

The Proposed Auckland Unitary Plan (notified 30 September 2013)

4.14 Stormwater management

Introduction

This section provides three sets of rules for managing stormwater that arises from the development or redevelopment of impervious areas and associated activities. One or more rules may apply, depending on the nature of the activity and its location.

Stormwater diversion and discharge rules

These rules control the diversion and discharge of stormwater from impervious areas, pursuant to s. 14 and 15 of the RMA. There are four categories of stormwater discharge:

- a. from public stormwater networks by a stormwater network discharge consent (these may include public roads)
- b. from public roads operated by road controlling authorities (where not covered by a stormwater network discharge consent)
- c. directed to ground soakage or to maintain moisture levels in peat soils;
- d. from impervious areas other than those connected to public stormwater networks, public roads, or discharges to ground soakage.

To avoid doubt, stormwater from a private site directed to a reticulated public stormwater network is considered part of the stormwater network discharge provided it meets the requirements of any relevant stormwater network discharge consent. Only private discharges that do not enter a public stormwater network require authorisation under clause c. or d. above.

The diversion and discharge of stormwater from impervious areas existing at the date of notification of the Unitary Plan are permitted provided that they and their associated effects do not increase above those that existed on that date;

Stormwater diversion and discharge from new / additional impervious areas are managed by both discharge and land use rules.

Stormwater management – flow rules

These are land use rules for managing stormwater runoff from impervious areas, pursuant to s. 9(2) and s. 30 of the RMA, applying to:

- a. Stormwater Management Area – Flow 1 and 2 overlay areas
- b. land use zones in accordance with zone impervious area thresholds
- c. areas discharging to the combined sewer network
- d. sites not connected to the public stormwater network.

Stormwater management – quality rules

These are land use rules for managing stormwater runoff quality from impervious areas pursuant to s. 9(2) and s. 30 of the RMA. They apply to the following high contaminant generating activities:

- a. uncovered parking or parking areas
- b. high contaminant yielding roofing, spouting, cladding and architectural features
- c. high use roads.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

Discharges of stormwater from an industrial or trade activity area are addressed in a separate section of the Unitary Plan. The 'industrial or trade activity area' is also defined in the plan.

Land use controls are used to ensure the same stormwater management requirements apply, as appropriate, to activities with a private stormwater discharge and those discharging to a public stormwater network. Where a site also has a stormwater discharge to land or water, other than via a public stormwater network, a stormwater discharge consent may also be required.

Rules applying specifically to stormwater runoff from public roads operated by road controlling authorities include both discharge rules and land use controls for high use roads and within Stormwater Management Areas – Flow 1 and 2 and discharges to the combined sewer network.

The report Auckland Unitary Plan Stormwater Management Provisions: Technical Basis of Contaminant and Volume Management Requirements (Auckland Council 2013) provides guidance for meeting the stormwater management requirements within Stormwater Management Area – Flow 1 and 2 and requirements applying to High Contaminant Generating Activities.

1. Stormwater discharges

1.1 Activity table

[rcp/rp]

Diversion and discharge of stormwater to land, water or the CMA including the diversion of surface water from impervious areas	
Activity	Activity Status
Existing impervious areas	
Impervious areas existing at the date of notification of the Unitary Plan	P
Impervious areas existing at the date of notification of the Unitary Plan that do not meet the permitted activity controls	RD
Stormwater Networks	
Stormwater from a stormwater network operated by a stormwater network utility operator	C
Stormwater from a stormwater network operated by a stormwater network utility operator that does not meet the controlled activity controls	RD
Public roads operated by a road controlling authority	
New impervious areas less than or equal to 5,000m ² , including ancillary impervious areas, that are part of a public road	P
New impervious areas, including ancillary impervious areas, that are part of a public road that do not meet the permitted activity controls	RD
Ground soakage and peat soils	
New impervious areas discharging to ground soakage and peat soil areas	P
New impervious areas discharging to ground soakage and peat soil areas that do not meet the permitted activity controls	RD
Impervious areas not otherwise provided for by stormwater network, public road, ground soakage and peat soil rules	
New impervious areas in a rural area, including rural zones, open space zones and special purpose zones outside the RUB where the impervious area is less than or equal to 5,000m ² and which does not increase the total impervious area of the site to more than 5,000m ²	P

The Proposed Auckland Unitary Plan (notified 30 September 2013)

New impervious areas in an urban area, including open space zones and special purpose zones within the RUB where the impervious area is less than or equal to 1,000m ² and which does not increase the total impervious area of the site to more than 1,000m ²	P
New impervious areas in an urban area, including open space zones and special purpose zones within the RUB where the total site impervious area is increased to greater than 1,000m ² but less than or equal to 5,000m ²	RD
New impervious areas where the development has been subject to structure or framework planning that includes integrated land use and stormwater planning	C
All other diversion and discharge of stormwater from impervious areas	
The diversion and discharge of stormwater from impervious areas not otherwise authorised by stormwater discharge and diversion rules	D

