

Addendum

To Belmont Winstone's – Department of Conservation land exchange report: **BlueGreen (2025) Belmont Quarry Land Exchange: Overview of Ecological Values. Report prepared by BlueGreen Ecology Ltd for Winstone Aggregate Limited**

The following are responses made by the authors (Dr Keesing and Dr Bull) of the afore mentioned technical ecology report and hold the qualifications and experience as laid out in that report. The authors agreed to adhere to the Environment Court Code of Practice, in respect of the report and this addendum.

We have carefully considered the comments and material provided by NZ Conservation Authority (NZCA), Wellington Botanical Society (WBS), New Zealand Transport Authority (NZTA), the Wellington Conservation Board (WCB), and the Friends of Belmont Regional Park on the proposed DOC-Winstone's land exchange at Belmont Regional Park, in response to ecology. For ease of reference, the issue raised, and our response, is set out below.

NZCA made the following points:

NZCA raised:

"The fact that the DOC-Get land is in separate parcels raises questions about the ability of these parcels to serve as corridors for species. Generalizing about corridor functions is difficult – as species/seeds/spores have very different trajectories and ways of moving within the environment, as well as timeframes over which such movement occurs. It is not clear how this fragmentation will influence species and communities. The loss of the Doc)-Give block will also mean the loss of the regenerative aspects of native seedbank that has been building up in the approximately 50 years of recovery, revegetation and pest management that has been undertaken in the area."

Our response is:

That there is no fragmentation, only a change to where the bush edge is in one location for a limited time. While these areas may be legal separate parcels they are all connected to the park physically by adjoining vegetation and will remain so after the OBDA is in operation.

NZCA raised:

Within the past week (reported 10 February 2026) in the OBDA, 11 swamp maire trees were found to be fruiting, with seedling plants beneath them from previous years. These were located in four areas across the proposed OBDA. The Friends of Belmont Regional Park now report 16 swamp maire in the OBDA area. In addition, more Ramarama (*Lophomyrtus bullata*) have been located. Swamp Maire has "Threatened – Nationally Vulnerable" status and Ramarama "Threatened – Nationally Critical" status in the DOC Threatened Species system and both are listed as "Critically Endangered" in the IUCN Red List.

Our response is:

We are aware of 17 swamp maire (as well as the presence of new seedlings) in the DOC-give area. To our knowledge only 5 swamp maire sit within the proposed footprint of the OBDA, which is smaller (at around 15ha) than the proposed exchange land at around 24 ha). The impact of the proposed OBDA will be considered at resource consent stage.

The ecological assessment acknowledges the threatened status of Swampmaire and Ramarama. This is well covered in our report.

The comments received have largely ignored or dismissed the improvement plantings offered by Winstone (being 200 swamp maire).

NZCA raised:

The boundary lengths of the parcels proposed to be transferred to DOC exceed the boundary lengths of the land proposed for the OBDA. The neighboring rural/residential properties, particularly in the Northern and Southern Gully parcels, present a number of issues if the land is transferred to DOC, in terms of management of incursions of weeds and pest species/predators from neighboring private owners, who may or may not be operating weed and pest control measures that harmonise with those proposed for the DOC-Get land. Pest and weed control will have ongoing associated financial implications for the Crown, relevant to the criterion "whether the consequences of the land exchange would be practical to manage on an ongoing basis ...".

Our response is:

The current boundary between quarry and vegetated park is Ca. 550m and there will be (in stage 1) a new open area around 500m (discounting the haul road which is through the open pasture pine now), and by stage 2, 800m but from there it remains generally around 800-1000m and is progressively advanced back through the OBDA with revegetation. The maximum if all stages are open is around 1500m (3 times the current edge).

We do not consider that the proximity to weed populations materially changes and whatever the area, weed management is required and will be on going for the life of the quarry, but also in perpetuity in the Park (we assume) and can be managed accordingly.

The DOC-Give itself has a number of persistent weeds and old mans beard appears randomly throughout most of the areas. We consider that the exchange DOC-get land contains more mature forest areas and is also more resistant to weed invasion than the younger DOC-Give area (which includes later seral canopy weeds such as pine and holly). Management and its funding of the DOC-get land has been proposed by Winstone as a condition of the exchange to reduce this risk (BlueGreen (2025) page 90, Table 20; Wikaira Consulting (2025), page 92–93).

NZCA raise:

In the Ecological Assessment of the Belmont Quarry Land Exchange the authors compared the DOC-Give area (23 ha that is known to include a variety of habitat types and ecological values) with the smaller parcels of land being proposed for exchange. In our opinion this led to a downgrading of the values present in portions of the DOC-Give land, where values were averaged across the whole area. While there may be currently negligible ecological values in some areas of the DOC-Give parcel (e.g. central exotic pine and grassland ridge), there are areas with potential for further recovery including wetland habitats. Natural inland wetlands are regionally rare (<3% remaining Regionally). The Ecological Assessment notes the presence of a wetland and wet gullies in the Doc-Give land which also represent important habitats with potential for swamp maire. As noted above there are both mature and young swamp maire within the OBDA. Wetlands in New Zealand have been reduced to ca. 10% of the pre-human cover and swamps to ca. 6% of their original extent. Given their ecological importance and the threats on these habitats, NZCA considers the potential loss of any such areas needs to be taken very seriously.

