

# Landscape Assessment Peer Review Report

RM220834 / RM22.434 / RC220834  
Cold Gold Clutha Ltd



**10<sup>th</sup> November 2023**

Prepared for:  
Kirstyn Royce

Consultant Planner  
**Central Otago District Council (CODC)**  
**Queenstown Lakes District Council (QLDC)**

Prepared by Richard Denney, Landscape Architect, DLA

**DLA**  
Landscape

## APPLICATION DETAILS

**Application:** Resource consent to undertake suction dredge gold mining within the bed of the Mata-au / Clutha River (Mata-au) and establish a slipway at Rongahere Road.

**Address:** Mata-au / Clutha Riverbed from the Luggate Bridge to the confluence with Lake Dunstan / Te Wairere.

**Legal Description:** Crown land, riverbed

### Queenstown Lakes District Council (QLDC)

**Proposed District Plan (PDP):** Rural Zone  
Outstanding Natural Feature (ONF)  
Wahi Tupuna – Te Ruia Tupapaku

**Operative District Plan (ODP):** Rural General Zone  
ONF  
Hydro Generation Zone  
Statutory Acknowledgement Area

**Application Status:** Non-Complying (PDP)

- at time of lodgement, would otherwise be discretionary under current PDP;
- mining activity other than provided in rules 21.4.32 and 21.4.33 is a discretionary activity;
- structures or moorings passes across or through the surface of any river or is attached to a bank (21.15.8);
- motorised craft for commercial purposes (21.15.11).

**Notes:** Council's planner has determined the dredge is not defined as a structure. I rely on the planner's definition.

### Central Otago District Council (CODC)

**Operative District Plan (ODP):** Water Surface and Margin Resource Area and the Rural Resource Area.  
Statutory Acknowledgement Area

**Application Status:** Discretionary –

- maritime vessels involved in commercial operations exceeding 6m in length and with an internal nozzle exceeding 150mm (5.7.4b)
- earthworks within 10m of any waterbody and removal of vegetation (5.7.2 b and c)
- more than three persons engaged in any activity, (4.7.6B).

**QLDC / CODC Planner  
Request:**

Confirm the suitability of the submitted landscape assessment as well as its findings, in particular with regard to the identified temporary adverse effects.

## **INTRODUCTION**

1. I am a landscape architect based in Tahuna / Queenstown with over ten years experience as a landscape assessment consultant to QLDC to support council planner's in the processing of resource consent applications, and three years' experience as a senior landscape architect for QLDC within the Resource Consents Team. I have over twenty-five years' experience as a landscape architect in the fields of landscape design, project management, open space policy and landscape assessment for local authorities in New Plymouth District, London Boroughs (UK), Auckland City, and Queenstown Lakes District, and in private landscape design practices in Christchurch and Auckland.
2. I have been engaged by QLDC to carry out a peer review of the landscape evidence submitted with the resource consent application to QLDC as RM220834, CODC as RC220834 and the Otago Regional Council (ORC) as RM22.434.
3. I carried out a site visit on the 3<sup>rd</sup> November in overcast but clear conditions to view the existing dredge in operation on the Mata-au river just downriver of Beaumont, and to view the landscape context of the proposed area of mining along the river between Lake Dunstan and the Luggate 'Red' Bridge.
4. I have reviewed the applicant's submitted landscape evidence<sup>1</sup> (the landscape report), and have read the relevant landscape sections of the submitted AEE, evidence of Mr Peter Hall, council's planner's S42a report, and public submissions.