1.2 Controls

1.2.1 Permitted activities

1. General
 - a. the discharge must not cause or increase scouring or erosion at the point of discharge or downstream.
 - b. the discharge must not result in, or increase, flooding of other properties in events up to the 10 per cent AEP or the inundation of buildings in events up to the 1 per cent AEP.
 - c. the discharge must not cause nuisance or damage to other property.
2. Existing impervious areas
 - a. the impervious area was existing on the date of notification of the Unitary Plan.
 - b. stormwater flows and volumes from existing impervious areas must not be increased above those at the date of notification of the Unitary Plan, including as a result of a change in land use or removal of existing stormwater management measures.
 - c. the concentration and load of contaminants in stormwater flows from existing impervious areas must not be increased above those at the date of notification of the Unitary Plan, including as a result of a change in land use or the removal of existing stormwater treatment measures.
 - d. any road ancillary area must not be used for:
 - i. storage of roading and building materials for more than 14 days continuously
 - ii. storage of hazardous material
 - iii. works/building yards
 - e. the diversion and discharge must not be otherwise authorised by a network discharge consent.
 - f. any redevelopment of existing impervious areas must meet the Stormwater Management – Flow and Quality requirements of the Unitary Plan
 - g. the method of treatment, diversion and location of the discharge must not change.
3. Public roads operated by a road controlling authority
 - a. the new impervious area, including footpaths, cycleways and ancilliary areas, must be less than or equal to 5,000m².
 - b. at a minimum, stormwater treatment must be applied to catchpits for concentrated flows, or by directing sheet flows across vegetated areas where flows are not concentrated
 - c. the drainage network, including road side drainages, swales and catchpits must be managed and maintained to ensure effective operation and prevent erosion, sediment generation and discharge

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- d. where stormwater is discharged to land, it must be dispersed to prevent scour and erosion.
 - e. any road ancillary area must not be used for:
 - i. storage of roading and building materials for more than 14 days continuously
 - ii. storage of material that may be hazardous to the environment
 - iii. works/building yards.
4. Ground soakage and peat soils
- a. the total impervious area on the site, including any new areas, must not exceed the lesser of:
 - i. the impervious area threshold for the relevant zone; or
 - ii. 1,000m²
 - b. any development requirements for ground soakage, including devices to treat discharges or soakage design, must be complied with
 - c. any flows in excess of soakage capacity or from soakage failure must be directed to a stormwater network or discharged without causing scour, erosion or increasing risk of flooding to people and property up or downstream
 - d. any new impervious area must meet the relevant requirements of the Stormwater Management – Flow and Quality requirements of the Unitary Plan, including in accordance with a resource consent granted under those rules.
5. New impervious areas less than or equal to 5,000m² in a rural areas, including rural zones, open space zones and special purpose zones outside the RUB
- a. the total impervious area on the site, excluding unsealed or graveled tracks, must be less than or equal to 5000m².
 - b. there must be no connection to the stormwater network available.
 - c. the discharge must be from an impervious area within a rural area, including rural zones, open space zones and special purpose zones outside the RUB .
 - d. stormwater must be discharged to land in a manner that disperses the flow and prevents scour and point discharges forming.
6. New impervious areas less than or equal to 1,000m² in an urban area, including open space zones and special purpose zones within the RUB (excluding public roads)
- a. the total impervious area on the site, including any new impervious area, must be less than or equal to 1000m².
 - b. there must be no connection to the stormwater network available.
 - c. the discharge must be from an impervious area that is within an urban area, including open space zones and special purpose zones within the RUB.
 - d. the new impervious area must meet the relevant requirements of Stormwater Management – Flow and Quality rules of the Unitary Plan, including in accordance with a resource consent under those rules.

1.2.2 Controlled activities

1. General

These controls apply to all controlled activities other than discharges from public stormwater networks

- a. The discharge must not cause or increase scouring or erosion at the point of discharge.
- b. The discharge must not result in, or increase, the flooding of other properties in events up to the 10 per

The Proposed Auckland Unitary Plan (notified 30 September 2013)

cent AEP or the inundation of buildings in events up to the 1 per cent AEP.

- c. The discharge must occur with the minimum of nuisance and damage and in particular avoids more than minor adverse effects on any other property.
 - d. Any new or redevelopment of existing impervious areas must meet the relevant requirements of Stormwater Management – Flow and Quality rules of the Unitary Plan, including in accordance with a resource consent under those rules.
 - e. The diversion and discharge must be managed, and where possible dispersed, to minimise erosion and sediment generation.
2. Stormwater networks
 - a. The application must include an assessment of adverse effects that addresses the matters identified in Table 1.
 3. New impervious area in developments that have been subject to an integrated structure plan process
 - a. The development has been subject to an integrated land use and stormwater management structure planning process that addresses the integrated management stormwater, freshwater and water quality objectives and policies of this Unitary Plan.

1.3 Assessment - Controlled activities

1.3.1 Matters of control

The council will reserve its control to the matters below for the activities listed as controlled in the activity table.