Our response is:

We appreciate that in the wider mix of the DOC-give land there are some higher value areas related to special species or wetland, but these areas are the minority and we consider the averaged value approach adopted in our report best represents and does not hide the actual ecological value.

We have adopted the same approach to the DOC-Get land. The same could be said of the “give” parcels which sum to more than the get exchange.

Further, while potential value does not factor into our assessment as value is as it is today, all areas have a range of potential values. That in mind, the averaged result was tempered with an increased focus on the greater values of especially swamp maire and its habitat even where the majority of land cover is young common seral broadleaf stages. This has led to a focus on ensuring proposed weed control improvements and commitment to establish 200 swamp maire in suitable wetland habitat.

Wellington botanical society (WBS) made the following observations to which we reply

WBS raised:

Our submission focuses on the loss of maire tawake (*Syzygium maire*) as this endemic species is Threatened-Nationally Vulnerable under the New Zealand Threat Classification System. Maire tawaka is considered to be in serious decline throughout its range. Fewer than 100,000 individuals are thought to exist, with a decline in population of 30-50% expected over the next three generations. In the Wellington region it is also considered Vulnerable and few than 1,000 individuals are estimated. This is due to historical fragmentation of its habitat and the arrival of myrtle rust (*Austropuccinia psidii*) to New Zealand. Activities such as the proposed land use changes cause further fragmentation of suitable habitat and increase the vulnerability of an already threatened species. Ramarama (*Lophomyrtus bullata*) (Threatened-Nationally Critical, Regionally Critical) is also present on the site

Our response is:

As discussed in the planning and legal comments the land exchange does not result in the destruction of these plants. The land exchange proposal offers 200 new plants in habitat found to be suitable within the DOC-Get land as part of the exchange to increase the conservation values of the DOC-Get land by creating a significant swamp maire area. (a 20% increase of the current estimated number of 1000 swamp maire estimated by WBS in the Wellington region). These plants will be grown up and established in the DOC-Get area which is suitable habitat.

The improvement proposed in the exchange application will be in the order of 200 new swamp maire in DOC-Get land (BlueGreen (2025), page 90, table 20). The methods proposed included taking seedlings and cuttings to secure the genetics of the swamp maire in the DOC-Give land. There appears to be little natural seed dispersal establishing new populations in the park and so through this process we aim to ensure establishment of a new large population of swamp maire in the park.

WBS raised:

We have reviewed the changes to the proposal. While the concession to move the southern part of the western boundary eastwards to exclude fourteen 6-10m maire tawake is good, the plan to deposit quarry overburden upstream will alter the hydrology of the site and very likely kill the trees, regardless. Maire tawake relies physiologically and ecologically on high-moisture soil and it is highly susceptible to disturbance. It should be noted that eight of these trees have fruited in the past month, representing an important seed source for further regeneration of maire tawake.

Our response is:

These effects arise from the development of the proposed overburden disposal area, rather than the land exchange, and accordingly will be assessed in detail at a later stage.

WBS raised:

The ecological offset proposal to plant 200 maire tawake in Southern Gully is a reasonably positive action, but biodiversity offsetting like this means accepting ecological losses for uncertain ecological recompense or gains. These trees may take decades to reach maturity and there is no guarantee they will persist that long. The loss of ecologically complex forest and wetland is not adequately compensated by a gain of regenerating scrub, nor the loss of mature flowering and fruiting plants (with successful recruitment evident) by the establishment of a grove of young saplings. The ecological assessment estimates the age of the existing swamp maire to be 50 to 60 years. The Wellington Botanical Society fails to see the “net ecological gain” from destroying 24 of these healthy in-situ trees, along with their habitat, and replacing them with 200 young plants to be managed for five years. We also consider the proposed “attempts to transfer the existing nine swamp maire in the OBDA by way of whole tree or pruned tree and root ball transfer” a cynical and poorly thought-out offer that is unlikely to have a positive outcome.

Our response is:

The establishment of 200 new swamp maire in the southern gully is not an ecological offset, as those values are not destroyed by the exchange. Ecological offset as a concept is covered within the Legal submission accompanying Winstone’s response. The 200 new swamp maire Winstone proposes is part of an improvement to provide a net benefit to conservation values in favour of DOC. The action is to cause a net gain from the land exchange.

The potential effects of the use of the OBDA includes the potential loss of swamp maire within the OBDA . A separate management process including a risk removal offset is proposed which involves the rearing and planting in new areas a further 50-100 plants in the exchange but outside the OBDA and suitable local areas within the park (there are several). The plan is to safe guard against the possible failure of the proposed transplantation of the swamp maire. If the transplantation does succeed there will be a significant net gain in swamp maire and increased distribution in the local area. In addition, there will be cuttings taken from the affected trees (there is no swamp maire forest) for plant establishment to try to save the genetic material, this will include also taking seed from those affected maire too. These ecological offset proposals will form part of the substantive application for resource consent approvals for the OBDA, and will be assessed further at that stage. They are discrete from the improvement package (planting 200 new swamp maire) that is proposed as part of the land exchange.

