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Submission of Transpower New Zealand Limited on the 'Exposure draft of proposed changes to the NPS-FM and NES-F (including wetland regulations)'

Transpower's role and activities

Transpower is the state-owned enterprise that plans, builds, maintains, owns and operates New Zealand's high voltage electricity transmission network (the **National Grid**). The National Grid includes some 11,000 km of transmission lines and cables (overhead and underground), and 178 substations across the country. The National Grid is controlled by a telecommunications network with 300 telecommunication sites, which help link together the components that make up the National Grid.

The National Grid extends from Kaikohe in the North Island to Tiwai Point in the South Island. The assets in the National Grid are an extensive, linear, and connected system of lines and substations. Thus, activities or changes on one part of the system can affect other parts. The National Grid operates on a regional or national scale in terms of the location of assets and the distances over which electricity is transmitted.

The National Grid has various technical, operational and locational constraints, which often means it is required to locate in, or traverse sensitive environments. This is largely a result of the National Grid being linear infrastructure which is required to connect between two fixed points, such as energy generators at the generation source, which Transpower has little to no influence over the location of, to distribution companies and major industrial users throughout New Zealand.

Transpower often has limited options for the location of National Grid connections. The scope for flexibility on route for new infrastructure will depend on its length – with greater flexibility being available with longer length. But, given the linear nature of the Grid, it cannot avoid all of its effects on the environments it passes through. To secure the benefits from National Grid infrastructure, some effects or impacts, including on sensitive environments, will be unavoidable.

The National Grid will be required for many years into the future,and is critical to enabling wider social and economic wellbeing. Transpower needs to be able to operate, maintain, upgrade and develop the National Grid in the most sustainable way for that outcome to be achieved.

New Zealand's climate response requires adaptation activities, which are intended to make existing infrastructure more resilient, such as creating larger or deeper foundations for National Grid support structures.

New Zealand's climate response also requires mitigation activities. As is well established now, from the work of the Productivity Commission, Transpower, the Climate Change Commission and others, if New Zealand is to achieve its climate change objectives with regard to mitigation, electrification of the economy is required. With more of the national economy dependent on electricity, the resilience and reliability of the electricity system becomes all the more critical to the country.[1] Electrification of the economy will involve moving economic activity off fossil fuels and onto renewable electricity within the next couple of decades, which means electricity demand is likely to more than double by 2050.[2]

For the electricity sector to meet this level of demand, existing generation and transmission assets will need to be well maintained, many more renewable generation projects will need to be built by generators, Transpower will need to both strengthen the National Grid and put in place a lot more National Grid connections to generators, distributors, and major users.

It is estimated that around 60-70 new connections to Transpower's National Grid will be required in the next 15 years, with this trend continuing through to at least 2050. Each new National Grid connection is a significant project. These National Grid connections are in addition to the 10-20 major upgrades to the core National Grid that will also be required before 2035.

The NPS-FM and NES-F must acknowledge the importance of developing and upgrading National Grid infrastructure to ensure it is sufficient to connect and reliably distribute new forms of energy and handle increasing peak loads, greater solar photovoltaics (PV), and battery penetration and the charging of electric vehicles.[3]

Summary of Transpower's position on the exposure draft of proposed changes to the NPS-FM and NES-F (including wetland regulations)

Q1: The proposed amendments to the wetland provisions are highlighted blue in the exposure draft of the NPS-FM and NES-F. Are the amendments clearly drafted? Does the drafting achieve the intent of the amendments (as set out in the attached policy rationale document)? Are there unintended consequences of this drafting?

Transpower understands and supports the need for a strengthened NPS-FM and NES-F. However, it is important that these documents are workable, clear on their face so there is no ambiguity, and that they provide for Transpower's activities given the extent and national importance of Transpower's assets across New Zealand.

As a consequence of its linear nature, Transpower has a large number of existing National Grid infrastructure assets located in or adjacent to waterways, including natural wetlands. Works undertaken within or adjacent to these waterbodies includes maintenance of access tracks, vegetation clearance, and support structure foundation works. These works are all routine activities that occur frequently across the country – to enable the ongoing operation, maintenance, and upgrade of the National Grid. While these works are generally of limited scale, infrequent, of short duration, and are generally associated with established assets accessed via a network of established access tracks, they need to be enabled so the National Grid can effectively function. Similarly, new development may need to locate in or adjacent to waterbodies due to operational or locational constraints. This development also needs to be enabled.

[1] Transpower *Te Mauri Hiko Energy Futures* (White Paper, 2018) at 7.

[2] Transpower *Te Mauri Hiko Energy Futures* (White Paper, 2018) at 5 and 16.

In summary, Transpower's key concerns with the exposure draft for the NPS-FM and the NES-F are as follows:

- Upgrades of National Grid infrastructure will be captured as part of construction activities, rather than as part of operation and maintenance activities, and will therefore be subject to the effects management hierarchy. This is not appropriate where the relevant upgrades are routine and being undertaken as part of the operation and maintenance of the National Grid.
- There are no transitional provisions within the NPS-FM and NES-F to provide that the regulations do not apply until such time as Central Government or regional councils have developed a practical "desktop assessment" tool/map of significant natural inland wetlands (as determined by lidar data or a similar high level assessment tool). Transpower cannot avoid wetlands during the investigation stage of a project if their location is not known – yet the need to avoid wetlands that were subsequently identified could become a barrier to a project at a later date.
- Reconciliation is required between the NPS-FM and other national policy documents such as the National Policy Statement on Electricity Transmission 2008 (the **NPSET**), or guidance on how to reconcile tensions between competing policy direction.
- The requirement for there to be a functional need under Clause 3.22 of the NPS-FM is too onerous, and not appropriate for linear infrastructure.
- There are technical issues with the pasture exclusion list and the separation of discharge into a separate rule, which need to be resolved.

Transpower seeks the following specific amendments to the wetland provisions to ensure the provisions are clearer and there are no unintended consequences:

- The definition of '*natural wetland*' is amended to include a minimum size in the order of 0.5ha – being the size at which a wetland is self-sustaining and valuable to species within the wider landscape.
- The term '*water body'* is defined to include "any water conveyance device such as a drain or channel" to ensure wetlands associated with these are not inadvertently captured as natural inland wetlands.
- The pasture species list is removed and the NPS-FM and NES-F rely on a dictionary definition of "pasture." The proposed list does not contain exotic plant species that have historically been planted for the purpose of grazing stock, and pasture species may change over time.
- The consenting pathway for the maintenance and operation of specified infrastructure, and related provisions in the NES-F is expanded to cover "upgrades".
- 'Operational need', as defined in the National Planning Standards, is added to the consenting pathway for specified infrastructure in the NPS-FM.
- Clause 3.22 is amended to make it clear that specified infrastructure activities includes ancillary activities
- Various amendments are made to clarify the principles relating to aquatic offsetting and compensation, and they only apply to the construction of new infrastructure.
- Regulation 45(5) is amended to apply to "significant" adverse effects.
- Regulation 46 is amended so the permitted activity conditions are more workable for specified infrastructure, and there is greater clarity as to what activities are permitted.
- Clause 3.1(2)(a) is amended to state a local authority cannot adopt more stringent measures than required by the NPS-FM.

Appendix A to this submission contains marked up provisions, with the relief sought by Transpower.

Q2: The proposed technical or clarificatory amendments to other provisions are highlighted yellow in the exposure draft of the NPS-FM and NES-F. What are your views on these proposed amendments? Are the proposed technical corrections clearly drafted? Does the drafting provide clarity on existing policies? Are there wider consequences of this drafting?

Transpower's concerns are confined to the amendments to wetland provisions. Transpower does not have any concerns with the technical amendments or clarifications proposed to other provisions.

