IN THE ENVIRONMENT COURT AT AUCKLAND

I TE KŌTI TAIAO KI TĀMAKI MAKAURAU

Decision [2021] NZEnvC 120

IN THE MATTER OF

an appeal under s 156(1) of the Local

Government Act (Auckland

Transitional Provisions) Act 2010 (LGATPA) and the Resource Management Act 1991 (RMA)

BETWEEN

BROOKBY QUARRIES LIMITED

(ENV-2018-AKL-150)

Appellant

AND

AUCKLAND COUNCIL

Respondent

AND

ROYAL FOREST & BIRD PROTECTION

SOCIETY OF NEW ZEALAND

INCORPORATED

ENVIRONMENTAL DEFENCE SOCIETY

INCORPORATED

FULTON HOGAN LIMITED

s 274 parties

Court:

Alternate Environment Judge L J Newhook

Commissioner R Bartlett

Hearing:

At Auckland on 27 and 28 July 2020

Appearances:

R E Bartlett QC, B J Matheson and K C Mackintosh for Brookby

Quarries Limited and Fulton Hogan Limited

M G G Gribben and J M B Bergin for Auckland Council

S R Gepp for Royal Forest & Bird Protection Society of NZ Inc C S S Woodhouse for Environmental Defence Society Inc

Date of Decision:

13 August 2021

Date of Issue:

13 August 2021

DECISION OF THE ENVIRONMENT COURT ON RELATIONSHIP OF S.E.A OVERLAY AND SPECIAL PURPOSE QUARRY ZONE UNDER THE AUCKLAND UNITARY PLAN IN TWO SPECIFIC QUARRIES

A: Appellant's amended plan provisions confirmed.

B: Costs reserved.

REASONS

Introduction

[1] While making recommendations to the Auckland Council on the then proposed Unitary Plan, the independent hearing panel (IHP) decided to delete the Significant Ecological Area Overlay (SEA Overlay) from several places in the region including in the Special Purpose Quarry Zone (SPQZ).

[2] The reason given by the IHP (in summary) was that the SEA Overlay was inconsistent with the purpose of the SPQZ, the extraction of minerals. The IHP nevertheless retained vegetation removal provisions over land zoned SPQZ, such that vegetation alteration or removal rules within Table E15.4.1 would still apply within the SPQZ, including restricted discretionary activity for vegetation alteration or removal over certain thresholds under Rule E15.4.1(A10).

[3] The recommendation of the IHP having been accepted by the Council, there was an appeal on points of law to the High Court. The parties there came to an agreement, in which they expressly accepted the Environment Court's decision in *Man O' War Station Limited v Auckland Council*¹ (subsequently upheld in the High Court² and the Court of Appeal³) that an area should be identified as an SEA

¹ [2014] NZEnvC 167

² Royal Forest & Bird Protection Society of New Zealand Inc v Auckland Council [2015] NZHC 767; [2015] NZRMA 329

³ Man O'War Station Limited v Auckland Council [2017] NZCA 24.

if it was assessed as significant, considering ecological significance factors, irrespective of the planning consequences of that identification.

- [4] In this case the High Court allowed the appeal by consent, reinstated the SEA Overlay and ordered that the AUP be amended by including a new restricted discretionary rule for "any vegetation alteration or removal within a quarry zone", with matters of discretion and assessment criteria related to that rule.
- [5] As it was entitled to under s156 LGATPA, Brookby Quarries then appealed to the Environment Court, supported by a notice under s 274 RMA by Fulton Hogan Limited (which companies we refer to jointly as "the quarry operators").
- [6] The quarry operators sought a specific objective and policy framework for vegetation alteration or removal in the SPQZ that recognised the need to remove vegetation in order to remove overburden to subsequently enable extraction of minerals.

[7] More particularly they sought:

- Amendments to the objectives and policies in Chapter D9.
- Amendments to the matters of discretion in E15.8.1(3) and assessment criteria in E15.8.2(3).
- Consequential amendments to give effect to the matters raised in the appeal.
- [8] RFBPS and EDS joined the appeal under s 274, in opposition.
- [9] Prior to a hearing in this Court scheduled for early 2019, the parties approached concerning uncertainty over the scope of the High Court's consent order. Judge Newhook agreed to state a case to the High Court as a result of which on 17 October 2019 the High Court confirmed that its consent order was intended to confer a right of appeal not only in respect of the activity status and assessment criteria, but also concerning relevant objectives and policies.

[10] A logical consequence of that confirmation was the parties then agreed⁴ that the options for relief set out in the planning evidence called by the Societies from Ms Sitarz, Ms Ford's primary and rebuttal planning evidence called by Auckland Council and Mr Hay's rebuttal planning evidence called by Brookby, are within the scope of the right to appeal conferred by s 156 LGATPA.

Issues narrowed pre-hearing

[11] Counsels' statement of issues of 17 July 2020 reported that issues in dispute among the parties had narrowed somewhat, and recorded issues agreed and points of disagreement.

[12] Except for one minor cross-reference in the assessment criterion E15.8.2(3) (i.e. the cross-reference to Policy D9.3(8A)) the parties agreed about the form and content of both the matters of discretion (E15.8.1(3)) and the assessment criteria (E15.8.2(3)) for the restricted discretionary activity.

[13] The key areas of disagreement related to the need for a separate objective and policy specifically supporting the new restricted discretionary rule and the appropriateness of the text of the objective and policy proposed by the quarry operators.

[14] The Council and the quarry operators submitted that a new objective (E.28.2(2)) and new policy (D9.3(18)) specific to the restricted discretionary activity rule, would be appropriate.

[15] The Societies did not accept that the new objective proposed by the quarry operators was appropriate. They recorded that they were not opposed in principle to the inclusion of a policy specific to the SEA/SPQZ interface but did not support the policy put forward by the quarry operators. Rather, the Societies proposed that if specific policy direction was needed, this could be achieved by amending the current policies (D9.6(6) and D9.6(8)) which relate to the

⁴ In counsels' joint statement of issues for the hearing dated 20 July 2020.

provision of infrastructure, to also apply to quarry activities within SEAs and SPQZs.

[16] Concerning the proposed policy framework, the primary difference between the position of Auckland Council and the quarry operators on the one hand, and the Societies on the other, was that the former considered that (aside from the coastal environment) there should be no requirement in the policy to "avoid" the removal of SEA vegetation related to mineral extraction within the SPQZ, whereas the Societies considered that the normal hierarchy should apply, such that there would be a requirement to avoid where practicable, adverse effects on values of significant ecological areas before other effects management options such as mitigation and offsetting were considered.

[17] The parties acknowledged that resource consents for the removal of SEA vegetation can be declined if there is inadequate mitigation, offset or compensation to address the relevant effects on biodiversity. This was reflected in the restricted discretionary activity status.

