Non-notified resource consent application report and decision

Summary of decision

File Reference:	WGN180027
Date Granted:	30 November 2018
Applicant:	Wellington Water Limited
Decision made under:	104A, 105, 107 and 108 of the Resource Management Act 1991 (the Act)
Consents Granted:	**Operative Regional Plans** **[34920] Non-complying activity** Discharge permit for the discharge of stormwater, and stormwater occasionally contaminated with wastewater, into fresh or coastal water, and onto or into land (including land in the coastal marine area) where it may enter fresh and coastal water from the Wellington City Council, Porirua City Council, Hutt City Council and Upper Hutt City Council owned stormwater network. **Proposed Natural Resources Plan** **[34920] Controlled activity** Discharge permit for the discharge of stormwater, and stormwater occasionally contaminated with wastewater, into fresh or coastal water, and onto or into land (including land in the coastal marine area) where it may enter fresh and coastal water from the Wellington City Council, Porirua City Council, Hutt City Council and Upper Hutt City Council owned stormwater network.
Activity:	Discharge of stormwater occasionally contaminated with wastewater from the Wellington City Council, Porirua City Council, Hutt City Council and Upper Hutt City Council owned stormwater network to land, freshwater and coastal water.

Location:	Various watercourses, the CMA and land around Wellington, Porirua, Hutt and Upper Hutt cities.
Map Reference:	Various
Legal Description:	Various
Duration of Consents:	5 years to expire on 30 November 2023
Consent conditions:	Attachment 1
Map of WNO's:	Appendix A

Processing timeframes:

Application lodged:	28/07/17	**Application officially received:**	28/07/17
Application stopped:	16/08/18	**Application started:**	09/05/18
Applicant to be notified of decision by:	21/05/18	**Applicant notified of decision on:**	30/11/18
Time taken to process application:	157 working days		

Time frames extended under section 37 of the Act by 137 working days with the agreement of the applicant

Decision:

Decision recommended by:	Gwen Stewart	Resource Management Consultant	
Decision peer reviewed by:	Josie Burrows	Resource Advisor, Environmental Regulation	
Decision approved by:	Jude Chittock	Team Leader, Environmental Regulation	

Reasons for decision report

1. Background

Wellington Water Limited (WWL, the applicant) is a council controlled organisation that manages Wellington City Council (WCC), Porirua City Council (PCC), Hutt City Council (HCC), and Upper Hutt City Council (UHCC) stormwater networks. WWL is seeking global stormwater discharge resource consents to continue to discharge stormwater from these local authority stormwater networks to land where it may enter water, and directly to water (fresh water and the Coastal Marine Area (CMA)).

The ultimate receiving waters are the Porirua Harbour, Wellington Harbour and the Porirua to Wellington coastline.

1.1 Planning context

The Proposed Natural Resources Plan (PNRP) was notified on 31 July 2015, and introduced a two stage consenting regime for the discharge of stormwater to the receiving environment from local authority stormwater networks. The consent regime requires a 'global' approach for stormwater discharges from local authority networks. This approach is consistent with the overall intent of the PNRP, which is to manage natural and physical resources in a holistic manner, recognising they are interconnected and reliant upon one another.

Stage one of the consenting regime requires consent be obtained under Rule R50 as a controlled activity. Matters of control retained by GWRC under Rule R50 include:

1. Requirements to monitor and report on the quality of stormwater discharges to fresh and/or coastal water, including of stormwater discharges containing wastewater.

2. Management of acute effects of stormwater on human health detected during monitoring.

3. Duration of consent up to a maximum of five years.

4. Timeframes for the development of a stormwater management strategy in accordance with Schedule N (Stormwater Management Strategy).

Stage two of the consenting regime requires consent be obtained under Rule R51 as a restricted discretionary activity. This rule requires the aforementioned stormwater strategy be included in the consent application. The matters of discretion under Rule R51 are restricted to:

1. The contents and implementation of the stormwater management strategy in accordance with Schedule N (stormwater strategy).

2. Development and implementation of methods, such as catchment specific stormwater management plan(s), in accordance with any relevant objectives identified in the PNRP, including any relevant whaitua specific objectives.

3. Management of adverse effects, including cumulative effects, on aquatic ecosystem health and mahinga kai, contact recreation and Māori customary use.

4. Management of adverse effects on sites identified in Schedule A (outstanding water bodies), Schedule B (Ngā Taonga a Kiwa), Schedule C (mana whenua), Schedule F (indigenous biodiversity).

The intention behind the two stage consenting regime is that monitoring undertaken during phase one will help to inform the development of a prioritised programme for improvements in the Stormwater Management Strategy (SMS) required by stage two.

1.2 Existing stormwater consents

There are two existing consents for stormwater discharges across local authorities, which will continue to operate alongside this consent. These consents were assessed and granted under Greater Wellington Regional Council (GWRC)'s operative plans.

- WCC hold four discharge permits WGN090219 [34353] [34358] [34359] & [34360] authorising the discharge of stormwater and stormwater occasionally contaminated with wastewater (from constructed overflows) to the Coastal Marine Area around Wellington City. These consents were notified under the operative plans, and subject to a number of conditions including the preparation of Integrated Catchment Management Plans (ICMPs) in two stages, and the monitoring of stormwater quality. These consents expire in 2021.

- HCC holds a discharge permit WGN070053 [34857] authorising the discharge of stormwater from the lower Gracefield catchment to the Waiwhetu Stream via a pump station. This consent was granted in March 2007 and will expire in March 2022. A condition of this consent required the development and implementation of a Stormwater Monitoring Plan (SMP) to assess the quality of stormwater in the Gracefield catchment, and to mitigate the effects of contaminants entering the stormwater network. The Gracefield SMP has been completed and monitoring is being implemented in accordance with the conditions of consent.

1.3 Proposal

The applicant has applied for a global discharge consent for discharges from the local authority stormwater networks located in Wellington City, Porirua City, Hutt City and Upper Hutt City, in accordance with the requirements of Rule R50 of the PNRP (as outlined in section 1.1 of this report).

The proposal is to:

- Continue to discharge stormwater occasionally contaminated with wastewater into fresh or coastal water, and onto or into land where it may enter fresh and coastal water from the Wellington City Council, Porirua City Council, Hutt City Council and Upper Hutt City Council owned stormwater networks (managed by WWL).

- Develop a Stormwater Monitoring Plan (SMP) within 6 months of the grant date to monitor the water quality of stormwater discharges to receiving environments across the four local authority areas. The approach to the development of the SMP and a copy of the draft plan was provided in the application. The SMP is focussed on collecting information to inform the second stage consents under the PNRP, which will require management options be implemented.

- Appropriately manage any acute effects of stormwater on human health detected during monitoring.

Stormwater contamination, wastewater overflows as well as descriptions of the networks are outlined in the following sections.

2. Existing stormwater networks

2.1 Stormwater contamination

Stormwater can be contaminated by sediments, oils, greases, metals and organic material accumulated on roads and other impervious areas. Rubbish and contaminants accidentally and illegally discharged into the stormwater system also contribute to the quality of water in the receiving environment.

Contaminants can accumulate on surfaces over time during dry periods between rain events (antecedent periods). Stormwater is not able to infiltrate impervious surfaces so runs overland, which provides a pathway for contaminants to become entrained, and during rain events these contaminants can be washed into the stormwater networks.

The degree of stormwater contamination can be influenced by land use and considerations such as transport routes and the amount of impervious surfaces. Contamination from surface run-off is an inherent part of stormwater.

Contaminants such as rubbish, wastewater, high sediment loads and toxins that enter stormwater other than through surface run-off can be managed to some degree by physical installations (e.g. grates and sumps to remove debris), earthworks management practices and educating the community about what is inappropriate to put into the stormwater network.

The stormwater and wastewater networks are often linked via constructed or unconstructed over flows, or due to leaks caused by inflow/infiltration. This can result stormwater becoming contaminated with wastewater.

2.1.1 Wastewater overflows

Given the connectivity between the wastewater and stormwater networks, the applicant proposes to include constructed and unconstructed wastewater network overflows (WNOs) which discharge into the stormwater network before discharging with stormwater into receiving environments within the scope of the consent.

All WNOs to be included occur at known locations (which have previously had overflow(s)), are included in Appendix A to this report.

For clarity wastewater discharges which discharge directly to receiving environments i.e. not via the stormwater network are outside the scope of this consent.

There are two main types of WNO's:

1. **Constructed overflows:** These are constructed deliberately and are built for the purpose of providing relief to the wastewater network during flooding events. For example wastewater pipes with built-on overflow design (refer to Photo 1), or pump stations that redirect excess wastewater to the stormwater network when the wastewater network capacity is exceeded (refer to Photo 2).

   Constructed overflows were constructed decades ago to act as a pressure release mechanism in the wastewater network and enable wastewater, usually diluted through a significant increase in rainwater, to preferentially enter the stormwater network rather than spill onto the surface (of private property, streets, parks, buildings and other built environments), where the risk to public health is dramatically increased.

2. **Unconstructed overflows:** These are unintentional e.g. during high flows a manhole cover "pops" and sewage flows down the street and enters the stormwater network (refer to Photo 3).