## **PROPOSAL**

5. A resource consent application has been received by QLDC, CODC and ORC to carry out suction dredge mining via a vessel. The vessel would be anchored over mined sites enabling a 250m manoeuvrability range. Each anchored site would be worked for a period of between one week to three months. The dredge would be progressively moved and re-anchored. Each area would be mined once and not reworked, and mined at the rates of no more than 1 hectare per month and no more than 10 hectares per year.
6. The dredge is 24m in length and 6.6m in width, and a height of approximately 3.5 to 4.5m in the water from observation, noting council's planner's report notes a 7.5m height with inclusion of roof appendages. The vessel (image below) is effectively a machine



*Photo 1. Existing mining dredge in operation 5km south of Beaumont bridge, Mata-au River, 6<sup>th</sup> Oct 2023. Context photo only.*

---

<sup>1</sup> Brief of evidence of Jessica McKenzie (Landscape Architect, 26<sup>th</sup> Oct 2023)

room shed and control room on a catamaran pontoon hull with anchoring winches extensions to the front, and coloured predominately *Lichen* a pale earthy muted brown / grey colour with a colour light reflectivity value (LRV) of 27% (Dulux 'Lichen').

7. Mining will be carried out within the areas of *Crown Mineral Mining Permits* 60515, 60593 and 60299. I understand for this application the area is between just down river of the Luggate 'Red' Bridge and to the head of Lake Dunstan and covers approximately a 25km stretch of the river. Identified exclusion areas are from the Lindis and Mata-au river confluence down to the head of Lake Dunstan, and an area around the Devils Nook near Luggate. Mining would not occur:
  - on river margins;
  - within 50m of any tributary greater than 1m in width;
  - within 20m of a lawful surface water intake.
8. Hours of operation are proposed at 7am to 8pm (evidence of Peter Hall), and works would cease during public holidays. I understand the application is for a ten-year duration of mining.
9. Water access to the dredge would be via 5.5m jet boat launched from public boat access points or private property. Refuelling would be via a bundled fuel storage tank (5000L) currently coloured white (right) and is likely to be moved between properties as the dredge moves along the river.
10. A slipway is proposed at a property legally described as Lot 1 DP 466676 on the true right of the river within the Central Otago District (COD) and bordering the Queenstown Lakes District (QLD) boundary. I understand the formation requires an earth scrape and removal of two poplar trees. The slipway site is the vicinity of several registered archaeological sites (NZ Archaeological Association) that do not appear to be identified in the application and further clarification on the location and nature of these sites is recommended to ensure potential effects on landscape heritage values do not need to be assessed.



Photo 2. Existing fuel tank bundle at Beaumont site, 6<sup>th</sup> Oct 2023.

## BACKGROUND

11. The consent and permit background are detailed in the council's planner's report. Relevant are conditions of consent and mitigation measures of the current consented activity that are referred to in the application, and potentially applied to this application. A draft set of proposed conditions of consent from the applicant is provided.

## ASSESSMENT REVIEW

12. For the purpose of this peer review, I will follow the format of the submitted landscape report providing comment on each section, and further comment on reasons for any areas of disagreement or where I consider further explanation or information is required.
13. The landscape report refers to *Te Tangi a te Manu Aoteroa*<sup>2</sup> as the guiding document for the assessment. This guideline was issued in July 2022 by the NZILA, and has been

<sup>2</sup> 'Te Tangi a te Manu : Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora, New Zealand Institute of Landscape Architects, July 2022.

adopted and widely used as the assessment guideline by institute members, and has been identified by the Environment Court. As per the landscape report I will follow *Te Tangi a te Manu Aotearoa*. Comments on effects will apply to the scale of effects (very low to very high) shown in paragraph 12 of the landscape report and are intended to advise council's planner and should be considered in context of the reasoning provided. Determination of whether effects are 'less than minor' or 'more than' are matters left to the planner.

## Proposal

14. I have provided my understanding of the proposal above. This is generally consistent with the landscape report except on the following:
- I understand that the dredge would be removed from the river for routine vessel certification and maintenance rather than moored in the river for the full duration.
  - I have viewed the dredge in operation with a brief plume. The demonstration was not a reliable measure for determination of visual effects as I understand the plume's visibility is dependent on the nature of sediment expelled at the time. I also note the video clip provided in the application is from directly above where the plume would be most visible in contrast to surrounding water. Viewed from the water surface level the visibility is less pronounced due to water surface glare, water turbulence and surrounding context. Plume visibility would also be variable depending on water clarity at the time. The noise of the dredge was clearly audible behind riverbank willows at the Beaumont site parking location at a distance of at least 100m. Comments to mechanical noise in this peer review report is in regard to landscape values rather than permitted environmental levels.
  - I have viewed the existing slipway from the opposing side of the river (below) at Beaumont. It was difficult to spot as the slipway was grassed in a context of riverside pastoral land and excavations were shallow. I have not visited the proposed slipway site.