1. General
 - a. Monitoring and reporting, including on a network wide basis for stormwater networks.
 - b. Operations and maintenance requirements.
2. Stormwater networks
 - a. The implementation of measures required to achieve the BPO for preventing or minimising the adverse effects of stormwater discharges from both existing and, where relevant, future discharges.
 - b. Any programme of further investigations and works required to give effect to the BPO.
 - c. The implementation of any programmes required to give effect to the BPO.
3. New impervious areas in developments that have been subject to an integrated structure or farmwork plan process that includes integrated land use and stormwater planning
 - a. The location of the discharge point(s)
 - b. Measures to avoid erosion, scour and flood risk.
4. The implementation and maintenance of measures to meet the stormwater diversion and discharge requirements of the integrated land use and stormwater management assessment.
 - a. Consistency with any relevant network discharge consent or publicly available and current Auckland Council stormwater management plans / analysis.

1.3.2 Assessment criteria

The council will consider the relevant assessment criteria below for the controlled activities listed above.

1. Stormwater networks
 - a. Whether the consent application adequately addresses the matters listed in Table 1.
 - b. The extent to which the proposed management of stormwater represents the BPO for the reticulated catchment, taking account of matters assessed as listed in Table 1.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

2. New impervious areas where the development has been subject to structure or framework planning that includes integrated land use and stormwater planning
 - a. Whether stormwater management is consistent with any relevant network discharge consent or publicly available and current Auckland Council stormwater management plans and/ analysis.
 - b. The extent to which the structure or framework plan and associated plan change or resource consent has achieved integrated and effective stormwater management across the proposed development area and in particular:
 - i. adopts water sensitive design and green infrastructure;
 - ii. minimises hydrological change;
 - iii. minimises contaminants.
 - c. Whether the structure or framework plan and associated plan change or resource consent provides clear requirements for stormwater management at both a site and sub-catchment level as relevant.
 - d. Whether there are processes in place to ensure that stormwater management will be implemented in accordance with the structure plan or framework plan requirements.
 - e. Whether there is clear identification of those elements that are to be vested in Council and that they meet the council requirements for vested infrastructure.
 - f. The extent to which adverse effects of stormwater diversions and discharges are prevented or mitigated, with particular regard to:
 - i. the nature, quality, volume and peak flow of the stormwater runoff
 - ii. the sensitivity of natural freshwater systems and coastal waters, including the Hauraki Gulf Marine Park, to the adverse effects of stormwater contaminants and flows
 - iii. the potential for the diversion and discharge to create or exacerbate flood risks
 - iv. options to manage stormwater on-site or the use of communal stormwater management measures
 - v. practical limitations in respect of the measures that can be applied.
 - g. The extent to which floodplains, food sensitive and flood prone areas and development area managed and whether overland flow paths have been identified and protected.

1.4 Assessment - Restricted discretionary activities

1.4.1 Matters of discretion

1. Existing Impervious Areas
 - a. the management of the adverse effects of the stormwater diversion and discharge on receiving environments, buildings and property
 - b. consistency with any relevant network discharge consent or publicly available and current Auckland Council stormwater management plans / analysis
 - c. operations and maintenance requirements.
 - d. monitoring and reporting.
2. Stormwater networks
 - a. the BPO for the management of the adverse effects of the stormwater diversion and discharge on receiving environments, buildings and property discharges
 - b. monitoring and reporting, including on a network wide basis

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- c. operations and maintenance requirements
 - d. the implementation of stormwater management devices and other measures to give effect to the BPO for preventing or minimising the adverse effects of stormwater discharges from both existing and, where relevant, future
 - e. any programme of further investigations and works required to give effect to the BPO
 - f. the implementation of any programmes required to give effect to the BPO.
3. Public roads operated by a road controlling authority
- a. the adoption of the BPO to prevent or minimise adverse effects of the stormwater diversion and discharge on receiving environments, buildings and property
 - b. consistency with any relevant network discharge consent or publicly available and current Auckland Council stormwater management plans / analysis
 - c. the management and mitigation of flood effects, including on buildings and property
 - d. operations and maintenance requirements
 - e. monitoring and reporting, including monitoring and reporting on a network wide basis.
4. Ground soakage and peat soils
- a. methods of soakage
 - b. measures to minimise the discharge of contaminants to groundwater aquifers
 - c. measures to maintain soil moisture levels in peat soils
 - d. disposal of stormwater in excess of device capacity and the management of associated adverse effects
 - e. the management and mitigation of flood effects, including on buildings and property
 - f. operations and maintenance requirements
 - g. monitoring and reporting, including monitoring and reporting on a network-wide basis.
5. Impervious areas not otherwise provided for by stormwater network, public road, ground soakage and peat soil rules
- a. the location and method of the discharge
 - b. methods and measures to avoid land instability, erosion, scour and flood risk
 - c. the management of stormwater flow and volume for maintaining or enhancing stream channels and stream health
 - d. the management of the adverse effects of the stormwater diversion and discharge on receiving environments, buildings and property, including cumulative effects
 - e. operations and maintenance requirements
 - f. monitoring and reporting.
6. Infringement of zone maximum impervious area control and infringement of zone maximum impervious area within a riparian yard.
- a. the location and method of the discharge
 - b. methods and measures to avoid land instability, erosion, scour and flood risk
 - c. the management of stormwater flow and volume for maintaining or enhancing stream channels and stream health

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- d. the management of the adverse effects of the stormwater diversion and discharge on receiving environments, buildings and property, including cumulative effects
- e. operations and maintenance requirements
- f. monitoring and reporting.

