



NEW ZEALAND ECOLOGICAL SOCIETY

Submitter details:

Name:	Dr Debra Wotton , President, NZES
Organisation:	The New Zealand Ecological Society
Email:	president@newzealandecology.org
Phone number:	021 258 0045
Signature	<i>Debra Wotton</i>

Submission on **Biodiversity Credit System**, 3 November 2023
The New Zealand Ecological Society
PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND
Email: info@newzealandecology.org

Friday, 3 November 2023

Water and Land Use Policy
Ministry for the Environment
PO Box 10362
Wellington 6143

biocredits@mfe.govt.nz

**SUBMISSION ON:
HELPING NATURE AND PEOPLE THRIVE. EXPLORING A BIODIVERSITY CREDIT
SYSTEM FOR AOTEAROA NEW ZEALAND DISCUSSION DOCUMENT**

The New Zealand Ecological Society (NZES) was formed in 1951 to promote the study of ecology and the application of ecological knowledge in all its aspects. NZES is the leading professional society for pure and applied ecology and publishes the *New Zealand Journal of Ecology*, the primary peer-reviewed publication for ecological science and research in the country and broader region. We have over 400 members, most of whom work with New Zealand's ecosystems and species through scientific research or applied management and policy. Our members serve as conservation managers, research scientists, applied ecologists, and academics, who work within the country's universities, Crown Research Institutes, central and local government, private consultancies, and community groups.

NZES has a long standing interest in government policy and funding for the protection and management of indigenous biodiversity, and continues to make comprehensive submissions to the government on these matters. For example, in recent years NZES has submitted on proposed and Exposure Drafts of the National Policy Statement for Indigenous Biodiversity (NPS-IB) (2011, 2020, 2022) and the Natural Built Environment Bill (2021, 2023), the Department of Conservation's Biodiversity Strategy (2019) and draft Threatened Species Strategy (2017).

NZES welcomes the opportunity to submit on the *Helping nature and people thrive: Exploring a biodiversity credit system for Aotearoa New Zealand Discussion Document*. We consider voluntary market trading biodiversity credits to be a complicated and fraught contemplation that has the potential for perverse outcomes. Of critical concern is the potential for a biodiversity credit system (BCS) to facilitate further degradation and losses of indigenous biodiversity.

We make the following key points:

- We congratulate the Ministry for the Environment for recognising that responding to the dual climate and biodiversity crises requires a concerted, sustained, and multi-pronged approach. We agree that incentivising pro-biodiversity / 'nature-positive' behaviours is crucial.
- A biodiversity credit market may have the potential to incentivise real additional gains for indigenous biodiversity, but there is **insufficient detail** provided in the discussion document for us to reach an informed conclusion either way.

Submission on **Biodiversity Credit System**, 3 November 2023
The New Zealand Ecological Society
PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND
Email: info@newzealandecology.org

- We emphasise that any BCS must be targeted **only at additional ‘nature-positive’ outcomes and must be completely separate from a biodiversity offsetting market** (or any element of addressing adverse effects from development). Using the credit system to provide effects management and biodiversity offsets will **facilitate degradation**.
- Likewise, any BCS should not be used to pay landowners, or agencies, to deliver on standing requirements (e.g., stock exclusion from waterways and wetlands, management of pests as required under regional pest management plans, conditions of consent) or basic duty of care responsibilities. Allowing this will **fail to provide additional gains, risk cost-shifting, and overstate the achievement of the BCS**.
- The discussion document is heavy on the potential virtues of a credit system but **light on the potential risks**. The consequences of a biodiversity credit system that fails to provide the necessary integrity are **entrenched biodiversity declines and losses**.
- The overarching purpose of a BCS for New Zealand remains unclear. The temptation to use a BCS as a multi-purposed mechanism appears to have **prevented due consideration of other mechanisms** to incentivise or generate desired outcomes that may be more fit for purpose, and likely to succeed, for specific outcomes. For example, payment of ecosystem services (PES) schemes, agri-environmental schemes, direct payments for actions, subsidies, taxes, rates, or levies.¹
- NZES cautions against allowing biodiversity credits to be generated on public land or for public agencies to supply credits. This is because to do so would **risk cost shifting** public funding if philanthropists or corporates can provide an alternative funding stream. It would be extremely difficult to parametrise a BCS in a way that tracks and prevents this risk. Any cost shifting will **result in decrease in investment**, not additional gains.
- Relying on a BCS to improve the state of indigenous biodiversity is **a high stakes endeavour**. A poorly scoped, designed, implemented or performing BCS will **facilitate further degradation and loss of indigenous biodiversity, disguised as good works**. The adverse consequences of this will be felt by those purchasing the credits (who pay in good faith for outcomes not achieved), the environment (continued biodiversity loss and degradation), and future generations (continued existential threat to wellbeing and survival and lost opportunities).