[18] There were other matters of disagreement relating to introductory text and a very minor disagreement between the Council and the quarry operators on the wording of the proposed new policy.

[19] We found the above summary of issues helpful and were also able to work in preparation for the hearing, from counsels' detailed schedules of matters agreed and matters disagreed, attached to the joint memorandum. At the request of the Court the parties also provided a schedule of parts of statements of evidence already filed that would not need to be pre-read on account of the narrowing of issues.

The hearing

[20] The hearing proceeded over two days, with the parties offering opening submissions and all witnesses except one being cross-examined.

[21] The two groups of parties remained resolutely apart, reflected in the extent to which the ecologists and the planners "held their ground" under questioning.

[22] Counsel for the Societies provided us with submissions as to why the existing planning framework (not supported by the quarry operators or the Council) should be preferred to the provisions being supported by themselves. They strongly submitted that retaining for the decision-maker a discretion to require that unacceptable adverse effects are avoided, would better accord with the planning framework in the AUP than an approach making a policy assumption that avoidance will not be required or achievable.

[23] The Societies outlined what they considered to have been an overall policy thrust of the AUP, that vegetation removal within any part of a quarry zone subject to a SEA Overlay, is classified as a restricted discretionary activity, with an emphasis on avoidance where practicable. They discussed the history of the treatment of the matter by the Independent Hearings Panel, the subsequent adoption of the IHP recommendations by the Council and the taking of proceedings in the High Court on appeal by Forest & Bird.

[24] The Societies made submissions about what they saw relevant to council functions, particularly under ss 30 and 31 RMA and quoting from Court decisions about what they suggested should be a mandatory obligation on regional councils to make objectives policies and methods for the maintenance of indigenous biodiversity⁵, and similar judicial expressions from other cases. Much of Ms Gepp's questioning of many witnesses for the other parties, proceeded on this footing.

[25] In answering questions from the Court, Ms Gepp seemed to submit that the obligation she contended for amounted to something of an environmental bottom line. However, as submitted by counsel for the council (including in closing) there is no case authority to support that claim, and such an

⁵ See for instance *Property Rights in New Zealand Inc v Manawatu-Whanganui Regional Council* [2012] NZHC 1272 at [31].

interpretation cannot be seen to be supported by the wording and content of s 30. We accept the reasoning of counsel for the council in that regard as follows:

- a) Section 30(ga) is one of many functions of regional councils (and unitary authorities) within s 30; none of the functions are given any priority within that section;
- b) In the Auckland context the provision of minerals is an issue of regional significance in the relevant chapter of the AUP "Issues of Regional Significance", among other things;
- c) The Council needs to implement all such matters where and to the extent relevant;
- d) The case authorities cited by the Societies do not support their submission and in particular the Environment Court is not bound by obiter comments of other divisions of the Environment Court; and there is no relevant higher court decision. Judicial references to environmental bottom lines are generally found in relation to national policy direction such as the NZ Coastal Policy Statement and part of the NPS-FM 2020, but not in the current context.

[26] We accept those submissions on behalf of the council and agree with counsel's reasoning. While the issue propounded on behalf of the Societies is undoubtedly important, it is not a "bottom line".

[27] We were further not assisted by a submission on behalf of the Societies⁶ that "a policy assumption that effects of mineral extraction cannot and should not be avoided is overly simplistic and inconsistent with the importance placed on the maintenance of indigenous biodiversity and safeguarding ecosystems in the scheme of the RMA". We do not find support for this rather one-sided emphasis in the provisions of the RMA and case law just discussed, even in Part 2 RMA itself.

⁶ At paragraph 34 of their opening submissions – 20 July 2020.

There are many more factors at play and in tension among themselves.

The case for the quarry operators.

[28] Mr SA Riddell, the managing director of Brookby gave evidence about aggregate supply and demand issues in the Auckland region, the importance of Brookby and Hunua Quarries in supplying the construction trades and infrastructure creation/maintenance, the nature of the quarrying, the difficulties of extracting the aggregate if prevented by overburden retention, and the costs of obtaining the aggregate in the alternative from the Waikato and Northland regions. His evidence was used by Brookby's economist witness Mr GM Akehurst to explain the economic implications of various scenarios.

[29] Neither statement was factually challenged by evidence in opposition⁷, and barely so in cross-examination.

[30] The fundamental points were that the fixed nature of the resource, the proven need for it, the uncertainty about getting consent for removal of the vegetation and overburden against the current regime, and the sheer costs of alternatives, were contrary to the national interests he and Mr Akehurst described. He also propounded the good ecological outcomes available from forward action of mitigation and offsetting that the quarry operators considered would flow from the regulatory regime they favoured.

[31] Between them, Mr Riddell and Mr Akehurst examined the current and forecast growth of population, construction and infrastructure in the Auckland region, and the likely scenarios for resulting demand for aggregate, noting that at the same time many sources of aggregate had been lost (covered by) expanding urban development or were simply not available in protected areas like the Hunua Ranges. The evidence was sobering and as we have said, little challenged.

[32] Brookby reminded us that the Environment Court had made findings about

⁷ Refer later in this decision for a description of the Societies' differing approach to matters economic.

positive effects in the regional and national interests of supply of aggregate, in *Brookby Quarries Limited v Auckland Council*⁸, in respect of which the circumstances had only since changed more in favour of the need for the resource as described in their current evidence.

[33] They gave evidence that costs of transporting aggregate from Auckland Region is over 40% less than from the Waikato and over 50% less than from Northland. They calculated that sourcing aggregate from outside the Auckland Region would incur additional transportation costs currently of between \$52m and \$71m annually, rising to between \$171m and \$256m by 2043.

[34] Mr Riddell described the quality of the available resource. He gave evidence describing the very capital-intensive nature of establishing new quarries, such that there are economic efficiencies to be gained by increasing production from existing quarries. He described the considerable financial costs of consenting expansions and new quarries under the existing regulatory framework, while stressing again the uncertainties in such exercises when the same grounds of opposition are mounted strongly time after time.

[35] He noted that since purchase in 1996, resource consenting costs at Brookby have been several million dollars (including council fees) and that mitigation cost including land acquisition has been more than \$17m.

[36] The council called evidence that strongly supported the case for the quarry operators. Based on the evidence, we found considerable favour with its submissions, both in opening and closing. Throughout the AUP process the Council has consistently recognised that mineral extraction within a quarry zone/SEA is a difficult issue and a special case, worthy of a bespoke approach that is different from the general approach in the AUP to other activities people might wish to undertake within SEAs. This clearly involves two competing themes, the protection of significant indigenous biodiversity⁹ and the economic and social

⁸ [2012] NZEnvC 168

⁹ See for instance RPS B7.2.

enablement of people and communities in the form of provision of aggregate, including by the zoning of significant mineral resources and extraction sites as SPQZ.¹⁰

[37] The Council submitted that in practice it is not possible to <u>fully</u> implement both directives in all circumstances – avoiding effects on the values of a SEA overlying aggregate would very likely mean the aggregate could not be extracted. Equally, the removal of some or all vegetation within a SEA overlying aggregate, without adequate mitigation and offset, would almost certainly have adverse effects on the values of that SEA.