1.4.2 Assessment criteria

1. All restricted discretionary activities (excluding stormwater networks and public roads and infringing the zone maximum impervious area within a riparian yard)
 - a. the extent to which the proposal prevents or minimises the adverse effects of the discharge, including cumulative effects, to the extent possible having regard to:
 - i. the nature, volume and peak flow of the stormwater discharge
 - ii. the sensitivity of the receiving environment to stormwater contaminants and flows
 - iii. avoiding the creation or increase of flood risk to other properties
 - iv. options for managing stormwater on-site or through communal management devices
 - v. practical limitations on the measures that may be used
 - vi. maintaining water levels in underlying peat soils and ground stability (where relevant)
 - vii. the adoption of water sensitive design and green infrastructure where practicable
 - viii. v Mana Whenua and community values and uses
 - b. options for discharge where there is no available stormwater network
 - c. consistency with any relevant network discharge consent or publicly available and current Auckland Council stormwater management plans/analysis
 - d. opportunities to reduce existing adverse effects and enhance receiving environments
 - e. the effects on marine sediment quality, in accordance with Coastal Zone Discharges [Policy 10](#) and associated Table 1.
2. Infringing the zone maximum impervious area within a riparian yard
 - a. Development that does not comply with the riparian or coastal yard controls will need to demonstrate that:
 - i. adverse effects on the function of the yard in managing flooding, erosion, or water quality, will be minimised
 - ii. the continuity of any vegetation corridor will be maintained
 - iii. Site works and associated vehicle movements are minimised in the within the yard
 - iv. there is no practicable alternative to development within the yard and that the development is located as far from the Coastal Marine Area, or stream as possible
 - v. locating development within the yard is required for the reasonable use and development of the site, including for the provision of public access or infrastructure such as recreational trails, bridges/culverts, underground utilities, wastewater or stormwater infrastructure
 - vi. the adverse effects of development within the yard are mitigated by planting with native plants and/or providing a wider setback elsewhere that will enhance the function of the yard
3. Stormwater Networks and Public Roads
 - a. the extent to which the BPO addresses the matters for stormwater networks and roads in Auckland-wide - Water quality and integrated management [Policy 10](#) and Table 1.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- b. the effects on marine sediment quality, in accordance with the Coastal zone - Discharges Policy 10 and associated Table 1.

1.5 Requirements for stormwater network discharge consents

Table 1:

A	The issues arising from stormwater and wastewater discharges, diversions and associated activities facing the catchment or district, including:
i	description of the drainage networks and their current and predicted future performance under likely growth scenarios
ii	assessment of the receiving environment and the actual and potential effects, including cumulative effects, of diversions and discharges from the network
iii	identification of potential urban growth, land use intensification and redevelopment and the consequence of this for the network and discharges
iv	management responsibilities for stormwater and wastewater networks and associated discharges
v	significant non-network land use and discharge activities that may have a material effect on environmental and stormwater management outcomes
B	A description of the objectives sought for the stormwater and wastewater discharges and diversions including:
i	social, ecological, economic, amenity and cultural objectives including the strategic importance of the activity and stormwater network
ii	the results of any consultation
iii	identified milestones required to achieve those objectives
C	The proposed approach to managing diversions and discharges including:
i	identification of the BPO for preventing or minimising the adverse effects of stormwater discharges from both existing and, where relevant, future discharges
ii	priorities for further investigation into minimising the effects of the discharges and development of management responses and associated milestones
iii	procedures for monitoring and reporting progress against objectives and milestones
iv	a regionally prioritised programme for implementing improvement projects and works
v	operation and maintenance programmes and processes
vi	other programmes to assist in achieving outcomes including education initiatives and community based programmes
vii	consistency with other landuse process outcomes such as structure plans, and publicly available and current Auckland Council stormwater management plans / analysis
viii	a process for reviewing the management approach based on an increased understanding of environmental responses, public health issues, community aspirations and network priorities
D	Public Road Networks (where not included in wider stormwater network discharge consents)
i	description of the drainage networks and their current and predicted future performance under likely growth
ii	assessment of the receiving environment and the actual and potential effects, including cumulative effects, of diversions and discharges from the network
iii	consideration of alternative options where potential adverse effects are significant
iv	social, ecological, economic, amenity and cultural objectives including the strategic importance of the activity and stormwater network
v	the results of any consultation
vi	consistency with other landuse process outcomes such as structure plans, and publicly available and current Auckland Council stormwater management plans / analysis
vii	identification of the BPO for preventing or minimising the adverse effects of stormwater discharges from both existing and, where relevant, future discharges
viii	operation and maintenance programmes and processes
ix	monitoring

The Proposed Auckland Unitary Plan (notified 30 September 2013)

2. Stormwater Management - Flow

It is anticipated that technical guidance will be provided through best management practice guidelines to support implementation of flow rules in this chapter.