¹ Stephens T, Greenhalgh S, Brown MA, Daigneault A 2016. Enhancing the tax system to halt the decline of nature in New Zealand. *Policy Quarterly* 12(1):26–34.
Hall D 2022. Adaptation finance: Risks and opportunities for Aotearoa New Zealand. Concept paper prepared for the Ministry of the Environment. Auckland: Mōhio Research and AUT.
<https://doi.org/10.24135/10292/15670>.

Response to *Discussion Document* questions:

Question 1:

*Do you support the need for a biodiversity credit system (BCS) for New Zealand?
Please give your reasons.*

Responding to the dual climate and biodiversity crises requires a concerted, sustained, and multi-pronged approach. NZES considers that incentivising pro-biodiversity / 'nature-positive' behaviours and disincentivising harm are crucial components to this response.

A biodiversity credit system (BCS) may have the potential to incentivise additional gains for indigenous biodiversity. However, there is insufficient detail provided in the discussion document for us to reach an informed conclusion either way. A BCS would be a very difficult thing to get right, and we are not convinced that the risks of generating perverse outcomes will be acknowledged and avoided. There is a high risk that this would not be a system that New Zealand biodiversity 'needs'.

The discussion document is heavy on the potential virtues of a BCS but light on the risks. The risks include (but are not limited to):

- **Use of simple metrics.** Markets and exchange systems favour simple metrics but there is no simple metric that covers all of indigenous biodiversity. Proxy measures, or credits awarded for generic actions (e.g., fencing or planting) can be appealing due to their simplicity (including speed and ease) but, without context and consideration of other drivers of change, are a poor indication of biodiversity outcomes. There is a high risk that a BCS would favour credits of low integrity. Further, the appeal of simpler and cheaper reporting metrics (e.g., number of trees planted) would favour planting over other forms of achieving biodiversity gains even if there are better alternatives (e.g., natural regeneration) to achieve greater biodiversity gains but which are harder to report on and which take longer.
- **Lack of uptake.** The appetite to participate in a formalised BCS is unclear and does not appear to have been tested. The need to seek additional funding streams for pro-biodiversity / nature-positive works (supply) is given significant consideration in the discussion document, but the same is lacking for evaluation of the likely buy-in to a formalised, voluntary BCS (demand). It is conceivable that, should a BCS be established and the demand prove to be lacking, the system becomes simplified (to make credits cheaper and more appealing) and / or eligibility widened such that what qualifies as a credit is less prescriptive. This would reduce the integrity of the BCS and make the link between credits and real, additional, gains even more tenuous.
- **Cost shifting.** Should public land and/or government funded activities be eligible for participation in a BCS there is a very real risk that expenditure and effort invested in pro-biodiversity activities is simply shifted to others resulting in either no increase in positive biodiversity outcomes or an increase in negative biodiversity outcomes (where uptake is insufficient or credits simplified).
- **Favouring the easier over the more complicated.** The BCS needs to be designed to avoid favouring lower value credits via the creation of relatively simple and common ecosystems that are quicker, easier, and cheaper to establish with less investment into more complex systems or those that take longer or are more difficult to establish.