*Photo 3. Existing slipway location on opposing side of the river south of Beaumont bridge, which I understand to be centre right side of this image, Mata-au River, 6<sup>th</sup> Oct 2023.*

## Methodology

15. The landscape report uses *Te Tangi A Te manu* as the guiding document for the methodology applied to the assessment. Further explanation as to how the methodology is tailored to this application would be useful as this is a relatively unusual application. The landscape report however provides:

- an understanding of the proposal applied to the landscape context,
  - a desk-top and observational landscape analysis with supporting determination of landscape values and attributes from an ORC produced study<sup>3</sup> and Environment Court decision<sup>4</sup> regarding the ONF status of the river within the QLDC PDP.
  - an explanation of the relevant statutory context between the ORC, CODC and QLDC applicable to this application,
  - and identification of permitted activities as a measuring point for determination effects.
16. Whilst the application including detailed information regarding the dredge, I consider in this instance a site visit to view the dredge is warranted given the relatively unusual nature of the application.

### **Existing Landscape**

17. The landscape report provides a landscape description by its physical, associative and perceptual attributes to determine landscape values.
18. Landscape values defined in section 31 of the landscape report are based on those values set out in *Environment Court decision (2019) Env C 160* in reference to the Mata-au ONF within the QLDC PDP. This approach I consider appropriate as the assessor has carried out their own landscape analysis and has determined the listed values and attributes are applicable. I note however there a few attributes noted in the landscape description not carried through to landscape values such as a sense of seclusion which is relevant to the application. Further details on landscape attributes and specific values within the CODC part of the landscape would have been useful.
19. I agree with the landscape report that the physical, perception and associative attributes and values that determine the river to be an ONF within the QLD are applicable to the proposed operational area within the river corridor. I note that the ONF is wide within the QLD and includes the terrace formations that in places are over a kilometre away from the river channel. For the purpose of this review the ONF qualities noted in the landscape report apply to the river corridor within the immediate confines of the immediate terrace rises either side of the river channel, which in places are active with the natural processes of the river.
20. The section of river of the application whilst having shared landscape qualities throughout also some variability in the natural landform, sense of containment, seclusion, access, biodiversity and scenic values. These variations influence the relative landscape sensitivity and capacity of differing areas of the river.
21. In addition, from my site observations and a desk-top analysis I note the following:
- Public road and public walking access to the river is surprising limited. Access is via crown reserve land (administered by the Department of Conservation), formed and unformed legal roads, fish and game routes (over existing public access), and public access easements related to recent lifestyle subdivision development particular within CODC. The quality of access is variable, and generally of a local and informal standard. Given the limited access opportunities routes would be valued by those who are aware of them, and indicate localised rather than continuous or linked areas of public walking and vehicle access and interaction with the river. There is no consistent formal network of trails or roads, aside from the *Upper Clutha River Trail*. There is however a consistent network of public reserves, marginal strip, and legal road along the length of the river that

---

<sup>3</sup> *Natural Character, Riverscapes & Visual Amenity Assessment, Clutha / Mata-au water quality plan change – Stage 1, Prepared for Otago regional Council, 15 October 2018.*

<sup>4</sup> *Environment Court Decision (2019) NZ EnvC 160*

offers potential for a connected trail and river access network. The limited provision and quality of existing access suggest a relatively limited number of users, although I have there no visitor statistics in the application to confirm. This also indicates a high degree of seclusion for existing users, along with marginal strips offering opportunities to move along the river into more secluded areas. This is likely to be highly valued by user groups such as anglers.