2.1 Activity table

[rp]

Section 9(2) RMA land use controls for managing stormwater flows	
Activity	Activity status
Within or discharging to a Stormwater Management Area – Flow (SMAF) 1 or 2	
Impervious areas (other than for a public road) of less than or equal to 25m ² in a SMAF 1 or 2	P
Impervious areas (other than for a public road) greater than 25m ² in a SMAF 1 or 2 (other than for a public road) that meet hydrology mitigation requirements	C
Impervious areas in a SMAF 1 or 2 unable to comply with the permitted and controlled activity controls	RD
Public roads operated by a road controlling authority within a Stormwater Management Area – Flow (SMAF) 1 or 2	
Impervious areas less than or equal to 1000m ² within a SMAF 1 or 2 that meet the hydrology mitigation requirements	P
Impervious areas greater than 1000m ² and less than or equal to 5000m ² within a SMAF 1 or 2 that meet hydrology mitigation requirements	C
Impervious areas within a SMAF 1 or 2 that do not meet the permitted and controlled activity controls	RD
Impervious areas where stormwater is directed to the combined sewer network (including from public roads)	
The redevelopment of existing impervious areas where these areas direct stormwater to the combined sewer network	P
The development of new impervious areas where these areas direct stormwater to the combined sewer network	C
The development of new or redevelopment of existing impervious areas where these areas direct stormwater to the combined sewer network and are unable to meet the permitted and controlled activity controls	D
Impervious areas in urban areas (excluding the strategic transport corridor and roads) not connected to the stormwater network	
The development of new impervious areas less than 25m ² where the total impervious area on the site comprises less than or equal to 10% of the total site area	P
The development of new impervious areas greater than 25m ² where the total percentage impervious area on the site is greater than 10%	C
The development of new impervious areas that do not meet the permitted or controlled activity controls	D
All zones with an Impervious Area Threshold where not otherwise controlled within SMAF 1 or 2, combined sewer or not connected to stormwater network (excluding the Hauraki Gulf Islands)	
Total impervious area on the site is less than or equal to the impervious area threshold for the relevant zone	P
Total impervious area on the site is greater than the impervious area threshold for the relevant zone in all areas	RD

2.2 Controls

2.2.1 Permitted activities

The Proposed Auckland Unitary Plan (notified 30 September 2013)

1. Public roads operated by a road controlling authority within a Stormwater Management Area – Flow (SMAF) 1 or 2
 - a. the new / redeveloped impervious area, including footpaths, cycleways and ancillary areas must be less than 1000m²
 - b. stormwater volumes and flow from the area must be managed to achieve the hydrology mitigation requirement specified in Table 2 for SMAF 1 and SMAF 2
 - c. the stormwater management device must be certified by a council-approved chartered professional engineer as being designed to meet the required level of hydrology mitigation and is constructed in accordance with the design and sound engineering practice.
 - d. the stormwater management device is fully operational prior to public use of road.
 - e. 'as built' plans and an operations and maintenance plan are provided to council within three months of practical completion of the works.
 - f. any devices are maintained in accordance with the operations and maintenance plan.
2. Impervious areas where stormwater is directed to the combined sewer network (including public roads)
 - a. the redevelopment does not result in an increase in impervious area and stormwater runoff discharging to the combined sewer network.
 - b. there is no alternative discharge option.
3. Impervious areas in urban areas (excluding the strategic transport corridor and roads) not connected to the stormwater network
 - a. either:
 - i. the increase in impervious area above that existing at the date of notification of the Unitary Plan is less than 25m²; or
 - ii. the total impervious area is less than 10 percent of the site area.

2.2.2 Controlled activities

1. New/redevelopment of impervious areas within a SMAF1 or 2 (excluding public roads)
 - a. the total site impervious area is less than or equal to the Impervious Area Threshold for the relevant zone
 - b. where the new impervious area or the redevelopment of existing impervious area comprises less than 50 per cent of the total site area stormwater from the new or redeveloped area is managed to achieve the Hydrology mitigation requirements specified in Table 2 for a SMAF1 and SMAF 2
 - c. where the new impervious area or the redevelopment of existing impervious areas comprises more than or equal to 50 per cent of the total site area:
 - i. stormwater from the total site impervious area is managed to achieve the hydrology mitigation requirements specified in Table 2 for a SMAF1 and SMAF 2.
2. Public roads operated by a road controlling authority within a SMAF 1 or 2
 - a. the new / redevelopment impervious area, including footpaths, cycleways and ancillary areas is greater than 1,000m² but less than 5,000m².
 - b. stormwater runoff from the new/redeveloped area, and any additional existing area discharging to the same discharge point(s) is managed to achieve the hydrology mitigation requirements specified in Table 2 for a SMAF1 and SMAF 2.
3. New impervious areas where the stormwater is directed to the combined sewer network
 - a. the total site impervious area is less than or equal to the Impervious Area Threshold for the relevant zone

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- b. any new impervious area does not increase the total impervious area or stormwater runoff from the site directed to the combined sewer network.
- 4. Impervious areas in urban areas (excluding the strategic transport corridor and roads) not connected to the stormwater network or ground soakage
 - a. the total site impervious area is less than or equal to the Impervious Area Threshold for the relevant zone
 - b. stormwater runoff can be discharged from the site without giving rise to significant adverse effects (including cumulative effects) including:
 - i. erosion or scour at or near the point of discharge
 - ii. flooding of any habitable floor or other property
 - iii. land instability, including cliff and stream bank erosion.