WBS raise:

We wholeheartedly oppose the proposed land swap. The sacrifice of “DOC-Give” area for the “DOC-Get” would be a net loss to biodiversity in the Wellington region and set back an area of Belmont Park’s regeneration by decades. The ecological report underrepresents the biodiversity value of the DOC land and overstates that of the Winstone Quarry. The “DOC-Give” area has significant biodiversity, harbours several nationally threatened species, and has a long history of natural regeneration. The land held by Winstone is in its earliest stages, has minimal biodiversity value, and will require significant investment for many years to achieve parity with other parts of the park.

Our response is:

We consider the entire exchange proposed will result in a net benefit in favour of the Conservation Estate. The outstanding value in the exchange is the swamp maire (predominantly in the DOC-Give), this has been balanced by the improvement being offered that provides for establishing 200 swamp maire in the

DOC-Get area. The conservation values of the DOC Get land are further supported by the presence of tawa kahikatea forest within the northern gully, which is regionally rare.

WBS raise:

We wish to bring a few matters to the attention of the project team at DOC considering the overburden proposal. First, is a recent research on maire tawake *Syzygium maire* in the Wellington region published by the School of Biological Sciences at Victoria University. The authors highlight that we “need to identify refugia in accessible, albeit sometimes fragmented, habitat” and recommend “leveraging human-nature interactions in areas to create, expand, and protect habitat for [this] rare species in a rapidly changing world”. *Syzygium maire* has a threat classification of Threatened-Nationally Vulnerable. The article illustrates that *Syzygium maire*’s preferred habitat of waterlogged areas in the Wellington region are few and shrinking.

Second, is the number of recently observed *Syzygium maire* in the proposed overburden deposit site. These can be seen at this link. Given that their habitat is shrinking, an area that hosts to many *Syzygium maire* is, in our view, rare and precious.

Our response is:

The proposal takes this study into account (it is discussed in our ecological report at page 84) (and we applied the guidance provided in this publication (BlueGreen (2025) at page 84) to review our findings and to develop a local model for locating suitable swamp maire habitat) and our proposal seeks to increase swamp maire numbers and expand areas of maire (also note section 9.3 of our report). This is, we believe, as the authors of the publication recommend i.e. “leveraging human-nature interactions”.

WBS raise:

Third, a large proportion of the land area under consideration for development is classified as a Category 1 threatened environment, indicating that less than 10% indigenous land cover of this type remains intact in Aotearoa New Zealand. This is the most threatened status allowed by this classification. Other species recorded in the area at risk are *Coprosma rubra* (with a national threat status of declining and regional status of uncommon) and *Lophomyrtus bullata* (with a national threat status of nationally critical).

Our response is:

This is true and is the condition of almost all of the lowlands (the primarily rural land) of New Zealand – a very large area - and that threat classification was taken into account in the assessment. There is no loss of indigenous land cover from the land exchange. The substantive application for resource consent will, in managing effects, recognize these special species too and has a proposed management response directed at avoiding any losses. We do note that *Ramarama* is also found in the DOC Get areas.

WBS raise:

The birdlife values we rate as equally high in both Doc-Give and DOC-Get. We note that Table 19 in Appendix B1 (Ecological Assessment) scores the Caspian tern and shag species as being in the Firth QEII but not in the POBDA area. Similarly, Table 4 (p25) states that the acoustic recorder AR3 (Lake) was in the Firth Block, whereas in fact the pond where these species were recorded straddles the boundary of both blocks, and the acoustic recorder (AR3) was installed at the boundary fence. We also note that one of the acoustic recorders (AR4) had not been analysed by the time the Ecological report was compiled. We conclude that there would be little change to the avifauna ecological values.

Our response is:

As per Table 4 in the report (replicated below), the AR3 was situated on the Firth Block, but the habitat it was sampling was the lake and surrounding late seral broadleaf forest. As such, the section of lake and any associated late seral broadleaf forest within the DOC- Give would have the same values as the part on the DOC- Get land within Firth Block. However, that value is confined to that habitat feature (pond and wider surrounding area) and is not afforded the entire DOC-Get land. This is already covered in detail in our 2025 report, at 7.1 (Page 66-69). The following table is copied below for the convenience of the Panel. We have reviewed our findings in the updated ecological report in light of that comment and confirm that the updated ecology report as assessed is correct.