- Aside from esplanade reserves and marginal strips, DoC reserves are identified as Mata-au Scientific Reserve (located within CODC), Sandy Point Conservation Area (QLDC), Kane Reserve Conservation Area and Scenic Reserve (QLDC), Reko Point Conservation Area (QLDC), and Autaia Scenic Reserve (QLDC) and are protected areas of recreational, biodiversity and scenic values. In addition, I note a QLDC Recreation Reserve and campground alongside the true left side of the river on the eastern side of Red Bridge, Luggate.
- Vegetation is highly modified on adjacent farmland with increasing indigenous biodiversity values and naturalistic character alongside the river, and a substantial increase at areas such as the Mata-au scientific reserve.
- The adjoining land outside of conservation areas is predominately pastoral farmland typical of the upper Clutha basin, with an open character, pivot irrigators, fencing, farm stock, shelter belts and relatively few buildings. There is a small area of rural industrial subzone land with existing and recent rural industrial development alongside the eastern side of Church Road adjacent to the river reserves at Luggate (QLDC). Industrial buildings and activity can be viewed in context of the river from the Upper Clutha River Trail. Industrial activity and development are not dominant but influences the perception and experience of the river landscape from the trail. A gravel extraction quarry is located on the opposing side of the river adjacent to the Luggate Tarras Road but has limited influence on the river landscape as the quarry is well screened by trees and earth mounding.
- There are a few residential farm dwellings alongside the river. Rural residential dwellings are concentrated within recent lifestyle subdivision development alongside the river margins at:
  - Bowman Road (accessed Maori Point Road) CODC
  - Maori Point Road (northern end) CODC
  - Riverside Road (CODC)
  - 3738 Luggate-Cromwell Road (includes existing dwellings, and consented undeveloped lots),(QLDC), and noted buildings and platforms are not in view from the river.

These sites, which is not a conclusive list, have an attractive riverside amenity in a rural pastoral or indigenous vegetated context, and several dwellings within these clusters within COD have river views and access to the river.

- The natural terraced topography of land contains much of the immediate river landscape, and despite the river size there are relatively few views of the river from the adjacent highways. In many highway views the valley plain appears as a continuum with very little indication of a river due to the abruptly incised nature of the river and consistent pattern of farming practices across the valley floor. It is only where the highway is elevated, comes close to or crosses the river does the majestic presence of the Mata-au river come into a visual awareness. There are no 'iconic' highway views of the river that define the region as such within this section of the river that I am aware of.
- Once within the immediate terraces either side of the river and down to the flood plain level there is a natural containment to the river landscape that separates it

from the surrounding agricultural flats. A sense of seclusion becomes apparent, which varies depending on the immediate land use and steepness of terrace topography. The sense of seclusion within the confines of the immediate terraces at river level is distinct for much of the river length, with a sense of containment within the otherwise wider basin open spaces. This accentuates a more natural context as the local landscape within the confines of the river terraces becomes dominated by natural character over the more modified surrounding context. Which is also aligns as to why the Mata-au ONF values are applicable throughout the river corridor.

- From observation Mata-au scientific reserve displays a high level of naturalness (on the cover to this report). Down at river plain level it is enclosed by tall actively eroding alluvial bluffs, a high degree of naturalistic vegetation cover, and sound of moving water dominate. At this location the river is tightly sinuous nearly folding back onto itself which provides interest and an appreciation of the river's scale and natural forms in views travelling along the terrace crest within the reserve. Visually this location showed the least amount of modification. Other areas such as at the Bowman Road lifestyle area also have riverside terracing containment but the pastoral context extends down to the river's edge along with lifestyle dwellings. It has a pleasant almost arcadian setting.
  - The river itself is a public place and a means of access through the upper Clutha landscape since the first people ventured inland from the coast. Water-based travel is largely recreational and commercial tourism in nature. The river is swift and by volume is Aotearoa's largest river, and presents few opportunities for safe family swimming along this stretch. From a water-based activity perspective the nature of the river experience is transitory as moving through the river landscape. From a land-based perspective of water-based river users such as recreational jet boats are generally passing through as the swift flowing river offers little opportunity to pause.
22. Section 3.1B. 5 of the PDP (QLDC) identifies 'landscape capacity' to accommodate subdivision and development without compromising its identified landscape values. A capacity is not identified in the landscape report. Determining landscape capacity for this type of activity rather than for buildings or structures is difficult given its unusual and transitory nature. Given the relatively high landscape values it is expected that landscape capacity would be low, recognising the permitted activities imply a pristine landscape devoid of activity is not anticipated. In this instance, landscape capacity or capability I consider has a relationship to a perception of temporary. My understanding of the landscape report is that it reaches a similar conclusion, in that there would be adverse effects, but overall the proposal would fall within an acceptable level of temporary effects in context of the landscape values.