2.3 Assessment - Controlled activities

2.3.1 Matters of control

- 1. All controlled activities
 - a. the implementation of stormwater management systems or devices to achieve stormwater hydrology mitigation requirement
 - b. operations and maintenance requirements
 - c. monitoring and reporting, including monitoring and reporting on a network wide basis where applicable.
- 2. Public roads operated by a road controlling authority within a SMAF 1 or 2
 - a. the provision of designs prior to work starting and as-built plans following completion of works.
- 3. New/redevelopment of impervious surfaces greater than or equal to 1000m² and less than 5,000m² for a public road in SMAF1 or 2
 - a. measures to manage stormwater runoff to no more than existing levels.
- 4. Impervious areas in urban land uses (excluding the strategic transport corridor and roads) not connected to the stormwater network
 - a. the method of stormwater management and discharge measures and the extent to which they minimise or mitigate adverse effects, including flooding, erosion and land stability
 - b. conditions in respect of connecting into a stormwater network should one become available.

2.3.2 Assessment criteria

- 1. All controlled activities
 - a. Whether the site stormwater runoff is directed to an on-site device and/or via a communal or public management device designed and sized to accommodate stormwater runoff from the site and achieve the stormwater hydrology mitigation requirements.

2.4 Assessment - Restricted discretionary activities

2.4.1 Matters of discretion

- 1. All restricted discretion activities
 - a. the management of effects, including cumulative effects, on streams, the capacity of the stormwater network, and flooding within the catchment
 - b. the design and implementation of stormwater flow / volume management measures
 - c. operations and maintenance requirements
 - d. monitoring and reporting.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

2. Impervious areas where stormwater is directed to the combined sewer network (including from public roads)
 - a. measures to mitigate potential increases in overflows from the combined sewer network.
3. Impervious areas in urban areas (excluding the strategic transport corridor and roads) not connected to the stormwater network
 - a. methods of stormwater disposal
 - b. the management of potential effects on land stability and erosion
 - c. the connection to a public stormwater network should one become available.

2.4.2 Assessment criteria

1. All restricted discretionary activities
 - a. the extent of existing flooding within the catchment and avoiding creating or increasing existing flooding, including incremental adverse effects
 - b. the extent to which the incremental and cumulative adverse effects of increased stormwater flows including on stream channels and stream health, natural character, biodiversity, erosion and stability and community and Mana Whenua values can be avoided, or if not avoided then otherwise adequately mitigated;
 - c. the ability to reduce existing adverse effects
 - d. whether a stormwater network is available and its capacity to cater for increased stormwater flows
 - e. whether stormwater flow is managed on-site or whether there are stormwater management devices in the catchment and their ability to accept and cater for increased stormwater flows to meet mitigation requirements
 - f. the ability of mitigation measures to detain the 2, 10 and 100 year, 24 hr rainfall event peak flows to the pre-development (grass) condition for the excess impervious area (applies to new/redevelopment of impervious areas in excess of zone impervious area thresholds only)

Table 2: Stormwater Management Area - Flow hydrology mitigation requirements

Stormwater Management Area	Hydrology mitigation requirement
SMAF1	<ul style="list-style-type: none"> • provide detention (temporary storage) with a volume equal to the runoff volume from the 95th percentile, 24 hr rainfall event for the impervious area for which hydrology mitigation is required; and • provide retention (volume reduction) of a 10mm, 24 hr rainfall event for the impervious area for which hydrology mitigation is required
SMAF2	<ul style="list-style-type: none"> • provide detention (temporary storage) with a volume equal to the runoff volume from the 90th percentile, 24 hr rainfall event for the impervious area for which hydrology mitigation is required; and • provide retention (volume reduction) of a 8mm, 24 hr rainfall event for the impervious area for which hydrology mitigation is required

The Proposed Auckland Unitary Plan (notified 30 September 2013)

3. Stormwater management - quality

3.1 Activity table

[rp]

