof
- ✔ Direct wash water onto unsealed ground such as grass, so that it will soak into the ground



The drains are just for rain.

tcdc.govt.nz/stormwater

Appendix 7: Stormwater Education Brochure for Business

What do you need to know about your business and stormwater?

THAMES COROMANDEL DISTRICT COUNCIL

Stormwater is one of the leading causes of water pollution. When it rains heavily, water runs off surfaces and collects pollutants like oil, litter, sediments, bacteria, pesticides and other commercial chemicals.

These are then deposited into our waterways, killing aquatic life and making these environments an unhealthy place to live, play and work in.

The most common pollutants from businesses found in stormwater include:

Chemical pollution – *e.g. oil, grease, detergent, fertiliser*

- ✔ Store chemicals correctly and take your wastes to approved landfill or collection areas
- ✔ Direct wash water onto unsealed ground such as grass, so that it will soak into the ground

- ✖ Don't leave open chemicals where they may be spilt. Dispose of chemicals or wastewater of any kind into stormwater sumps or drains
- ✖ Don't let the water from any exterior washing or water blasting flow to the road and enter the stormwater network

Litter – *e.g. plastic bags, food wrappers, cigarette butts*

- ✔ Keep your work areas clean

- ✖ Don't allow litter to enter stormwater systems