Photo 1: View of a wastewater network overflow pipe into a stormwater pipe that discharges to the CMA (Source: WWL response to further information request email dated 4 May 2018)

Photo 2: View down a manhole of a wastewater overflow pipe that redirects excess wastewater from a pump station into a stormwater pipe. The stormwater pipe discharges into a nearby stream (Source: WWL response to further information request email dated 4 May 2018).

Photo 3: View of a manhole overflowing onto the street and discharging into the stormwater network via nearby curb and channel/sumps (Source: WWL response to further information request email dated 4 May 2018).

Known constructed overflows are outlined in Section 2.2 of this report in the catchment summary sections.

The applicant has confirmed that wherever possible constructed WNOs will be monitored under the SMP using an overflow monitoring device.

With regards to unconstructed overflows the applicant has stated that these are inherently difficult to monitor given the difficulty with installing automated flow monitoring equipment at these locations (when they can be located at all). However, as the stormwater monitoring programme is implemented, opportunities for using new technologies and methodologies for measuring flows from unconstructed WNO's will be investigated and incorporated where possible.

2.2 Stormwater catchments

The applicant has split the area into 28 urban catchments across the four local authorities. Detailed catchment maps have been provided showing the known features of the stormwater network including stormwater pipes, open channels, main sewer trunk, known WNO's and stormwater outlets.

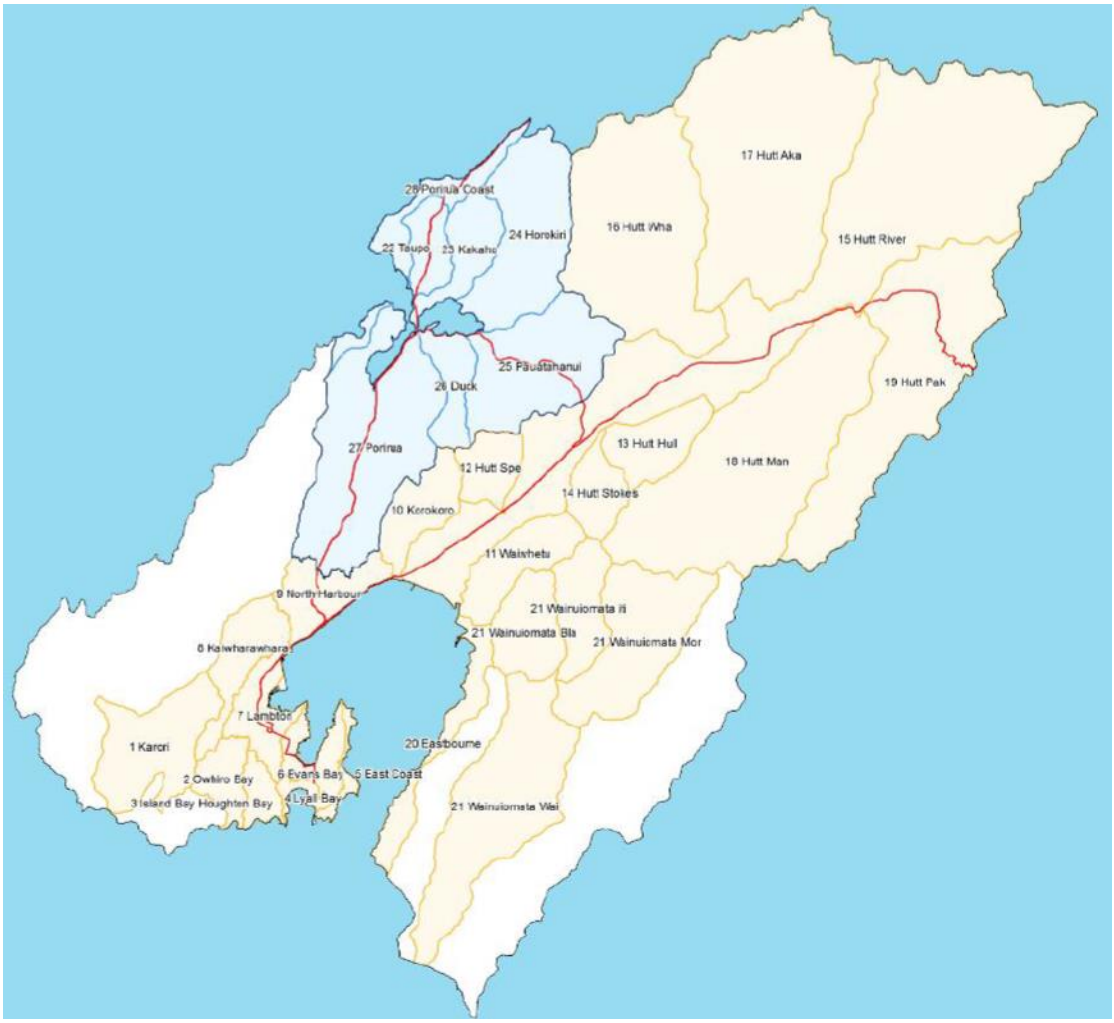

Figure 1: Map showing the 28 stormwater catchment areas, as mapped in the application.

2.2.1 Wellington City stormwater network

Wellington City's stormwater network consists of nine catchments and extends from Karori in the west, Owhiro, Island, Houghton and Lyall bays to the south, through to Seatoun, Miramar, Lambton Harbour, Kaiwharawhara, Ngauranga and Korokoro to the north-east. These catchments drain either to Wellington's very exposed southern coast or to the relatively sheltered waters on the western side of Wellington Harbour.

Most of Wellington City is serviced by a piped stormwater network, as natural watercourses have become increasingly confined or piped to allow more intensive use of land as the population has grown. However, some urban streams still remain, including the Kaiwharawhara, Owhiro and Karori streams.

In the Lambton harbour catchment, which is intensively urbanised, all streams have most or all of their length piped and none flow freely to the sea as open channels. The remnant open sections typically occur in the remaining vegetated open space encompassed by the Town Belt, reserves and the Botanic Gardens. A total of 139 remnant open channel sections from 48 separate watercourses are identified in the Lambton Harbour catchment.

Wellington City's steep topography generally enables gravity-flow of stormwater to discharge points. Stormwater pump stations are only used in low lying areas such as Kilbirnie.

The majority of properties drain to kerb outlets, with occasional soak holes in older areas that are difficult to service by the existing piped network.

Further information received on the 9 August 2018 revealed that there are 73 constructed WNOs and 8 unconstructed WNO's discharging into the stormwater networks within WCC's jurisdiction.

The monitoring data and modelling output to date indicates that the most significant WNO point in the Wellington City network is at Murphy Street. At this location, the constructed WNO provides significant flood relief for the downstream network.

2.2.2 Porirua City stormwater network

Porirua's stormwater network extends across seven catchments from Pukerua Bay at the northern end of Porirua CBD, to the boundary with Tawa at the southern end. To the east, the stormwater network serves all Whitby residential areas. The proximity of two harbour arms and numerous streams results in a system of localised networks. There are many rural catchments made up of open streams and watercourses. However, in built-up urban areas, these streams have become part of the enclosed piped network.

Older residential properties drain mainly to the street kerb or rely on the disposal of stormwater to ground (soak pits). Run-off from residential properties and streets is directed into reticulation wherever possible, with all new developments required to provide for stormwater reticulation.

Further information received on the 9 August 2018 revealed that there are two constructed WNOs and 33 unconstructed WNO's discharging into the stormwater networks within PCC's jurisdiction.

2.2.3 Hutt City stormwater network

Hutt City's stormwater network consists of nine catchments, including those in Lower Hutt and Petone. The network extends from Korokoro in the east and around the Wellington Harbour to include the Eastern Bays. Most catchments drain into the Hutt River which enters the north-eastern side of Wellington Harbour, with the exception of the Wainuiomata catchment which drains to the south coast near Baring Head.

Most of Hutt City is serviced by a piped stormwater network and includes 27km of open drains, 14 pumping stations (to supplement gravity drainage in low-lying areas), and five earth retention dams (to reduce the peak load in the system during heavy rainfall events). The stormwater network is particularly crucial as Hutt City is located on a natural flood plain.

Properties in Hutt City are generally serviced by kerb outlets or direct connection to the stormwater main. There are generally more direct connections in Hutt City than the other cities.

Further information received on the 9 August 2018 revealed that there are 26 constructed WNOs discharging into the stormwater networks within HCC's jurisdiction.

2.2.4 Upper Hutt City stormwater network

Upper Hutt's stormwater network consists of six catchments each with their own discharge point to the Hutt River. Upper Hutt is serviced by a piped network that includes 11.4km of open drains, six pump stations and two detention dams (at Heretaunga and Emerald Hill).

The majority of residential properties drain to soak pits or kerb outlets, and many road side sumps also drain to soak pits. New developments are able to drain to soak pits that are appropriately designed and specified.

Further information received on the 9 August 2018 revealed that there are four constructed WNOs discharging into the stormwater networks within UHCC's jurisdiction.

2.3 Stormwater Monitoring Plan

The applicant has provided a Draft SMP (appendix F to the application) which includes a development framework for finalisation of the SMP (as shown in Figure 2 below). A timeframe of 6 months is proposed for submission of the final SMP from the dated that this consent is granted. The draft SMP has evaluated the availability of information on values, pressures and the state of each catchment. From this, a matrix has been developed to prioritise monitoring to fill key information gaps.

