rules residential zone

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New Rule: REr.106D Maitahi Bayview Structure Plan (Schedule X)

Contents of residential zone rule table continued

REr.74	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - Storm and waste water			
REr.75	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - Earthworks			
REr.76	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - Heavy structures			
REr.77	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - New residential units			
REr.78	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - Extension or rebuilding of existing residential units			
REr.79	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - Accessory buildings			
REr.80	Grampians Slope Risk Overlay - Storm and waste water			
REr.81	Grampians Slope Risk Overlay - Earthworks			
REr.82	Flood Path, Flood Overlays			
REr.83	Inundation Overlays - Low lying ground susceptible to localised stormwater ponding or tidal inundation			
REr.84	Wakefield Quay Precinct			
REr.85	Heritage Buildings, Places and Objects - Alterations to Group A and B items			
REr.86	Heritage Buildings, Places and Objects - New Buildings on the site of a Heritage Item			
REr.87	Heritage Buildings, Places and Objects - Demolition or removal of Group A and B item			
REr.88	Heritage Buildings, Places and Objects - Demolition or removal of Group C items			
REr.89	Heritage Precincts - Alterations to any building (including listed Heritage Buildings)			
REr.90	Heritage Precincts - Erection of new buildings			
REr.91	Heritage Precincts - Removal or demolition of Listed Heritage Buildings			
REr.92	Heritage Precincts - Front fences			
REr.93	Heritage Trees - Trimming of a Heritage Tree identified in Appendix 2			
REr.94	Landscape Trees - Trimming of a Landscape Tree identified in Appendix 2			
REr.95	Heritage and Landscape Trees - Activities within the root protection zone of a Heritage or Landscape			
1121.00	Tree identified in Appendix 2			
REr.96	Heritage and Landscape Trees - Removing or destroying a Heritage or Landscape Tree identified in Appendix 2			
REr.97	Local trees - Removing a local tree identified in Appendix 2			
REr.98	Archaeological sites			
REr.99	Bishopdale Pottery (Scheduled Site - Sch.B)			
REr.100	Nelson Marlborough Health Services (Scheduled Site - Sch.C)			
REr.101	BP Annesbrook (Scheduled Site - Sch.D)			
REr.102	Ngawhatu Residential Area (Scheduled Site - Sch.E)			
REr.103	Polytechnic (Scheduled Site - Sch.F)			
REr.104	Trafalgar Street/Hathaway Court (Scheduled Site - Sch.G)			
REr.105	Bishopdale Subdivision Area (Scheduled Site – Sch.H)			
REr.106	Marsden Valley (Scheduled Site – Sch I)			
REr.106A	Marsden Plateau Landscape Area (Scheduled Site – Sch U)			
REr.106B	Marsden Hills (Scheduled Site – Sch V)			
REr.106C	Enner Glynn and Upper Brook Valley Structure Plan (Schedule W) – refer to the Rural Zone Chapter 12			
REr.106D	Maitahi Bayview Structure Plan (Sch X)			
Subdivision				
REr.107	Subdivision - General			
	Rules relating to Overlays on the Planning Maps			
REr.108	Services Overlay - Subdivision			
REr.109	Landscape Overlays - Subdivision			
REr.110	Fault Hazard Overlay - Subdivision			
REr.111	Flood Path Overlay, Flood Overlay and Inundation Overlay - Subdivision			
REr.112	Tahunanui Slump Core Slope Risk Overlay and Tahunanui Slump Fringe Slope Risk Overlay - Subdivision			
REr.113	Heritage Precincts - Subdivision			
REr.114	Heritage Overlays (excluding Heritage Precincts and Wakefield Quay Precinct) Subdivision			
REr.115	Bishopdale Subdivision Area (Scheduled Site – Sch.H)			
REr.116	Grampians Slope Risk Overlay - Subdivision			
Freshwater				
	(Refer Appendix AP28.9 for freshwater rules)			
	N. 18-18-17 Pportion of a Lord for moderation relico)			

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New Rule: REr.106D Maitahi Bayview Structure Plan (Schedule X)

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Item	Permitted	Discretionary/Non- complying
REr.106D Maitahi Bayview Structure Plan (Schedule X)		 REr.106D.3 Schedule X applies

