

Three Waters Management

Issues

The Three Waters Management (TWM) Chapter implements provisions to manage the impact of land use and *subdivision* on *water* resources and services, namely *stormwater*, *wastewater* and *water supply*:

- Stormwater systems manage the quality and quantity of *stormwater* runoff to minimise flood damage and to protect people, land, infrastructure and the receiving environment from adverse effects.
- Wastewater systems collect and convey *wastewater* for subsequent treatment and disposal. This will normally consist of either connection to the *reticulated wastewater* network, or on-site treatment and disposal (either individual or communal in nature).
- A water supply is necessary to ensure that a sufficient quality and quantity of water is available to all properties.

Adequate provision must be made for three waters services when subdividing land to enable the anticipated use of that land and manage potential adverse effects. Subdividers are encouraged to consider efficient, low impact infrastructure designs when preparing applications. Larger scale developments and *subdivisions* may require an Integrated Three Waters Assessment.

Where a public *reticulated* three waters network with sufficient capacity is available, connection to it is required when undertaking *subdivision* where connection is practicable. Connection is also encouraged where this would be a logical extension of the public *reticulated* network. Successfully implemented and managed *reticulated* three waters networks have significant economic, social, environmental and cultural benefits and should be protected as *regionally significant infrastructure*.

Where a connection to the public *reticulated* network is not available or practicable, an alternative private system will be required when undertaking *subdivision*. It is important that private systems are appropriately designed to protect the health and wellbeing of residents as well as the health of the receiving environment both on-site and within the surrounding area.

In addition to the District Plan, Whangārei District Council Bylaws may impose controls and restrictions on three waters management. Consent may also be required from the Northland Regional Council with regard to *stormwater*, *wastewater* and *water supply*.

Objectives

TWM-O1 Connections

Ensure that connections to public *reticulated* three waters networks are provided within *reticulated stormwater areas, reticulated wastewater areas, and reticulated water supply areas*.

TWM-O2 Reticulated Networks

Maintain the effectiveness, efficiency and sustainability of *reticulated* three waters networks.

TWM-O3 Integrated Infrastructure

Plan and provide for three waters infrastructure in an integrated and comprehensive manner.

TWM-O4 Private Systems

Ensure that private three waters systems are provided where connections are not provided to public *reticulated* networks.

TWM-O5 Adverse Effects

Minimise adverse effects from *stormwater* and *wastewater* on people, property, infrastructure, the receiving environment and cultural values.

Policies

TWM-P1 Three Waters Infrastructure

To ensure that three waters resources are appropriately managed by requiring *subdivision* and development to provide three waters infrastructure that:

1. Is coordinated, integrated and compatible with the existing infrastructure and capacities.
2. Enables the existing public *reticulated* network to be expanded or extended to adjacent land where that land is within a *reticulated stormwater area, reticulated wastewater area or reticulated water supply area*.

TWM-P2 Reticulated Areas

To sustainably and efficiently manage three waters resources by avoiding private three waters systems where connection to the public *reticulated* network is practicable in a *reticulated stormwater area, reticulated wastewater area or reticulated water supply area*.

TWM-P3 Capacity

To manage the scale and design of *subdivision* and development where connection is proposed to public *reticulated* three waters networks to ensure that there is sufficient capacity in the public *reticulated* networks, or where necessary require upgrades and/or extensions to the public *reticulated* networks to enable appropriate *subdivision* and development.

TWM-P4 Future Development

To ensure that three waters infrastructure is designed to accommodate the anticipated servicing requirements of plan enabled development in the locality.

TWM-P5 Vested Assets

To require vested assets, and connections to vested assets, to be designed and constructed in a manner that protects the ongoing operation, maintenance and upgrading of that asset.

TWM-P6 Private Systems

To ensure that where connection to a public *reticulated* three waters network is not available or practicable that provision can be made for:

1. A *water* supply.
2. The treatment, disposal, and where appropriate attenuation, of *stormwater* in a way that does not lead to significant adverse effects on or off site.
3. Management of *wastewater* via:
 - a. An on-site *wastewater* treatment system; or
 - b. Approval to connect to a private *wastewater* system.

TWM-P7 Flooding

To reduce the risk of flood hazards or increased upstream and downstream flood levels resulting from *stormwater discharges*.