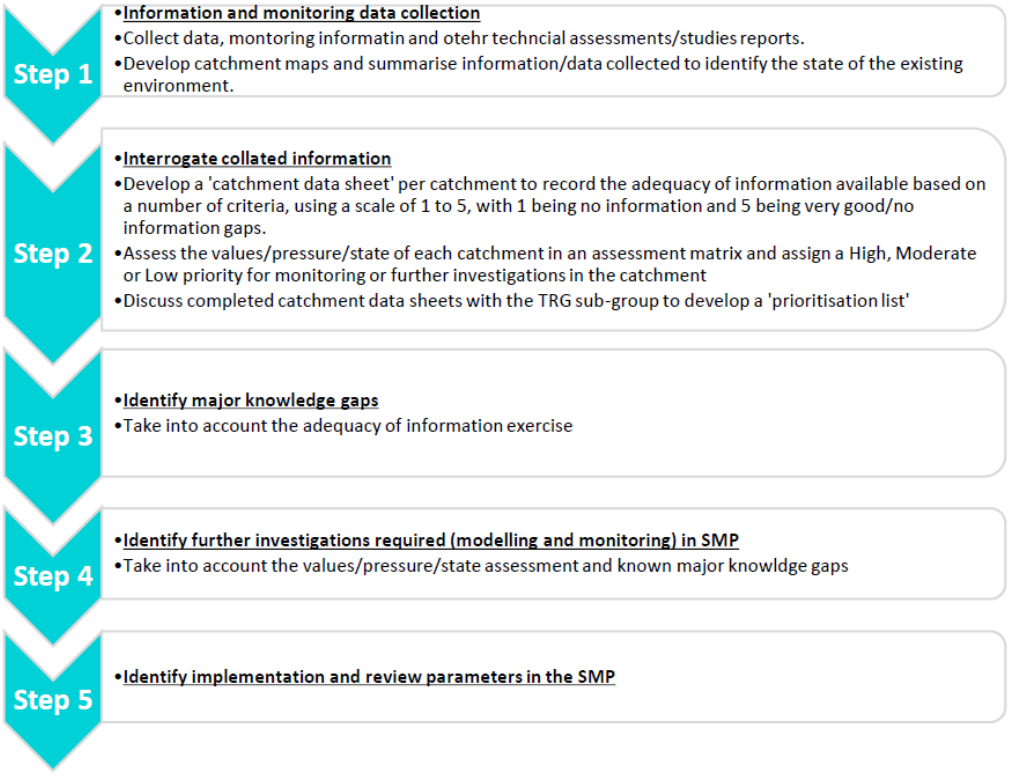

Figure 2: Stormwater Monitoring Plan development framework (from application).

A final SMP will be submitted in accordance with recommended conditions of consent which will incorporate and give effect to the conditions of this consent. Recommended conditions of consent are outlined in section 5 of this report.

2.4 Interaction with existing consents

As outlined in section 1.2 of this report there are two existing consents which are applicable to this application. Consent WGN070053 held by HCC authorising the discharge of stormwater from the lower Gracefield catchment to the Waiwhetu Stream via a pump station and WGN090219 authorising the discharge of stormwater and stormwater occasionally contaminated with wastewater (from constructed overflows) to the Coastal Marine Area around Wellington.

Consents WGN070053 and WGN090219 will continue to be implemented until they expire.

The monitoring regime established under the consent subject to this report will provide more comprehensive data to inform the implementation of the existing consents and the types of interventions required under conditions relating to the existing consents.

Over time it is anticipated that the focus of implementation of the existing consent will reflect policy outcomes set out in the PNRP with respect to wastewater and stormwater, and articulated in SMS as specified in Schedule N of the PNRP.

3. Reasons for resource consent

3.1 Operative Regional Plans

The rules in the operative regional plans are focussed on individual discharges from pipes, rather than a global consenting framework. GWRC have made an organisational decision to process the global stormwater consents for territorial authorities under the PNRP rules (as described and signed off in document ENVREG-10-72).

This decision has been made because the PNRP sets a precedent for local authority stormwater discharges to be consented using a global framework, as a controlled activity and with a clear framework. As discussed in the sign off document, the Operative Plan rules and policies are not deemed to be comparable to the approach taken in the PNRP, given the rules are for point source discharges rather than holistic management of a stormwater network.

An assessment of the operative plan rules are outlined below.

RMA section	Plan	Rule	Status	Comments
15	Regional Freshwater Plan	2	Permitted	The Regional Freshwater Plan has a variety of rules that cover stormwater discharges; but they are focussed on point source rather than discharges from whole TA networks. Strictly looking at the operative plan, the discharge would be assessed under Rule 5 as a **discretionary activity** as they may contain wastewater.
		3 (not meeting rule 2)	Controlled	
		5 (stormwater containing wastewater)	Discretionary	
	Regional Coastal Plan	53	Permitted	The Regional Coastal Plan has a variety of rules that cover stormwater discharges; but they are focussed on point source rather than discharges from whole TA networks. Strictly looking at the operative plan, the discharges would be assessed under Rule 60 as a **non-complying activity**, as they may contain wastewater, and some outfalls would discharge to into a coastal water body with significant conservation values (Pauatahanui Inlet).
		61 (not meeting Rule 53)	Discretionary	
		58 (stormwater containing wastewater)	Discretionary	
		60 (stormwater containing wastewater to any coastal water body with significant conservation values)	Non-complying	
	Regional Discharges to Land Plan	3	Permitted	The Regional Discharges to Land Plan has a variety of rules that cover stormwater discharges; but they are focussed on point source rather than discharges from whole TA
		2 (not meeting rule 3)	Discretionary	
		8 (stormwater containing	Discretionary	

RMA section	Plan	Rule	Status	Comments
		wastewater)		networks. Strictly looking at the operative plan, the discharges would be assessed under Rule 8 as a **discretionary activity**, as they may contain wastewater.

3.2 Proposed Natural Resources Plan

The Proposed Natural Resources Plan (PNRP) was publicly notified by the Council on 31 July 2015. All rules in the PNRP have immediate legal effect under section 86B (3) of the Act. As the application was lodged after 31 July 2015, the PNRP is relevant to determining the resource consents required, activity status, the notification decisions and the substantive assessment of the proposal under section 104 of the Act.

RMA section	Rule	Status	Comments
15	R50	Controlled	Consent has been applied for within 2 years of plan notification, and so will be processed under Rule R50 as a Controlled Activity. Consents received after this notification period will be processed as a Restricted Discretionary Activity. The application was received within two years and as such can be processed as a controlled activity pursuant to Rule R50.
	R51	Restricted discretionary	

Given that the application is for a global discharge consent which spans a wide area, stormwater catchments are located within, upstream or adjacent to multiple scheduled sites. These have been detailed in section 5.4 of the consent application. I adopt this section of the application in accordance with section 42A (1B) (a) of the Act

3.3 Overall activity status

Wellington Regional Council's (GWRC) consenting approach to TA stormwater consents has been discussed above in Section 3.1 of this report and ENVREG-10-72. The conclusion reached in this assessment is that the TA global stormwater discharges are most appropriately assessed under Rule R50 as a **Controlled Activity** under the PNRP.

3.4 Consultation

Iwi authority	Comments
Port Nicholson Block Settlement Trust (PNBST)	The applicant consulted with this party prior to lodgement of the application. This consultation is discussed in section 11.2.3 of the application. • In summary: The water quality of open streams is a key concern. A list of waterbodies identified as having particular cultural significance to PNBST was provided to WWL

	• PNBST are currently developing cultural health indicators • Mahinga kai and Māori customary use in the coastal environments are important • PNBST and the Wellington Tenths Trust seek the following outcomes from the Stage One global stormwater consent: a) Improvements to problem areas, particularly the health of shellfish b) Maintaining Wellington Harbour water quality, visual clarity and no odour c) Native fish populations being maintained or improved d) Water quality being maintained or improved • PNBST are interested in being a member of the Stormwater Working Party After consent lodgement, PNBST was provided with a copy of the application for comment in accordance with the agreement between the iwi and GWRC regarding consultation on non-notified consent applications. No further comments were received. Further consultation was undertaken with the iwi regarding proposed conditions of consent. Conditions of consent are discussed in section 5 of this report.
Ngāti Toa Rangatira (Ngāti Toa)	The applicant consulted with this party prior to lodgement of the application. This consultation is discussed in section 11.2.3 of the application. In summary: • Ngāti Toa consider flooding in Porirua to be a major problem • Ngāti Toa are currently working on developing cultural health indicators. Rawiri Faulkner (consultant) is leading this project • Ngāti Toa would like to collaborate with WWL to explore which cultural health indicators can be used to monitor water quality • Ngati Toa are interested in being involved with physical monitoring • Ngati Toa would like to identify areas that would benefit from monitoring including customary gathering sites, Porirua Harbour and around the Porirua coastline, and Porirua Stream • Ngati Toa are interested in being a member of the Stormwater Working Party After consent lodgement, PNBST was provided with a copy of the application for comment in accordance with the agreement between the iwi and GWRC regarding consultation on non-notified consent applications. The following comment was provided by Turi Hippolite - *"The global stormwater application will have adverse effects on the interests of Ngati Toa. At this stage it is that our values are implemented in the marine cultural health monitoring*