Submission on **Biodiversity Credit System**, 3 November 2023
The New Zealand Ecological Society
PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND
Email: info@newzealandecology.org

- **Entrenched losses and facilitation of further degradation.** The adverse consequences of a poorly designed or implemented BCS will manifest as further declines in biodiversity.

NZES acknowledges that a BCS of some form is likely to emerge in the future in response to other emerging developments nationally and internationally (e.g., Nature-related Financial Disclosures). However, the scope, design and implementation of the BCS will require the utmost care and rigour if it is to avoid temptation to be overly simplistic and generate perverse outcomes. Until there is greater certainty on this front and the issues identified above resolved, it is premature to consider the potential for a voluntary BCS to provide **additional biodiversity gains**, and on that basis, whether NZES can support it.

Question 2:

Below are two options for using biodiversity credits. Which do you agree with?

(a) Credits should only be used to recognise positive actions to support biodiversity. (b) Credits should be used to recognise positive action to support biodiversity, and actions that avoid decreases in biodiversity.

Please answer (a) or (b) and give your reasons.

NZES submits that should a BCS be introduced, credits should only be used to recognise **additional** positive gains for biodiversity. For any BCS to avoid facilitating losses it is imperative that avoiding degradation or losses in indigenous biodiversity remains within the regulatory framework, and remain entirely independent of a BCS. This applies to any measure undertaken for any aspect of effects management, including mitigation actions, biodiversity offsetting measures or actions undertaken as compensation for development-induced adverse impacts on indigenous biodiversity.

We reiterate that biodiversity credits should only apply to **additional** nature-positive actions or outcomes, and any works that must occur anyway (e.g., under any National Policy Statement, regional plan, district plan, as condition of consent etc.) should be disqualified. This is because to allow these works to qualify for generating credits will falsely claim additional gains where there are none.

Further, avoidance of future loss of biodiversity (extent or condition) should also be excluded from a BCS. This is because quantifying the amount of actual gain achieved by actions to avert future loss relies on describing counterfactual scenarios which are difficult to predict. Estimating biodiversity gains from avoiding / averting future loss is risky as actual gains are typically overestimated. This has been demonstrated in the context of biodiversity offsetting², and the risks will equally apply to a BCS.

² Maron M, Bull JW, Evans MC, Gordon A 2015. Locking in loss: Baselines of decline in Australian biodiversity offset policies. *Biological Conservation* 192:504–512.
 Buschke FT 2017. Biodiversity trajectories and the time needed to achieve no net loss through averted-loss biodiversity offsets. *Ecological Modelling* 352:54–57.
 Maseyk FJF, Maron M, Gordon A, Bull JW, Evans MC 2020. Improving averted loss estimates for better biodiversity outcomes from offset exchanges. *Oryx* 55(3):393–403.

Question 3:

Which scope do you prefer for a biodiversity credit system? (a) Focus on terrestrial (land) environments. (b) Extend from (a) to freshwater and estuaries (eg, wetland, estuarine restoration). (c) Extend from (a) and (b) to coastal marine environments (eg, seagrass restoration). Please answer (a) or (b) or (c) and give your reasons.

Indigenous biodiversity occurs within and across the terrestrial and aquatic (fresh, coastal, and marine waters) environments. As the Discussion Document highlights, declines, losses in and pressures and threats to indigenous biodiversity occur across all environments. Response to the biodiversity and climate crises must also span environments.

Seeking opportunities to enhance ecological connectivity will also be necessary to improve ecological integrity and resilience. However, it is unclear how issues of tenure and statutory responsibility for freshwater and coastal marine environments will be dealt with within a BCS. These questions need to be addressed. NZES reiterates that government activities or public land should not be eligible.