Extract from our report:

Table 4: Bioacoustic recorder deployment details (locations shown in Figure 11 and updated recently (26 February 2026 update) with the additional bioacoustics data)

BIOACOUSTIC RECORDER	HABITAT	SITE	RECORDING PERIOD
AR1 (Tawa)	Tree free and tawa-kāmahi forest	Northern gully	17-24 July 2025
AR2 (Exotic)	Ridgeline exotic treeland and young gorse/pasture	OBDA	17-24 July 2025
AR3 (Lake)	Lake surrounded by late seral broadleaf forest	Firth Block QE II	17-24 July 2025
AR4 (Manuka)	Manuka mixed broadleaf forest	OBDA	13-19 August 2025

Wellington Conservation Board (WCB) has the following comments**WCB raise:**

The Greater Wellington Regional Council has embarked on a generational restoration plan for the park, including retirement and replanting of significant areas of farmland. Greater Wellington is involved in discussions with adjacent landowners, and other agencies with ecology restoration obligations associated with other progress.

Our response is:

That is understood and it is anticipated that this project contributes to that endeavor in quite a significant way.

WCB raise:

A swamp maire restoration (200 trees) is proposed as part of the conservation gain initiative, as well as other replanting efforts. Through the Friends, Dr Colan Balkwell provided the following comment: *"It is hard to envisage how the proposed swap could provide land that is ecologically valuable as the park land considered for exchange"*. This view is consistent with a range of opinions shared with the Board. We are concerned that the offset proposal does not clearly specify the duration propagation and planning swamp maire, or how security of long-term funding would be protected. The timeframe and certainty of weed and pest control, and regeneration efforts, is an important consideration in assessing overall conservation outcomes. Sourcing suitable native species for replanting activities is a challenge in the Wellington region, and assured long-term approach should be incorporated into plans.

The Board believes that these activities should be assured for a time appropriate to mitigate the area potentially lost to the land swap. We believe this would be in the vicinity of 30-40 years and aligned with economic life of the quarry. The board supports the BlueGreen recommendations attempting to translocate 9 of the swamp maire to another location. Where practical, areas or species of significance should be protected from disturbance for as long as possible, including adopting a planning approach of avoidance by default.

Our response is:

The land proposed for exchange (proposed DOC- Get land) is still part of the wider Belmont hills landform and biogeographical condition, it is not alien to the park and offers a rare larger wetland area. It has ecological value.

It is important to note that the improvement package is a conservation gain, not an offset for a loss or removal of vegetation.

In the absence of observed new populations of swamp maire establishing locally by themselves (in the park), we consider that the Winstone proposed improvement package to establish a large swamp maire forest in suitable habitat and to provide the necessary resources to do so. This might be one of the few initiatives that will establish new areas of swamp maire around the park, and is a valuable conservation opportunity. This project has the potential to substantially increase the population of swamp maire in the Region and provides an excellent opportunity for restoration, study and research into the species (we note the support for the experimental translocation of while swamp maire)– all of which can be factored into the proposed planting and management plan proposed by Winstone as a condition of the exchange. The matters raised regarding sourcing and monitoring can be considered in developing a planting and management plan.

In addition to the exchange improvement gains (which is not an offset), the substantive RMA application will address the loss and relocation of swamp maire arising from the development of the OBDA. A full offset package will be developed for the loss or impact arising from that development, as part of the RMA approvals, to address those effects at that point.

On the concern about sourcing suitable native species for replanting, we consider that there is a suitable source of plants available locally, that weed and pest management are offered and for a suitable period. We agree with the Wellington Conservation Board that 30-40 years is an appropriate time for Winstone's (the beneficiary of the land swap) to manage the swamp maire offered in the southern gully (DOC- Get land).

Lastly, we agree with the comment that whether the swamp maire transplantations (as part of ecological offsetting) are 5 or 9 (or 14), the attempt to transplant is, while experimental, very worth attempt and will provide useful insight into the species. Further details of that will be provided in the ecological assessment to support the resource consent application (they are not intended to be relocated as part of the exchange application).

WCB raise:

The Board believes that the proposed land-swap, should it be approved, presents considerable opportunity for longitudinal ecological research, including relating to trans-location of species, restoration efforts and changes in soil ecology over time. We recommend these opportunities be explored as part of any further mitigation and offset discussions.

Our response is:

Subject to our comments about not confusing the improvements proposed as part of the exchange and any offset required to address the impact of the proposed OBDA at the resource consent stage, we agree with the Board that the exchange does present a considerable conservation opportunity to create a large swamp maire forest. This restoration project provides an excellent opportunity for research and further learning of this species and would support measures to ensure this is provided for in the development of the planting and management plan.

WCB raise:

The Department's 5 Year Regional Strategy (updated 8 January 2026) states that DOC will take an integrated landscape approach to conservation aligned to nature, rather than administrative boundaries. The intent is to ensure all factors and perspectives are weighed and prioritised.

Supporting iwi and like-minded partners is critical to success in this context, adopting a strong partnership-based approach to mitigation efforts is vital.

Greater Wellington is in ongoing discussions with organisations who have restoration obligations under various other consent processes. In some cases, restoration efforts for mitigation purposes have been mutually agreed to be conducted with the Belmont Park. In parallel, GWRC has indicated it will be retiring some areas of the park from farming and incorporating these areas into restoration plans.