Transpower's position on specific amendments set out in the exposure draft of proposed changes to the NPS-FM and NES-F (including wetland regulations)

Amendment 1 – Definition of 'natural wetland'

Q3: Are these proposed amendments clearly drafted? Does the drafting achieve the intent of the amendments (as set out in the attached policy rationale document)? Are there unintended consequences of this drafting? In particular, we welcome your feedback on this list of 'exotic pasture species', in particular commentary on any missing species, and whether the list would work when applied in your region.

The exposure draft seeks to amend the definition of "natural wetland" and delete the definition of "improved pasture" within the NPS-FM and NES-F.

Lack of quality or size assessment in relation to a natural wetland

Transpower remains concerned that there is no quality or size assessment required under the definition of "natural wetland".

Transpower considers the quality of a wetland should be relevant when identifying whether it comes within the definition of a natural wetland and therefore is subject to the provisions of the NPS-FM and NES-F.

Transpower understands the developing supporting document "Pasture Exclusion Assessment Methodology" (Denyer, Clarkson & Bartlam 2022) will guide the assessment of natural wetlands under the NPS-FM to being just a bit larger than a plot ($2m^2$) as a minimum size. Transpower understands, based on ecological advice, that $2m^2$ is not a realistically viable, functional wetland.

Transpower's ecological advice is that a functional wetland minimum size in the order of 0.5ha should be introduced into the definition of natural wetland to acknowledge the size at which a wetland is self-sustaining and valuable to species within the wider landscape.

Clarification of the term "water body"

Wording has been introduced to the definition of "natural wetland" within the NPS-FM to clarify the operative exclusions to a natural wetland.

Proposed exclusion (a) clarifies that a wetland cannot be accidental or self-induced but must be a deliberately constructed wetland.

Proposed exclusion (b) provides that a wetland that has developed (by itself) in or around a deliberately constructed water body, since the construction of the water body, is not a natural wetland. This would cover water reservoirs and hydro lakes and perhaps a wide range of ponds and lakes and water features but would not cover poorly installed culverts or other "blockages" resulting in wet grounds occurring.

A water body is defined in the Resource Management Act 1991 (**RMA**) as:

> *"waterbody means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area."*

The definition of a '*waterbody*' under the RMA is narrow, and it appears that a dug drain or a channel would not come within it. Therefore, wetlands that develop in or around a dug drain or channel, would not currently come within the proposed exclusion (b) outlined above. In Transpower's view, this would be at odds with the intention of the NPS-FM to exclude wetlands that develop in or around deliberately constructed waterbodies. Transpower considers the exclusion should extend to waterbodies such as a drain or channel.

The language within the exposure draft therefore needs to be amended to state that the term '*waterbody'* includes any water conveyance device such as a drain or channel, so that the proposed exclusion (b) would apply to such water conveyance devices.

Exotic species list

Transpower has an interest in the pasture species list as large parts of the National Grid infrastructure is located within pasture/rural land.

Proposed clause (d) is the principal exclusion for pasture (farms) and is defined as a wetland that is within an area of pasture and has ground cover comprising more than 50% exotic pasture species (as identified in the National list of Exotic Pasture Species) and is not known to contain a threatened species.

Transpower considers that including reference to a definitive list of species to be accepted as pasture is problematic, as the list does not contain exotic plants that have historically been planted for the purpose of grazing (as discussed in further detail below) and pasture species can change over time.

- The list of species has no Obligate Wetland Plants or Facultative Wetland pasture species. Transpower considers that this is a serious limitation on the exclusion applying to lowland farms. The absence of wet pasture species less commonly sown today but prevalent in many farms (especially sheep and beef) throughout New Zealand (e.g., mercer grass, creeping bent, Glyceria species) and the absence of pasture associated species (creeping butter cup, water pepper, Juncus effusus) means it will be virtually impossible to exclude any wet to damp pastoral areas not intensively managed. Those unlisted grass species were introduced into New Zealand as wet pasture species, for the purposes of grazing stock.
- The dictionary definition of pasture is "plants (such as grass) grown for the feeding especially of grazing animals".[4] The listing of pasture species does not align with this broader definition. Given "pasture" has a readily understood dictionary definition, there is no need to list what is considered to be pasture species because any such list is unlikely to be complete relative to the definition and will be out of date as farming practices and species use change.

Transpower considers the species list should be removed and the NPS-FM and NES-F should rely on a dictionary definition of "pasture" so as to allow for adaptability and to not constrain or incorrectly restrict the proper identification of pasture. Importantly, this approach would allow the exclusion to apply to wet pasture species.

[4] https://www.merriam-webster.com/dictionary/pasture

Additional issues with the practicality of identifying wetlands

There are a number of practical issues with the accurate identification of wetlands in a consenting context.

Transpower has a very comprehensive programme for undertaking its maintenance and upgrade works on the National Grid. This programme includes factors such as weather conditions and identified outages (when certain lines are 'shut down' for a defined period of time to enable the work to occur). Transpower needs to be able to readily identify whether it requires resource consent and then apply for the necessary consents well in advance of its scheduled maintenance/upgrade works. As discussed below, a significant concern for Transpower is the lack of certainty as to whether its activities are within proximity to a natural wetland.

The type of works Transpower may undertake within or adjacent to natural wetlands includes maintenance of access tracks, vegetation clearance, and support structure foundation works, all to enable the ongoing operation, maintenance, and upgrade of the National Grid. While these works are generally of limited scale, infrequent, of short duration, and are generally associated with established assets accessed via a network of established access tracks, they need to be enabled under the RMA so the National Grid can be effectively operated, maintained, developed and upgraded as recognised by the NPSET.

Reliance on publicly available information

Transpower undertakes a robust and consistent alternatives assessment process for identifying and securing the most suitable alignment and location for new and replacement transmission infrastructure (such as lines, substations and switching stations). As part of this assessment, Transpower will identify any sensitive locations, and take steps to seek to avoid those sensitive locations, in accordance with Policy 8 of the NPSET. It is only due to the linear nature of Transpower's infrastructure, and the technical and operational requirements of Transpower's infrastructure, that sensitive locations, once identified, may not be able to avoided in all instances.

Since approximately 2005, Transpower has applied a systematic methodology called the ACRE process for route identification for major new lines/stations projects. This methodology was developed taking into account international best practice and the need for the method to not only be able to demonstrate that Transpower had met its statutory requirements under both the RMA and the Public Works Act 1981 with regard to the consideration of alternatives, but also to ensure that good environmental outcomes are achieved in an integrated and transparent process.

The ACRE model (Area, Corridor, Route, Easement) is a site and route selection tool which is based on a progressive filtering approach where increasing and more specialised detail is provided on environmental, property and engineering constraints throughout the process to enable the identification, selection and confirmation of a final location for transmission assets.

The ACRE model is designed for major lines projects where multiple corridor options can initially be considered within an overall project area, followed by alternative route options within a preferred corridor and finally a preferred route alignment for which an easement is sought. The process starts with the broadest feasible area and systematically and progressively narrows the area of interest down to a single preferred site/route through increasingly detailed information collection and analysis of potential effects at each stage to ensure that any adverse effects on the environment can be limited.

At the early assessment stage for a project, Transpower often has to rely on publicly available information in making its assessment as to what constraints exist and what options should

progress as it often does not have access to the relevant land. However, until regional councils have completed the mapping exercise of natural inland wetlands, information about the location of most wetlands will not be publicly available.

In addition, if ecological assessments to determine wetland extent need to be undertaken on private property, there will likely be issues in relation to accessing the private property for the purposes of undertaking an ecological assessment (including how that information may be used or stored).

Significant time and cost to identify wetlands

Regional Councils have 10 years to map all existing natural inland wetlands.[5] Until then, there is a lack of certainty as to whether proposed activities will be within proximity of a natural wetland. Significant time, effort and investment is required to determine whether works are near a wetland that will trigger consenting obligations under the NES-F.