We note that large projects (e.g., that focus on restoration of coastal marine environments or large-scale restoration projects) that leverage funding and investment from a number of parties spanning the private and public sectors can, and already do, occur outside of a formalised BCS. In light of this, it is unclear what the motivation to participate within a formalised voluntary BCS would be where such undertakings can already occur but without transaction costs or necessary restrictions.

Question 4:

Which scope do you prefer for land-based biodiversity credits? (a) Cover all land types, including both public and private land including whenua Māori. (b) Be limited to certain categories of land, for example, private land (including whenua Māori). Please answer (a) or (b) and give your reasons.

NZES is of the view that public land should not be eligible for generating land-based biodiversity credits as this risks cost shifting and delivering less, not more, investment. While it is evident that resourcing of biodiversity management on public land is insufficient, relying on a market to fill shortfalls (e.g., sustained deer control to allow forest to regenerate on PCL) is risky. The *Discussion Document* lacks any comparative analysis of alternative funding models for conservation works on public land and it is unclear why a biodiversity credit market is considered the most feasible option to boost resourcing.

We assume the intention behind including whenua Māori is to address the intergenerational and ongoing inequities endured by Māori and/or provide alternative income streams from whenua Māori where future opportunities for economic development may be further prevented by the requirements of the National Policy Statement for Indigenous Biodiversity (NPS-IB). However, whether a BCS is either an appropriate or best mechanism to respond is unclear. The *Discussion Document* provides no evaluation of alternative approaches to adequately provide for iwi, hapū, and whānau rights and interests, or insight as to how a BCS can either meaningfully respond to Treaty obligations or provide hapū or whānau-led bespoke solutions to place-based issues. NZES notes it is not for us to provide answers or solutions to these issues but raise them as critical considerations in responding to the biodiversity and climate crises.

Submission on **Biodiversity Credit System**, 3 November 2023
 The New Zealand Ecological Society
 PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND
 Email: info@newzealandecology.org

Question 5:

Which approach do you prefer for a biodiversity credit system? (a) Based primarily on outcome. (b) Based primarily on activities. (c) Based primarily on projects.

Please answer approach (a) or (b) or (c) and give your reasons.

Should a BCS be progressed for the purpose of 'protecting, restoring, or enhancing indigenous biodiversity' NZES considers that credits should be generated by positive outcomes.

Although outcomes are more difficult to track and measure, and potentially time consuming for gains to be realised, it is necessary base a BCS on outcomes to ensure that credits are only awarded for actual positive change in biodiversity. Gains from activities are highly context dependent such that the same activity can vary widely in terms of gain generated, and indeed produce perverse outcomes.

We note that incentivising activities will not necessarily directly translate to additional biodiversity outcomes, particularly where the activities being implemented are not those required to alleviate specific threats and pressures present, or the indigenous biodiversity in question is not responsive to the activity being implemented. For example, the planting of riparian margins has been touted as bringing about a range of benefits for indigenous biodiversity and water quality. From a water quality perspective, fencing alone can reduce sediment-bound phosphorus and stock exclusion reduces in-stream concentrations of *E.coli*. Planted riparian margins can improve aquatic habitat by providing shade, lowering temperatures, and adding carbon, for example, regardless of the quality or composition of the species assemblage within the riparian margin, but gains for terrestrial biodiversity are likely to be lower than anticipated or perceived.

Further, we note that credits based on activities will likely attract the common, easy, cheaper activities (e.g., such as planting a less diverse range of common species which would produce marginal gains). It is unclear if the complexities of a market are required to incentivise such generic (and often not particularly useful) actions and activities.

Both of these weaknesses would rapidly undermine the credibility of any BCS.

Credits valued on the actual outcome are more equitable than credits based on activities. Describing the context-dependent specifications that underpin assumptions about the relationship between specific activities and biodiversity outcomes to provide greater certainty (and therefore integrity) that credits are being granted for actual additional biodiversity gains would likely be complicated and unwieldy. The trade-off between transaction cost (the costs involved in verification of actual gains in highly complex ecological systems) and credibility is the central problem for any biodiversity credit system.

