TO:	Stevenson Aggregates Limited	Date:	17 September 2025
ATTENTION:	Jessica Urquhart	Job No:	64827
FROM:	Treffery Barnett		

DRURY QUARRY SUTTON BLOCK – ECOLOGY RESPONSE #55 & #59. VALUES AND EXTENT.

S67 Comments - Item number 55

Item number 55 in the Auckland Council further information request by Andrew Rossaak stated:

> *The Ecological Impact Assessment (EcIA) does not address how the loss of stream extent is managed through the effects management hierarchy - the proposal has a net loss in stream length (it is noted stream values are accounted for through the use of the Stream Ecological Valuation (SEV) method).*

This statement has two parts.

Firstly, it refers back to the National Policy Statement for Freshwater Management (NPS-FM), Policy 7: The loss of river **extent and values** is avoided to the extent practicable,)[1] and Appendix 6 of the NPS-FM – Principles for aquatic offsetting # 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*.

Secondly, whether the Stream Ecological Valuation (SEV) Methodology combined with the Environmental Compensation Ratio (ECR) provides for values and extent or only values.

We have investigated this question for other applications and are firmly of the position that the SEV/ECR methodology, when applied correctly, is in accordance with Policy 7 of the NPS-FM and offsetting principle #3 in Appendix 6 of the NPS-FM.

Offset Model

The SEV/ECR methodology, as recommended by Auckland Council, accounts for both values and extent (length) of a stream. An integral part of the model is that there should be no loss in stream extent in the calculations, and if, when all the stream habitat functions have been accounted for, the proposed offset length is less than the impacted length, then additional offset length must be included, to a minimum of the impact length.

Storey et al. (2011[2]):

[1] Note Policy 7 of the NPS-FM has been included as Policy E3.3(18) of the Auckland Unitary Plan. Policy E3.3(1) states Rivers. The loss of river extent and values is avoided, unless the council is satisfied: (a) that there is a functional need for the activity in that location; and (b) the effects of the activity are managed by applying the effects management hierarchy

[2] **Storey, R. G., Neale, M.W., Rowe, D.K., Collier, K.J., Hatton, C., Joy, M.K., Maxted, J.R., Moore, S., Parkyn, S.M., Phillips, N., Quinn, J.M., (2011**) Stream Ecological Valuation (SEV): a method for assessing the ecological function of Auckland streams. *Auckland Council Technical Report 2011/009*. 66p.

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> *Stream area is important to conserve in order to keep habitat values, but this should not be at the expense of stream length. (Section 6.5.1)*
>
> *It is recognised that there are values associated with edge habitat and the proximity to banks so that a minimum* ***replacement length equal to stream length lost needs to be part of the environmental compensation framework.*** *In other words,* ***replacement stream length would have to equal the stream length lost or be longer if the replacement stream was narrower than the one lost****. (Section 6.5.1)*
>
> *Section 6.5.4 Conditions for the calculation of environmental compensation ratios*
>
> *It is recognised that there are values associated with edge habitat and the proximity to banks so that* ***a minimum replacement length equal to stream length lost needs to be part of the environmental compensation framework****. In other words, replacement stream length would have to equal the stream length lost or be longer if the replacement stream was narrower than the one lost.*

The documents that the SEV/ECR methodology in current use is based on two early documents (Auckland Regional Council 2006 (TP 302) & (2008) TP302 – second edition[3]), both which clearly have developed the following methodology to account for stream loss (values and extent):

> *Section 6.4 Use of the SEV values to derived environmental compensation Ratios: states the methodology is designed to address* ***the ecological risk factors associated with the cumulative loss of streams to development and the steady change in areal distribution of high-quality stream reaches****.*

This clearly does not separate values and length from each other in the process.

In the four decisions that I reviewed after the NPS-FM was updated in 2020, where stream reclamation was offset in the Auckland region, none separated the extent and values as separate parts of the stream offset. All four used the SEV/ECR approach to offset stream loss. Therefore, I consider this methodology to be a standard practice in Auckland.

The most closely scrutinised stream reclamation and offset project in Auckland in recent years was the Waste Management NZ Ltd (Wayby Valley Landfill) Council decision, which is discussed in more detail the memorandum from Buddle Findlay dated 17 September 2025.

In addition, this artificial separation of the values from the extent is not required in terrestrial habitats, where the offset is calculated. For all other offsets (e.g. terrestrial and wetlands), the biodiversity values are all offset, and there is no separate requirement to then carry out a second and entirely separate offset for the area of the loss (which then has no ecological value as it has all been offset).

The provisions do require that offset account for length, in that the quantum of works is not resolved by value alone. If value offset is satisfied by offset works which achieve the necessary value outcome over a shorter length of stream than that being lost, then additional offset works are required to ensure a match in overall length. But that obligation does not require construction of

[3] **Auckland Regional Council (2006)** Stream Ecological Valuation (SEV): a method for scoring the ecological performance of Auckland streams and for quantifying mitigation June 2006 TP302 91pp.
Auckland Regional Council (2008) Stream Ecological Valuation (SEV): a method for scoring the ecological performance of Auckland streams and for quantifying environmental compensation January 2008 TP302 second edition. 93pp.

new stream or accounting for length as a separate entity to stream values – it is simply that the length over which offset works are completed is extended. Once all the stream biodiversity values have been offset (including ensuring the offset extent is at a minimum equivalent to the length lost), there are no additional and separate biodiversity values associated with length i.e. length has absolutely no biodiversity values to offset if all the ecological values have already been offset over an equivalent length.