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New Rule: REr.106D Maitahi Bayview Structure Plan (Schedule X)

Assessment Criteria	Explanation
REr.106D.4	REr.106D.5
Schedule X applies	Schedule X applies

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Amended Rule: REr.109.5 Explanation

Item	Permitted	Controlled	Discretionary/Non-complying
REr.109	REr.109.1	REr.109.2	REr.109.3
Landscape Overlays Subdivision	Subdivision is not a permitted activity.	not applicable	Subdivision in the Landscape Overlay, is a restricted discretionary activity, if:
Cabalvision			 a) it is accompanied by the design and information requirements as detailed in AP14.2 in Appendix 14, and
			 is accompanied by a landscape assessment by an appropriately qualified person, and
			c) it complies with all other controlled activity terms REr.107.2 b) to h), and
			 d) in relation to Comprehensive Housing Developments compliance with REr.107.2 f) is not required provided it meets the restricted discretionary standards and terms of rule REr.22.3.
			Discretion is restricted to:
			 i) the matters of restricted discretion in Rule REr.107.3 (subdivision: general), with particular regard to the visual impacts of the subdivision and the likely structures that will be built on the subdivided land, and
			ii) the location of building sites, and
			iii) the matters in the Nelson Tasman Land Development Manual 2019 with particular regard to the alignment and location of roads, the width of carriageways and planting of berms, and
			iv) retention of existing vegetation and other site features, and
			v) location and design of utilities, and
			vi) extent and form of earthworks and the matters in REr.61.3, and
			vii) size, shape and orientation of allotments, and
			viii) the location and types of planting for amenity and restoration.
			 ix) the extent of compliance with Appendix 7 Guide for Subdivision and Structures in the Landscape Overlay.
			Discretionary Activity
			Activities that contravene a standard for the restricted discretionary activity are discretionary.

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Amended Rule: REr.109.5 Explanation

Assessment Criteria REr.109.4		Explanation REr.109.5	

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New Schedule: Sch.X Maitahi Bayview Area

Sch.X Maitahi Bayview Area

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X.1 Application of the schedule

This Schedule applies to the Kaka Valley and Bayview property area shown as 'Schedule X' on Planning Maps 5, 7, 8, 11, 15 and 52.

The majority of the Schedule site is located within the Kaka Valley which is enclosed by the Botanical, Malvern, Kaka and Sharland Hills with Malvern Hills separating the valley from Nelson Haven. The remainder of the site is on the north-western facing slopes of the Malvern Hills looking over Nelson Haven and Tasman Bay. Botanical Hill is identified as an important visual focus for part of the inner city area with the Malvern range providing a visual backdrop to northern side urban area. Kaka Hill is identified as a strategic part of the city backdrop and forms the foreground and entrance to the Nelson region. Sharland Hill is closely associated with these hills with its ridgeline and upper slopes being visually important for the backdrop to the city.

The site is located close to the city centre and is recognised as having the ability to accommodate future growth through the Future Development Strategy. However, this must be balanced against the important landscape and visual characteristics which are valued by the community, and also appropriate maintenance and enhancement of recreational values, cultural values, and ecological values.

Figures 1 & 2 of this Schedule are spatial tools which direct development in an appropriate manner taking account of topography, landscape and visual character and

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ecological values. The Structure Plan has been prepared using best practice urban design principles.

The development of the valley floor for residential development is a progression of existing residential development within the wider Maitai Valley. The lower and middle slopes of the Malvern Hills are already developed, and the proposed residential zoning of the upper slopes providing an extension of this existing development and zoning. However, specific controls are placed on the development of the upper Malvern Hill slope areas which are defined in this Schedule on Figure 2 as the 'skyline' and 'backdrop' areas to ensure landscape values and characters are maintained.

The Schedule seeks to integrate into the NRMP by requiring that the zones are developed in a manner consistent with the Plan provisions. This is considered to meet the expectations of the community and ensure development is undertaken in a harmonious and consistent manner with the wider region. The intention of the additional rules proposed within this Schedule is to provide for higher quality environmental and urban design outcomes for areas of the site which are particularly sensitive to the local landscape and visual amenity values. The rules also require that ecological values are maintained, enhanced and protected in a manner which is consistent with the National Policy Statement for Freshwater.