These initiatives create a significant opportunity for collaboration opportunities within the park, allowing a multi-generational perspective on ecological restoration at a landscape scale.

As part of mitigation activity should the land swap be approved, the Board believes that incorporating mitigation efforts into a multi-generational, multi-organisation restoration plan for the park would make an impactful and enduring contribution to enhancing conservation values in the area.

Our response is:

The ecological improvements that are proposed as part of the land exchange will contribute to the restoration of values in the park and its surrounds. We are unaware of the other processes underway, but agree that there may be opportunity for collaboration.

Friend of Belmont Regional Park (FOBRP) made the following points to which we respond

FOBRP raise:

The FoBRP has already provided much input to the Department of Conservation (DOC) regarding the application for a land exchange for the purpose of extending the extent and operations of Belmont Quarry. We have discovered and published much about the ecology of the area – in particular the abundance of valuable and threatened tree and plant species, and the rare, uplifted wetlands present that are vital for these species. And in the process, we have significantly re-shaped the understanding of the conservation land involved, so that it is now clear that the applicant's original dismissal of the DOC land as having "low ecological value" rested on superficial and inadequate ecological surveys that entirely missed the key values of the block.

Our response is:

Consultation with DOC has helped form the proposal. The EIANZ process does separate and focus on individual species but these are only one factor contributing to the values assessment. The assessment is an assessment of the ecological habitat and is an averaged assessment where it is a large area with a mosaic of similar assemblages such as here, and where they are not sufficiently large and different to be treated separately. Most of the exchange DOC-give is regenerating broadleaf of various ages and is not special in the ecological domain. The swamp maire in the exchange area are in the ex-farm sedimented gullies, not in the identified terrace wetland. The values however, of the wetland and swamp maire were

taken on board and the values tempered following consultation with DOC and as a comparison with the local DOC Get areas. The hot spots in value were a significant part of the reshaping of the OBDA so as not to involve loss within the exchange where those species and their current habitats values were recognised in order to ensure the exchange did not cause loss of those values.

FOBRP raise:

The POBDA is now known to contain areas of very high ecological value.

Our response is:

We disagree. Five trees in the DOC-Give is not a forest and is not a habitat, they are five relatively young, isolated trees in gullies of seral broad leaf forest. The hot spot value is the central western gully where there are 14 canopy trees with significant fruiting and seedling establishment. This area has been removed from the exchange proposal.

FOBRP raise:

The proposal would replace one large and roughly square-shaped block with three blocks that are physically disconnected, with awkward shapes, and consequently a much greater (3.6x) perimeter-to-area ratio, increased incursion of invasive species and a generally poor ecological outcome. The applicant has been made aware of this problem (Appendix C3, p8) but there is no way of mitigating it.

Our response is:

There is no real fragmentation. The north-western additions are continuous with the park vegetation north and bring better connection to the southern gully system. The Dry Creek additions add directly to the Dry Creek area, and it is only the Firth block that could be perceived to be more isolated, but it too retains strong connectivity east and north.

We do not consider that the proximity to weed populations materially changes and whatever the area, weed management is required and will be on going for the life of the quarry, but also in perpetuity in the Park (we assume) and can be managed accordingly.

During the development of the OBDA (which will be considered as part of the substantive application) while a new edge is created it simply replaces the current edge. At some stages of the OBDA process that edge is longer (1500m instead of 500m at most) but that is relatively short lived. Ultimately with the revegetation proposed over the OBDA, the new edges created are removed and the perceived fragmentation is resolved such that by year 50 the area is entirely again forested.

FOBRP raise:

At the heart of this issue is the question as to what parts of the proposed “DOC-Get” areas can justifiably be included in the comparison of conservation values. The proposed “DOC-Get” areas are summarised in Figure 1. The various parcels in the DOC-Get areas are:

- Southern Gully is the small block in the south-west corner of Fig 1. It comprises 3.94 ha of native vegetation surrounding a poorly-drained area previously used for grazing.
- Northern Gully is the roughly L-shaped block to the west of the existing quarry. The total area is 12.6 ha, of which 2.87 ha comprises established native forest, already protected by a QEII covenant, with the remainder mostly being regenerating bush. Parts of the Northern Gully area have already been subject to overburden dumping.
- The Firth Block is the yellow-shaded area to the east of the existing quarry. This comprises 9.6 ha of mixed native forest, and includes part of a pond which straddles the boundary with the POBDA block. The entire Firth Block is already conserved by QEII covenant.

Dry Creek here refers to a rectangular ring of land surrounding the old quarry site, NW of Haywards, comprising 7.94 ha of mixed exotic and regenerating native forest. Some parts have been previously used for quarrying purposes.

Our response is:

The southern gully contains wetland and stream and is valuable as potential swamp maire habitat and as a wetland – but it is continuous with the northern gully and Cottle area, making only a small part of that area open to debate as QEII. It is true however that much, but not all, of the valued mature forest is in the QEII area (especially the better tawa-kamahi area) but the valued wetland area, the hinau-kamahi forest and half of the northern mature forest as well as the mature pukatea forest and stream protection are additions and not currently in the QEII area.