[38] The retention of restricted discretionary activity status for vegetation alteration or removal in a quarry zone/SEA remains important, but needs clear objective and policy framework support, as appears to us supported by the confirmation from the High Court (without of course any comment on the merits) that the issue under appeal in this Court consequent on the High Court consent order can include relevant objectives and policies.

[39] The Council and the quarry operators both submitted that if the AUP provisions remained without change, a decisionmaker on an application for vegetation removal in a quarry zone/SEA would need to identify, interpret and reconcile the different provisions, which could be inefficient and lead to different results for similar situations in different places. Based on the evidence from the quarry operators, they and the Council agreed that it is not practicable for rock extraction activities within SEAs to avoid adverse effects on them in the Brookby and Drury quarries. As a result, they submitted, the more efficient and effective approach is for the AUP to clearly signal that the initial or primary policy response for SEAs is not appropriate for excavating materials in the Brookby and Drury quarries, due to the unique and limited circumstances of them. They submitted that it would be better that the AUP signal this now. If there should prove to be no need to refuse consent because of inadequacies of offset and mitigation, the goal would be that the community receives the aggregate it needs

¹⁰ See for instance RPS B7.6.

and significant ecological effects of rock extraction activities within SEAs are mitigated and offset so that there would be no net loss and preferably a net gain.

[40] By the end of the hearing, we gained the impression from the matters upon which much cross-examination had proceeded (<u>significant</u> indigenous biodiversity), that the two quarries expressly the subject of evidence before us (Brookby and Drury), could usefully be the subject of further ecological study and report to the Court.

[41] The owners of other quarries having taken no part in the proceedings, we decided, after conference in Court with counsel, that the further studies should be confined to these two quarries and likewise the outcome of the appeal.

[42] The Societies expressed their unhappiness with this approach, because they said that it was not affordable for their ecologist to be involved in further studies and conferencing. We nevertheless felt from the evidence as filed, and the answers given by various witnesses in cross-examination, that there might well be the prospect of resolution of the case one way or the other concerning the two quarries if these steps were taken. We regret that the Societies felt unable to participate but having chosen to enter the litigation, they needed to accept that the Court would progress it as it felt appropriate on the information before it.

Further steps post-hearing

[43] A report on each of the two quarries was filed in November 2020, attached to a joint witness statement by the council and quarries' ecologists. The planners for the Council and the quarry operators made a joint witness statement which was lodged in mid-December.

[44] On 25 January 2021, the Court having directed that the parties' planning experts provide the Court with their suggested draft provisions, jointly where possible, the planners for all parties undertook this task and their two alternative sets of provisions were attached to the joint memorandum of counsel.

[45] On 24 February 2021, counsel for all parties signed and filed a joint memorandum regarding further proposed timetable.

[46] Counsel then conferred as directed and considered that in the light of additional ecological information and the outcome of the planning conferencing, no further hearing would be required as no party wished to test those matters by cross-examination. The Court being similarly minded, it approved the parties' proposed timetable for the filing and exchange of closing submissions, which occurred through March and April this year.

The further studies and conferencing of witnesses

[47] On 3 September 2020, we issued directions as to post-hearing steps, including a timetable for completing further ecological assessments in line with the oral directions we had made at the conclusion of the hearing. We required that the scope and methodology for the ecological assessments be referred to us for approval or for resolution of any matters in dispute.

[48] The ecologist called by the quarry operators Ms Shanks, and Dr Maseyk called by the Council, then conferred and agreed methodology to conduct field investigations, confer, produce an ecological report concerning each quarry and a joint witness statement.

[49] The ecologists agreed methods to undertake ecological investigations of SEAs overlying SPQZs at the two quarries and set purpose and scope overall and investigations to be undertaken at each quarry including for examination of vegetation, terrestrial fauna, freshwater ecological values and methods of reporting. Concerning Brookby Quarry, the work was intended to build on the Bioresearches Report entitled "Brookby Quarry Stage 3 Expansion Area: Assessment of Ecological Values" dated October 2018. That for Drury Quarry needed to be more investigative because it was not building on an earlier detailed report.

[50] The work was to be guided by certain publications, for example the Department of Conservation Biodiversity Inventory and Monitoring Toolbox, the NZ Threat Classification System Manual and relevant Department of Conservation status publications for various taxonomic groups, other publications on naturally uncommon and rare habitat types, threatened environment classification protocol, reports relevant to the Ecological District and regional classifications of vegetation types and threat status, and regional species lists and classifications. Reporting and evaluation was to be consistent with EIANZ (2018) guidelines. Further, by reference to an extensive list of publications appended to the ecologists' memorandum.

[51] The Court approved that memorandum and fieldwork was undertaken by J S Ecology and Bioresearches in September and October 2020. Two reports resulted, one in respect of each quarry, and both were appended to the joint witness statement of the ecologists' dated 17 November 2020.

[52] The joint witness statement reiterated methods that had been approved by the Court, undertaken in line with the many publications earlier referenced.

[53] In line with the directions of the Court, and based on our understanding of the evidence at the July hearing in which there was a heavy focus by the Societies on threatened and at risk species, regionally important species and naturally uncommon and historically rare ecosystems, the studies and the joint report focussed on those areas. Out of care, the ecologists extended their purview to regional threat status in addition to national, which they considered to be critical to the maintenance, management and enhancement of regional biodiversity and thus also contributing to the biodiversity pattern and distribution at a national scale.

[54] A number of threatened or at risk (nationally or regionally) species and habitat types were found at each quarry, agreed to be reliable detections. These were as follows:

a) Brookby Quarry:

- i) Carmine rata (*Metrosideros carminea*); threatened nationally vulnerable;
- ii) Approximately 11 ha of taraire tawa podocarp forest; regionally threatened endangered;
- iii) Forest gecko (Mokopirirakau granulatus) at risk declining;
- iv) Tuna/Longfin eel (Anguilla dieffenbachii); at risk declining.

b) At Drury Quarry:

- i) Approximately 5 ha of historically rare volcanic boulder field forest habitat, presently within SEA_T 5349 (Ballard's Cone);
- ii) Carmine rata; threatened nationally vulnerable, present within Ballard's Cone;
- iii) Small leafed kowhai (*Sophora microphylla*); regionally at risk sparse, present within Ballard's Cone;
- iv) Tuna/Longfin eel; at risk declining, recorded within the southern SEA_T 5346;
- v) Long-tailed bat/Pekapeka-tou-roa (*Chalimolobus tuberculatus*); threatened nationally critical, recorded from a single record within the southern SEA_T 5346 indicating the species may utilise within this particular SEA.
- [55] In addition, at Brookby Quarry, the vegetation communities and flora values were evaluated as "high", terrestrial fauna values as "moderate" and freshwater values as "high". Overall ecosystem and habitat values at this quarry were evaluated as "high".