The purpose of this Schedule is to ensure that subdivision and development proceeds in general accordance with the Structure Plan accompanying this Schedule and to incorporate specific rules within the Schedule and respective Rule Tables of the Nelson Resource Management Plan.

Schedule X is referred to in the following Residential, Rural and Suburban Commercial Zones rules: REr.106D, REr.109.5, SCr.69C, SCr.71.2 and RUr.77C.

All activities provided for in the relevant rule tables for each zone apply to the land within Schedule X, except as specifically provided for in this Schedule and the Structure Plan. Additional rules are provided for specific overlays and zone areas within the Structure Plan. These rules are to be considered in additional to all relevant zone rules except where specified.

X.2 Comprehensive housing development in the Residential Zone – Higher Density Area

Comprehensive Housing Developments (with or without subdivision) in the Residential Zone - Higher Density Area are a restricted discretionary activity if:

- a) it is accompanied by the design and information requirements as detailed in AP14.2 in Appendix 14, and
- b) it meets the restricted discretionary standards and terms of Rule REr.22.3; and
- c) it complies with the mandatory matters in the Nelson Tasman Land Development

 Manual 2020; and
- d) <u>esplanade reserve is provided in accordance with the standards in X.7 of this Schedule.</u>

Discretion is restricted to:

- i) The matters of control under REr.107.2 where subdivision is proposed, and
- ii) The ability of the subdivision, as expressed in the design statement, contextual analysis and preliminary infrastructure design to demonstrate the urban design outcomes sought; and
- iii) The matters in Rule REr.22.3; and
- iv) Consistency with Appendix 22 (Comprehensive Housing Development), and
- v) The matters in the Nelson Tasman Land Development Manual 2020, and
- vi) The matters in Appendices 11 to 12 of the Plan, and

- vii) The design and layout of roads, access, cycleways, walkways, reserves and biodiversity corridors; and
- viii) The staging of development and associated roading and reserves; and
- ix) The restricted discretionary matters listed in REr.108.3 (Subdivision in the Services Overlay) where subdivision is proposed; and
- x) Consistency with the Maitahi Bayview Structure Plan.

Resource consent for restricted discretionary activities will be considered without notification or service of notice.

Activities which contravene a standard for the restricted discretionary activity are discretionary.

Explanation

This specific rule for Schedule X supersedes REr.107.3 and REr.108.3 of the Plan for comprehensive housing developments. The purpose of this is to make specific provision for higher density residential development as a restricted discretionary activity, to provide a streamlined planning process, and so achieve the NPS-UD in an efficient manner, while still requiring high quality outcomes and appropriate servicing.

X.3 Subdivision – general (Residential Zone)

Subdivision is a restricted discretionary activity if:

- a) it is accompanied by the design and information requirements as detailed in AP14.2 in Appendix 14; and
- b) it complies with all relevant standards in Appendices 10 to 12; and
- c) it complies with the mandatory matters in the Nelson Tasman Land Development Manual 2020; and
- d) <u>esplanade reserve is provided in accordance with the standards in X.7 of this Schedule; and</u>
- e) The net area of every allotment is at least

Residential - Higher Density Area: 300m2

Residential - Standard Density Area: 400m2 Residential - Lower Density Area: 800m2

Residential - Lower Density Area (Backdrop Area): 1500m2

Except for allotments created solely for access or utility services; and

- f) a rectangle measuring 15m by 18m is capable of being located within the boundaries of any allotment, that is clear of any right of way and on a front site, part of which is within 5m of the road boundary, except for allotments created solely for access or utility services, and
- g) the layout and design is in general accordance with the Structure Plan or as otherwise specified by Schedule X.

Discretion is restricted to:

- i) The matters of control under REr.107.2, and
- ii) The ability of the subdivision, as expressed in the design statement, contextual analysis and preliminary infrastructure design to demonstrate the urban design outcomes sought; and
- iii) The matters in the Nelson Tasman Land Development Manual 2020, and
- iv) The matters in Appendices 11 to 12 of the Plan, and V. The design and layout of roads, access, cycleways, walkways, reserves and biodiversity corridors; and
- v) The staging of development and associated roading and reserves; and

- vi) The restricted discretionary matters listed in REr.108.3 (Subdivision in the Services Overlay); and
- vii) Consistency with the Maitahi Bayview Structure Plan.