FOBRP raise:

Fragmentation – the perimeter of the conservation area would increase dramatically. The current boundary with the quarry, from the western edge of Northern Gully down to the eastern intersection with Hebden Crescent is 1.45 km long. The perimeter of the proposed boundary would increase by 360%, to approximately 5.25 km. The negative consequences of this will be discussed later, along with the significance of the increased fragmentation of the conservation land.

Our response is:

See our response above regarding fragmentation.

This is an artificial argument because through the staging of the OBDA development there is rarely if ever that length of new open exposed park forest edge. There is no actual fragmentation, all the DOC-get areas remain connected to the park and all the park areas remain connected. However, there will be a new edge that for stage 1 and 2 would mean 800m instead of the current 550m. At worst this could be around 1km at the latest stages, by which time it would be beginning to be revegetated and would diminish back to where it is today.

FOBRP raise:

Ecology – when comparing the ecological values in terms of habitat, the POBDA in the current pak has a wide range of values from low (pine and grass in the centre) to very high (swamp maire and ramarama populations elsewhere); the corresponding values in the Northern Gully (excluding the QEII part) are low to moderate, and quoted as high in the Southern Gully. (The FoBRP has to take this on trust from the reports, since the FoBRP has not been allowed access to the DOC-Get areas). On the whole, given the importance of established 50 to 85 year old and valuable tree species, and their associated wetlands, within the POBDA, the DoBRP considers that the proposal would result in a significant loss in ecological habitat value.

Our response is:

The values in the DOC-get areas, swamp maire aside, are better with more areas of mature forest and Ramarama and rare habitat types. It is the presence of the many decades of advanced successional development in the DOC get areas that create much of the ecological gains e.g. in the pukatea gully, the tawa-kamahi forest, hinau-kamahi forest, and the tawa forest of the firth block. It is also the case that the north tawa also protects a valuable waterway. The inclusion of the southern gully wetland and the proposed improvement in establishing 200 new swamp maire also contributes to a net gain in conservation values for the DOC-managed land. In the round we remain of the opinion that the exchange is balanced in favour of DOC in terms of ecology.

FOBRP raise:

The birdlife values we rate as equally high in both Doc-Give and DOC-Get. We note that Table 19 in Appendix B1 (Ecological Assessment) scores the Caspian tern and shag species as being in the Firth QEII but not in the POBDA area. Similarly, Table 4 (p25) states that the acoustic recorder AR3 (Lake) was in the Firth Block, whereas in fact the pond where these species were recorded straddles the boundary of both blocks, and the acoustic recorder (AR3) was installed at the boundary fence. We also note that one of the acoustic recorders (AR4) had not been analysed by the time the Ecological report was compiled. We conclude that there would be little change to the avifauna ecological values.

To which we say:

As above, in our response to WBS on birdlife values.

FOBRP raise:

The FoBRP has already made submissions to DOC on the topic of valuable species within the POBDA, so this section will be a brief summary of those points:

Since learning of the Fast-track application in late 2024, the FoBRP has helped coordinate further ecological surveys, which have revealed the presence of valuable species within the POBDA, notably:

- 24 healthy specimens of swamp maire (*Syzygium maire*), status: threatened – national (and regionally) vulnerable
- 23 health specimens of Ramarama (*Lophomyrtus bullata*), status: threatened – nationally (and regionally) critical
- Two observations of *Comptosia rubra* and one of *Carex maorica*
- Perched inland wetland areas which support these populations, these environments are rare.

Swamp maire and ramarama are widely distributed throughout the POBDA and include trees up to 10m tall (see Fig 2). At the time of writing (February 2026) 11 of the swamp maire are fruiting (see Fig 3). The FoBRP has roped off all of these trees to protect their fragile root systems from foot traffic.

Our response is:

We note that in the OBDA there are 5 swamp maire (acknowledging the Inaturalist suggestion of 14), with 17 others being near but outside the OBDA and 14 of those outside the DOC-give area. It will be recognised in the substantive application for resource consents that adverse effects on swamp maire must be appropriately managed.

We recognize the Ramarama in the DOC-give, noting it is also present in the DOC get. The Ramarama will not be affected by the land exchange process. There will be a process as part of the OBDA development for salvaging those Ramarama, which are not all cleared at one time and that process is not reflected in the exchange but the values are present in the give and get areas. The details of which will become available through the substantive application.

Similarly the values associated with the wetland species are also retained through the application and so the exchange does not cause the loss of those values to the DOC land.

FOBRP raise:

Aerial photographs dating back to 1941 (available at <https://retrolens.co.nz/>) show streams, gullies and wetlands within the POBDA as dark, ungrazed areas. It is here that seedling and sapling remnants of the original native forest appear to have survived. So for at least 85 years, these areas have provided an ecological sanctuary for Swamp maire, Ramarama and *Coprosma rubra*. While still young in ecological terms, the ecological value of the established Swamp maire, classified as Threatened-Nationally Vulnerable under the New Zealand Threat Classification System, far outweigh proposals for new plantings which have no guarantee of success.