[56] At Drury Quarry, overall vegetation communities and flora values were evaluated as "very high" at Ballard's Cone and "low" for the other three SEAs within the SPQZ. Fauna values were evaluated as "moderate" at the southern SEA_T 5346, due to the long-tailed bat detection and "low" for all other SEAs. Freshwater values were "moderate" for the southern SEA due to the presence of long-fin eel and "low" for all other SEAs.

[57] The ecologists recorded that these ecosystem and habitat value evaluations were conducted appropriately, following the EIANZ guidelines.

[58] In this joint report the ecologists advised the Court about the adequacy of methods and search effort. In particular they agreed that not every single species present at the site would be detected during field investigations of this nature and therefore search effort and field methods were designed to maximise detection of the species and habitat types of most concern; and that desktop surveys were used to check for species and ecosystems of significance that could be potentially present within the SEA areas overlying SPQZ in each quarry, based on known species distributions and habitat requirements, as well as likely presence of habitat types of interest.

[59] They advised that the investigations had been carried out by suitably qualified field ecologists and that the methodology approved by the Court had been followed.

[60] They expressed a high level of confidence that target species would be detected if they were present, with four caveats about temperature, difficulties of detecting lizard species, potential seasonal differences and that the same level of certainty could not be applied to other biodiversity values outside of the scope of the targeted field work.

[61] The witnesses offered us guidance for site-specific policy.

[62] Of particular importance was the presence of a historically rare habitat type – volcanic boulder field forest, present in Ballard's Cone in the Drury Quarry, a

habitat type that is physically and ecologically irreplaceable.

- [63] Overall ecosystem and habitat values were evaluated as "high" for Brookby Quarry and range from "very high" to "low" for the SEAs present in the Drury Quarry.
- [64] They offered us commentary about a wetland present in the Drury Quarry, (wetland habitat being under real threat nationally). They agreed that the overall biodiversity value for this wetland habitat was "low", although the water quality was evaluated as "good".
- [65] The witnesses recorded that further indigenous biodiversity losses and declines at a regional scale would occur if the elements of biodiversity identified as having high values present within the SPQZs in those quarries were permanently lost.
- [66] Finally, the witnesses reminded us that their investigations had not been directed to the potential to mitigate or offset adverse effects on the biodiversity values present in the two quarries, such that the ability or otherwise to avoid the permanent loss of the values had not been commented on beyond noting the irreplaceability of the Ballard's Cone volcanic boulder field forest.
- [67] Subsequent to the publication of the ecology joint witness statement, the planning witnesses conferred, Mr D Hay (Brookby), Mr M Tollemache (Fulton Hogan), Ms N Sitarz (the Societies) and Ms M Ford (Council).
- [68] The witnesses drew on their earlier statements of evidence-in-chief, the joint witness statement they had earlier prepared on 5 February 2019, the 17 July 2020 joint memorandum of counsel containing statement of issues for the hearing, the ecological evaluation reports on the two quarries and the ecology joint witness statement dated 17 November 2020.
- [69] They produced their new joint witness statement on 10 December 2020.

- [70] They continued to focus on provisions in chapter D9 (SEA Overlay), chapter E15 (Vegetation Management and Diversity), chapter E28 (Mineral Extraction from Land) and chapter H28 (Special Purpose Quarry Zone).
- [71] The three key matters the planners discussed were their response to the new ecology JWS, the relevance or otherwise of the recent National Policy Statement for Freshwater Management 2020 and National Environmental Standards for Freshwater 2020 and the proposal by the quarries' planners for site specific provisions.
- [72] Concerning the new ecology JWS the quarries' planners considered that their earlier recommended draft provisions could be adapted to become site-specific to the two quarries but would otherwise remain appropriate. Ms Ford considered that the new ecology JWS did not alter her general opinion as stated in her evidence, more-or-less aligning with the views of the quarries' planners. Those three planners noted particularly that the process of any future applications for vegetation removal within the SEAs at the two quarries would bring to bear proposed matters of discretion and assessment criteria which would provide the opportunity to assess the currently identified and any future additional threatened or at risk species or ecosystems as assessed at that time, and that applications for consent could be refused if appropriate. Ms Sitarz on the other hand was concerned that the proposed policy thrust appeared to predetermine that avoidance and remediation are not practicable for mineral extraction; and did not address ecological concerns on a wider front than presently assessed.
- [73] The planners were similarly divided over the relevance of the National Freshwater Policy Statement and National Environmental Standards for Freshwater. Ms Sitarz was concerned that the provisions being proposed would be inconsistent with provisions that the Council is required (by the NES) to insert into the AUP without using processes under Schedule 1 RMA.
- [74] The other three planners considered that the NES Freshwater would apply to relevant activities independently of the AUP provisions, acknowledging that

the National Policy Statement would be relevant, but that the AUP as a whole would need to be amended to implement the NES and that this workstream was now under way and could take several years. The quarries' planners added that within the AUP there are multiple rules applying to vegetation removal (including alongside and within water bodies) which may trigger additional resource consent requirements above the consent required for vegetation removal within a SEA.

[75] The planners' JWS attached the amended proposed provisions from the quarries' planners, and the slight difference of opinion about wording in E15.8.2(3) between Ms Ford and the quarries' planners, was discussed. We consider that matter later in this decision. Ms Ford generally otherwise supported the proposed provisions. Ms Sitarz had not changed her mind about this since providing her evidence for the earlier hearing, while supporting the previously agreed (JWS planning 5 February 2019) inclusion of amendments to E15.8.1 Matters of Discretion and E15.8.2 Assessment Criteria but remaining opposed to other changes.

The focus of the parties' submissions since the further ecological reporting

[76] The Societies lodged their closing submissions on 16 March 2021, followed by those for the quarry companies on 30 March and for the Council on 8 April. The submissions on behalf of the Societies set the topics to be addressed by the parties in the main, although counsel for the quarries added some further details about the proposed provisions.