This approach has been supported by Auckland Council. In Auckland Council's legal submission to the High Court[4] dated 15 July 2024, Auckland Council submitted that the loss of river extent and values is one concept (paragraphs 62 -64).

> 62 *In light of the relevant principles applying to plan interpretation discussed earlier in these submissions, the Council submits that Forest & Bird's interpretation of Policy E3.3(18) is not supported by the plain meaning of the policy or by the text of the policy in its immediate context in the AUP or in the National Policy Statement for Freshwater Management 2020 (NPS-FM).*
>
> 63 *The Council submits that, when properly interpreted, "the loss of river extent and values" in Policy E3.3(18) is one concept. The conjunction used in the policy is "and" not "or".*
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> 64 *In the Council's submission there is a clear difference between the text of Policy E3.3(18) and Policy E3.3(17) in the way in which each of the policies inserted into the AUP from the NPS-FM addresses loss of extent and values. Forest & Bird seeks to conflate the requirements of the two policies.*

As detailed in document E5:9 Residual Effects Analysis Report: Stream and Wetland Offset, the total loss in stream length at the Sutton Block Site is 3,341 m. This length will be fully offset by an equivalent length on the Drury Quarry Site and Tuakau Site of 3,341 m, with additional length (128 m) restored immediately downstream of the Sutton Pit, providing a 1 : 1 ratio for loss of stream length and a 1 : 10 ratio for loss of stream bed area, as detailed in Section 4 of Report E5:9.

The proposed stream offset meets all the 11 Principles of aquatic offset within the NPS-FM, as detailed and tabulated in Report E5:9 for stream loss offset.

Item number 55 Additional Council Comments dated 25 August 2025

Mr Rossaak noted:

> *It is noted that the applicant's ecologist has provided for both value and extent as separate effects management actions in the current Fast Track Application for Kings Quarry.*

Kings Quarry

With regard to the Bioresearches Kings Quarry application, the stream residual effects report has been revised (as one of the offset sites was withdrawn in the King Quarry application). The residual effects are updated and addressed using a combination of offset (SEV/ECR methodology) and compensation, with river extent and values as one concept.

[4] CIV-2024-404-271 and CIV-2024-404-367

The Kings Quarry Freshwater Ecology Residual Effects Analysis Report (Section 7 page 40) reads:

> *7.1 No-Net-Loss*
>
> *When referring to stream loss, both the NPS-FM and AUP OP define it in terms of extent and values. We concur with this interpretation of stream extent and values as one concept. It is acknowledged, however, that debate exists among practitioners regarding this issue, as raised during the Covid-19 Fast Track consent application for Kings Quarry. The argument raised is that SEV and ECR calculations account only for the loss of stream values, while the Project will also result in the net-loss of stream extent. We do not agree with this approach as the SEV/ECR methodology was designed for stream loss in the Auckland Region, accounting for extent and values in a single concept (i.e. stream reclamation).*

Mr Rossaak states "The reports consider offset and compensation as being the same", drawing attention to the "principals in Appendix 6 of the NPS:FM. In particular item 7, which broadly addresses principles such as like for like and proximity".

At no stage do we state or infer that offset and compensation are the same in either this application or the Kings Quarry application.

We have a clear understanding of the progression of the effect management hierarchy, which is clearly articulated in our reports, including addressing each Principle of Offsetting in Appendix 6 of the NPS-FM, and providing additional detail and reasoning under item 7. Please refer to document **E5:9 Residual Effects Analysis Report**: **Stream and Wetland Offset**, specifically Sections 3.1 Freshwater Habitat Loss; 3.2 Principles of Aquatic Offsetting and Compensation; 3.5 Offset Sites; and Section 7 Assessment against the principles of aquatic offsetting for further detail.

Item number 59 Additional Council Comments dated 25 August 2025

Regarding Mr Rossaaks comments regarding the potential of the impact wetlands:

> *The potential evaluation of the impact wetlands is not undertaken in the same manner as the potential evaluation of the offset wetland. For example, the impact wetland potential excludes any weeding or planting, yet this is the primary action to increase the potential of the offset wetland. This results in inconsistent offset assessment when considering the potential of both sites.*

The potential of an impact site is assessed under good land use practices not restoration. This is a rural site and actively farmed, therefore the potential of the aquatic habitats, under good land use practices was assessed assuming fencing from stock and the effective rural planting zone as described in Dairy NZ (2016*) Getting riparian planting right in Auckland*. This is detailed in Section 5.3.2 Stream and Wetland Potential of the EcIA (Document E5:2 Ecological Impact Assessment). Restoration of wetlands (including weed control and maintenance), such as proposed at the Tuakau Site, costs upwards of half a million dollars, and is therefore an unrealistic expectation of most farms.

Regards,

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