	programme. *We will continue to talk to Wellington Water on implementing cultural indicators in the monitoring programme."* Further consultation was undertaken with the iwi regarding proposed conditions of consent. Conditions of consent are discussed in section 5 of this report.
Applicant group(s) under the Marine and Coastal Area (Takutai Moana) Act 2011 (MACA)	In accordance with section 62 of the MACA the applicant has confirmed that they have notified and sought the views of the relevant applicant group(s).
Other parties or persons	**Comments**
Dr Claire Conwell, Senior Coastal Scientist, GWRC Environmental Science Department.	Dr Conwell has provided ongoing technical advice to GWRC Environmental Regulation during the processing of the application. In particular she has reviewed the proposed conditions of consent to ensure that they are sufficient for purpose.
Technical Reference Group (TRG)	The SMP and consent conditions have been guided by the input of a technical reference group consisting of Juliet Milne (NIWA), Jonathan Mores (NIWA), Olivier Ausseil (Aquanet Consulting Ltd), Claire Conwell (GWRC), Sabrina Yung (GHD) and David Cameron (MWH). It is anticipated that this group will guide the development of the final SMP required by conditions of consent discussed in section 5 of this report.

4. Notification decision

A decision was made to process the application on a non-notified basis on 4 August 2017. Further information on the notification decision is provided in document #170001-1537359365-85.

5. Environmental effects

5.1 Matters of control

As outlined in section 3 of this report the stormwater from a local authority network at plan notification is a controlled activity under Rule R50. Under Rule R50 GWRC retain the following matters of control:

1. Requirements to monitor and report on the quality of stormwater discharges to fresh and/or coastal water, including of stormwater discharges containing wastewater

2. Management of acute effects of stormwater on human health detected during monitoring

3. Duration of consent up to a maximum of five years

4. Timeframes for the development of a stormwater management strategy (SMS) in accordance with Schedule N (stormwater strategy)

5.2 Existing environment

The applicant has provided an Existing Environment Report in Appendix B of the application. This report outlines that there are two major catchments which drain into two major harbours, Wellington Harbour and Porirua Harbour. These two main areas have been further divided down into 28 sub-catchments which mostly correspond with stormwater catchments. Flat coastal areas without streams were combined into a "coastal catchment".

The report:

- Describes the stormwater networks managed by WWL;
- Describes the current state of catchments within which the stormwater networks are located, and the water bodies into which the stormwater is discharged; and
- Identifies the locations of relevant existing monitoring sites including those established for monitoring stormwater quality, receiving water quality, surface water quality, sediment quality and condition of biological communities within stormwater catchments.

Information collated in the report was used to prepare the draft SMP included as Appendix F to the application.

I concur with all matters discussed Existing Environment Report and adopt this assessment in accordance with section 42A (1B) (a) of the Act.

5.3 Effects to receiving environments

The applicant has provided an assessment of environmental effects (AEE) in section 8 of the application. The AEE includes an assessment of effects to:

- Receiving water quality (section 8.2);
- Ecology (section 8.3);
- Shell fish and mahinga kai (section 8.4);
- Effects to human health and contact recreation (section 8.5);
- Visual, aesthetic, and amenity values (section 8.5);
- Māori customary use (section 8.7);
- Values of areas identified in Schedules A, C and F of the PNRP (section 8.8); and
- Positive Effects (section 8.9).

The applicants AEE generally concludes that the review of existing monitoring data has not lead to a conclusive determination or qualification of the level of adverse effect to receiving environments resulting from the discharge of

stormwater from the local authority stormwater networks (which in some cases contains wastewater).

The assessment also highlights that there are other contributing factors to the general health of water bodies, such as, adverse ecological outcomes in freshwater environments being connected to the amount of impervious area in a catchment.

The assessment states that localised effects are dependent on the sensitivity of the receiving environment. For example, receiving environments which are relatively constrained or low energy tend to accumulate stormwater contaminants due to the deposition of fine sediments on which the contaminants are entrained.

I concur with all matters discussed in the AEE and adopt this assessment in accordance with section 42A (1B) (a) of the Act.

The lack of determination regarding the scale of effect of the discharge of stormwater from the local authority networks means that the quality of the water being discharged may be having a more than minor adverse effect in some receiving environments.

I note that, for this consent process, the matters for control are limited to those outlined in section 5.1 of this report. Conditions relating to the control of contaminants are limited to those required for the management of acute effects of stormwater on human health detected during monitoring (conditions relating to this are outlined in section 5.4.1 of this report).

With the exception of water quality as it relates to acute effects of stormwater on human health, in brief, the intent of this consent is to ensure monitoring of stormwater discharges over the next five years is sufficient to inform the longer term SMS required during the phase two consent (Rule R51 of the PNRP).

Consent conditions relating to the monitoring of water quality are discussed in section 5.4.1 of this report.

5.4 Matters for control and consent conditions

5.4.1 Monitoring of water quality

The applicant has included a draft SMP in Appendix F of the application. As outlined in section 3 of this report this has been prepared in consultation with a Technical Reference Group (TRG).

This group has also been involved with the development of the recommended conditions (Attachment 1). It is anticipated that this group will guide the development of the final SMP required by recommended conditions of consent.

The conditions of consent outlined in Attachment 1 require a final SMP be submitted within 6 month of the grant of this consent. Conditions require that the final SMP contains the following information:

a) Monitoring objectives;

b) Stormwater discharge, and freshwater and coastal receiving water sampling locations, including:

   i) Identification of high priority sampling sites based on existing knowledge; and

   ii) Sampling sites located within sites of significance to iwi agreed in consultation with iwi. These should include but may not be limited to locations within sites identified in Schedule C of the Proposed Natural Resource Plan

c) Water quality, sediment quality and/or ecological variables and associated test methods;

d) Indicator organisms identified for specific monitoring sites for the purposes of monitoring effects to human health

e) Key metadata and other supporting information that is to be collected, including weather conditions, field observations and photographs;

f) Linkages with other existing resource consents and/or monitoring programmes;

g) Data assessment and reporting procedures; and

h) Timing and process for reviewing the SMP, including the personnel that will undertake the review.

Monitoring of water quality for effects to mana whenua values

To ensure that adequate information is gathered regarding effects to mana whenua values to inform the SMS, the requirements of the final SMP (as outlined above) set out that the consent holder must identify sampling locations; including sampling sites located within sites of significance to iwi. These sites must be agreed in consultation with iwi.

Conditions of consent require that the results of monitoring (including monitoring within sites of significance as identified by iwi) is submitted annually (reporting requirements discussed in section 5.4.3 of this report). As part of this, the consent holder is required to provide an assessment by an appropriately qualified and experienced person (i.e. iwi representatives) regarding the significance of the results from a mana whenua perspective.

This annual interpretation of water quality monitoring from a mana whenua perspective will allow a picture to be built up over the duration of this consent of any likely adverse effects to mana whenua values resulting from the discharge of stormwater. This can be used when identifying priority areas for improvement in the development of the SMS.

In addition to the routine monitoring and reporting described above recommended conditions require the consent holder to:

- In collaboration with Greater Wellington Regional Council and iwi contribute to and help to facilitate the development of the Regional Framework for Kaitiaki Monitoring required by Method M2 of the Proposed Natural Resources Plan. This shall include contributing to and helping to facilitate the development of a Kaitiaki Freshwater Health Index.

- Within 6 months of the development of the Regional Kaitaiki Monitoring Framework required by Method M2 of the Proposed Natural Resources Plan the consent holder shall submit for approval to the Manager, a Mana Whenua Values Monitoring Plan (MWVMP) which has been developed in consultation with relevant iwi authorities and in accordance with the Regional Kaitaiki Monitoring Framework

The above conditions of consent have been developed in consultation with iwi who have confirmed that they are satisfied with them.

5.4.2 Management of acute effects of stormwater on human health detected during monitoring

Data presented in the application indicates that during wet weather in particular discharges of stormwater have the potential to adversely affect human health, especially as a result of wastewater contamination.

To ensure that the management of acute effects of stormwater on human health detected during monitoring is adequate; the below conditions of consent have been developed in consultation with Dr Conwell, TRG and the applicant (conditions 10-13):

To ensure that potential acute effects on human health will be communicated and managed appropriately, condition 10 requires that **within three months** of the granting of this consent, a Wastewater Overflows into the Stormwater Network Management and Procedures Plan (WOSNMP) must be submitted to GWRC for approval.