Question 6:

Should there also be a requirement for the project or activity to apply for a specified period to generate credits?

Please answer Yes/No and give your reasons.

Yes.

As noted above, credits should be awarded for additional outcomes, not activities with unknown (and potentially perverse) outcomes. The permanence of those outcomes should be the goal. For example, where the outcome is increase or maintenance of a native bird population, there would also need to be an underpinning requirement to ensure any credits generated are permanently secured (e.g., covenanting of the landholding) where any credits are generated. It would be very unwise to consider credits for systems where any gains are able to disappear in the future – in plantation forestry for example.

If considering activities, these also need to have been implemented for long enough to generate the targeted gain. For example, if predator control is being implemented to achieve an increase in bird populations then that control needs to apply for as long as needed to achieve and maintain the gains in bird populations.

NZES reiterates that incentivising activities will not necessarily directly translate to additional biodiversity outcomes and that permanent legal protection over the private landholding with the restoration activities would need to be a requirement.

Question 7:

Should biodiversity credits be awarded for increasing legal protection of areas of indigenous biodiversity (eg, QEII National Trust Act 1977 covenants, Conservation Act 1987 covenants or Ngā Whenua Rāhui kawenata?

Please answer Yes/No and give your reasons.

No.

Simply covenanting land produces no additional biodiversity gain unless the area can be reasonably demonstrated to be at risk of loss within a defined time period (see also response to Q2). This would introduce a level of complication and uncertainty (and cost), and risk awarding credits to landowners for no, or little, gain. Further, legal protection alone does not prevent ecosystem degradation or species loss, if management actions are lacking.

However, securing credits generated by landowners needs to be a requirement of a BCS and this may be achieved via covenanting. This raises further questions that have not yet been addressed, such as whether the requirement for permanency would influence landowners interest in participating in a BCS, and whether areas used to generate credits are of interest to covenanting agencies or meet their eligibility criteria.

Question 8:

Should biodiversity credits be able to be used to offset development impacts as part of resource management processes, provided they meet the requirements of both the BCS system and regulatory requirements?

A very hard no. A BCS should not be perversely used to enable businesses to cause more degradation. This would not be a system that would have credibility, nor is it something that New Zealand's indigenous biodiversity 'needs'.

See also our responses to questions 2, 11, 13, and 22.

Submission on **Biodiversity Credit System**, 3 November 2023
 The New Zealand Ecological Society
 PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND
 Email: info@newzealandecology.org

Question 9:

Do you think a biodiversity credit system will attract investment to support indigenous biodiversity in New Zealand?

Please give your reasons.

NZES is unsure on this matter as it is unclear how this will happen voluntarily. The *Discussion Document* offers no analysis or evidence for demand, and we remain unclear what the demand, beyond regulatory requirements (e.g., offsetting which needs to be outside of the BCS), would be.

We note that those wishing to do things on a voluntary basis can do so already. An appetite for green investment does not necessarily equate to an appetite to voluntarily participate in a formalised market with the associated and necessary restrictions, trade rules, and transaction costs.

We suggest that initial start-up funds will need to be invested to generate initial credits and/or credits up front (in advance) to undertake the works necessary to deliver biodiversity gains, and it is unclear where these funds will come from.

We also note that if the principle objective is to attract investment into enhancing and protecting indigenous biodiversity then alternative mechanisms to achieve that should be explored and a BCS not just defaulted to in the absence of this wider analysis and evaluation.

Question 10:

What do you consider the most important outcomes a New Zealand biodiversity credit system should aim for?

The discussion document (page 29 and 30) presents outcomes for an ideal BCS. However, it is very unclear how the aims set out relate to outcomes for indigenous biodiversity. The aims as they stand are more focused on the design and process matters of implementing a BCS. Further, Figure 4 is captioned 'principles of a biodiversity credit system' yet does not present any principles and is obscure in its message. For example, is 'works for the system' considered the most important due to its position at the top of the pyramid, or the least important due to it being the tip and not the base of the pyramid?