Resource consent for restricted discretionary activities will be considered without notification or service of notice.

Activities which contravene a standard for the restricted discretionary activity are discretionary.

Explanation

This specific rule for Schedule X supersedes REr.107.3, REr.108.3 and REr.109.3 of the Plan. The purpose of this is to make specific provision for residential development as a restricted discretionary activity, to provide a streamlined planning process, and so achieve the NPS-UD in an efficient manner, while still requiring high quality outcomes and appropriate servicing.

The Maitahi Bayview Structure Plan and Schedule X contain site specific controls over landscape effects from building. Refer to the general rules below.

X.4 Backdrop area

Building within the Backdrop Area (as identified on Attachment B1.2 of Schedule X) is a controlled activity if:

- the final colour of any building's external roof and gutters uses a natural range of greys, browns or greens with a light reflectivity value (LRV) of less than 20%.
- the final colour of any building's external walls, joinery and spouting uses a natural range of greys, browns or greens with a light reflectivity value (LRV) of less than 32%.
- the site area shall be planted with a minimum of 20% native vegetation cover.

Control is reserved over:

- The buildings external appearance;
- The following planting palette and a maintenance schedule.

Trees

- Alectryon excelsus Titoki
- Aristotelia serrata Makomako
- o Beilschmiedia tawa Tawa
- o *Cordyline australis* Cabbage tree
- o <u>Dodonaea viscosa Akeake</u>
- o Dacrycrpus dacrydioides Kahikitea
- o <u>Dacrydium cupressinum Rimu</u>
- o Fuchsia excorticata Kōtukutuku, tree fuchsia
- o Fuscospora solandri Black Beech
- o Fuscospora truncate Hard Beech
- o Griselinia lucida Puka
- o Hoheria angustifolia
- o Kunzea ericoides Kānuka
- o <u>Leptospermum scoparium Manuka</u>
- o <u>Macropiper excelsum Kawakawa</u>
- o <u>Melicytus ramiflorus Māhoe</u>
- o <u>Myoporum laetum Ngaio</u>
- o <u>Myrsine australis Māpou</u>
- o Olearia paniculate Akiraho
- o <u>Pittosporum eugenioides Tarata</u>
- o <u>Pittosporum tenuifolium Kōhūhū</u>
- o <u>Plagianthus regius</u> Lowland ribbonwood
- <u>Podocarpus totara Tōtara</u>
- o Prumnopitys ferruginea Miro

- Prumnopitys taxifolia Matai
- o <u>Pseudopanax crassifolius</u> Lancewood
- Sophora microphylla Kōwhai
- Weinmannia racemose Kāmhai

Shrubs, Ground Covers, Grasses, and Sedge

- <u>Brachyglottis repanda Rangiora</u>
- o <u>Coprosma repens Taupata</u>
- o <u>Coprosma robusta Karamū</u>
- o *Veronica stricta* Koromiko
- o *Melicytus crassifolius* Coastal porcupine scrub
- o Ozothamnus leptophyllus Tauhinu
- o *Phormium cookianum* Wharariki
- o <u>Cortaderia richardii South Island Toetoe</u>

Any building that does not comply with a controlled activity standard shall be a restricted discretionary activity, with the following matters of discretion:

- The buildings external appearance.
- Visibility of the building from public places.
- Effects on the visual amenity values of the Backdrop Area.
- Opportunities for mitigating the visual effects and reducing a buildings visual prominence through planting, earthworks, or through the use of low impact architectural design techniques.

Resource Consent for a Restricted Discretionary Activity shall be considered without notification or service of notice.

Explanation

This rule, combined with the minimum allotment sizes required by X.3 above and the information requirements of Appendix 14, will ensure the visual amenity of the hill slopes within the Backdrop Area are maintained to an appropriate standard.