Our response is:

Those older photos show vegetated gullies, but this does not mean they were ungrazed. Rather they were not cleared totally and were allowed to regenerate as opposed to the dry grasslands. The photos suggest a uniform regeneration of seral scrub, not retention of old forest.

But we do agree that these gullies are more advanced and have become refugia for swamp maire and in the east wetlands.

FOBRP raise:

The FoBRP invited comment from Dr Colan Balkwill, who has recently completed a PhD around swamp maire at Victoria University of Wellington, and is familiar with many of its habitats throughout Aotearoa. Colan visited the POBDA and commented "I observed healthy swamp maire trees of various ages, at least two of which were likely original and seeded prior to land clearance. These trees are therefore not only of historical value but also harbour a snapshot of the ancestral genetic diversity of the region prior to deforestation. They therefore represent living fossils, and any seed they produce is of high value. The habitat as a whole is well suited to swamp maire and other swamp forest plants

Our response is:

The larger older trees (also observed by us), i.e. those with the greatest value as fruiting trees (related to the above statement), are not in the exchange area, but in the central western gully (where they have been roped off (14 fruiting trees).

With respect to the 5 OBDA swamp maire in the DOC-give area, these are not affected by the land exchange. And the substantive application will seek to ensure these are salvaged and offset (both) as well as securing their genetic material. Our swamp maire habitat GIS assessment based on the Victoria University research publication methods and our own field work shows that there are many small swamp maire habitats in the wider local area but which currently do not have swamp maire. The net outcome for swamp maire is a gain.

FOBRP raise:

"Greater Wellington has lost over 95% of its swampland habitat. Any remaining swamps, and the plants they contain, should therefore be considered irreplaceable, and it is hard to envisage how the proposed swap could provide land that is as ecologically valuable as the park land considered for exchange. Of specific note is the site's relative isolation from other swamp maire remnants, and its ease of access, both of which are important components of protecting these trees from myrtle rust. Isolation means reinfection is less likely, and accessibility allows monitoring and control to be more easily carried out by members of the public".

Our response is:

Wetlands and swamp maire habitat and swamp maire are not irreplaceable. Wetlands are created and swamp maire are successfully established in restoration programs. The friends of Waikanae River group have successfully established at least two areas of swamp maire, of which at least 10 are canopy height (for example). The below photograph shows one of eight along this particular created wetland edge healthy and becoming a canopy representative.



A planted swamp maire (right), one of eight along a created wetland edge and walking path left on the Waikanae River.

Wetland values in the DOC give area are balanced by a similar sized wetland in the DOC get area, which is currently still early in its regeneration, and which has proposed improvements to cause a representative wetland that will be more advanced than that lost and with 200 swamp maire.

FOBRP raise:

All of the currently known swamp Maire are publicly visible on the iNaturalist website; these are the only known swamp maire within Belmont Regional Park, and the nearest recorded population is in Stokes Valley (2.5km distant), on the other side of the Hutt Valley.

Our response is:

The issue here is that there is no comprehensive swamp maire survey over the ecological district but we acknowledge that iNaturalist reports do provide a good if unverified survey effort. The iNaturalist shows 14 Swamp maire within the DOC-Give, we assess there to be 8 plants in the DOC-Give and 5 likely to be impacted by the OBDA footprint) but regardless of the actual number the processes proposed as part of the land exchange does not remove swamp maire and rather it adds 200 new swamp maire to be established in suitable habitat in a similar area. There remains swamp maire habitat adjacent and throughout this area of the park and those areas do not currently contain swamp maire.

FOBRP raise:

This part of Belmont Regional Park is part of a Key Natural Ecosystem (KNE), and forms part of a vital ecological corridor connecting native forest fragments in the western hills of Lower Hutt.

Our response is:

The temporary removal (50 years) as a consequence of the OBDA development (not the land exchange) does not exclude or disconnect the KNE, nor does it reduce the width at the Park at that location such that the connectivity north and south is seriously jeopardized for most mobile species currently present. But it is recognized that at the point of the OBDA the width of the seral scrub regenerating vegetation in the park will reduce by 50% in the first 20 years of OBDA operation. There are other such “narrow” bands of seral vegetation south of this location which still offer connectivity and therefore so should this area.

FOBRP raise:

The proposed land exchange would remove about 23.5 ha from that KNE, but the greatest impact would be that, although the overall area of conserved land would remain roughly unchanged, the perimeter between the regional park and the quarry lands would increase by a factor of 43.61, from 1.45km to 5.25km. (That is the increase in plan distance; the actual boundary increase would be greater, given the topographic changes along it). DOC have already raised this as a significant problem (see Appendix C3, p8):

There does not appear to be consideration that the OBDA + setback area is one intact square-shaped block, whereas the other 3 blocks are not physically connected and have awkward, long shapes with high perimeter:area ratios. This is important for fauna and ecology generally, as island biogeographic theory states that larger areas can support more diverse range of species. In addition, the connectivity of the OBDA to other larger areas of native habitat does not appear to have been considered in the scoring system.