[77] The quarry companies also proffered what they considered to be some overarching information (reiterated from earlier in the case). First, that the two quarries provided nearly 50% of Auckland's annual production of aggregate. Secondly, that other than Hunua Quarry (which is not materially impacted by a SEA Overlay), the other quarries (than those represented) that are subject to a SEA Overlay provide relatively little total volume to the Auckland market.¹¹

¹¹ Supplementary evidence of S Riddell 30 June 2020, in particular Figure 2 to that

Thirdly that the area of SEA Overlay as it affects SPQZs at Brookby and Drury Quarries is less than 0.1% of the total SEA Overlay area within Auckland. 12

[78] We now address particular issues argued in closing.

Is a "carve out" appropriate?

[79] The counsel for the Societies submitted that "the primary reason not to proceed with a carve out comes down to the joint ecological evidence demonstrating that there are ecologically irreplaceable and nationally threatened and at risk species and habitats within the two quarries and that further indigenous biodiversity losses and declines at a regional scale would occur if the elements of biodiversity identified as having high values within the two quarries were lost"¹³.

[80] They added that: "The identification of an irreplaceable habitat type, in particular, makes the choice stark: will the AUP allow the destruction of that habitat type by not including "avoidance" as one of the options available to a future consent authority, or will it allow a decision to be made at resource consent stage that includes the "avoidance" option" 14.

[81] They acknowledged that the planner for the Fulton Hogan (re the Drury Quarry) recommended what they (the societies) called a "carve out to the carve out" in relation to the ecologically irreplaceable values at Ballard's Cone, the point of which seemed to them to raise some difficulty of "even further specificity", out of keeping with the remainder of the AUP.

[82] They submitted that this could lead to some precedent problem and that the ecological values elsewhere in the quarries would in some way be downgraded; they submitted that such a "carve out" was not supported by higher

evidence.

 $^{^{12}}$ Drawn largely from Exhibit 1 in the case; for example, out of a total SEA area in the region of 79,095 ha only 0.4% of that falls within SPQZs and only 0.06% covers Brookby Quarry.

¹³ Societies' closing submissions paragraph 3.

¹⁴ Societies' closing submissions paragraph 3.

level direction and further that it amounted to creating in effect a "de facto controlled activity". They also worried the approach appeared inconsistent with the approach of the AUP to infrastructure.

[83] We find rather unnecessary the use of pejorative terms like "carve out" and "having to make stark choices". Further, we do not agree with the submission about an alleged "de facto controlled activity" (in respect of which the Societies' counsel argued that the activity of quarrying somehow "must be authorised"), in circumstances in which it is clear on its face that the proposal is for a restricted discretionary rule with wide acknowledgement from the planning witnesses and the other counsel, that refusals of consent could occur in certain circumstances; particularly when an assessment of a proposal demonstrated that mitigation or offsetting could not be adequately undertaken.

[84] The quarry operators responded that there is no legal planning policy or principle that supports the argument that a so called "carveout" is inappropriate. They submitted that the AUP and other district and regional plans contain examples of specific sites and resources being managed through bespoke provisions, for instance Precincts in the AUP and designations in that and many other plans. They submitted that given these two quarries provide about half of Auckland's aggregate needs and are both significantly covered by SEA Overlays that would significantly impact the supply of aggregate, there was sound planning justification for a somewhat different approach being taken at these two SPQZ's compared to others in Auckland.

[85] They submitted that their proposed provisions did not amount to a "defacto controlled activity"; the activity would remain a restricted discretionary, and if in any given application for consent, the mitigation and offset package was not sufficient, then consent could be declined.

[86] They further submitted that there is no legal or planning principle that would require the management of mineral resources (often recognised as an exception to the sustainable management of resources) to be consistent with how infrastructure is managed. This because, there is no locational flexibility for

quarries within the SPQZ and no locational flexibility at either of the two quarries in respect of the SEA Overlay. If quarrying of these areas is as to be undertaken, vegetation within the SEA Overlay needs to be removed. In contrast, infrastructure does not have the same locational constraint. We comment that that would not be invariable but is a reasonable submission in the general sense.

[87] Auckland Council provided a more nuanced response about the "carve-out" allegation. It acknowledged that the quarry operators' revised provisions are now site-specific and further that there are very few similar site-specific provisions within the biodiversity or vegetation management provisions of the AUP. However, it also recorded that the AUP as a whole contains 169 precincts that provide site-specific objectives, policies and rules. Precincts generally only contain district plan rules while the revised provisions are regional plan provisions, however the difference in jurisdiction should not be determinative of the appropriateness or otherwise of site-specific direction. What should be determinative is that the AUP already contains a significant number of site-specific provisions and the Revised Provisions are entirely consistent with that approach.

[88] As to the suggestion that the quarry operators were seeking some sort of *de facto* controlled activity status, the Council offered a similar response to that of the quarry operators.

[89] We agree with the council and the quarry operators on these matters. There is no call to label matters "carve-outs", but instead it is appropriate to identify reasonable planning principle to underpin a site-specific approach given the importance of the aggregate resource in the two quarries, its fixed locations, and the sparing use of some important site-specific matters in the AUP. We are not confronted with a proposal for a *de facto* controlled activity approach. Of significance, if further detailed ecological investigations at the time of any resource consent application demonstrate for whatever reason that mitigation and avoidance will not offer adequate protection, consent could be refused by the decision-maker at the time.

Allegedly inconsistent with national direction on freshwater

[90] In their final submission the Societies continued their theme alleging the quarry operators were seeking that mineral extraction "must be allowed to occur" despite the SEA Overlay. They submitted that that "ethos" has not been upheld by government in promulgating the NES-Freshwater in relation to wetlands, given, they alleged, information from the Brookby management evidence of Mr Riddell that quarrying would result in wetland drainage.

[91] They submitted that the NES prohibits earthworks which would result, or are likely to result, in the complete or partial drainage of all or part of a natural wetland where earthworks do not have another status under regulations 38 to 51 of that instrument.¹⁵

[92] The Societies submitted that quarrying would not have another status under regulations 38-51 and therefore quarry operators could not apply for or be granted resource consent for earthworks in wetlands. They submitted that the provisions sought by the Societies in these proceedings are more consistent with the NES-Freshwater, than the "carve out provisions". They also noted that the NES-Freshwater also provides that reclamation of the bed of a river is a discretionary activity, noting from the evaluation reports for the two quarries that they include several streams.

[93] The Societies noted the crossover into the National Policy Statement Freshwater Management 2020 directing Auckland Council to make certain changes to the AUP to give effect to certain of the national instrument's policies.

[94] The quarry operators in their closing submissions noted that these matters had been raised by the Societies for the first time in their closing submissions and that neither of the new freshwater national instruments had been the subject of planning evidence in this case (although there had been a discussion of them in section 6 of the Planning JWS dated 10 December 2020).

¹⁵ Regulation 53 of that instrument.