The condition specifies that the WOSNMP must set out how actual or potential acute effects on human health will be communicated and managed. Condition 10 specifies that the WOSNMP must be prepared in consultation with Regional Public Health and include at a minimum:

a) An overview summary of the different sources of wastewater overflows that enter the stormwater system, including wastewater from constructed overflows, unconstructed overflows, illegal cross-connections and leaks from private laterals;

b) Detail of sanitary survey procedures and detailed upstream catchment investigations including but not limited to specific upstream catchment investigations in the Hutt, Akatarawa and Whakatikei rivers to be followed in the event that the trigger limits outlined in condition 11 (discussed below) are recorded.

c) Actions to be taken if the source of wastewater is identified, including for known and newly identified wastewater sources;

d) Risk communication procedure(s) to be followed to inform the public of the actual or potential presence of wastewater overflows, including but not limited to:

   i) measures to inform and educate the public about the human health risks associated with stormwater discharges;

   ii) the use of automated notifications to inform recreational users of sewage overflows (for example, by posting to a web site and/or text message);

   iii) the timing and recipients of notifications to Regional Public Health and Greater Wellington Regional Council of sample results that indicate a potential acute effect to human health. Notifications may include results from culvert discharge sampling and/or receiving environment sampling;

e) A review of existing health warning signage to distinguish between ongoing versus acute short-term health risks; and

f) A process for reviewing and updating the procedure on at least an annual basis in conjunction with the SMP.

Recommended condition 11 outlines water quality limits which if exceeded trigger the requirement to undertake a sanitary survey. Trigger limits set by condition 11 are as follows:

a) Any water sample collected in dry weather from a stormwater outfall or pipe under this consent has an indicator bacteria count exceeding 10,000 cfu/100mL; or

b) Any two successive routine water samples collected at a coastal receiving water site exceed 1,000 indicator bacteria count per 100 mL; or

c) Any two successive routine water samples collected at a freshwater receiving water site, with the exception of any sites on the Hutt, Akatarawa and Whakatikei rivers, exceed 1,000 indicator bacteria count per 100 mL; or

d) Any single dry weather water sample collected from the Hutt, Akatarawa or Whakatikei rivers exceeds 1,000 indicator bacteria count per 100 mL.

Condition 11 specifies that details and outcomes of any sanitary surveys undertaken must be provided **monthly** to GWRC and summarised in the Annual Report as required by Condition 15 (discussed in section 5.4.3 below).

Recommended condition 12 outlines the immediate actions to be undertaken in the event that a sanitary survey indicates that there is the potential for an acute effect to human health. The immediate actions specified by condition 12 are as follows:

- Undertake the actions and communications procedures approved in accordance with the WOSNMP approved under condition 10 (discussed above). This includes but may not be limited to establishing temporary warning signs if necessary to prevent people coming into contact with the discharge; and

- Whenever practicable implement immediate remedial works to address the causes of the contamination.

  In the event that immediate remedial works to address the causes of the contamination cannot be undertaken (if for example the problem is more complex and wide spread that simply fixing a burst sewer main), the consent holder will be required to commence a human health mitigation project required by recommended condition 13.

  Condition 13 requires human health mitigation projects to be carried out when either:

  a) The rolling 12-month median indicator bacteria count obtained from undertaking routine monthly monitoring in the receiving waters exceeds 1,000 cfu/100 mL; or

  b) The sanitary survey undertaken in accordance with Condition 11 indicates continued contamination which has the potential to result in acute human health effects and this is linked to discharges from the stormwater network and the cause of the contamination has not been rectified through immediate actions as required by Condition 12.

  Condition 13 specifies that the project scopes shall be provided to GWRC, within 1 month of completion of the sanitary survey required under Condition 11, with proposed implementation timeframes. The consent holder shall prioritise projects based on the significance and magnitude of acute effects.

  The consent holder's projects may include, but not be limited to:

  a) Installation of permanent signage;

  b) Further sewer/stormwater network investigations such as CCTV and/or faecal source tracking;

  c) Public education;

  d) Physical works;

e) Further catchment investigations including cultural and human health monitoring.

(a) Waste water overflow

As discussed in section 2.1.1 of this report there are existing constructed and un-constructed wastewater network overflows which discharge with stormwater into receiving environments though the stormwater network. A list of known constructed and unconstructed wastewater network overflows to stormwater was provided on 9 August 2018 and is included as Appendix A to this report.

Through consultation with the policy department it has been decided that minor wastewater overflows should be included in this consent as they are closely linked with the operation of the stormwater network (i.e. There is no immediate solution to preventing the discharge of wastewater in the stormwater network via constructed and unconstructed overflows).

This consent does not authorise the construction of any new wastewater overflows, nor does it authorise the direct discharge of waste water to receiving environments (i.e. not via the stormwater network).

To ensure that discharge of wastewater into the stormwater network is limited to those currently existing a condition of consent has been recommended which defines the scope of WNOs authorised by this consent (recommended condition 2).

As not all unconstructed overflow sites were known at the time of granting consent, any additional unconstructed overflow sites discovered are also authorised by this consent. To ensure that unconstructed WNOs discovered during the course of this consent are captured, I have recommended that an updated list of all unconstructed WNOs is submitted annually as part of the information required in the annual report required by recommended condition 15.

5.4.3 Reporting requirements

As outlined above some of the conditions relating to the management of acute effects on human health have their own reporting requirements. In addition to this the applicant is required under condition 15 to submit a report annually by the 1 September. Condition 15 specifies that the annual report must include the following:

a) A summary of physical capital and maintenance works to the stormwater network carried out in the previous year to mitigate acute effects on human health including on Human Health Mitigation Projects undertaken in accordance with condition 13 (discussed above);

b) A summary of any expansions or additions to the stormwater network (such as new roads or subdivisions) in the preceding year;

c) A summary of water sample results that exceeded trigger levels specified in condition 11 (discussed above);

d) The results of sanitary surveys required by condition 11, including details, findings and remedial works undertaken or planned (with timeframes) to address the source of contamination;

e) A summary of routine monitoring results and analysis of results from previous years including:

i) an assessment by an appropriately qualified and experienced environmental scientist(s) on the differences and trends, and the significance of the results from a human and environmental health perspective; and

ii) an assessment by an appropriately qualified and experienced person of the significance of the results from a mana whenua perspective (this should include but is not limited to specific reference to results of monitoring undertaken within the sites of significance identified in condition (b)(ii));

a) Observations and photographs from the visual inspections undertaken during stormwater outfall monitoring;

b) An assessment by a suitably qualified and experienced environmental scientist of the adequacy of existing monitoring and investigations in identifying any adverse effects from stormwater discharges and recommendations for amendments to the SMP and WOSNMP; and

c) A summary of meetings held with the Stormwater Working Party (SWP) required by condition 14 (discussed in section 5.5 below).

5.4.4 Timeframes for the development of a stormwater management strategy in accordance with Schedule N (stormwater strategy)

The consent duration is recommended to be 5 years in accordance with matter of control number 3. Recommended consent condition 17 requires the development and submission of a draft SMS within 4 years of the grant of this consent.

This time frame is considered to be sufficient to allow adequate time for monitoring undertaken in accordance with this consent to inform the SMS. Further detail will be able to be added to the SMS prior to any second stage consent being issued to take into account monitoring data obtained between the submission of the draft SMS and the consent application being considered.

5.5 Other consent conditions

In addition to the conditions outlined above which have been designed to align with the matters of control. In consultation and agreement with the applicant an additional consent condition (condition 14) has been recommended which requires the establishment of a Stormwater Working Party (SWP).

The SWP is not a decision making group, but will be a forum of key stakeholders for the dissemination of information on consent compliance, impacts of stormwater discharges on receiving environments as the information becomes available, remedial actions taken and priorities for future work.

The SWP will be established for purposes of:

a) Reviewing key findings in the Annual Report;

b) Engaging in the development of the draft Stormwater Management Strategy required by recommended condition 17; and

c) Any other relevant matters relating to the exercise of this consent.

Condition 14 requires that for the purpose of this consent, the SWP shall have the following terms of reference:

i) A meeting shall be called by the consent holder with no less than 20 working days' notice and at least annually;

ii) The agenda for the meetings and any relevant reports shall be circulated to all SWP members a minimum of 10 working days prior to the meeting; and

iii) Records of each meeting shall be kept and circulated to members within 20 working days of each meeting being held. The records should include, but not be limited to, issues discussed, actions agreed upon and any follow-up on agreed actions from previous meetings.

5.6 Summary of effects

I consider that currently it is difficult to quantify the effects that stormwater is having on the receiving environments. Conditions of consent have been included to ensure that adequate information is gathered over the 5 year consent duration to fill knowledge gaps and provide sufficient information to quantify effects to each receiving environment and develop a comprehensive SMS in accordance with Schedule N of the PNRP in preparation for the phase two consent required under Rule R51 for the PNRP.

I consider that the above conditions of consent which have been developed in consultation with the applicant and suitably qualified environmental scientists fulfil the matters of discretion listed by Rule R50 of the PNRP including the management of acute effects of stormwater on human health detected during monitoring.

6. Statutory assessment

6.1 Part 2

Part 2 of the Act outlines the purposes and principles of the Act. Section 5 defines its purpose as the promotion of the sustainable management of natural and physical resources. Sections 6, 7 and 8 of Part 2 define the matters a consent authority shall consider when achieving this purpose.

I am satisfied that the granting of the application is consistent with the purpose and principles in Part 2 of the Act.