If it is unknown whether a site contains a wetland, an applicant must:

- Firstly, determine whether any areas of the site are a wetland as defined under the RMA.
- Secondly, determine whether any areas identified as a wetland are a 'natural wetland' as defined in the NPS-FM.
- Finally, determine the 'extent' of the natural wetland, to determine if consenting obligations under the NES-F apply. For example, many of the wetland regulations involve a 10m or 100m setback requirement. To know whether this is satisfied will depend on clear and accurate identification of the natural wetland and its boundary, which may not be known or clear.

Therefore, if it is unknown whether an area includes a wetland, and there is limited information on the vegetation, soil and hydrology of the site, some form of ecological assessment on-site to confirm wetland presence is likely to be required.

Given the NES-F includes such restrictive regulations relating to natural wetlands, there should be clarity as to exactly where they apply. Transpower considers applicants and the public require certainty. Users should be able to easily determine where they cannot meet a standard and a resource consent is required, or for new infrastructure development areas that Transpower should "seek to avoid" (as per requirement in Policy 8 of the NPSET referenced above). However, most of the wetland regulations require expert evidence in order to ascertain whether or not they are triggered, and/or sufficient background data about the existing state of the wetland (which is unlikely to be readily available in most circumstances).

These requirements are even more onerous for linear infrastructure that may traverse hundreds of kilometres. A transitional approach should be adopted with the regulations not applying until such time as Central Government or regional councils have developed a practical "desktop assessment" tool/map of significant natural inland wetlands (as determined by lidar data or a similar high level assessment tool).

We also note a practical concern with wetlands not being identified "up front' – a limited number of ecologists being available to carry out necessary assessments. Transpower has regularly made use of ecologists in applying the NES-F to date – but at times there have been lengthy delays (sometimes of many months) in determining whether an area is or is not a

[5] National Policy Statement for Freshwater Management 2020, cl 3.23(4).

natural wetland. These time delays (on top of delays in consents being processed) creates consequences for accessing and maintaining the Grid.

While we accept the need to involve ecologists in work near wetlands, the expert input required of them needs to occur in the most efficient and effective manner. Upfront mapping is one way this could occur.

Ephemeral wetlands

Regional councils have an obligation to map ephemeral wetlands which are known to be naturally less than 0.05 hectares. As discussed above, the NES-F regulations apply to areas of any size that meet the definitions of 'natural wetland'. In practice this means an ecological assessment must be undertaken to ensure no ephemeral wetlands may be impacted by a project. This is likely to require annual surveys as by definition ephemeral wetlands will only be present for part of the year.

Given the significant cost and time delays to identify ephemeral wetlands, Transpower considers that ephemeral wetlands should be excluded from the 'natural wetland' definition unless they are identified and classified as containing threatened species (as per the requirements in the NPS-FM) on a publicly available regional council map.

Newly constructed natural wetlands near existing National Grid infrastructure

An exclusion to the definition of natural wetland in the NES-F is a deliberately constructed wetland. This exclusion does not apply to wetlands constructed to offset impacts on, or to restore, an existing or former natural wetland. Artificially constructed wetlands may be located near existing National Grid structures as they were designed at a time when the NES-F was not in force. Similarly, third parties may construct new natural wetlands for offsetting or restoration purposes near National Grid infrastructure. For example, the extensive wetland to be constructed near Lake Horowhenua to help restore the polluted lake is close to the National Grid.

Transpower considers that the "deliberately constructed wetland" exclusion should apply to wetlands constructed for conservation or biodiversity offsetting or restoration purposes. Otherwise, this may unfairly penalise existing infrastructure that is already located near third party wetlands created for 'conservation or biodiversity offsetting' or restoration purposes. Transpower considers this should be made clear in the natural wetland definition.

Amendment 2 – The tests of 'national and/or regional benefit' and 'functional need'

Q4: Are these proposed amendments clearly drafted? Does the drafting achieve the intent of the amendments (as set out in the attached policy rationale document)? Are there unintended consequences of this drafting?

The exposure draft seeks to amend the requirements at clause 3.22 of the NPS-FM relating to ensuring the loss of extent of natural inland wetlands is avoided, their values are protected, and their restoration is promoted, except where certain circumstances apply.

Maintenance and operation of specified infrastructure

Transpower supports the consenting pathway for the maintenance and operation of specified infrastructure at clause 3.22(1)(a)(vi). However, Transpower considers the construction of that clause is too narrow and should be expanded to capture upgrades. For example, climate change adaptation activities will require larger or deeper foundations, which are intended to make existing infrastructure more resilient.

Currently, such activities are likely be considered as upgrades to existing infrastructure, and would not be captured by clause 3.22(1)(a)(vi). Instead, they would be subject to clause 3.22(1)(b). This means routine activities that must occur would be subject to the additional requirements in clause 3.22(1)(b) relating to functional need and the effects management hierarchy. Transpower does not consider that it is appropriate to treat upgrade activities differently from maintenance and operation activities. Instead, upgrades should be enabled through the consenting process, as this is a more efficient use of resources which utilises existing National Grid infrastructure.

Transpower considers the following amendments are required to clause 3.22(1)(a)(vi):

> The maintenance, upgrade or operation of specified infrastructure, or other infrastructure (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

Alternatively, Transpower seeks a new clause 3.22(1)(a)(viii) as follows:

> The maintenance, upgrade or operation of National Grid infrastructure.

Construction and upgrade of specified infrastructure

While Transpower also supports the intent of the consenting pathway for the construction and upgrade of specified infrastructure at clause 3.22(1)(b), Transpower has several concerns with the application of that clause (in addition to the issue set out above relating to routine upgrade activities being captured by clause 3.22(1)(b)).

Provide significant national or regional benefits

The National Grid clearly provides significant national benefits, as recognised in the NPSET. However, Transpower is concerned that others may argue that it needs to be demonstrated that the activity being undertaken has significant national or regional benefits, and ancillary activities that are necessary for National Grid infrastructure do not meet that threshold. Therefore, Transpower seeks the following amendment so there is no ambiguity:

> the specified infrastructure (as opposed to the activity in isolation) will provide significant national or regional benefits.

Transpower notes other provisions within clause 3.22(1)(b) refer to 'activity' rather than 'specified infrastructure', so there is an additional basis for making this clarification.

Functional need requirement

Transpower is concerned about the retention of the requirement for there to be a functional need for specified infrastructure to be located in a particular place. The requirement for a functional need is too burdensome and Transpower proposes that 'operational need', as defined in the National Planning Standards, should be added as an alternative to establishing a 'functional need'. This is consistent with the position taken in the exposure draft of the NPS-IB (as discussed below).

Transpower seeks to avoid locating its National Grid infrastructure in or near wetlands. However, Transpower is subject to locational and operational constraints and as a consequence of the linear nature of the National Grid, Transpower may need to locate new assets near natural wetlands. Functional need is defined in the NPS-FM as meaning the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity *can only occur* in that environment. Technical advice issued by Environment Canterbury and Otago Regional Council states that where it is technically possible that an activity can occur elsewhere, but there are technical, logistic or operational reasons why it is

preferred for the activity to occur at the location (e.g. issues of cost, land ownership), there is no functional need. Rather, these are operational needs.[6]

Transpower considers this interpretation of 'functional need' is problematic, as on this reading, if an alternative is technically feasible it is possible, whatever the cost. It is hard to envisage a situation where there will not be an alternative to avoid effects if costs and/or the necessity for third party action and/or technical preferences are disregarded.