[95] The quarry operators acknowledged that the Court would need to have regard to these instruments, but given that they had been raised at a very late stage of the proceedings, the most appropriate approach would be to ensure that there is nothing in the provisions under consideration that would be "completely contrary" to them, or render the AUP inconsistent with them.

[96] The quarry operators acknowledged the recent decision of the Environment Court in *Minister of Conservation v Northland Reginal Council*¹⁶ where the Court found that there is a need to consider whether it is more appropriate to achieve the newly specified outcome provided under the NPS-FM in the event that there is a difference in outcome to the prior national policy statement; also concerning the NES-FW as insofar as it would be redundant to impose rules that would require immediate amendment.

[97] The submission of the quarry operators on this was that the application of their proposed provisions would not result in an inconsistency or difference in outcome through the application of the new freshwater regime because the current proposed provisions relate to management of vegetation within a SEA Overlay and not freshwater or wetlands. They submitted that whatever other resource consents might be needed, whether under those national instruments or any other rules, is a matter for the quarry operators when they make the necessary applications for consent (noting as well that at the time those applications are made, the national instruments might have changed).

[98] They noted that the NPS-FM has a specific section directing the regional council to implement it, which the planners told us in their JWS is only starting in Auckland and will take on a coordinated and consistent approach across the entire AUP.

[99] The Council pointed to input from its planning expert Ms Ford in the JWS acknowledging that the NPS-FM is a relevant higher order planning document that must be given effect to but submitting however that it is of limited relevance

¹⁶ [2021] NZEnvC 001 at [33].

to the remaining issues in dispute in this case. Also, that the AUP as a whole has to give effect to that NPS within a specified timeframe and that the Council has an ongoing workstream to do so. Counsel pointed to various AUP policies that are receiving attention. His submission was that future resource consent applications involving reclamation of a stream or river or any works in a wetland where the site is also subject to a SEA will need (subject to the activity status of the application) to be assessed against these new policies <u>in addition</u> to the provisions relating to SEAs. He submitted that it is relatively common for a complex application to be assessed against a range of provisions that address different resource management matters.

[100] He submitted that the proposed revised provisions relating to policies D9.3 and E.3.3 demonstrate consistency coupled with slightly different expressions of the same concepts, or at least that they are not inconsistent. He submitted that the slightly different wording in the respective provisions does not create irreconcilable tensions or pull in different directions. An application that needs to assess the different sets of provisions can consider and apply each set, in response to the particular circumstances at the time of an application.

[101] We consider on this issue that the Societies are asking us to stray beyond the scope of the present proceedings. We accept the submission of the Council that the proposed revised provisions are at least not inconsistent with the river and wetland national policies and that future applications for resource consent can, as they must, consider many complex matters typically raised in such applications. The matters raised by the Societies concerning the national instruments are not reasons to favour their conservative preferred outcome in the present proceedings.

Information on ecological values allegedly inadequate

[102] In their closing submissions the Societies alleged that the new reports on the two quarries and the information offered by the two ecologists in their JWS, was inadequate to support the exclusion of the requirement to avoid adverse effects where practicable.

[103] They submitted that the higher order provisions of the AUP required that areas of significant indigenous biodiversity value are protected from the adverse effects of subdivision use and development.17 They submitted that this is to be achieved by identifying areas of significant indigenous vegetation that meet with the factors in Schedule 3 – Significant Ecological Areas (SEAs) – Terrestrial Schedule. SEAs are identified if they meet one or more of the following factors:

- a) Representativeness;
- b) Threat status and rarity;
- c) Diversity;
- d) Stepping-stones, migration pathways and buffers;
- e) Uniqueness or distinctiveness.

[104] The new ecological assessments were said to be limited to the detection and identification of any Threatened or At-Risk species or habitat types, which the Societies submitted was just one of the factors that determines significance.

[105] They submitted that the other four criteria allegedly not assessed also have ability to be of such importance that mineral extraction should not proceed. They recorded their belief that the Court confirmed the importance of looking into all five significant criteria, not just threat status, from the bench, towards the end of the hearing.

[106] In answer to the last suggestion it needs to be said that the Court believed the question being asked by counsel was "in the round", to the effect that all of the matters in the Terrestrial Schedule would need to be covered by a quarry proponent by the time any application for resource consent was being considered by a decision maker. In some contrast, although possibly not

¹⁷ AUP, B7.2.1(1).

adequately enunciated by the Court in its response to counsel, the focus on threatened and at risk species at the current stage had come about as a result of the emphasis in the evidence of the Societies' ecologist witness Ms van Meeuwen-Dijkgraaf, on the inadequacy (as she saw it) of mitigation and offsetting in the protection of threatened and at risk species, reflected as well in Ms Gepp's cross examination.

[107] The quarry owners submitted in closing that the Court now has sufficient information to be able to adopt the provisions they propose.

[108] They noted that in the aftermath of the hearing, detailed ecological investigations had been conducted at both quarries, including as to vegetation, flora, fauna and freshwater assessments, following methods agreed between the expert witnesses and accepted by the Court.

[109] The quarry operators submitted that the investigations were not limited to the detection and identification of threatened and at risk species or habitat types but also included an assessment of all factors listed under Schedule 3 of the AUP, pursuant to methods set out in the Ecological Impact Assessment Guidelines (EclA) EIANZ for use in New Zealand Terrestrial and Freshwater Eco-systems (2018). They submitted that these methods are considered best practice and most up to date and are widely accepted by many ecologists.

[110] They provided us with a list of elements considered in relation to each SEA, taken directly from the field notes (three at Drury Quarry and one at Brookby Quarry). We agree that the notes reveal references to such matters in parts referencing representativeness, diversity and a migration pathway, in addition to text concerning threatened species and ecosystems and rare species.

[111] The quarry operators referred us back to evidence heard, and Exhibit 1, in making the following points:

• The total of SEA Overlay effecting SPQZs summarised in Exhibit 1, is 0.1% of the total SEA Overlay area within Auckland, submitted to be minuscule.