TWM-P8 Integrated Three Waters Assessments

To require Integrated Three Waters Assessments for large scale developments to:

1. Provide three waters infrastructure in an integrated and comprehensive manner.
2. Enable and recognise the benefits of *green infrastructure* and low impact design.

TWM-P9 Infrastructure

To require subdividers and developers to meet the fair and reasonable costs of any upgrades or extensions of public *reticulated* three waters infrastructure which are attributed to the impacts of the *subdivision* or development.

Rules

TWM-R1 Any Activity Not Otherwise Listed in This Chapter

Activity Status: Permitted

Where in All Zones and Port Nikau Development Area:

1. Resource consent is not required under any rule of the District Plan.
2. The activity is not prohibited under any rule of the District Plan.

TWM-R2 Subdivision (Stormwater)

Activity Status: Restricted Discretionary

Where in All Zones and Port Nikau Development Area:

1. All *sites* are designed and located so that provision is made for:
 - a. The collection, treatment and disposal of *stormwater* that meets the following requirements:
 - i. Any attenuation is able to accommodate an additional 20% for climate change.
 - ii. The primary *stormwater* system is capable of conveying a 50% *AEP* storm event (+20%) where the system is a piped network with no surcharge.
 - iii. The primary *stormwater* system is capable of conveying a 20% *AEP* storm event (+20%) where the system is a piped network allowing a *discharge* within 0.3m of the lid level.
 - iv. The secondary *stormwater* system is capable of conveying the 1% *AEP* storm event (+20%) within a defined path to ensure that *surface water* will not enter *buildings* (excluding detached *garages*).
 - v. The *stormwater* system will not connect or overflow to any *wastewater* system.
 - vi. The *stormwater* system is designed and constructed for an asset life of at least 50 years.

- b. Connection to a public *reticulated stormwater* network where the *site* is located within a *reticulated stormwater area*.

Matters of discretion:

1. Adverse effects on existing *reticulated stormwater* networks.
2. The capacity of existing *reticulated stormwater* networks and whether the servicing needs of the proposal require upgrades to existing infrastructure.
3. Feasibility of connection to and logical extension of the existing *reticulated stormwater* networks.
4. Adverse effects on the surrounding environment and neighbouring properties from the collection, treatment and disposal of *stormwater*.
5. The efficient provision of services to the land being subdivided and to nearby land that might be subdivided in the future.
6. The appropriate level of attenuation within the *site* based on surrounding and downstream flooding risks.
7. The ability of the *stormwater* system to ensure that the peak *discharge* flow rates from the *site* are not increased beyond the levels that exist prior to the proposed *subdivision* and future land uses (except in circumstances where that is not appropriate).

Note:

1. Acceptable means of compliance for the provision, design and construction of infrastructure is contained within the [Whangārei District Council Engineering Standards](#).

Activity Status when compliance not achieved: Restricted Discretionary

Matters of discretion:

1. The matters of discretion listed in TWM-R2.
2. The extent and effects of any non-compliance with TWM-R2.

Notification:

Any restricted discretionary activity under TWM-R2 shall not be notified or limited-notified unless the relevant *Network Utility Operator* is determined to be an affected person in accordance with section 95B of the Resource Management Act 1991 or Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.

TWM-R3 Subdivision (Wastewater)

Activity Status: Restricted Discretionary

Where in All Zones and Port Nikau Development Area:

1. All *sites* (excluding any *site* for *accessways, roads, utilities* and *reserves*) are designed and located so that provision is made for:
 - a. Collection, treatment and disposal of *wastewater*.
 - b. Connection to a public *reticulated wastewater* network where the *site* is located within a *reticulated wastewater area*.

Matters of discretion:

1. Adverse effects on existing *reticulated wastewater* networks.
2. The capacity of existing *reticulated wastewater* networks and whether the servicing needs of the proposal require upgrades to existing infrastructure.
3. Feasibility of connection to and logical extension of the existing *reticulated wastewater* networks.
4. Provision of *wastewater* collection, treatment and disposal.
5. Adverse effects on the surrounding environment and neighbouring properties from the collection, treatment and disposal of *wastewater*.
6. The efficient provision of services to the land being subdivided and to nearby land that might be subdivided in the future.