X.5 Skyline area

Building within the Skyline Area (as identified on Attachment B1.2 of Schedule X) is a controlled activity if:

- a) The final colour of any building's external roof and gutters uses a natural range of greys, browns or greens with a light reflectivity value (LRV) of less than 20%.
- b) The final colour of any building's external walls, joinery and spouting uses a natural range of greys, browns or greens with a light reflectivity value (LRV) of less than 32%, and either
- c) The final height of any dwelling shall sit below the primary ridgeline, as illustrated on the Maitahi Bayview Structure Plan (Sheet B1.2); or
- d) Any building proposed to extend above the ridgeline shall be supported by a landscape assessment by a suitably qualified and experienced landscape architect along with a detailed landscape plan, setting out how the visual impacts of a building exceeding the height of the primary ridgeline are to be mitigated.

Control is reserved over:

- 1. Earthworks.
- 2. <u>Building location, scale, height, modulation, roof pitch, colour, reflectivity and any</u> other aspects of the external appearance.
- 3. The following planting palette and a maintenance schedule.

Trees:

- Alectryon excelsus Tītoki
- o <u>Aristotelia serrata Makomako</u>
- Beilschmiedia tawa Tawa

- o Cordyline australis Cabbage tree
- Dodonaea viscosa Akeake
- o <u>Dacrycrpus dacrydioides Kahikitea</u>
- o Dacrydium cupressinum Rimu
- Fuchsia excorticata Kōtukutuku, tree fuchsia
- o Fuscospora solandri Black Beech
- o Fuscospora truncate Hard Beech
- o *Griselinia lucida -* Puka
- Hoheria angustifolia
- o Kunzea ericoides Kānuka
- Leptospermum scoparium Manuka
- o <u>Macropiper excelsum Kawakawa</u>
- Melicytus ramiflorus Māhoe
- Myoporum laetum Ngaio
- o Myrsine australis Māpou
- o Olearia paniculate Akiraho
- o Pittosporum eugenioides Tarata
- o Pittosporum tenuifolium Kōhūhū
- o Plagianthus regius Lowland ribbonwood
- o Podocarpus totara Tōtara
- o Prumnopitys ferruginea Miro
- o <u>Prumnopitys taxifolia Matai</u>
- Pseudopanax crassifolius Lancewood
- Sophora microphylla Kōwhai
- o Weinmannia racemose Kāmhai

Shrubs, Ground Covers, Grasses, and Sedge

- o Brachyglottis repanda Rangiora
- o <u>Coprosma repens Taupata</u>
- Coprosma robusta Karamū
- Veronica stricta Koromiko
- o <u>Melicytus crassifolius</u> Coastal porcupine scrub
- Ozothamnus leptophyllus Tauhinu
- o Phormium cookianum Wharariki
- Cortaderia richardii South Island Toetoe
- 4. Effects on the visual amenity values of the Skyline Area;
- 5. Potential opportunities for screening or mitigating visual effects and reducing the buildings visual prominence through planting, earthworks, or through the use of low impact architectural design techniques.

Any building which does not comply with Controlled Activity conditions a)-d) of this Rule shall be a Restricted Discretionary Activity with discretion restricted to the following matters:

- 1. The buildings external appearance
- 2. <u>Effects on the visual amenity values of the Skyline Area.</u>
- 3. The extent to which structures will be visible from the Nelson City Centre and State Highway 6 (QE II Drive);
- 4. Opportunities for mitigating the visual effects and reducing the buildings visual prominence through planting, earthworks, or through the use of low impact architectural design techniques.

Resource Consent for a Restricted Discretionary Activity shall be considered without notification or service of notice.

Explanation

This rule, combined with the minimum allotment sizes required by X.2 above and the information requirements of Appendix 14, will ensure the landscape values of the Skyline Area are maintained to an appropriate standard.

X.6 Prohibited activities

The following activities are prohibited:

- a) Buildings on Kaka Hill backdrop and skyline area as identified on Attachment B1.2 of Schedule X;
- b) Buildings within the Significant Natural Area as identified on B1.2 of Schedule X.

Explanation

These rules will ensure the landscape and natural values of Kaka Hill are protected long term.