Transpower proposes that the clause 3.22(1)(b) in the NPS-FM be modified in relation to specified infrastructure so the requirement includes 'operational need' as well as 'functional need'. 'Operational need' is defined in the National Planning Standards as meaning the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints. Transpower considers this is more appropriate, particularly when a substantial cost to the public purse in pursuing other alternatives may be necessary to meet the 'functional need' requirement.

Transpower does not consider that broadening the functional need test for specified infrastructure to operational need would result in widespread loss of natural inland wetland extent. This is because, in addition, the specified infrastructure activity would still need to meet the other requirements of clause 3.22(1)(b), such as: managing the adverse effects through the 'effects management hierarchy'. This hierarchy requires initial consideration of how to avoid adverse effects where practicable, then how to minimise, remedy, offset, and compensate, in that order.

Transpower considers that this still aligns with the aim of the NPS-FM and NES-F to ensure no net loss of natural wetland extent or values occurs. While Transpower acknowledges that the use of operational need was considered by the Ministry for the Environment, as set out in the policy rationale document, it appears this was only considered in the context of the new consenting pathways for landfills, cleanfills and urban development. In our view, reconsideration is required specifically in relation to specified infrastructure.

Transpower also notes that the exposure draft for the National Policy Statement for Indigenous Biodiversity (**NPS-IB**) recognises operational need as a legitimate reason for new, or the development of specific infrastructure, to have adverse effects on significant natural areas. Transpower considers it would be inconsistent for the NPS-IB to recognise operational need, while the NPS-FM does not.

Implications of the decision in Poutama Kaitiaki Charitable Trust v Taranaki Regional Council

Transpower also notes that the issues with the functional need requirement in clause 3.22(1)(b)(iii) were considered by the High Court in *Poutama Kaitiaki Charitable Trust v Taranaki Regional Council.*[7] The case involved the realignment of approximately 6km of State Highway 3 north of New Plymouth, through the lower Mangapepeke Valley. The project needed to meet the threshold of functional need under the NPS-FM in order for the pathway under clause 3.22(1)(b) to be available.

[6] Otago Regional Council *Technical Advice Note: National Policy Statement for Freshwater Management 2020 – What is Functional Need?* (May 2021) at 2 https://www.orc.govt.nz/media/9899/technical-advice-note-nps-for-freshwater-management-2020-what-is-a-functional-need.pdf and Environment Canterbury *Technical Advice Note: Rivers and Essential Freshwater 2020* (November 2020) at 3.

[7] [2022] NZHC 629.

The Court considered what "can only occur in that environment" means in the definition of functional need in the NPS-FM and noted that the strict language of "can only" employs a high threshold to satisfy the functional need definition.[8]

The Court referred to a report issued by the Ministry for the Environment on the draft first set of National Planning Standards in which the definition of "functional need" is discussed. The report identifies a concern raised by submitters that the definition may be too restrictive, particularly in the case of linear infrastructure where there may be good reasons or technical reasons why it should be enabled to occur in a particular location, even where it may be possible that it could occur elsewhere. To address this issue (and as set out above), "operational need" was included in the National Planning Standards to cover activities that need to traverse, locate, or operate in a particular environment because of technical, logistical or operational characteristics or constraints.[9]

The Court also referred to *Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council* as indicating that 'functional need' does not require the proposed location for a development to be the only possible location. In that case, the Court acknowledged that there was a functional need for the activity, notwithstanding that it might be able to occur in other locations. [10]

The Court noted that in the Ministry for the Environment recommendations report and *Te Rūnanga o Ngāti Awa,* the focus was on the *location* of a particular activity. While in clause 3.22(1)(b)(iii) of the NPS-FM, the functional need for the specified infrastructure can only be "in that location", the Court queried what is meant by "that location".[11]

The Court considered that to interpret "that location" as being the "natural inland wetland" overlooks the broader focus of the definition of "functional need" which is not on a particular location but the need for an activity to locate in a "particular environment".[12]

Therefore, in relation to the case before, the Court stated that:[13]

> *…the project aims to improve existing linear infrastructure. It involves the creation of a new stretch of road approximately six kilometres in length which is required to join with two existing and fixed points on the highway.*
>
> *In order to connect these two points, it is necessary for the road to traverse the environment(s) between them. In this case, one of the environments is the lower Mangapepeke Valley. In theory, there could be an infinite number of route possibilities, or locations, connecting the relevant points of the highway. But these potential routes are constrained by practicalities, including distance, cost, terrain, and constructability, as well as environmental considerations. With any linear infrastructure, alternative locations or routes will always exist. And the existence of any conceivable alternative*

[8] At [48].

[9] At [48] – [50].

[10] At [51] citing *Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council* [2020] NZHC 3388, [2021] NZRMA 76 at [223] and [235], citing *Te Rūnanga o Ngāti Awa v Bay of Plenty Regional Council* [2019] NZEnvC 196, (2019) 21 ELRNZ 539 at [225]–[226].

[11] At [52].

[12] At [53].

[13] At [56] – [57].

would make the specified infrastructure exception in cl 3.22(1)(b) otiose. Such redundancy could not have been intended.

On that basis, the Court considered that the project did have a functional need because it could only occur in the relevant environment, and accordingly did meet clause 3.22(1)(b).

Transpower considers that *Poutama Kaitiaki Charitable Trust v Taranaki Regional Council* clearly demonstrates the difficulty with applying a functional need requirement in the NPS-FM to linear infrastructure. If functional need is not interpreted as set out by the Court, and as noted by the Court, the exception in clause 3.22(1)(b) becomes redundant - this cannot have been the intention.

The risk that linear infrastructure, such as the National Grid, may not meet the functional need requirement for the reasons set out above is, in Transpower's view, too great. A different requirement is clearly necessary to ensure that Transpower's activities can continue to be provided for given the extent and national importance of Transpower's assets across New Zealand, and Transpower's need to be able to operate, maintain, upgrade and develop the National Grid.

Therefore, as discussed above, Transpower seeks that:

a) Clause 3.22(1)(b) in the NPS-FM be modified so the requirement includes 'operational need', as an alternative to 'functional need' for all specified infrastructure; or

b) National Grid infrastructure (rather than specified infrastructure generally) is exempt from meeting this 'functional need' requirement.

Ancillary activities

It appears that the consenting pathway for construction and upgrade of specified infrastructure is limited to work required on the infrastructure itself and does not include ancillary works and activities which are necessary for the construction or upgrade of the relevant infrastructure.

As set out above, Transpower is required to undertake ancillary works and activities associated with the construction of its National Grid infrastructure, including construction, and maintenance, of access tracks and ancillary vegetation clearance.

Transpower considers clause 3.22 needs to be amended to make it clear that specified infrastructure activities includes ancillary activities.

Transpower has assets in the Denniston Plateau, which is a scheduled wetland in the West Coast Regional Plan. In carrying out foundation refurbishment, a short section of access track was required to be constructed to the back legs of the tower – shown by the red notations on Figure 1 below. While it is clear that the work on the tower would come within specified infrastructure, further clarity could be provided in relation to ancillary activities that are necessary to the operation, maintenance and upgrade of the Grid.

Figure 1. Track access earthworks on the Denniston Plateau

Clause 3.22(2) and (3) Natural inland wetlands

Transpower does not support the amendments at clause 3.22(2) and (3) which would mean additional requirements apply to the operation and maintenance of existing infrastructure.

The provisions mean that any operational and maintenance activities, which would result directly or indirectly in the loss of extent or values of a natural inland wetland, would be required to satisfy the Council of the following in order for consent to be granted:

(a) that the applicant has demonstrated how each step of the effects management hierarchy will be applied to any loss of extent or values of the wetland (including cumulative effects and loss of potential value), particularly (without limitation) in relation to the values of: ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity values; and

(b) if aquatic offsetting or aquatic compensation is applied, the applicant has had regard to the principles in Appendix 6 or 7, as appropriate; and

(c) any consent granted is subject to:

  (i) conditions that apply the effects management hierarchy; and

  (ii) a condition requiring monitoring of the wetland at a scale commensurate with the risk of the loss of extent or values of the wetland.