6.2 Matters to be considered – Section 104-108

Section 104-108 of the Act provides a statutory framework in which to consider resource consent applications. All relevant matters to be considered for this application are summarised in the table below:

RMA section	Matter to consider	Comment
104(1)(a)	Actual or potential effects on environment	See Section 5 of this report.
104(1)(b)(iii)	National Policy Statement for Freshwater Management 2014	The NPSFM is given effect to through policy 66 of the PNRP (discussed below).
104(1)(b)(iv)	National Coastal Policy Statement 2010 *Objective/Policy* Objectives 1 and 6 Policies 22 (sedimentation) and 23 (discharge of contaminants)	In summary, the approach to stormwater management is generally consistent with these objectives and policies because WWL is: • Seeking to safeguard the function and resilience of the coastal environment and preserve its natural character; • Providing for tangata whenua involvement, through consultation with iwi as part of this consent process, contributing to the development of the Regional Kaitiaki Monitoring Framework, and involving iwi in a SWP during the term of the consent; • Providing for the social, economic and cultural wellbeing of communities by ensuring the stormwater network is operating effectively; • Taking an integrated 'global' approach to stormwater management; • Seeking to enhance the quality of water in the coastal environment; • Proposing to assess and monitor sediment and other water quality impacts on the coastal environment where appropriate; • Continuing to take steps to manage the avoidance of adverse effects from stormwater discharge to the coastal environment, by limiting sewage contamination where possible, promoting integrated management and promoting design options that reduce wastewater flows to stormwater reticulation systems at source.

RMA section	Matter to consider	Comment
	Policy 23	Policy 23 in particular relates to the discharge of contaminants. This policy seeks to manage discharges to water in the coastal environment and recognises that particular regard should be given to the sensitivity of the receiving environment, nature of the contaminants discharged and the capacity of the environment to assimilate the contaminants. The policy effectively prohibits direct discharges of untreated human sewage directly to water in the coastal environment (23(2)). Regarding stormwater containing sewage, the policy seeks to avoid or remedy cross-contamination where practicable and promote integrated management of catchments and networks. Wastewater discharges to the stormwater network are from constructed and unconstructed overflows, which provide for emergency events. In general WWL is seeking to manage these adverse effects and remedy these connections where possible, thereby reducing wastewater discharges. It is not possible to immediately fix all overflows, as many are historic connections and are related to network capacity. In addition, these discharges are not "direct" to the CMA, but are indirect via the stormwater network, and wastewater has been diluted during rainfall discharge events.
104(1)(b)(v)	**Regional Policy Statement**	I consider that, with the application of the recommended conditions of consent, the proposed activity is consistent with the RPS. The most relevant objectives and policies to consider for this application are outlined below.
	Objective	**Policy**
	Objective 3 – Habitats and features in the coastal environment that have significant indigenous biodiversity values are protected; and Habitats and features in the coastal environment that have recreational, cultural, historical or landscape values that are significant are protected from inappropriate subdivision,	Policy 24: Protecting indigenous ecosystems and habitats with significant indigenous biodiversity values.

RMA section	Matter to consider	Comment
	use and development.	
	Objective 7- The quality of coastal waters is maintained or enhanced to a level that is suitable for the health and vitality of coastal and marine ecosystems.	Policy 5: Maintaining and enhancing coastal water quality for aquatic ecosystem health Policy 40: Safeguarding aquatic ecosystem health in water bodies Policy 37: Safeguarding life supporting capacity of coastal ecosystems
	Objective 10 - The social, economic, cultural and environmental, benefits of regionally significant infrastructure are recognised and protected.	Policy 39: Recognising the benefits from renewable energy and regionally significant infrastructure Policy 8: Protecting regionally significant infrastructure
	Objective 13 - The region's rivers, lakes and wetlands support healthy functioning ecosystems.	Policy 19: Managing amenity, recreational and indigenous biodiversity values of rivers and lakes Policy 43: Protecting aquatic ecological function of waterbodies Policy 64: Supporting a whole of catchment approach
	Objective 23 - The region's iwi authorities and local authorities work together under Treaty partner principles for the sustainable management of the region's environment for the benefit and wellbeing of the regional community, both now and in the future.	Policy 66: Enhancing involvement of tāngata whenua in resource management decision-making
	Objective 26 - Mauri is sustained, particularly in relation to coastal and fresh waters.	Policy 49: Recognising and providing for matters of significance to tāngata whenua
	Comment	
	The proposal is considered consistent with the above objectives and policies for the following reasons: • The application forms stage-one of a two-stage process to establish a clear direction for stormwater management within Wellington, Lower Hutt, Porirua and Upper Hutt. The information collected over the five year consent term will inform the SMS. The SMS will be designed to reduce adverse effects on aquatic ecology, contact recreation and Māori customary use in the long term. • Conditions of consent will ensure a more targeted approach to monitoring stormwater discharges over the consent term. This approach will enable further data to be collected to refine the key areas	

RMA section	Matter to consider	Comment
	of focus in the long-term forming part of the SMS. • The stormwater network is regionally significant due to the critical service it provides to the community. The continued use and maintenance of this network, including the associated discharges in a sustainable way, is therefore crucial to the management of stormwater.	
104(1)(b)(vi)	**Operative Regional Freshwater Plan**	As outlined in section 3 of this report, a decision was made to process this application under the provisions of the PNRP. As such, no detailed assessment has been provided for the Operative Regional Plans. However, I consider that the proposal is not contrary to the Objectives and Policies of the Operative Regional Plans as the purpose of this consent is to inform a comprehensive SMS which will aim to improve the quality of stormwater discharges from the stormwater network. This aim and outcome is generally consistent with the objectives and policies of the Relevant Operative Regional Plans.
	Proposed Natural Resources Plan	I consider that, with the application of the recommended conditions of consent, the proposed activity is consistent with the PNRP.
	Objective/Policy	*Comment*
	Objectives O9, O11, O12 and Policies P7, P8, P10, P12, P13	These objectives and policies relate to: • The beneficial use and development of natural resources, including water. • Recreational values of watercourses. • Māori customary use. • The use and ongoing operation of, regionally significant infrastructure (which by definition includes stormwater networks). The proposal is considered consistent with these objectives and policies. specifically the proposal: • Will undertake monitoring to fill the knowledge gap regarding the level of effect to aquatic ecosystems, recreational values and Māori customary use. • Will develop a SMS to reduce effects and restore values in accordance with the provision of the PNRP. • recognises the cultural, social and economic benefit of using land and water for the treatment and disposal of stormwater; • Recognises the benefits of the stormwater network as regionally significant infrastructure by having regard to the

RMA section	Matter to consider	Comment
		operational requirements of the network.
	Objectives O14, O15, O16 and Policies P17, P19, P20	These objectives and policies relate to the Māori relationships with natural resources and recognises the importance of mauri, mana whenua relationships with the environment and the cultural relationship of Māori with water. Iwi have been involved in the development of consent conditions which have been designed to: • Ensure that water quality monitoring within sites of significance is undertaken and that the results are interpreted from a mana whenua perspective; and • Facilitate the development of the regional Kaitiaki Monitoring Framework after which time a specific Mana Whenua Values Monitoring Plan will be developed and implemented under this consent. The intention of these conditions is to inform the SMS. The SMS will develop a prioritised program for improvement of areas within the stormwater network. Long term it is anticipated that impacts to Māori customary use and sites of significance will be reduced.
	Objectives O23, O24, O25 and Policies P31, P32,	These objectives and policies relate to maintaining and restoring water quality, aquatic ecosystem health and mahinga kai and ensuring water quality is maintained or improved for primary and secondary contact recreation. Under these objectives and policies the restoration of water quality for aquatic ecosystem health and mahinga kai is encouraged and significant adverse effects are to be avoided, remedied, mitigated or offset. The proposal is considered consistent with these objectives and policies for the following reasons: • The proposal is an ongoing activity and there is not expected to be any significant change in effects from that currently occurring (i.e. effects to aquatic ecosystem health and mahinga kai are not anticipated to get worse during the 5 year duration of consent); • Under this consent, effects to water quality is required to be monitored and a SMS developed. The SMS will develop a

RMA section	Matter to consider	Comment
		prioritised program for improvement of areas within the stormwater network. Long term it is anticipated that impacts to aquatic ecosystem health and mahinga kai will be reduced.
	Objective O31, O33, O35 and Policies P40, P41, P44, P45	These objectives and policies relate to sites with significant values, including indigenous biodiversity values (Schedule F1) and mana whenua values (Schedule C). A number of the watercourses receiving stormwater from the stormwater network are listed in the PNRP are sites with significant values. These classifications have been considered throughout this consent process. As discussed elsewhere, effects to receiving environments including those identified as having significant values will be monitored for a duration of 5 years. Conditions of consent have been developed in consultation with suitably qualified and experienced environmental scientists to ensure that monitoring is sufficient for its intended purposes. The purpose of monitoring is the development of the comprehensive SMS which will develop a prioritised program for improvement of areas within the stormwater network.
	Objective O47, O48 , O50and Policies P66, P67, P73, P74, P76, P78, P79, P81	These objectives and policies relate to discharges. Primarily, the amount of sediment-laden run-off entering the water is to be reduced, and stormwater networks and urban land uses are to be managed so that the adverse quality and quantity effects of discharges from the network are improved over time. The improvement of water quality overtime is the long term goal of the SMS under the phase two consent. P66 pertains to the NPS-FM. In general terms as the discharge is not new (i.e. it is a continuation of the same activity) and the scale and intensity of the discharge is not expected to change (in a way which is more than minor) over the next 5 years, this policy does not strictly apply to this application. P73 and P74 are particularly relevant and require the adverse effects of stormwater discharges to be minimised through good management practice, source control, implementing sensitive urban design and