Section 9(2) RMA land use controls for managing stormwater contaminants in runoff from high contaminant generating land use activities	
Activity	Activity status
New and redevelopment of existing uncovered parking (including that which is accessory to the main use of the site)	
Uncovered parking (including that which is accessory to the main use of the site) including entry/exit (including that which is accessory to the main use of the site), which is less than or equal 1000m ² in area and which are not located in the Industrial or Trade Activity area	P
Uncovered parking (including that which is accessory to the main use of the site) including entry/exit, which are greater than 1000m ² in area and which are not located in the Industrial or Trade Activity area, where stormwater quality management requirements are met	C
Uncovered parking (including that which is accessory to the main use of the site) including entry/exit, which do not meet the permitted and controlled activity controls	RD
New high contaminant-yielding roofing, cladding or architectural features	
The installation of high contaminant yielding roofing, spouting, cladding material or architectural features ,subject to meeting maximum area thresholds	P
The installation of high contaminant yielding roofing, spouting, cladding material or architectural features, exceeding permitted activity area controls and where stormwater quality management requirements are met	C
The installation of high contaminant yielding roofing spouting, cladding material or architectural features that does not meet the permitted and controlled activity controls	D
New, and redevelopment of existing, high-use public roads operated by a road controlling authority	
Impervious area less than or equal to 5000m ²	P
Impervious area that discharges stormwater to an existing consented stormwater quality management device	P
Impervious area greater than 5000m ² where stormwater quality management requirements are met	C
Impervious area that does not meet the permitted activity and controlled activity controls	RD

3.2 Controls

3.2.1 Permitted activities

1. New, and redevelopment of existing, uncovered parking (including that which is accessory to the main use of the site)
 - a. The new or redeveloped parking including entry/exit must be less than 1000m², excluding any area that is included in an Industrial or Trade Activity area.
2. New high contaminant-yielding roofing, spouting, cladding or architectural features
 - a. The total area of high contaminant yielding roofing, spouting, cladding or architectural features used on the site must not exceed:
 - i. 25m² in urban area
 - ii. 25m² in any rural zone where the stormwater runoff from the roofing, spouting, cladding or architectural features is piped directly to a watercourse
 - iii. 250m² in any rural zone where the stormwater runoff from the roofing, spouting, cladding or architectural features is directed to any vegetated drain/swale, wetland or similar.

The Proposed Auckland Unitary Plan (notified 30 September 2013)

3. New, and redevelopment of existing, high use public roads less than 5000m²
 - a. The new/redeveloped impervious area of the high use road must be less than or equal to 5000m²
 - b. Stormwater runoff from the new/redeveloped area, and any additional existing area discharging to the same discharge point(s), must be managed by devices that are designed to meet the stormwater quality management requirements for the relevant contaminants of concern in Tables 3 and 4.
 - c. The stormwater management devices must be certified by council-approved chartered professional engineer as being designed to meet the stormwater quality requirements and is constructed in accordance with the design and sound engineering practice.
 - d. The stormwater management devices must be built generally in accordance with the certified design and is fully operational prior to public use of the new/redeveloped road.
 - e. 'As built' plans and an operations and maintenance plan must be provided to council within three months of practical completion of the works.
 - f. Stormwater management devices must be maintained in accordance with the operations and maintenance plan.
 - g. A compliance programme must be established and followed to ensure compliance with all permitted activity controls and is provided to council by three months of practical completion of the works.
4. New, and redevelopment of existing, high-use roads that discharge to existing stormwater quality management devices
 - a. Stormwater runoff from the new/redeveloped area must be directed to an existing stormwater quality management device, required by a current stormwater discharge consent, subject to:
 - i. certification by a council-approved chartered professional engineer that the existing stormwater management device is designed and sized to accommodate the increase in flow from the new/redeveloped impervious area without reducing design treatment levels or causing scour or erosion;
 - ii. stormwater management devices are maintained in accordance with resource consent requirements or an operations and maintenance plan

3.2.2 Controlled activities

1. New, and redevelopment of existing, uncovered parking (including that which is accessory to the main use of the site)
 - a. Where the new or redevelopment of existing uncovered parking areas, including entry/exit, comprises more than 1000m² but is less than 50 per cent of the total car park area (excluding any area that is included in an Industrial or Trade Activity area):
 - i. stormwater runoff from the new / redeveloped parking must be managed by devices that are designed to meet the stormwater quality management requirements for the relevant contaminants of concern in Tables 3 and 4.
 - b. Where the new or redevelopment of existing uncovered parking, including entry/exit, comprises more than 1000m² and is greater than 50 per cent of the total parking area (excluding any area that is included in an Industrial or Trade Activity area):
 - i. stormwater runoff from the entire parking area must be managed by devices that are designed to meet the stormwater quality management requirements for the relevant contaminants of concern in Tables 3 and 4.
2. New high contaminant-yielding roofing spouting, cladding or architectural features
 - a. The total area of any high contaminant yielding roofing, spouting, cladding or architectural features used on the site exceeds:

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- i. 25m² in any urban zone.
 - ii. 25m² in any rural zone where the runoff from the roofing, spouting, cladding or architectural features is piped directly to a watercourse.
 - iii. 250m² in any rural zone where the runoff from the roofing, spouting, cladding or architectural features is directed to any vegetated drain/swale, wetland or similar.
 - b. Stormwater runoff from the roofing, spouting, cladding or architectural features is managed by devices that are designed to meet the stormwater quality management requirements for the relevant contaminants of concern in Tables 3 and 4.
3. New/redeveloped impervious area for a high use public road
 - a. Stormwater runoff from the new/redeveloped impervious area, and any additional existing impervious area discharging to the same discharge point(s), is managed by a device or devices designed to meet the stormwater quality management requirements for the relevant contaminants of concern in Tables 3 and 4.