Note:

1. *Acceptable means of compliance for the provision, design and construction of infrastructure is contained within the [Whangārei District Council Engineering Standards](#).*

Activity Status when compliance not achieved: Restricted Discretionary

Matters of discretion:

1. The matters of discretion listed in TWM-R3.
2. The extent and effects of any non-compliance with TWM-R3.

Notification:

Any restricted discretionary activity under TWM-R3 shall not be notified or limited-notified unless the relevant *Network Utility Operator* is determined to be an affected person in accordance with section 95B of the Resource Management Act 1991 or Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.

TWM-R4 Subdivision (Water Supply)

Activity Status: Restricted Discretionary

Where in All Zones and Port Nikau Development Area:

1. All *sites* (excluding any *site* for *accessways*, *roads*, utilities and reserves where no irrigation is required) are designed and located so that provision is made for:
 - a. A *water supply*.
 - b. Connection to a public *reticulated* water supply network where the *site* is located within a *reticulated water supply area*.

Matters of discretion:

1. Adverse effects on existing *reticulated* water supply networks.
2. The capacity of existing *reticulated* water supply networks and whether the servicing needs of the proposal require upgrades to existing infrastructure.
3. Feasibility of connection to and logical extension of the existing *reticulated* water supply networks.
4. Provision of suitable *drinking water*.
5. The efficient provision of services to the land being subdivided and to nearby land that might be subdivided in the future.

Note:

1. *Acceptable means of compliance for the provision, design and construction of infrastructure is contained within the [Whangārei District Council Engineering Standards](#).*

Activity Status when compliance not achieved: Restricted Discretionary

Matters of discretion:

1. The matters of discretion listed in TWM-R4.
2. The extent and effects of any non-compliance with TWM-R4.

Notification:

Any restricted discretionary activity under TWM-R4 shall not be notified or limited-notified unless the relevant *Network Utility Operator* is determined to be an affected person in accordance with section 95B of the Resource Management Act 1991 or Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.

TWM-R5 Subdivision (Integrated Three Waters Management Assessments)

Activity Status: Controlled

Where in All Zones and Port Nikau Development Area:

1. The *subdivision* results in 8 or more additional *sites* (excluding *sites* for the purposes of reserves, network utilities or transport corridors) from one parent *site* which existed at 4 June 2021.

Matters of control:

1. Recommendations, proposed mitigation measures and conditions of the Integrated Three Waters Assessment and any further information provided through the consent process, including matters relating to:
 - a. The effects on the sustainable provision of three waters infrastructure, and the sustainable use of three waters resources.
 - b. Methods of minimising impacts on three waters resources, including methods to reduce, reuse and/or recycle three waters resources.

Note:

1. Any application shall comply with information requirement rule TWM-REQ3.

TWM-R6 Land Use (Integrated Three Waters Management Assessments)

1. Activity Status: Controlled

Where in the Business Zones and Port Nikau Development Area – Local Commercial Area:

- a. The activity increases the *impervious area* within a *site* by 1,000m² – 5,000m² from what existed at 4 June 2021.

Matters of control:

1. Adverse effects on environmental and cultural values from the management and *discharge* of *stormwater* and *wastewater*.
2. The provision of integrated low impact design or *green infrastructure* solutions to minimise adverse effects.
3. Opportunities for multipurpose infrastructure (i.e. *stormwater* reserves that function as walking tracks).
4. The ability of three waters infrastructure to service potential future development within the *site*.

2. Activity Status: Restricted Discretionary

Where in the Business Zones and Port Nikau Development Area – Local Commercial Area:

- a. The activity increases the *impervious area* within a *site* by more than 5,000m² from what existed at 4 June 2021.

Matters of discretion:

1. Recommendations, proposed mitigation measures and conditions of the Integrated Three Waters Assessment and any further information provided through the consent process.