RMA section	Matter to consider	Comment
		progressively improving discharges. Under this consent water quality is required to be monitored and a Draft SMS developed. The SMS will develop a prioritised program for improvement of areas within the stormwater network. P74 requires adverse effects to be managed through a range of measures, including undertaking monitoring and managing acute adverse effects of discharges. Conditions of consent have been designed to specifically align with the requirements of these policies and objectives. Conditions of consent have been included to ensure that acute adverse effects are managed during the phase one consent.
104(1)(c)	Any other matter	There are no other matters relevant to this application.
104(2A)	Value of investment for existing consents	I have considered the value of existing investment associated with this application.
105(1)	Matters relevant to discharge permits	I have had regard to the matters outlined in section 105(1).
107	Restrictions on grant of certain discharge permits	Section 107 does not preclude the granting of this consent.
108	Conditions on resource consents	Standard conditions of consent for this activity type are recommended. Any additional conditions are outlined in Section 5 of this report. All conditions are documented in Attachment 1 to this report.

6.3 Weighting of the Proposed Natural Resources Plan

As discussed in section 3 of this report the rules in the Operative Regional Plans are focussed on individual discharges from pipes, rather than a global consenting framework, GWRC have made an organisational decision to process global stormwater consents for TAs under the PNRP rules (as described and signed off in document ENVREG-10-72).

This is because the PNRP sets a precedent for local authority stormwater discharges to be consented using a global framework. As discussed in the sign off document, the Operative Plan rules and policies are not deemed to be comparable to the approach taken in the PNRP, given the rules are for point source discharges rather than holistic management of a stormwater network.

Considering the above, full weight is given to the PNRP.

7. Main findings

In conclusion:

1. The proposed activity is consistent with the Purposes and Principles of the Resource Management Act 1991.

2. The proposed activity is consistent with the relevant objectives and policies of the New Zealand Policy Statement for Freshwater Management, the New Zealand Coastal Policy Statement, Regional Policy Statement the Proposed Natural Resources Plan.

3. Conditions of the consent(s) will ensure that the effects of the activity are monitored to inform a comprehensive Stormwater Management Strategy (SMS)

4. The proposal incorporates appropriate mitigation measures, to ensure that acute adverse effects on human health are managed.

8. Duration of consent

A duration of 5 years has been recommended in accordance with the matters of control on Rule R50 and direction of policy 74 in the PNRP.

9. Monitoring

The following compliance monitoring programme will be undertaken during the consent term:

- Review and approval of final Stormwater Monitoring Plan submitted in accordance with condition 3.

- Review and approval of a Mana Whenua Values Monitoring Plan submitted in accordance with condition 6.

- Review and approval of a Wastewater Overflows into the Stormwater Network Management and Procedures Plan submitted in accordance with condition 10.

- Review of sanitary survey information as required submitted in accordance with condition 11.

- Review and approval of human health mitigation project proposals submitted in accordance with condition 13.

- Review of annual report submitted in accordance with condition 15.

- Review of Draft SMS submitted in accordance with condition 17.

Charges relating to this monitoring programme are outlined in the cover letter enclosed with this report.

Attachment 1: WGN180027 [34920] and [34921] Consent conditions

Definitions
The following expressions have the meaning given:

Bacteria *means all the indicator organisms identified for the specific monitoring sites in the stormwater monitoring plan.*

Constructed overflows *means deliberate overflows via wastewater pipes with built-in overflow designed to discharge into the stormwater network, or pump stations that redirect excess wastewater to the stormwater network when the wastewater network capacity is exceeded.*

The Manager *means the Manager, Environmental Regulation, Wellington Regional Council.*

Unconstructed overflows *means unintentional overflows that occur when wastewater pipes receive flows in excess of their conveyance capacity as a result of heavy*

Sanitary survey *means actions or investigations necessary to identify the source of faecal contamination, such as dry and wet weather water sampling, faecal source tracking (if applicable), visual inspections of the discharge (including lifting of manhole covers and closed circuit television monitoring (CCTV)), and considering inputs from other sources such as illegal cross-connections and leaks from private wastewater laterals. Sanitary survey techniques will be undertaken as outlined in the Wastewater Overflows into the Stormwater Network Management and Procedures Plan (WOSNMP) by condition 10.*

rainfall and surcharge predominantly through service access chamber lids (manholes).

Wastewater network overflows (WNOs) *means constructed and unconstructed overflows into the stormwater network.*

General conditions

1. The consent holder shall operate the proposed discharges in general accordance with the consent application and associated documents lodged with the Wellington Regional Council on 28 July 2017 and further information received on:

    - 2 May 2018 (response to further information request email with attachments)

    - 11 May 2018 (email with attached source file of wastewater network overflow to stormwater coordinates)

- 1 June 2018 (email with attached map showing wastewater network overflows to stormwater)

- 9 August 2018 (email with spreadsheet and map detailing wastewater network overflow information)

Where there may be contradictions or inconsistencies between the application and further information provided by the applicant, the most recent information applies. In addition, where there may be inconsistencies between information provided by the applicant and conditions of the consent, the conditions apply.

2. Wastewater contamination of the stormwater network from new wastewater networks or connections (constructed overflows) are not authorised by this consent.

Note: This condition defines the scope of WNOs authorised by this consent. As not all unconstructed overflow sites were known at the time of granting consent, any additional unconstructed overflow sites discovered are also authorised by this consent. Should the consent holder request the addition of unconstructed overflow sites in Appendix A, a change of consent conditions under Section 127 of the Resource Management Act may be required, however this should be treated as an administrative change.

Monitoring Plans

3. The consent holder shall **within six months** of the granting of this consent, or within such longer time as may be agreed in consultation with the Manager, submit for approval of the Manager a *Stormwater Monitoring Plan* (SMP).

The SMP shall be approved, to confirm it addresses all the matters listed in Condition 4.

4. The purpose of the SMP is to set out the monitoring and other information-gathering necessary to inform the management of acute effects on human health and the development of the long term Stormwater Management Strategy required by Condition 17.

The SMP shall include at a minimum the following detail:

a) Monitoring objectives;

b) Stormwater discharge, and freshwater and coastal receiving water sampling locations, including:

i) Identification of high priority sampling sites based on existing knowledge; and

ii) Sampling sites located within sites of significance to iwi developed in consultation with iwi. These should include but may not be limited to locations within sites identified in Schedule C of the Proposed Natural Resource Plan

c) Water quality, sediment quality and/or ecological variables and associated test methods;

d) Bacteria indicator organisms identified for specific monitoring sites for the purposes of monitoring effects to human health

e) Key metadata and other supporting information that is to be collected, including weather conditions, field observations and photographs;

f) Linkages with other existing resource consents and/or monitoring programmes;

g) Data assessment and reporting procedures; and

h) Timing and process for reviewing the SMP, including the personnel that will undertake the review.

Note 1: The consent holder has engaged a group of environmental scientists (known as the Technical Review Group, (TRG)) to advise on the content of the SMP. The consent holder will collate recommendations made by the TRG, determine the final content of SMP, and submit the SMP to Greater Wellington Regional Council for approval.

Note 2: Modelling will be required to inform the draft Stormwater Management Strategy (SMS) required by condition 17 of this consent. To inform the modelling appropriate hydrological information will need to be gathered and collated.

5. The consent holder shall in collaboration with Greater Wellington Regional Council and iwi contribute to and help to facilitate the development of the Regional Framework for Kaititaki Monitoring required by Method M2 of the Proposed Natural Resources Plan. This shall include contributing to and helping to facilitate the development of a Kaitiaki Freshwater Health Index.

6. Within 6 months of the development of the Regional Kaitaiki Monitoring Framework required by Method M2 of the Proposed Natural Resource Plan the consent holder shall submit for approval to the Manager a *Mana Whenua Values Monitoring Plan* (MWVMP) which has been developed in consultation with relevant iwi authorities and in accordance with the Regional Kaitaiki Monitoring Framework.

7. The consent holder shall commence implementation of the monitoring plans developed in accordance with conditions 3 and 6 within 10 working days of receiving approval.

Note: The consent holder intends to progressively implement the monitoring outlined in the SMP to monitor priority catchments first.

8. Any amendments proposed to the approved plans required by condition 3 and 6 shall be confirmed in writing by the consent holder and be to the satisfaction of the Manager prior to implementation.

9. All sampling techniques, including sample preservation and dispatch to the analysing laboratory, employed in respect of the conditions of this consent shall be carried out by suitably trained and experienced persons in accordance with best practice and in accordance with the requirements of the analysing laboratory. All water and sediment analyses undertaken in connection with this consent shall be performed by an Internationally Accredited (IANZ) registered laboratory, or as otherwise approved by the Manager.

Note: The consent holder should aim to collect water quality data that meets the highest quality code (QC 600) in the National Environmental Monitoring Standards (NEMS) when achievable.