X.7 Esplanade reserve standards

- a) For the area adjoining the Maitai River and over Kaka Stream, esplanade reserve shall be vested in stages as subdivision progresses in accordance with the Maitahi Bayview Structure Plan.
- b) An esplanade reserve with a minimum total width of 40m shall be vested in stages as subdivision progresses.
- c) Planting in general accordance with the following planting palette:

Trees:

- Alectryon excelsus Tītoki
- o Aristotelia serrata Makomako
- Beilschmiedia tawa Tawa
- o Cordyline australis Cabbage tree
- o <u>Dacrycrpus dacrydioides Kahikitea</u>
- o *Dodonaea viscosa* Akeake
- o Dacrydium cupressinum Rimu
- o Fuchsia excorticata kōtukutuku, tree fuchsia
- Fuscospora solandri Black Beech
- o Fuscospora truncate Hard Beech
- o *Griselinia lucida -* Puka
- o Hoheria angustifolia
- o Kunzea ericoides Kānuka
- o <u>Leptospermum scoparium Manuka</u>
- o <u>Macropiper excelsum Kawakawa</u>
- Melicytus ramiflorus Māhoe
- o <u>Myoporum laetum Ngaio</u>
- Myrsine australis Māpou
- Olearia paniculate Akiraho
- o <u>Pittosporum eugenioides Tarata</u>
- o <u>Pittosporum tenuifolium Kōhūhū</u>
- o <u>Plagianthus regius Lowland ribbonwood</u>
- o Podocarpus totara Tōtara
- Prumnopitys ferruginea Miro
- o <u>Prumnopitys taxifolia Matai</u>
- o <u>Pseudopanax crassifolius</u> <u>Lancewood</u>
- o <u>Sophora microphylla Kōwhai</u>
- o Weinmannia racemose Kāmhai

Shrubs, Ground Covers, Grasses, and Sedge

Aposadmia sismilis - Oioi

- Carex secta Pukio
- Carex virigata Pūrei
- o Cortaderia richardii South Island toetoe
- Phormium tenax Common rush
- o Juncus edgariae Tauhinu
- o Juncus pallidus Giant rush
- Juncus australis Rush

Plants set back from Stream and Wetland Margins

- Astelia frangrans Kahakaha
- o <u>Coprosma propingua Mingimingi</u>
- o Coprosma rigida Streamside coprosma
- Coprosma robusta Karamū
- Myrsine divaricate Weeping Māpou
- Veronica stricta Koromiko

Note: It is recognised here that the lower Kaka Stream tributary may, subject to resource consent approval, be realigned as a part of developing in general accordance with the Maitahi Bayview Structure Plan.

Explanation

This requirement will ensure that esplanade reserve is vested in accordance with the Maitahi Bayview Structure Plan, and that the enhancement planting be undertaken in general accordance with an appropriate planting palette.

Information and Design Requirements

In order to ensure the cultural and freshwater values of the subject site are maintained and enhanced, X.8 and X.9 require appropriate consideration and assessment of these values, to be submitted with resource consent applications.

X.8 Cultural values and engagement with Te Tau Ihu Iwi

In recognition of the Te Tau Ihu Statutory Acknowledgements 2014 and the requirement of the NPS-FM 2020, any subdivision and development of land within Schedule X shall be prepared after having particular regard to cultural values and the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). As a part of demonstrating this, a Cultural Impact Assessment (prepared by a contractor approved by Iwi) shall be submitted with any resource consent application involving earthworks, discharges, freshwater and terrestrial ecology, comprehensive housing, or subdivision.