NZES considers that the most important outcomes of a BCS should be aligned with national priorities and centred on **additional gains** that contribute to maintaining and enhancing ecological integrity³ and resilience⁴ including:

- Increasing indigenous species occupancy.
- Increasing indigenous dominance and maintenance of natural ecological processes.

³ Defined in the New Zealand Environment Reporting Act 2015 as *'the full potential of indigenous biotic and abiotic features and natural processes, functioning in sustainable communities, habitats, and landscapes.'*

⁴ The ability to withstand disturbances of greater severity and the ability to recover from disturbances when they do impact.

- Increasing indigenous ecosystem representation (the full range of New Zealand's ecosystems, across domains).

Achieving these outcomes will not be possible via a voluntary BCS alone and therefore any BCS must be seen as a component of a wider multi-pronged response to the biodiversity and climate crises that includes staunch policies and regulatory framework to protect existing indigenous biodiversity and prevents continued development-induced declines.

Question 11:

What are the main activities or outcomes that a biodiversity credit system for New Zealand should support?

We set out above the main outcomes we consider that BCS should support. Only actions that provide **additional contributions** to these outcomes should be supported by a BCS.

We reiterate that any actions undertaken for the purposes of managing adverse effects associated with development should not be included in the BCS.

Question 12:

Of the following principles, which do you consider should be the top four to underpin a New Zealand biodiversity credit system? Principle 1 – Permanent or long-term (eg, 25-year) impact. Principle 2 – Transparent and verifiable claims. Principle 3 – Robust, with measures to prevent abuse of the system. Principle 4 – Reward nature-positive additional activities. Principle 5 – Complement domestic and international action. Principle 6 – No double-counting, and clear rules about the claims that investors can make. Principle 7 – Maximise positive impact on biodiversity

It is unclear why 'principles' associated with a BCS should be arbitrarily restricted in number. NZES considers that as many trade rules or parameters as required to support the necessary integrity should be built into the design of the BCS. NZES is also of the view that these should not be relegated to principles which could be seen as guidelines or 'best practice', but design specifications that cannot be deviated from.

Noting the above, but to answer the question, we consider Principles 1, 2, 3, and 6 to be the 'top four'. Principles 4 and 7 are poorly worded and seem to be more akin to purpose statements.

Question 13:

Have we missed any other important principles? Please list and provide your reasons.

- A very explicit statement describing the fundamental requirement for outcomes to be **additional**.
- Buying and selling of credits must be independent of exchanges of indigenous biodiversity to deliver offset or compensation for development-induced losses.
- Cost shifting cannot be allowed.

Question 14:

What assurance would you need to participate in a market, either as a landholder looking after biodiversity or as a potential purchaser of a biodiversity credit?

NZES is not looking to be either a buyer or a seller in a BCS. However, we note that any BCS needs to be designed and implemented in a manner that achieves its purpose – additional positive indigenous biodiversity outcomes – and that any scheme is accountable not only to the participants of the scheme but also to the wider (non-participatory) members of the community and future generations to deliver on this obligation.

Necessary assurances include, that any BSC scheme:

- Is based on positive and additional biodiversity outcomes.
- Has transparent and clear eligibility criteria.
- Has transparent and clear measurement, monitoring and reporting protocols.
- Ensures any biodiversity enhancement is permanent.
- Has a registry to list who is paid for what improvements on what land to avoid double counting and selling the same actions multiple times.
- Has clearly articulated consequences for reversal of any positive biodiversity outcomes.
- Independently verifies the biodiversity outcomes.
- Real biodiversity outcomes are achieved.
- Does not compromise or undermine iwi, hapū, and whānau rights and interests and ability to exercise their kaitiakitanga obligations in accordance with tikanga and kawa at place.

Question 15:

What do you see as the benefits and risks for a biodiversity credit market not being regulated at all?