Notes:

1. Any application shall comply with information requirement rule TWM-REQ3.
2. *Impervious areas less than 1,000m² are permitted under TWM-R1.*

Information Requirement Rules

TWM-REQ1 Connection to Public Reticulated Three Waters Networks

All Zones and Port Nikau Development Area

1. Any consent application where connection to public *reticulated* three waters network(s) is proposed shall include an assessment detailing (where relevant):
 - a. Provision made for connections to public *reticulated* three waters networks.
 - b. Confirmation from Council that sufficient capacity exists within public *reticulated* three waters networks to service the proposed development.
 - c. Any upgrades and/or extensions to existing public *reticulated* three waters infrastructure that are proposed or necessary.
 - d. Consideration of the elevation of each proposed *site* to establish a service envelope where that *site* is able to be serviced without the need for on-site pumping. Reference shall be made to any part of the *site* that is outside the service envelope.
 - e. Land and infrastructure to be vested in the Council.

TWM-REQ2 On-site Three Waters Management

All Zones and Port Nikau Development Area

1. Any consent application where connection to public *reticulated* three waters networks is not proposed is required to show the details and layout of the proposed three waters system(s) including (where relevant):
 - a. In a *reticulated stormwater area, reticulated wastewater area or reticulated water supply area*, demonstration as to why connection to the public *reticulated* three waters network is not proposed or is not practicable.
 - b. In a *reticulated stormwater area, reticulated wastewater area or reticulated water supply area*, an assessment of any effects on the practicability of future expansion of the public *reticulated* network, and any mitigation measures proposed (e.g. easements required to enable future expansion).
 - c. Evidence that the proposed *wastewater, stormwater* or water supply system can either comply with the permitted activity standards of the Northland Regional Plan or a regional consent has been obtained or is concurrently being applied for.
 - d. A site plan detailing the overall proposed development, showing existing contours in areas proposed for development of three waters infrastructure, and any overland flow-paths, *rivers, wetlands, water bores* etc. which exist pre-development in the subject property and in adjoining properties.
 - e. Where any *buildings or structures* are located within overland flow-paths, *rivers, wetlands, water bores*, etc. demonstration of how the development will maintain their capacity to convey flows.
 - f. Details of an effluent disposal area and reserve area and provision for ongoing maintenance and operation of the proposed *wastewater* system.
 - g. Proposed *stormwater* attenuation and/or water quality treatment system(s), including location, preliminary sizing and associated works (e.g. *landscaping, road* construction).
 - h. Demonstration (by drawings, calculations and reports) that the requirements of rule TWM-R2.1(a) can be achieved.
 - i. Details of water demand (flow and pressure) and suitable *drinking water* sources.
 - j. Copies of any correspondence or written approvals from private persons or Council departments in relation to the proposed *stormwater* system, and confirmation of how any conditions of those approvals will be met.
 - k. Where a private communal three waters system is proposed, details of a formal legal mechanism (e.g. proposed easements) by which each *site* owner is individually and

severally responsible for the maintenance and performance of the system and ongoing ownership of the disposal area.

Notes:

1. Additional information on details to be provided is contained within the [Whangārei District Council Engineering Standards](#).
2. Evidence of a satisfactory water supply will be assessed as part of the building consent application. Applicants are advised to consult with the Fire and Emergency New Zealand, Northland Health and the Northland Regional Council, and to refer to the Drinking Water Standards for New Zealand 2005 (Revised 2008).
3. Sufficient water demand includes compliance with the Firefighting Water Supplies Code of Practice SNZ 4509:2008.

TWM-REQ3 Integrated Three Waters Assessments

All Zones and Port Nikau Development Area

1. Any application under rules TWM-R5 – R6 shall include an Integrated Three Waters Assessment which details:
 - a. How the proposal is consistent with the recommendations, measures and targets of any relevant Council approved Catchment Management Plan.
 - b. An assessment of any potential effects (including cumulative effects) of the development in relation to the *site*, any adjoining *sites*, the wider catchment and cultural values.
 - c. Information on how *wastewater* (including trade waste) will be managed to minimise any impacts on the *reticulated* network or from on-site *discharges*.
 - d. The provision of *water* supply, *wastewater* disposal and/or *stormwater* disposal reticulation through the proposed development or *subdivision* to a standard necessary to provide adequate reticulation to adjacent land zoned for *reticulated* development.
 - e. Any low impact design, or *green infrastructure* solutions that are proposed, what benefits these will provide, and how they will be operated and maintained to ensure ongoing water efficiency benefits.
 - f. Consideration of opportunities to integrate three *waters* infrastructure and informal or passive recreation opportunities.
 - g. Any proposed conditions.