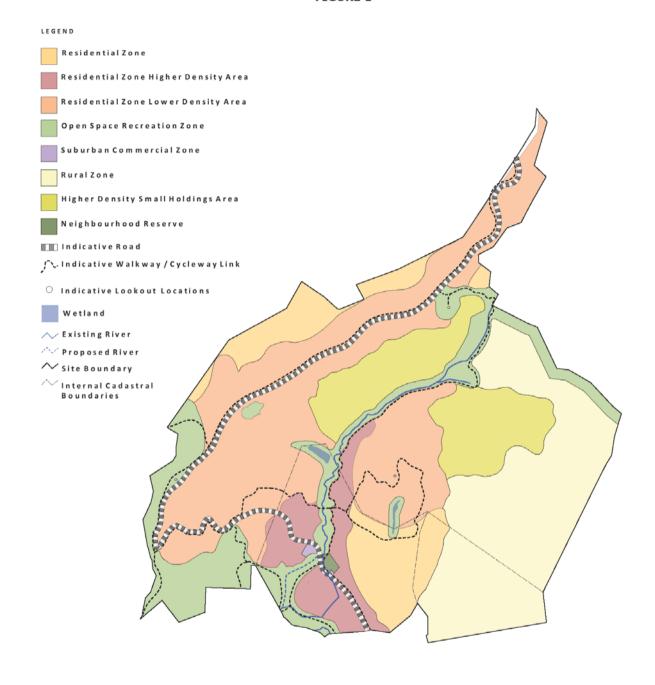
X.9 Ecological outcomes and freshwater

Alongside the NTLDM 2020 or its replacement, the following best practice principles shall be used in the subdivision and development design process, with an assessment from a suitably qualified person demonstrating the application of these principles:

- 1. Align with the objectives and intent of the NPS-FM and NES 2020 which include mandatory provisions around stream/wetland effects avoidance and application of the effects management hierarchy.
- 2. <u>Co-design with nature an integrated and regenerative approach to urban development:</u>
 - a) <u>Use 'green infrastructure' engineering solutions where possible to mimic or work with processes found in the natural environment.</u>
 - b) Retain, restore and enhance existing elements of the natural drainage system, and integrate these elements into the urban landscape.
- 3. Address pressures on waterbodies close to source by implementing Water Sensitive Design (WSD) principles in the planning through to the implementation stages

- 4. <u>Mimic predevelopment hydrology through retention and detention. Predevelopment channel forming flows in Kaka Stream to be managed to reduce risk of scour and sediment mobilisation.</u>
- 5. Pass first flush of all site generated stormwater through constructed vegetated treatment devices prior to discharge to Kaka Stream, existing wetlands or Maitai River. First flush to be based on treating 80-85% of mean annual volume or stormwater resulting from 3-month ARI rainfall event.
- 6. <u>Map areas with high infiltration capacity and factor in design to optimise</u> <u>groundwater recharge and baseflow where possible as part of water sensitive design strategy.</u>
- 7. Provide and protect overland flow paths through road design and other dedicated pathways to pass peak flows from upper slopes safely.
- 8. Retain and protect the upper reach of Kaka Stream (above woolshed) through continuous riparian corridor (Blue-Green Spine). Corridor to reflect natural topography and be delineated to support;
 - a) Channel meanders and flood benches
 - b) Robust riparian vegetation
 - c) Peak flood capacity
 - d) Eco-system function and habitat
 - e) <u>Integrated stormwater wetlands</u>
 - f) Public access via well designed walking/cycling paths (no roads except at crossing points)
- 9. Where practical, co-locate stormwater treatment wetlands within Kaka Stream Blue-Green Spine to protect mainstream, increase urban ecology, connect the community with water and provide high quality amenity.
- 10. <u>Identify and delineate development areas able to drain to Blue-Green Spine or other dedicated stormwater treatment areas not able to be captured in these to self-manage through on lot management of water quality/quantity.</u>
- 11. Where feasible, integrate peak flood controls within Blue-Green Spine whilst ensuring that Eco-System function (including fish passage) is preserved, stormwater wetlands are protected, and the health and safety of community and visitors are protected.
- 12. <u>Provide for the realignment of the lower portion of the Kaka Stream where this provides for improved ecological outcomes, provides for more efficient urban form and demonstrates adherence with best practice channel design guidelines.</u>
- 13. Identify, protect and enhance all remaining natural wetlands.
- 14. Protect and enhance the Kaka Stream and its tributaries, including:
 - a) Minimising stream loss.
 - b) Identifying springs/seeps and protect these including the flow paths to the nearest streams
 - c) Providing for flood flows (1:100yr) within the stream including its riparian margins.
- 15. <u>Provide for ecological linkages between ecological areas (freshwater and terrestrial) inside and neighbouring Schedule X.</u>
- 16. <u>Manage earthworks and compaction outside residential zones to minimise changes to the hydraulic response of flows directly or indirectly discharging into the Kaka Stream and its tributaries.</u>
- 17. Conserve and reuse water resources, through maximising water-use efficiency by reducing potable water demand and maximising the use of greywater and stormwater.
- 18. Considering climate change during all stages of the design process.

SCHEDULE X STRUCTURE PLAN FIGURE 1



SCHEDULE X LANDSCAPE OVERLAY FIGURE 2