It is difficult to evaluate the benefits of a biodiversity credit market while its scope and design remains so unclear and uncertain.

The risks of the market not being regulated include:

- No motivation to buy or sell, leading to lack of participation in the market. An associated risk is the relaxing of trading rules and reducing transaction costs (e.g., less rigorous checks and balances) to generate more activity in the market. This would result in lower integrity of credits, and a BCS that facilitates further declines of indigenous biodiversity.
- To ensure the necessary integrity the market would require strict trading rules and enforceable audits, and the transaction costs, formality, and prescription of a formalised market may well not appeal to those attracted to voluntarily undertake positive works. The motivation for voluntarily buying credits in a formalised market remains unclear when

conceivably the same actors could undertake such activities outside of a formalised market (thus avoiding the prescription and costs of a formalised BCS).

- Double-counting occurs.
- Success is measured by the level of participation (buyers and sellers recognised and awarded kudos for voluntary participation) in the market and not by biodiversity outcomes.

Question 16:

A biodiversity credit system has six necessary components (see figure 5). These are: project provision, quantification of activities or outcomes, monitoring measurement and reporting, verification of claims, operation of the market and registry, investing in credits.

To have the most impact in attracting people to the market, which component(s) should the Government be involved in? Please give your reasons.

Government should be adequately funding and managing indigenous biodiversity on public conservation land and waters and should not rely on, or utilise, a market to deliver this investment. There must be no involvement of government (central or local) that allows cost shifting.

NZES considers that the Government has a role to facilitate additional gains and incentivise pro-biodiversity behaviours and could set the expectations and policy settings for a regulated BCS, but should not be a participant.

There is potential for the Government to provide initial start-up funds to establish a BCS, create the necessary market structure, and generate initial credits. A centralised and coordinated registry of credits against land titles could also be a responsibility of government.

Verification of claims and monitoring and reporting should be undertaken by an independent body, but setting verification rules is a role for government.

Question 17:

In which areas of a biodiversity credit system would government involvement be most likely to stifle a market?

See our answer to question 16 re: government involvement in a market.

NZES is of the view that Government participation (as a buyer or seller, or via cost-share arrangements) will distort the market, further jeopardising positive biodiversity outcomes.

Question 18:

Should the Government play a role in focusing market investment towards particular activities and outcomes and if so why? For example, highlighting geographic areas, ecosystems, species most at threat and in need of protection, significant natural areas, certain categories of land.

NZES is of the view that national or regional priorities and SNAs should be funded adequately in the first instance and not relegated to the whims of a voluntary market. Any BCS must be targeted at additional activities and outcomes for indigenous biodiversity.

Submission on **Biodiversity Credit System**, 3 November 2023
 The New Zealand Ecological Society
 PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND
 Email: info@newzealandecology.org

Coordination of provision of credits to maximise gains and create ecological connectivity could be facilitated by regional councils, in line with regional strategies, although this will potentially narrow the market by adding further layers of prescription. However, there is potential to incentivise strategic positioning of credits without restricting a market to only those credits.

Fundamentally, the government's role should be to set the overall rules of the system to ensure credibility of any credit that is being generated, but not have ongoing interference.

Question 19:

On a scale of 1, not relevant, to 5, being critical, should a New Zealand biodiversity credit system seek to align with international systems and frameworks?

Please give your reasons.

The scale of relevance is context dependent.

If the intention is to seek international investment then a BCS will need to stand up to international scrutiny and expectations. International scrutiny is also likely if private interests are using the BCS for marketing or 'social licence' purposes.

We do not consider a New Zealand BCS should merge with international schemes though as the outcome needs to be additional nature-positive gains here in New Zealand.

NZES considers that in establishing a BCS in New Zealand, lessons should be learnt from international experiences (success and failures) in designing and implementing biodiversity markets.

Question 20:

Should the Government work with private sector providers to pilot biodiversity credit system(s) in different regions, to test the concept?