Our response is:

Please see our above response regarding the fragmentation issue. The perimeter along the park and quarry (currently around 550m) will slowly increase (ie the extent of non-forest edge increases as stages progress) with the effects of stage 1, 2 being the most obvious, but these are also mitigated through revegetation first. There is no time in the process where the entire linear outer extent is cleared and would cause the extent the friends propert to occur. At worst we estimate an additional 1200m of new quarry park interface when all of most of the stages are enacted but not all restored and that effect is temporary.

FOBRP raise:

A longer perimeter will greatly amplify the “edge-effect”, whereby the conservation values near the edges of conservation land are depleted over time through incursion of invasive weeds, pest animals, and (for example) airborne pathogens, such as myrtle rust. This effect is already pronounced and obvious along the current POBDA boundary with the quarry.

Our response is:

See above regarding the fragmentation issue. Because of the staging the vegetation is not cleared all at once and there is progressive revegetation meaning the edge effect while occurring at a different location and variably over the years is actually fairly similar to that of today. We note also that some of the “new” edge effect is not new as there is already edge with the open access way for the park north and through the central ridge of the OBDA.

FOBRP raise:

In fragmented landscapes, edge effects can dominate the entire area, leading to significant loss of habitat for species that require undisturbed interiors. A Nottingham Trent University study (March 2025) suggests that fragmented landscapes have 12.1% fewer species than unfragmented ones

<https://www.ntu.ac.uk/about-us/news/news-articles/2025/03/want-to-preserve-biodiversity-go-big-researchers-say>).

Our response is:

This level of fragmentation will not occur, and the new edges replace the existing in magnitude, and it is a very far reach to suggest the clearance of the OBDA in the staged fashion proposed would lead to such effects in the remaining park area. The park retains its large size and is not divided or fragmented. It has, for a time, a thinner band at one location, which will be no thinner than other areas already present today and is over time refilled with native vegetation.

FOBRP raise:

Because of their QEII status, the Firth and Northern Gully established forest areas are currently part of the wildlife corridor between the regional park, the Hutt Valley and the great extent of native forest further east. Importantly, they are contiguous with the conservation KNE within the park, but the proposed land exchange and subsequent quarry activity would sever this wildlife corridor

Our response is:

There is no severing of a corridor and no actual fragmentation. The mobile species are still able to navigate through native vegetation cover in a similar way as they can now move north and south, east and west.

FOBRP raise:

We have said little about the relative values of the old Dry Creek clean-fill site, NW of the Haywards Intersection. From a recreation perspective, it is clear from Fig 5 of the Land exchange report (p21) that the area offered by the applicant gives no recreation advantage, being steep-sided bush, adjacent to retired quarry working, and off to one side (east) of all other recreational activity in the park. The exceptionally weedy nature of the old quarry side and its proximity to the proposed exchange block, along with the distance from the rest of the park, suggest that little or no ecological value would be gained from this part of the proposed exchange.

Our response is:

While we also considered the lower levels of the old Dry Creek quarry to be too weedy for inclusion in the exchange, the areas proposed for exchange do have values and values not dissimilar for fauna as the OBDA, only without swamp maire habitat. They, while weedy, have areas of good regeneration of native cover and there is a weed and pest management component to the exchange.

FOBRP raise:

After the initial discovery of 14 swamp maire within the POBDA, the applicant brought the western boundary eastwards in an attempt to mitigate the impact, ostensibly by avoiding the swamp maire. However the submitted plans (eg Fig 2.1 on p3 of the Hydrology Assessment) show the catchment upstream of these trees to be within the POBDA, and if the hydrology in this gully is modified, this grove of swamp maire could be expected to die within one or two years, as was explained in section 3 above.

Our response is:

While it is outside of our area of expertise, we understand that the OBDA cannot alter hydrology or cause discharge of material to that central western gully (especially) and that protection of the hydrology and

material entering the swamp maire gully is paramount. The effects of the development of the OBDA area are to be considered as part of the substantive application.

FOBRP raise:

One of our key findings is that the POBDA contains irreplaceable ecosystems and threatened tree species that were not known before the application was conceived. The applicant's argument supporting net ecological gain is rooted in incomplete and unreliable data, and current knowledge shows it to be false.

Our response:

We remain of the view that the land exchange will achieve a net ecological gain.

The natural inland wetland area present on the DOC-Give is not irreplaceable; it is a relatively simple Carex-kiokio wetland with some regionally underrepresented sedge and rush taxa that is in a modified state post farm use. Wetland recreation is typically successful throughout the country, but we note that the loss of the wetland area is a substantive application offset issue, and is not an effect of the land exchange. The exchange offers the same area of wetland (southern gully) with restorative and swamp maire additions and management. Regardless of that the OBDA resource consent application has an offset developed for that wetland effect. It is possible to both recreate native assemblage wetland and cause swamp maire to be propagated in new areas (see Friends of Waikanae River example above).

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