Transpower considers that these requirements are unreasonable for routine works on existing infrastructure that would be classified as maintenance or upgrades, and the provisions should not apply to such activities.

Transpower has a current project which requires clearance of vegetation (trimming and some removal) that has grown too close to the conductors of two spans of a transmission line. requires vegetation clearance around two spans of transmission line. The vegetation work would not involve full clearance of vegetation in the corridor around the line, but trimming of some species, and removal of targeted individual trees. The line is located in a Significant Ecological Area (SEA) and has several waterways and natural wetlands nearby.

Initial advice from the consultant ecologist engaged by Transpower is that 9.2ha of offsetting would be required (due to the wetlands, and location in an SEA). Further advice is to amend our plans to reduce the vegetation trimming and removal in order to reduce the the amount of offsetting that would be required. However, this approach could mean more frequent visits to control vegetation in the area resulting in increased disturbance of the area and greater cost.

Transpower needs to be able to maintain safe clearances between vegetation and our lines, and work needs to occur in the most efficient manner possible. While we are yet to work through the full implications if this advice, it does highlight a number of issues with the approach in exposure draft – we cannot avoid the clearance work – it must occur, in order to protect both the line and the vegetation around it. If vegetation grows too close the a transmission line, it can result in flashovers, and ultimately fire. A requirement to work through the effects management hierarchy is inefficient. Further, the requirement to provide offsetting for such works is also fraught – we will need to come back and trim the vegetation on an ongoing basis – are repeat offsets to be applied for such routine works? Such an outcome is considered inappropriate and disproportionate.

Amendment 8 – Include aquatic offset/compensation principles

Q10: Are these proposed amendments clearly drafted? Does the drafting achieve the intent of the amendments (as set out in the attached policy rationale document)? Are there unintended consequences of this drafting? Are these principles fit for purpose for aquatic offset/compensation? What weight should be given to these principles in the decision making by the consent authority?

The exposure draft seeks to include a new Appendix 6 and 7 in the NPS-FM relating to the principles for aquatic offsetting and compensation, as well as associated amendments to the definitions in clause 3.21(2). As noted above, Clause 3.22(3)(b) has also been amended to provide that the Council must make changes to its regional plan to ensure that an application is not granted unless the Council is satisfied that regard has been had to the principles in Appendix 6 and 7 if aquatic offsetting or compensation has been applied by an applicant.

Appropriateness of applying Appendix 6 and 7 to operation, maintenance, and upgrade activities

While the principles in Appendix 6 and 7 may be appropriate for new large scale infrastructure projects, Transpower queries whether such principles are appropriate for operation, maintenance, and upgrade activities, which would include routine works undertaken by Transpower (and often on a repeated basis as the vegetation example above shows). In such circumstances, the principles set out in Appendix 6 and 7 are not appropriate as they are too onerous and it would be inefficient to have regard to them. The requirement to offset and compensate, and associated principles in Appendix 6 and 7, should not apply to operation, maintenance, and upgrade activities.

Requirements under Appendix 6 and 7

Transpower also has some concerns with the requirements under Appendix 6 and 7.

As an overall comment, Transpower notes that while the NPS-FM and the exposure draft of the NPS-IB use similar wording in the offsetting and compensation principles, there are some differences. This could cause issues where a project affects ecological values which are relevant under both National Policy Statements, and therefore both sets of principles will need to be addressed.

Clause 2(b)

Clause 2(b) in Appendix 6 and 7 states that offsetting or compensation is not appropriate where effects on extent or values are uncertain, unknown, or little understood, but potential effects are significantly adverse. This requirement could potentially remove the consenting pathway afforded to specified infrastructure. In practice, this requirement amounts to a direction to avoid adverse effects and should be deleted.

For example, clause 2(b) could be triggered where there is a cryptic bird species such as bittern in a wetland being affected (e.g., where transmissions lines go over such a wetland and the risk of electrocution or collision arises), or some other little studied fauna whose reliance on a portion or a size or an intactness of an existing wetland feature cannot be quantified. In these examples the effects on the species may be uncertain, unknown or little understood due to lack of information on the species. In such circumstances, Appendix 6 and 7 may preclude offsetting and compensation from being undertaken, and if there are residual adverse effects on the bittern, the activity must be avoided. This is not appropriate in the context of National Grid assets, where there may be operational, technical or locational requirements that require those transmission lines to be located across that wetland, and therefore there needs to be a consenting pathway to provide for this.

For the reasons set out above, Transpower considers that clause 2(b) should not apply to specified infrastructure.

Clause 2(c)

Clause 2(c) of Appendix 6 and 7 states that where there is no technically feasible option by which to secure the required gains in an acceptable timeframe then an offset is also rejected. The reference to an acceptable timeframe is too uncertain and subjective as it does not suggest what an acceptable timeframe is, or who has the authority to make that determination.

Transpower therefore considers that the reference to “within an acceptable timeframe” should be removed from clause 2(c) in both Appendix 6 and 7. Alternatively, the reference to “within an acceptable timeframe” should be defined.

Clause 3

In respect of Appendix 6, clause 3, the requirement for a like-for-like quantitative loss/gain calculation can be problematic given the subjective nature of the inputs into the offsetting models and the model itself. The calculation models do not provide for ‘trading up’ or ‘trading sideways’.

While Transpower does not oppose the requirement for a no net loss outcome in clause 3, it seeks removal of reference to the like-for-like quantitative loss/gain calculation and instead would support a more transparent, reasonable and logical process.

Clause 10

The requirement in Clause 10 to undertake effective stakeholder participation may be problematic and may cause issues where the ecological offset or compensation does not meet the stakeholder expectations. Clause 10 should be reworded in the offset principles in

Appendix 6 to ensure stakeholders cannot require outcomes to be achieved that are different to that required by the ecological assessment.

Amendment 10 – Clarify the take, use, dam, diversion, and discharge of water

Q12: Are these proposed amendments clearly drafted? Does the drafting achieve the intent of the amendments (as set out in the attached policy rationale document)? Are there unintended consequences of this drafting?

Various amendments are proposed to the NES-F in relation to the take, use, dam, diversion and discharge of water. Changes are proposed to the specified infrastructure regulations 45, 46 and 47.

Discharges of water

Specifically, the discharge of water within, or within a 100m setback from, a natural wetland is separated out from other activities in regulations 45 and 47 but not within regulation 46. Transpower proposes amendments to regulation 46 to also separate out the discharge of water and ensure consistency with the other regulations. Discharges will either be permitted under regulation 46, a restricted discretionary activity under regulation 47, or a discretionary activity under regulation 45 provided certain standards are triggered. The standards include that there is a hydrological connection between the discharge and a natural wetland, and there are likely to be adverse effects from the discharge on the hydrological functioning or the habitat or the biodiversity values of a natural wetland.

While separating out discharges from other activities is supported by Transpower, the standard will trigger most activities within 100m of a wetland. This is because the standard relates to all discharges of water, there will arguably always be a hydrological connection, and there is no scale or significance applied to the 'likely adverse effects'. This approach therefore is of concern to Transpower given the wide application, and uncertainty introduced. Transpower seeks that regulations 46, 45(5)(c), and 47(3A)(e) are amended to apply to "significant" adverse effects.

Regulation 47 requires that the discharge of water within, or within a 100m setback from, a natural wetland is a restricted discretionary activity if it complies with a number of conditions including that the bed profile and hydrological regime of the natural wetland must be returned to their original condition no later than 30 days after the start of the activity subject to some exceptions. If the conditions cannot be complied with then the activity will be a non-complying activity.