- Both quarries are close to a very large area (20,000 ha) of native vegetation in the Hunua Ranges and other significant protected areas in nearby reserves and forests.
- Section 8 of the two ecology reports offer detailed evaluations of the biodiversity values in the two quarries using the EIANZ Guidelines.
- Section 9 of each ecology report discusses the regional and national significance of threatened and at-risk species and ecosystems found within the two quarries.
- The reporting ecologists express confidence that there are no biodiversity elements within the two quarries that are irreplaceable (except for the Ballard's Cone which is intended to remain protected) and that all other biodiversity elements can be appropriately mitigated or offset.
- Potentially adverse effects on threatened or at-risk flora or fauna species can be managed through the use of widely accepted translocation of management protocols.
- Loss of taraire forest (less than 1% of the total area of this forest type found in the Hunua ecological district) can be addressed via a suite of offsetting instruments including advance planting, "trading up" and biodiversity enhancement measures.
- [112] Counsel for the Council in closing submissions acknowledged that while there was a focus in the ecological reports on threatened and at-risk species and habitat types, the investigations described in the JWS included a wide range of matters as follows:
 - a) Species listed under the New Zealand threat classification as either threatened or at risk;
 - b) Species listed as regionally important in regional species lists;

- c) Naturally uncommon and historically rare ecosystems; and
- d) Threatened habitats or ecosystems as determined by regional classifications.
- [113] Counsel for the Council made the point that the focus in this way responded to concerns about "limits or offsetting" discussed in the evidence of Dr van Meeuwen-Dijkgraaf and in the opening submissions of the Societies.
- [114] For instance, counsel for the Societies in opening submissions on 27 July 2020 described limits to offsetting as being ecological values that are so irreplaceable or vulnerable that the risk of them not being successfully offset is too high.18 We certainly gained the impression that the focus of the Societies was on an appropriate policy response being to avoid the effects rather than through mitigation, offset or compensation.
- [115] Finally, on this topic, counsel for the Council reiterated the submission that at the time of subsequent consent processes, any new or previously unidentified ecological values identified that cannot be mitigated or offset, can be the subject of refusal of consent by the decisionmaker.
- [116] Our assessment is that the latter submission is important in our coming to the conclusion that we can weigh at this stage the quite considerable wealth of information brought by the ecologists in the latest studies and JWS and feel able to find that the source of approximately half of the aggregate supply needed for Auckland be the subject of planning provisions that are reasonably enabling of same, while nevertheless offering ultimate protections through refusal of consent should new matters be uncovered and assessed by the decision maker as being particularly relevant in terms of further information brought forward in an inquiry under Schedule 3 of the AUP.

¹⁸ At [69].

Relevance of Part 2 RMA

[117] There was brief mention by some participants of whether or not there should be recourse to Part 2 RMA.19 An example was in the evidence of Mr Hay20 in which he recorded responsibly that he understood from legal counsel that in the context of this appeal, where the Unitary Plan could be considered to be recently and competently prepared, there may be little need to have recourse to Part 2. He recorded as well however that recourse to Part 2 could be had, he was advised, where there is a gap in the planning framework, where there may be seen to be a direct conflict between relative objectives and policies that sit at the same level in a planning hierarchy.

[118] Mr Hay considered that there was both a policy gap and a direct conflict between key objectives and policies (as discussed elsewhere in this decision), so he had brief regard to Part 2 in making his assessment of what he considered to be an appropriate set of planning provisions to manage the protection, use and development of mineral resources on the one hand and areas of significant indigenous vegetation on the other.

[119] He noted that s 5 RMA specifically excludes minerals from matters to be considered in terms of sustaining the potential of natural resources, however the effects of mineral extraction activities on other natural and physical resources (such as ecosystems and waterways) must still be assessed and managed appropriately. He discussed the factors of mapping of quarry zones, making provision for mineral extraction as a controlled activity and a policy gap in the planning framework concerning vegetation removal, needing appropriate policy support for restricted discretionary activity consenting with the potential for applications to be declined. He was concerned at the potential for the existing AUP provisions (SEA Overlay) effectively "sterilising" the aggregate resource without the policy change.

¹⁹ Having regard to the decision of the Supreme Court in *Environmental Defence Society Inc v New Zealand King Salmon Company Limited & Ors* [2014] NZSC 38.

²⁰ Hay, Evidence-in-Chief, paragraph 4.9 and following.

- [120] Concerning s 6(c) RMA, he said the SEA Overlay is the planning tool in the Unitary Plan for protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Schedule 3 of the AUP lists the factors which the SEA has been scheduled for. His opinion was that s 6(c) requires the protection of areas rather than every single item; furthermore, that the protection of areas of indigenous vegetation and significant habitats does not of itself disallow the ability to provide for offsetting if the values can be recreated over time.
- [121] Mr Hay considered that the proposed new provisions would provide a suitable planning framework in terms of the matters requiring consideration under s 7 RMA, in particular subsections (a) and (d).
- [122] Mr Hay was not challenged about these matters except concerning some individual aspects of them relying on the expert evidence of the ecologists called by the quarry operators and the Council. We find that for both reasons advanced by Mr Hay, limited resource should be had to Part 2, and consistent with our other findings on substantive issues, we agree with his advice about how to apply those factors.

Evaluation under s 32 RMA

- [123] Our immediately preceding finding will start to indicate where we consider the answer under s 32(1)(a), lands, concerning the extent to which the objectives are the most appropriate way to achieve the purpose of the Act.
- [124] The options for achieving the objectives are raised in only the most limited way, because despite the Societies' insistence on suggesting that the provisions will amount to a de facto controlled activity, we consider that the restricted discretionary activity status for removal of vegetation and the proposed policies, adequately make provision for the objectives which address in an appropriate way the competing objectives.
- [125] Concerning efficiency and effectiveness, we face the difficulty that the

economic witnesses Mr G M Akehurst for the quarry owners and Dr S E Greenhalgh for the Societies', gave evidence from two substantively different points of view, Mr Akehurst from a primarily financial quantitative economic viewpoint and Dr Greenhalgh from what she called a qualitative viewpoint based on her understanding from other evidence of the ecosystems and biodiversity values at play.

[126] Mr Akehurst's evidence was strongly underpinned by the factual evidence of the Chief Executive of Brookby Quarries Mr S A Riddell, essentially not successfully challenged. In contrast the reliance by Dr Greenhalgh on her understanding of the ecological evidence for the Societies' which caused us to direct further studies by the ecological witnesses, must ultimately be placed into the context of our findings on that further exercise21.

[127] Dr Greenhalgh was cross-examined by Mr Matheson about these matters. She was not able to offer any information to contradict the information brought by Mr Riddell and Mr Akehurst, particularly about the cost of transporting aggregate to Auckland from alternative locations further afield and had conceived that she had not done an analysis herself of the percentage of significant ecological areas impacted by the SPQZs in Auckland, other than to speculate that there might be other areas around Auckland where one might be able to win aggregate.

[128] The Societies' planner Ms Sitarz, under cross-examination, recorded that a qualitative cost and benefit analysis was beyond her expertise and relied on Dr Greenhalgh. She conceded that quarry operators had provided some evidence of costs and benefits to the Court. Her answers when questioned about the contrast in values, we found rather vague, speculative and unhelpful.

[129] In re-examination Mr Hay was asked by Mr Bartlett whether he could think of any new information that might come to hand between now and

²¹ We do note Mr Akehurst's proper concession under cross examination by Ms Gepp, that he had not undertaken her qualitative approach and nor was he an ecologist.

consideration of a resource consent application in five or ten years' time, that might make it practicable to both expand the quarry and preserve the vegetation in the area of the expansion, to which he replied that he could not imagine that it would become economically efficient to do underground mining for rock resource.