3.3 Assessment - Controlled activities

3.3.1 Matters of control

1. All controlled activities
 - a. the implementation of a stormwater management system or devices to achieve the stormwater quality management requirements
 - b. operations and maintenance requirements
 - c. monitoring and reporting, on a network-wide basis.

3.3.2 Assessment criteria

1. All controlled activities
 - a. whether the site stormwater runoff is directed to an on-site device and/or via a communal or public management device designed and sized to accommodate stormwater runoff from the site and achieve the stormwater quality management requirements.

3.4 Assessment - Restricted discretionary activities

3.4.1 Matters of discretion

The council will restrict its discretion to the matters below for restricted discretionary activities.

1. Infringement of maximum impervious area control within riparian yards or infringement of the coastal protection yard:
 - a. adverse effects on the function of the yard
 - b. the continuity of any vegetation
 - c. site works and associated vehicle movements
 - d. practicable alternatives
 - e. reasonable use and development of the site
 - f. mitigation.
2. New and redevelopment of existing uncovered parking or parking areas (including that which is accessory to the main use of the site)
 - a. stormwater quality management requirements for minimising adverse effects
 - b. implementation of stormwater quality management measures
 - c. operations and maintenance requirements

The Proposed Auckland Unitary Plan (notified 30 September 2013)

- d. monitoring and reporting, including monitoring and reporting on a network wide basis.
3. New and redevelopment of existing impervious area for a high use public road
 - a. the implementation of the BPO for managing stormwater quality and associated adverse effects
 - b. Stormwater quality management requirements
 - c. Operations and maintenance requirements
 - d. Monitoring and reporting, including monitoring and reporting on a network wide basis.

3.4.2 Assessment criteria

The council will consider the relevant assessment criteria below for restricted discretionary activities.

1. All restricted discretionary activities
 - a. the nature of the discharge;
 - b. the sensitivity of the receiving environment, including coastal waters, and its susceptibility to the adverse effects of stormwater contaminants
 - c. the extent to which incremental and cumulative adverse effects of stormwater contaminants on receiving environments including on biodiversity, community and Mana Whenua uses and values can be avoided, or if not avoided then otherwise adequately mitigated;
 - d. the ability to reduce existing adverse effects
 - e. whether stormwater contaminants are managed on-site or whether there are stormwater management devices in the catchment that can accept and cater for increased stormwater contaminant loads to meet mitigation requirements
 - f. the effects on marine sediment quality, in accordance with Auckland wide water quality and integrated management [policy 10](#) and Table 1.
2. Infringement of maximum impervious area control within riparian yards or infringement of the coastal protection yard:
 - a. development that does not comply with the riparian or coastal yard controls will need to demonstrate that:
 - i. adverse effects on the function of the yard in managing flooding, erosion, or water quality, will be minimised
 - ii. the continuity of any vegetation corridor will be maintained
 - iii. site works and associated vehicle movements are minimised in the within the yard,
 - iv. there is no practicable alternative to development within the yard and that the development is located as far from the Coastal Marine Area, or stream as possible
 - v. locating development within the yard is required for the reasonable use and development of the site, including for the provision of public access or infrastructure such as recreational trails, bridges/culverts, underground utilities, wastewater or stormwater infrastructure
 - vi. the adverse effects of development within the yard are mitigated by planting with native plants and/or providing a wider setback elsewhere that will enhance the function of the yard.
3. New and redevelopment of existing impervious area for a high use public road unable to meet rules, permitted activity and controlled activity controls
 - a. the nature of the discharge;
 - b. the sensitivity of the receiving environment, including coastal waters, and its susceptibility to the adverse effects of stormwater contaminants
 - c. the extent to which incremental and cumulative adverse effects of stormwater contaminants on

The Proposed Auckland Unitary Plan (notified 30 September 2013)

receiving environments including on natural character, biodiversity, community and Mana Whenua uses and values can be avoided, or if not avoided then otherwise adequately mitigated;

- d. the ability to reduce existing adverse effects;
- e. the extent to which the water quality matters for stormwater networks and roads in Auckland wide water quality and integrated management [policy 10](#) and Table 1.
- f. the effects on marine sediment quality, in accordance with Coastal Zones discharges [policy 10](#) and Table 1.
- g. the practicality and limitations of applying stormwater quality management, particularly to existing high use road networks.

Table 3: Stormwater quality management requirements

Symbol	Name	Design effluent quality requirement for stormwater runoff from 90% of the annual rainfall
M	Metals	Total zinc < 30 µg/L, Total copper < 10 µg/L
S	Sediment	Total suspended solids < 20 mg/L
T	Temperature	Temperature < 25°C

Table 4: Stormwater contaminants of concern

Receiving environment	Land use activity		
	High use roads, car park	Roofing metal	Industrial sites activity area
River or Stream	M, S, T	M, T	Appropriate to nature of activities, contaminants and receiving environments
All other receiving environments	M, S	M	

S = sediment

M = metals

T = temperature

The Proposed Auckland Unitary Plan (notified 30 September 2013)