Transpower is required to carry out activities that discharge water and would fall within regulation 47 as outlined above. A common example is dewatering as part of tower foundation works, which is required when the water table is high. Water is pumped out of the foundation area to adjacent ground, to enable work in a "dry" excavation.

Such activities would likely require consent as a non-complying activity because the bed profile and hydrological regime of the natural wetland cannot always be returned to its original condition no later than 30 days after the start of the activity. Transpower considers it is not appropriate for its discharge activities to trigger non-complying activity status and National Grid infrastructure and ancillary activities should be included in the list of exceptions in regulation 47(6).

Enabling upgrades

Transpower assumes that any upgrades to existing specified infrastructure would currently be captured as a discretionary activity as "constructing specified infrastructure" under regulation 45 and would not be considered to be a permitted activity as "maintenance or operation of specified infrastructure" under regulation 46, due to the limitation in regulation 46(4)(b) requiring no increase in size. If this is correct, it is particularly onerous as it ignores the reality of Transpower's maintenance and upgrade activities which often involve strengthened foundations (including encasing existing steel in concrete or installing deeper foundations). , and would result in routine activities requiring discretionary activity consent. Instead Transpower considers that upgrades should be permitted subject to conditions.

Additional amendments required to regulation 46

Regulation 46(2) of the NES-F provides that earthworks[14] or land disturbance[15] within, or within a 10 m setback from, a natural wetland is a permitted activity if it is for the purpose of maintaining or operating specified infrastructure or other infrastructure and complies with the conditions listed in regulation 46(4). If the earthworks or land disturbance do not comply with the conditions then they are a restricted discretionary activity.[16]

Transpower is concerned that a number of the permitted activity conditions could never be met when applied to National Grid activities. For example, the activity must not result in the formation of new pathways, boardwalks, or other accessways (reg 46(4)(c)). Transpower makes use of existing access tracks as much as possible, before constructing new ones. However, new accessways may need to occur, as discussed in the Denniston Plateau example above.

Another example is the activity must not be for the purpose of increasing the size of the specified infrastructure or other infrastructure (reg 46(4)(b)). As set out above, this would often only involve minor earthworks as part of routine activities but the activity will still be considered a restricted discretionary activity, or possibly a discretionary activity, despite the effects on a natural wetland being minor, less than minor or transitory/negligible.

In other cases it could be that an existing access track is located within an existing wetland, and Transpower is undertaking earthworks to construct a new access track in a location which avoids the existing wetland but is still in close proximity to it. There would be a positive ecological outcome by removing an existing access track from a wetland, yet the activity will still be subject to an onerous consenting pathway under the NES-F. In such circumstances, the construction of an access track should be permitted to recognise that constructing a new access track outside of the existing wetland is a better ecological outcome.

In addition to the above changes sought to regulation 46, Transpower considers amendments are required to ensure the drafting is clearer and there is no ambiguity that certain activities are permitted activities because they do not trigger the standards for restricted discretionary or

[14] Earthworks has the meaning given by the National Planning Standards 2019 and means the alteration or disturbance of land, including by moving, removing, placing, blading, cutting, contouring, filling or excavation of earth (or any matter constituting the land including soil, clay, sand and rock); but excludes gardening, cultivation, and disturbance of land for the installation of fence posts.

[15] Land disturbance has the meaning given by the National Planning Standards 2019 and means the alteration or disturbance of land (or any matter constituting the land including soil, clay, sand and rock) that does not permanently alter the profile, contour or height of the land.

[16] Regulation 47(2).

discretionary activities. For example, an activity that will not result in the complete or partial drainage of all or part of a natural wetland should be expressly included as a permitted activity.

Other General Feedback

Reconciliation between National Policy documents

As is set out throughout this submission, there are inconsistencies between the NPS-FM and other National Policy Statements. Transpower considers that these inconsistencies must be addressed.

Transpower also considers that further direction must be provided as to how to reconcile competing tensions between National Policy Statements. For example, Transpower can anticipate a situation where National Grid infrastructure may traverse significant natural areas, wetlands and outstanding natural features. Further guidance is necessary on how to apply the various National Policy Statements applying to those sensitive locations, and how to resolve any conflict including with the NPS-ET.

Technical amendments or clarifications proposed to other provisions

Transpower has no concerns with the technical amendments or clarifications proposed to other provisions. However, Transpower supports the inclusion of "bed" in Policy 7 of the NPS-FM in relation to river bed extent as it provides clarity about what the policy applies to.

Local authority may adopt more stringent measures

Under clause 3.1(2)(a) of the NPS-FM a local authority may adopt more stringent measures than required by the NPS-FM. No changes have been suggested to this provision in the exposure draft.

This is a significant concern for Transpower as the way the NPS-FM can be implemented by local authorities is uncertain, and is likely to result in different and inconsistent approaches throughout New Zealand.

It is extremely important to Transpower that the implementation of the NPS-FM by local authorities is consistent, given Transpower's assets traverse New Zealand. Transpower is routinely involved in Council planning processes to ensure that the NPSET is appropriately and consistently applied by local authorities. It would make the process more efficient and outcomes more certain for national stakeholders if there is consistent application of the national policy direction in the NPS-FM from the outset.

Transpower seeks that clause 3.1(2)(a) is amended to state a local authority cannot adopt more stringent measures than required by the NPS-FM.

Definition of specified infrastructure

Transpower notes that the definition of specified infrastructure is different from the definition proposed in the NPS-IB exposure draft. Transpower considers that consistency between the two National Policy Statements is essential.

Finally, we are concerned that para (b) of the specified infrastructure definition links to the definition of regionally significant infrastructure in relevant regional policy statements or regional plans. Some plans define nationally significant infrastructure and regionally significant infrastructure separately (eg. the notified version of the proposed Otago Regional Policy Statement). This approach could result in some nationally significant infrastructure not being considered specified infrastructure. This risk could be avoided by amending para (b) to refer to definitions of nationally significant infrastructure and regionally significant infrastructure in the

regional policy statements and plans. This is not an issue for Transpower as it is specified infrastructure under para (a).

Appendix A – Relief Sought by Transpower New Zealand Limited

Exposure draft of amendments to the National Policy Statement for Freshwater Management 2020

1.4 Interpretation

(1) In this National Policy Statement:

water body means fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area, and includes any water conveyance device such as a drain or channel.

3.1 Overview of Part

(2) ~~Nothing in this Part:~~

~~(a)~~ A local authority must not ~~prevents a local authority~~ adopt~~ing~~ more stringent measures than required by this National Policy Statement~~; or~~

~~(b) limits a local authority's functions and duties under the Act in relation to freshwate~~r.

3.21 Definitions relating to wetlands and rivers beds

(1) In clauses 3.21 to 3.24:

natural wetland means a wetland (as defined in the Act) that is at least 0.5ha and is not:

(a) a deliberately constructed wetland~~, other than a wetland constructed to offset impacts on, or to restore, an existing or former natural wetland as part of giving effect to the effects management hierarchy~~; or

(b) a wetland that has developed in or around a deliberately constructed water body, since the construction of the water body; or

(c) a geothermal wetland; or

(d) a wetland that:

(i) is within an area of pasture; and

(ii) has ground cover comprising more than 50% exotic pasture species ~~(as identified in the National List of Exotic Pasture Species (see clause 1.8))~~; and

(iii) is not known to contain threatened species.

(e) an ephemeral wetland unless the wetland is identified as known to contain threatened species on a publicly available regional council map in accordance with clause 3.23(1).

specified infrastructure means any of the following: …

(a) infrastructure that delivers a service operated by a lifeline utility (as defined in the Civil Defence Emergency Management Act 2002) including ancillary activities.

(b) nationally and regionally significant infrastructure identified as such in a regional policy statement or regional plan, and includes ancillary activities.