[130] The Council provided us with little assistance in this area, but the quarry operators provided sufficient focus, the quality of which contrasted strongly with the limited information from the Societies' on the point, to allow us to find in favour with the quarry operators without difficulty.

Section 290A RMA

[131] It will be apparent from discussion early in this decision, that we have considered the recommendations of the Independent Hearings Panel of the AUP and the decision of the Council on those. The positions of the parties have altered a little, but the quarry operators and the Council are now propounding a position somewhat similar to the recommendations and the Council decision, particularly in the restricted discretionary activity approach. It will go without saying that the parties have approached matters here in a great deal more detail than was possible before the IHP, so differences no doubt reflect that. Things have advanced significantly since then, particularly having regard to the further ecological evaluations done since our hearing.

Conclusion

[132] We find in favour of the quarry operators' proposed provisions, and direct they be placed in the AUP. They attached as **Appendix A**. We resolve the minor wording difference between the Council and quarry operators in favour of the latter. While there may be a minor difference of wording from some phraseology in the AUP, we do not consider the consequences likely to create interpretative difficulty, and we prefer the wording of the quarry operators in this instance.

[133] Costs are reserved, although unlikely to be an issue in a plan appeal.

For the Court:

L J Newhook

Alternate Environment Judge



Appendix A

Insert new text to E28.1 Background:

- farm and forestry quarries are provided for in rural zones; and
- vegetation alteration or removal activities in the Special Purpose Quarry Zone are provided for in Chapter E15 Vegetation management and biodiversity

Objectives

Insert a new final paragraph to D9.1.1:

Objective E28.2.(2) is to be considered alongside Objectives D9.2.(1)-(3) in relation to Policy D9.3.(8A).

With respect to excavation of minerals in a Special Purpose – Quarry Zone, policy D9.3(8A) recognises that it is not practicable to avoid adverse effects on the values of a SEA at Brookby and Drury Quarries (excluding SEA_T_5349), and therefore these effects are required to be mitigated or offset.

Insert a new objective E28.2.(2):

The removal of vegetation, associated with mineral extraction activities within the significant ecological areas in the Special Purpose – Quarry Zone at Brookby and Drury Quarries (excluding SEA_T_5349), which has significant effects is avoided, remedied, mitigated or offset to the extent described in Policy D9.3.(8A).

Policy

Insert a new policy D9.3.(8A):

Significant Ecological Areas in the Special Purpose – Quarry Zone (Brookby and Drury Quarries only (excluding SEA_T_5349)).

- (8A) Manage the removal of vegetation within significant ecological areas to provide for mineral extraction activities within a Special Purpose Quarry zone, provided that, any significant adverse effects:
 - (a) from excavating minerals including removal of overburden are mitigated or offset; or
 - (b) from other mineral extraction activities not within (a) are first avoided, and, if avoidance is not practicable having regard to the need to operate a safe and efficient quarry, are remedied, mitigated or offset;

while:

promoting where practicable the implementation of mitigation or offset planting or other measures prior to any removal of vegetation; and

(i) having regard to matters 1 (noting that the activities described in 8A(a) above are only required to mitigate or offset significant adverse effects), 2 (in respect to additionality), 3, 4 and 5 in Appendix 8 Biodiversity Offsetting, including taking account of the environmental benefits of undertaking actions in advance of any vegetation removal.

Matters of discretion

Amend matter of discretion E15.8.1:

(3) Any vegetation alteration or removal within a Special Purpose Quarry Zone

In addition to the matters in (1) above, the Council will restrict its discretion to the matters below for the activities listed as restricted discretionary in the activity table:

- (a) scale, location, quality, significance, visibility of indigenous vegetation and habitats
- (b) significant adverse effects on existing streams, wetlands, riparian margins and habitat
- (c) buffer areas between Mineral Extraction Activities and remaining areas of significant ecological areas
- (d) duration and staging of Mineral Extraction Activities
- (e) proposals for the avoidance, remediation or mitigation of significant adverse effects, or the offsetting of residual adverse effects in the local area, including positive environmental benefits such as actions (including planting) undertaken in advance of vegetation removal
- (f) benefits derived from extracting the resource.

Assessment criterion

Amend assessment criterion E15.8.2(3):

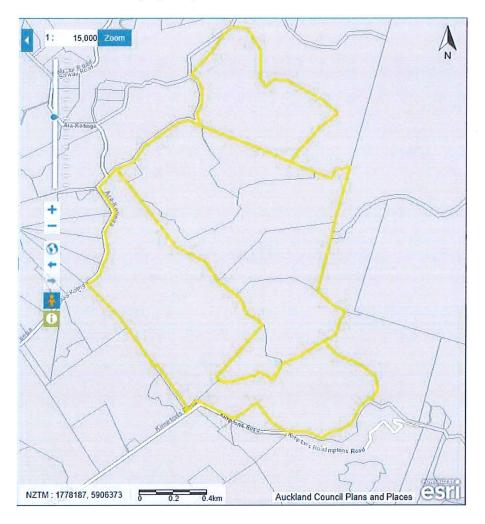
- (3) Vegetation alteration or removal within a significant ecological area within a Special Purpose Quarry Zone:
 - (a) The extent to which the proposed measures, including staging and rehabilitation (and to the extent described in Policy D9.3.(8A) for Brookby and Drury Quarries) will minimise or mitigate significant

adverse effects, offset residual adverse effects or provide for positive environmental benefits through one or more of:

- (i) actions undertaken in advance of vegetation removal;
- (ii) the enhancement or protection of existing areas of indigenous vegetation;
- (iii) the ratio, quality and type of new indigenous planting in relation to the established vegetation to be removed;
- (iv) the translocation of any indigenous plant and animal species;
- (v) establishing ecological linkages with existing vegetation and/or habitats;
- (vi) ongoing programmes of weed and pest control; and
- (vii) fencing and stock removal.
- (b) Whether or the extent to which the proposed offset measures implement the 'no net loss principle' and the timeframe over which it will be achieved.
- (c) The extent to which the vegetation proposed to be removed forms part of an ecological corridor, or is adjacent to a watercourse and acts as a filter for sediment and water runoff, or protect threatened plants or animal species and whether the activity will significantly adversely affect these values
- (d) Whether the scale or location of the activity will significantly affect water quality or quantity and the habitat value of waterways or wetlands
- (e) The extent to which the activity is necessary to enable continued efficient operation of the mineral extraction site

Add the Following Figures to the end of Chapter E28:

Figure E15.10.1 Brookby Quarry extent



7.19 Figure E15.10.2 Drury Quarry extent