If you support this work, which regions and providers do you suggest?

This seems very similar to the private/public partnerships model that is already occurring in New Zealand. Given these arrangements are already happening, a more informative question might be what additional value can be gained by conducting such arrangements within a formalised BCS?

Question 21:

What is your preference for how a biodiversity credit system should work alongside the New Zealand Emissions Trading Scheme or voluntary carbon markets?

(a) Little/no interaction: biodiversity credit system focuses purely on biodiversity, and carbon storage benefits are a bonus. (b) Some interaction: biodiversity credits should be recognised alongside carbon benefits on the same land, via both systems, where appropriate. (c) High interaction: rigid biodiversity 'standards' are set for nature-generated carbon credits and built into carbon markets, so that investors can have confidence in 'biodiversity positive' carbon credits.

Please answer (a) or (b) or (c) and give your reasons.

Submission on **Biodiversity Credit System**, 3 November 2023

The New Zealand Ecological Society

PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND

Email: info@newzealandecology.org

Both markets are highly complex, and we suggest greater certainty is needed that we can design and implement a BCS first before adding additional complexities. We are concerned that by heading straight to stacking biodiversity and carbon markets, there will be a temptation to simplify metrics used to measure additional biodiversity gains, and a dilution of goals for indigenous biodiversity.

NZES suggests it would be more prudent to amend the ETS to incentivise carbon storage from indigenous ecosystems, rather than shoe-horn carbon into a BCS in an attempt to achieve the same outcome.

Question 22:

Should a biodiversity credit system complement the resource management system? (Yes/No)

For example, it could prioritise:

- *Significant Natural Areas and their connectivity identified through resource management processes*
- *endangered and at-risk taonga species identified through resource management processes.*

NZES is firm in its position that any BCS must be entirely independent of the resource management system, and **additional** to it. In prioritising requirements of the NPS-IB (or other RM planning documents) it is highly likely that a BCS would be opened up to actions and measures to address adverse effects from development (e.g., mitigation, offset or compensation measures) as the NPS-IB provides for a consenting pathway within an effects management hierarchy framework.

The 'additional to' the RM system is important, because there is a high risk that credits will end up funding activities that are required to be undertaken anyway, such as pest control under RPMSs or fencing and setbacks from waterways. Just as there should be no credits for any activities that are required as conditions of consent, there should be no credits for any activities that are required under regulations or duty of care.

Question 23:

Should a biodiversity credit system support land-use reform? (Yes/No)

(For example, supporting the return of erosion-prone land to permanent native forest, or nature-based solutions for resilient land use.)

Yes, if that land-use reform is additional to what would have happened anyway (e.g., as part of a whole farm plan, change in land use to reduce externalities of the farm system etc.).

New Zealand has long-failed to incentivise pro-biodiversity land use, ensuring that degradation and continued loss of indigenous biodiversity remains cheap while maintaining and enhancing indigenous biodiversity remains expensive. Therefore NZES is of the view that the need for land-use reform in the broader sense is critical. **It is unclear whether this is best delivered by a BCS.** We also consider that should large-scale land-use reform be an intended outcome, then all potential mechanisms to achieve this should also be considered and evaluated to ensure incentives are best fit for purpose.

Strategic investment in nature-based solutions for resilient land use will be critical in our response to the dual biodiversity and climate crises and should be incorporated into land use decision-making as a matter of course, not left to the whims of a voluntary, unregulated market. Further,

Submission on **Biodiversity Credit System**, 3 November 2023

The New Zealand Ecological Society

PO Box 5008, Waikiwi, INVERCARGILL 9843, NEW ZEALAND

Email: info@newzealandecology.org

we note that management actions to improve performance of the provision of ecosystem services is not necessary synonymous with actions to enhance indigenous biodiversity, as ecological function can be delivered by non-native species.

NZES reiterates that it is imperative that there is a clear purpose underpinning any BCS and this will drive the scope and design of the system.