3.22 Natural inland wetlands

(1) Every regional council must include the following policy (or words to the same effect) in its regional plan:

"The loss of extent of natural inland wetlands is avoided, their values are protected, and their restoration is promoted, except where:

(a) the loss of extent or values arises from activities for any of the following purposes:

(i) the customary harvest of food or resources undertaken in accordance with tikanga Māori

(ii) wetland maintenance, restoration, or biosecurity

(iii) scientific research

(iv) the sustainable harvest of sphagnum moss

(v) the construction or maintenance of wetland utility structures (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)

(vi) the maintenance, upgrade or operation of specified infrastructure and ancillary activities, or other infrastructure (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020

(vii) natural hazard works (as defined in the Resource Management (National Environmental Standards for Freshwater) Regulations 2020)~~; or …~~

(vii) the maintenance, upgrade or operation of National Grid infrastructure and ancillary activities; or

(b) the regional council is satisfied that:

(i) the activity is necessary for the purpose of the construction ~~or upgrade~~ of specified infrastructure or ancillary activities; and

(ii) the specified infrastructure (as opposed to the activity in isolation) will provide significant national or regional benefits; and

(iii) there is a functional need or operational need for the specified infrastructure in that location; and

(iv) the effects of the activity are managed through applying the effects management hierarchy; or

As an alternative to the proposed amendment to clause 3.22(1)(b) above, amend clause 3.22(1)(b)(iii) as follows:

(iii) there is a functional need for the specified infrastructure in that location, unless the infrastructure is National Grid infrastructure; and

(2) Subclause (3) applies to an application for a consent for an activity that:

(a) is for a purpose that falls within any exception referred to in subclause (1)(a) to (f), other than the exceptions in paragraph (a)(i) or a(vii); and

(b) would result (directly or indirectly) in the loss of extent or values of a natural inland wetland.

(3) Every regional council must make or change its regional plan to ensure that an application referred to in subclause (2) is not granted unless:

(a) the council is satisfied that the applicant has demonstrated how each step of the effects management hierarchy will be applied to any loss of extent or values of the wetland (including cumulative effects and loss of potential value), particularly (without limitation) in relation to the values of: ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity values; and

(b) the council is satisfied that, if aquatic offsetting or aquatic compensation is applied, the applicant has had regard to the principles in Appendix 6 or 7, as appropriate; and

(c) any consent granted is subject to:

(i) conditions that apply the effects management hierarchy; and

(ii) a condition requiring monitoring of the wetland at a scale commensurate with the risk of the loss of extent or values of the wetland; and

(iii) if the consent is granted in relation to urban development, the conditions specify who will monitor the condition of the wetland over time, and how.

Appendix 6: Principles for aquatic offsetting

These principles apply to the use of aquatic offsets for the loss of extent or values of natural inland wetlands and river beds ("extent or values" below).

1. Adherence to effects management hierarchy: An aquatic offset is a commitment to redress more than minor residual adverse effects and should be contemplated only after steps to avoid, minimise, and remedy adverse effects are demonstrated to have been sequentially exhausted.

2. When aquatic offsetting is not appropriate: Aquatic offsets are not appropriate in situations where, in terms of conservation outcomes, the extent or values cannot be offset to achieve no net loss, and preferably a net gain, in the extent and values. Examples of an offset not being appropriate would include where:

(a) residual adverse effects cannot be offset because of the irreplaceability or vulnerability of the extent or values affected:

(b) unless associated with the construction, operation, maintenance or upgrade of specified infrastructure or ancillary activities, effects on extent or values are uncertain, unknown, or little understood, but potential effects are significantly adverse:

(c) there are no technically feasible options by which to secure gains ~~within an acceptable timeframe~~.

3. No net loss and preferably a net gain: This ~~is demonstrated by a like-for-like quantitative loss/gain calculation, and~~ is achieved when the extent or values gained at the offset site (measured by type, amount and condition) are equivalent to or exceed those being lost at the impact site.

4. Additionality: An aquatic offset achieves gains in extent or values above and beyond gains that would have occurred in the absence of the offset, such as gains that are additional to any minimisation and remediation undertaken in relation to the adverse effects of the activity.

5. Leakage: Aquatic offset design and implementation avoids displacing harm to other locations (including harm to existing biodiversity at the offset site).

6. Landscape context: An aquatic offset action is undertaken where this will result in the best ecological outcome, preferably close to the impact site or within the same ecological district. The

action considers the landscape context of both the impact site and the offset site, taking into account interactions between species, habitats and ecosystems, spatial and hydrological connections, and ecosystem function.

7. Long-term outcomes: An aquatic offset is managed to secure outcomes of the activity that last at least as long as the impacts, and preferably in perpetuity. Consideration must be given to long-term issues around funding, location, management and monitoring.

8. Time lags: The delay between loss of extent or values at the impact site and the gain of extent or values at the offset site is minimised so that the calculated gains are achieved within the consent period consent period or, as appropriate, a longer period (but not more than 35 years).

9. Science and mātauranga Māori: The design and implementation of an aquatic offset is a documented process informed by science and mātauranga Māori, where available.

10. Stakeholder participation: Opportunity for the effective and early participation of stakeholders is demonstrated when planning aquatic offsets, including their evaluation, selection, design, implementation, and monitoring. For the avoidance of doubt, when planning aquatic offsets assessments by ecologists as to the outcomes to be achieved take priority over stakeholder's views.

11. Transparency: The design and implementation of an aquatic offset, and communication of its results to the public, is undertaken in a transparent and timely manner.

Appendix 7: Principles for aquatic compensation

These principles apply to the use of aquatic compensation for the loss of extent or values of natural inland wetlands and river beds ("extent or values" below).

1. Adherence to effects management hierarchy: Aquatic compensation is a commitment to redress more than minor residual adverse impacts, and should be contemplated only after steps to avoid, minimise, remedy, and offset adverse effects are demonstrated to have been sequentially exhausted.

2. When aquatic compensation is not appropriate: Aquatic compensation is not appropriate where, in terms of conservation outcomes, the extent or values are not able to be compensated for. Examples of aquatic compensation not being appropriate would include where:

(a) the affected part of the natural inland wetland or river bed, or its values, including species, are irreplaceable or vulnerable; or

~~(a)~~(b) unless associated with the construction, operation, maintenance or upgrade of specified infrastructure, effects on the extent or values are uncertain, unknown, or little understood, but potential effects are significantly adverse; or

~~(b)~~(c) there are no technically feasible options by which to secure proposed no net loss and preferably a net gain outcome ~~within an acceptable timeframe~~.

3. Scale of aquatic compensation: The extent or values to be lost through the activity to which the aquatic compensation applies are addressed by positive effects that outweigh the adverse effects.

4. Additionality: Aquatic compensation achieves gains in extent or values above and beyond gains that would have occurred in the absence of the compensation, such as gains that are additional to any minimisation and remediation or offsetting undertaken in relation to the adverse effects of the activity.

5. Leakage: Aquatic compensation design and implementation avoids displacing harmful activities or environmental factors to other locations (including harm to existing biodiversity at the compensation site).

6. Landscape context: An aquatic compensation action is undertaken where this will result in the best ecological outcome, preferably close to the impact site or within the same ecological district. The action considers the context of both the impact site and the compensation site, taking into account interactions between species, habitats and ecosystems, spatial and hydrological connections, and ecosystem function.

7. Long-term outcomes: Aquatic compensation is managed to secure outcomes of the activity that last as least as long as the impacts, and preferably in perpetuity. Consideration must be given to long-term issues around funding, location, management, and monitoring.

8. Time lags: The delay between loss of extent or values at the impact site and the gain or maturity of the extent or values at the compensation site is minimised so that the calculated gains are achieved within the consent period or, as appropriate, a longer period (but not more than 35 years).