Management of acute human health effects

10. The consent holder shall **within three months** of the granting of this consent, submit for approval of the Manager a Wastewater Overflows into the Stormwater Network Management and Procedures Plan (WOSNMP) that sets out how actual or potential acute effects on human health will be communicated and managed. This procedure shall be prepared in consultation with Regional Public Health and include at a minimum:

    a) An overview summary of the different sources of wastewater overflows that enter the stormwater system, including wastewater from constructed overflows, unconstructed overflows, illegal cross-connections and leaks from private laterals;

    b) Detail of sanitary survey procedures and detailed upstream catchment investigations including but not limited to specific upstream catchment investigations in the Hutt, Akatarawa and Whakatikei rivers to be followed in the event that the trigger limits outlined in condition 11 are recorded.

    c) Actions to be taken if the source of wastewater is identified, including for known and newly identified wastewater sources;

    d) Risk communication procedure(s) to be followed to inform the public of the actual or potential presence of wastewater overflows, including but not limited to:

        i) measures to inform and educate the public about the human health risks associated with stormwater discharges;
        ii) the use of automated notifications to inform recreational users of sewage overflows (for example, by posting to a web site and/or text message);

        iii) the timing and recipients of notifications to Regional Public Health and Greater Wellington Regional Council of sample results that indicate a potential acute effect to human health. Notifications may include results from culvert discharge sampling and/or receiving environment sampling;

e) A review of existing health warning signage to distinguish between ongoing versus acute short-term health risks; and

f) A process for reviewing and updating the procedure on at least an annual basis in conjunction with the SMP.

Note: Risk communication procedures shall be consistent with the Microbiological water quality guidelines for marine and freshwater recreational areas (MfE/MoH 2003); or subsequent amendment.

11. The consent holder shall commence a sanitary survey, actions and risk communication procedures in accordance with the methods and procedures approved under condition 10 in the relevant upstream catchment(s) as soon as practicable but within 24 hours of receipt of analytical results of either a), b), c) or d) occurring:

a) Any water sample collected in dry weather from a stormwater outfall or pipe under this consent has an indicator bacteria count exceeding 10,000 cfu/100mL; or

b) Any two successive routine water samples collected at a coastal receiving water site exceed 1,000 indicator bacteria count per 100 mL; or

c) Any two successive routine water samples collected at a freshwater receiving water site, with the exception of any sites on the Hutt, Akatarawa and Whakatikei rivers, exceed 1,000 indicator bacteria count per 100 mL;

d) Any single dry weather water sample collected from the Hutt, Akatarawa or Whakatikei rivers exceeds 1,000 indicator bacteria count per 100 mL

The details and outcomes of any sanitary surveys undertaken shall be provided **monthly** to the Manager and summarised in the Annual Report as required by Condition 15.

Immediate actions

12. If a sanitary survey indicates that there is the potential for adverse effects to human health resulting from discharges from the stormwater network, as established by monitoring undertaken in accordance with Condition 11, the consent holder shall:

- Undertake the actions and communications procedures approved in accordance with condition 10. This includes but may not be limited to establishing temporary warning signs if necessary to prevent people coming into contact with the discharge; and

- Whenever practicable implement immediate remedial works to address the causes of the contamination.

Note 1: The response timeframes of the consent holder may be subject to external factors such as, but not limited to, time required to gain access to private property should the site of potential remedial works require it, and engaging subcontractors to undertake remedial works.

Note 2: The intent of this condition is to prevent the public coming into contact with any discharge that could have the potential for acute effects on human health and to address the cause of the contamination as quickly as possible where a human health project is not required e.g. fix a broken sewer pipe or wastewater overflow.

Human Health Mitigation Projects

13. Human health mitigation projects shall be developed where either a) or b) occurs:

    a) The rolling 12-month median indicator bacteria count obtained from undertaking routine monthly monitoring in the receiving waters exceeds 1,000 cfu/100 mL; or

    b) The sanitary survey undertaken in accordance with Conditions 10 and 11 indicates continued contamination which has the potential to result in acute human health effects and this is linked to discharges from the stormwater network and the cause of the contamination has not been rectified through immediate actions as required by Condition 12.

    The project scopes shall be provided to the Manager, within 1 month of completion of the sanitary survey required under Conditions 10 and 11, with proposed implementation timeframes. The consent holder shall prioritise projects based on the significance and magnitude of acute effects.

    The consent holder's projects may include, but not be limited to:

    a) Installation of permanent signage

    b) Further sewer /stormwater network investigations such as CCTV and/or faecal source tracking

    c) Public education

    d) Physical works

    e) Further catchment investigations including cultural and human health monitoring

    The human health mitigation projects developed to manage any acute effects on human health shall be to the satisfaction of the Manager.

    Note: It is noted that budget restrictions are a consideration with the implementation of certain projects.

Note 2: The investigations and projects are to be programmed and undertaken based on priority. It may be necessary for the consent holder to align the scheduling of monitoring, investigations and projects with funding confirmed through Council Annual Plans and Council Long Term Plans.

Stormwater Working Party

14. The consent holder shall in consultation with the Manager establish a **Stormwater Working Party (SWP)** and invite members of the party to a meeting at least annually for the duration of this consent.

    The members of the SWP shall be representatives of key stakeholder organisations to be confirmed with the Manager and shall be sufficient for the purposes of:

    a) Reviewing key findings in the Annual Report;

    b) Engaging in the development of the draft Stormwater Management Strategy required by condition 17; and

    c) Any other relevant matters relating to the exercise of this consent.

        For the purpose of this consent, the SWP shall have the following terms of reference:

        i) A meeting shall be called by the consent holder with no less than 20 working days' notice and at least annually;

        ii) The agenda for the meetings and any relevant reports shall be circulated to all SWP members a minimum of 10 working days prior to the meeting; and

        iii) Records of each meeting shall be kept and circulated to members within 20 working days of each meeting being held. The records should include, but not be limited to, issues discussed, actions agreed upon and any follow-up on agreed actions from previous meetings.

Note: the SWP is not a decision making group, but is a forum for the dissemination of information on consent compliance, impacts of stormwater discharges on receiving environments as the information becomes available, remedial actions taken and priorities for future work.

Annual Report

15. The consent holder shall prepare and submit an Annual Report to the Manager **by 1 September each year**.

    The Annual Report shall include the following:

a) A summary of physical capital and maintenance works to the stormwater network carried out in the previous year to mitigate acute effects on human health including on Human Health Mitigation Projects undertaken in accordance with condition 13;

b) A summary of any expansions or additions to the stormwater network (such as new roads or subdivisions) in the preceding year;

c) A summary of water sample results that exceeded trigger levels specified in condition 11;

d) The results of sanitary surveys required by condition 11, including details, findings and remedial works undertaken or planned (with timeframes) to address the source of contamination;

e) A summary of routine monitoring results and analysis of results from previous years including:

   i) an assessment by an appropriately qualified and experienced environmental scientist(s) on the differences and trends, and the significance of the results from a human and environmental health perspective; and

   ii) an assessment by an appropriately qualified and experienced person of the significance of the results from a mana whenua perspective (this should include but is not limited to specific reference to results of monitoring undertaken within the sites of significance identified in condition (4)(b)(ii));

f) Observations and photographs from the visual inspections undertaken during stormwater outfall monitoring;

g) An assessment by a suitably qualified and experienced environmental scientist of the adequacy of existing monitoring and investigations in identifying any adverse effects from stormwater discharges and recommendations for amendments to the SMP and WOSNMP;

h) A summary of meetings held with the SWP required by condition 14;

i) An updated list of all known unconstructed wastewater network overflows

Note 1: The Annual Report shall report on the year 1 July to 30 June inclusive.

Note 2: It is recommended the TRG assess the SMP in year two of the consent and advise on any updates required.

Note 3: It is recommended the suitability of the monitoring programme for assessing effects on mahinga kai and customary use is reviewed in consultation with the relevant iwi authority.

16. The consent holder shall provide electronic copies of the Annual Report to the Stormwater Working Party (established by condition 14 of this consent).

Stormwater Management Strategy (SMS)

17. The consent holder shall prepare and submit to the Greater Wellington Regional Council by **30 November 2022** a draft long term Stormwater Management Strategy (SMS) in consultation with Stormwater Working Party required by condition 14.

    The draft SMS shall be prepared in accordance with Schedule N of the Proposed Natural Resources Plan (or subsequent amendment).

Review condition

18. The Greater Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to section 128 of the Resource Management Act 1991, at any time within one month of the first and third anniversary of granting consent for the following purposes:

    a) To review the adequacy of any report and/or monitoring requirements, and if necessary, amend these requirements;

    b) To deal with any adverse effects on the environment which may arise from the exercise of this consent, and which is appropriate to deal with at a later stage; and

    c) To enable consistency with any relevant operative Regional Plans or National Environmental Standards, or Regulations.

    The review of conditions shall allow for the deletion or amendment of conditions of this consent, and the addition of such new conditions as are shown to be necessary to monitor and report on the quality of stormwater discharges, and manage acute health effects of stormwater discharges on human health.

Appendix A - Co-ordinates of Wastewater Network Overflows