9. Trading up: When trading up forms part of aquatic compensation, the proposal demonstrates that the aquatic extent or values gained are demonstrably of greater or higher value than those lost. The proposal also shows the values lost are not to Threatened or At Risk species or to species considered vulnerable or irreplaceable.

10. Financial contribution: A financial contribution is only considered if it directly funds an intended aquatic gain or benefit that complies with the rest of these principles.

11. Science and mātauranga Māori: The design and implementation of aquatic compensation is a documented process informed by science and mātauranga Māori, where available.

12. Stakeholder participation: Opportunity for the effective and early participation of stakeholders is demonstrated when planning for aquatic compensation, including its evaluation, selection, design, implementation, and monitoring. For the avoidance of doubt, when planning aquatic offsets assessments by ecologists as to the outcomes to be achieved take priority over stakeholder's views.

13. Transparency: The design and implementation of aquatic compensation, and communication of its results to the public, is undertaken in a transparent and timely manner.

Exposure draft of changes to the National Environmental Standards for Freshwater 2020

2 Commencement

(1) These regulations come into force on 3 September 2020.

(2) However,—

(d) regulations 37 to 56 (natural wetlands) and Schedules 2 to 4 come into force on a date to be appointed by the Governor-General by Order in Council.

(da) An order under this section is secondary legislation (see Part 3 of the Legislation Act 2019 for publication requirements).

Construction of specified infrastructure

45 Discretionary activities

(1) Vegetation clearance within, or within a 10 m setback from, a natural wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.

(2) Earthworks or land disturbance within, or within a 10 m setback from, a natural wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.

(3) Earthworks or land disturbance outside a 10 m, but within a 100 m, setback from a natural wetland is a discretionary activity if it—

(a) is for the purpose of constructing specified infrastructure; and

(b) results, or is likely to result, in the complete or partial drainage of all or part of the natural wetland.

(4) The taking, use, damming, or diversion of water within, or within a 100 m setback from, a natural wetland is a discretionary activity if it is for the purpose of constructing specified infrastructure.

(5) The discharge of water within, or within a 100 m setback from, a natural wetland is a discretionary activity if—

(a) it is for the purpose of constructing specified infrastructure; and

(b) there is a hydrological connection between the discharge and a natural wetland; and

(c) there are likely to be significant adverse effects from the discharge on the hydrological functioning or the habitat or the biodiversity values of a natural wetland.

Maintenance ~~and~~ operation, upgrade and limited construction of specified infrastructure and other infrastructure

46 Permitted activities

(1) Vegetation clearance within, or within a 10 m setback from, a natural wetland is a permitted activity if it—

(a) is for the purpose of maintaining, upgrading or operating specified infrastructure or other infrastructure; and

(b) complies with the conditions.

(2) Earthworks or land disturbance within, or within a 10 m setback from, a natural wetland is a permitted activity if it—

(a) is for the purpose of maintaining, upgrading or operating specified infrastructure or other infrastructure; and

(b) complies with the conditions.

(2A) Earthworks or land disturbance outside a 10 m, but within a 100 m, setback from a natural wetland is a permitted activity if it—

(a) is for the purpose of constructing specified infrastructure; and

(b) will not result, or is not likely to result, in the complete or partial drainage of all or part of the natural wetland.

(3) The taking, use, damming, or diversion~~, or discharge~~ of water within, or within a 100 m setback from, a natural wetland is a permitted activity if it—

(a) is for the purpose of maintaining, upgrading or operating specified infrastructure or other infrastructure; and

(b) complies with the conditions.

(3A) The discharge of water within, or within a 100 m setback from, a natural wetland is a permitted activity if—

(a) it is for the purpose of maintaining, upgrading, operating, or constructing specified infrastructure; and

(b) there are not likely to be significant adverse effects from the discharge on the hydrological functioning or the habitat or the biodiversity values of a natural wetland; and

(c) it complies with the conditions.

Conditions

(4) The conditions are that—

(a) the activity must comply with the general conditions on natural wetland activities in regulation 55, but regulation 55(2), (3)(b) to (d), and (5) do not apply—

(i) if the activity is for the purpose of maintaining or operating hydro-electricity infrastructure; or

(ii) as conditions on the activity as it relates to the maintenance and operation of public flood control, flood protection, or drainage works; and

~~(b) the activity must not be for the purpose of increasing the size of the specified infrastructure or other infrastructure unless the increase is to provide for the passage of fish in accordance with these regulations; and~~

~~(c) the activity must not result in the formation of new pathways, boardwalks, or other accessways; and~~

(d) if the activity is vegetation clearance, earthworks, or land disturbance, the activity must not occur over more than 500 m^2 or 10% of the area of the natural wetland, whichever is smaller; and

(e) if the activity is earthworks or land disturbance,—

(i) trenches dug (for example, to maintain pipes) must be backfilled and compacted no later than 48 hours after being dug; and

(ii) the activity must not result in drains being deeper, relative to the natural wetland's water level, than they were before the activity.

~~(f) if the activity is a discharge of water, it must not be a restricted discretionary activity as described in regulation 47(3A).~~

(5) However, the condition in subclause (4)(d) does not apply if the earthworks or land disturbance is for planting.

47 Restricted discretionary activities

(1) Vegetation clearance within, or within a 10 m setback from, a natural wetland is a restricted discretionary activity if it—

(a) is for the purpose of maintaining or operating specified infrastructure or other infrastructure; and

(b) does not comply with any of the conditions in regulation 46(4).

(2) Earthworks or land disturbance within, or within a 10 m setback from, a natural wetland is a restricted discretionary activity if it—

(a) is for the purpose of maintaining or operating specified infrastructure or other infrastructure; and

(b) does not comply with any of the conditions in regulation 46(4).

(3) The taking, use, damming, or diversion of water within, or within a 100 m setback from, a natural wetland is a restricted discretionary activity if it—

(a) is for the purpose of maintaining or operating specified infrastructure or other infrastructure; and

(b) does not comply with any of the conditions in regulation 46(4), but does comply with the conditions in subclause (5) of this regulation.

(3A) The discharge of water within, or within a 100 m setback from, a natural wetland is a restricted discretionary activity if—

(c) it is for the purpose of maintaining or operating specified infrastructure or other infrastructure; and

(d) there is a hydrological connection between the discharge and a natural wetland; and

(e) there are likely to be significant adverse effects from the discharge on the hydrological functioning or the habitat or the biodiversity values of a natural wetland; and

(f) it does not comply with any of the conditions in regulation 46(4), but does comply with the conditions in subclause (5) of this regulation.

(4) However, the conditions in subclause (5) of this regulation do not apply if the activity is for the purpose of maintaining or operating hydro-electricity infrastructure.

Conditions

(5) The conditions are that—

(a) the activity must be undertaken only for as long as necessary to achieve its purpose; and

(b) before the activity starts, a record must be made (for example, by taking photographs) of the original condition of the natural wetland's bed profile and hydrological regime that is sufficiently detailed to enable compliance with paragraph (c) to be verified; and

(c) the bed profile and hydrological regime of the natural wetland must be returned to their original condition no later than 30 days after the start of the activity.

(6) However,—

(a) the condition in subclause (5)(c) does not apply to any part of the bed that is in direct contact with a part of the specified infrastructure or other infrastructure that was constructed for maintenance purposes; and

(b) the 30-day limit in the condition in subclause (5)(c) does not apply if the maintenance and operation of the infrastructure necessitates the ongoing taking, use, damming, diversion, or discharge of water~~.~~; and

(c) the condition in subclause (5)(c) does not apply if the activity is for the purpose of constructing, operating, upgrading or maintaining National Grid infrastructure or ancillary activities.

Matters to which discretion restricted

(7) The discretion of a consent authority is restricted to the matters set out in regulation 56.