### **Natural Character**

23. The landscape report includes landscape analysis via ORCs water quality plan change document<sup>5</sup> on the Lake Wanaka to Lake Dunstan reach of Mata-au and is useful for this application. It reinforces the high natural values of this stretch of river with natural character defined as very high for the active riverbed, and high for the river margins, river context, experiential and visual amenity.

### **Relevant Statutory Context**

24. A statutory context is provided in the landscape report. The Otago Regional Policy Statement I agree is high level but note:

---

<sup>5</sup> *Natural Character, Riverscapes & Visual Amenity Assessment, Clutha / Mata-au water quality plan change – Stage 1, Prepared for Otago regional Council, 15 October 2018.*



- Policy 3.1.1 d) regarding freshwater states to maintain or enhance, as far as practicable, amenity and landscape values of rivers, lakes and wetlands;
  - and in regard to riverbeds in policy 3.1.2 e) to maintain or enhance, as far as practicable natural functioning and character, and amenity values;
  - and policy 3.2.3 the identification of ONFs and ONLs, and 3.2.4 regarding management of such features and landscapes.
25. This is followed by listing of relevant objectives and policies within QLDC and CODC District Plans. Given the nature of this application I consider a definition of 'temporary' relevant to this application, but difficult to find a definitive guide within the relevant statutory plans. The activity is unlikely to leave a lasting adverse effect on the 'landscape' as the operation once complete would remove the vessel and associated structures from the landscape. The only lasting element would be the proposed slipway.
26. The vessel is unlikely to be fixed to one position for a long duration. There is however no condition defining maximum duration at each anchoring point. The anchoring of the vessel with 250m range of manoeuvrability over a visible stretch of water over 500m in length would accumulate an ongoing presence of the activity within one location. Given the application notes up to three months at each anchoring spot and there are visible stretches of the river that extend over 1.5 km there is potential for the dredge to be operating in river views for over a year. This excludes temporary mooring for weather events etc.
27. My understanding of a permitted baseline context and the proposal as submitted as described in council's planner's s42a report is that:
- The proposal would comply with the relevant noise controls, and therefore proposed noise levels are considered to be within a 'permitted' context.
  - Suction dredging is permitted up to 150mm internal nozzle, a 350mm diameter proposed.
  - Permitted for change in water clarity or water colour within 100m downstream (ORC) of the operation. An allowance for 200m is applied for.
  - Dredge mining is permitted where total motive power of any dredge does not exceed 13 horsepower (QLDC), the proposal is for 600 horsepower and noting an upscaling of machinery and vessel size to accommodate.
  - Permitted for motorised vessels for recreational activities and commercial activities regarding search and rescue, hydrological survey, public scientific research, resource management monitoring, water weed control and access to adjoining land for farming(QLDC).
28. I agree with the landscape report that smaller scale dredging units and a 100m sediment plume could be reasonably anticipated within the proposed operational area. I note that such permitted activities could also be anticipated in addition to the proposed activity if consent were to be granted although I understand a 500m separation distance is required between operations.
29. The landscape report (Para 44) has not regarded noise effects as the proposed noise levels are compliant with the relevant noise controls. I understand from council's planner that as proposed noise level would be compliant, noise from the proposal would fall into a permitted noise level context. I consider the industrial nature of the noise and its duration within an ONF context has relevance in regard to the existing natural attributes and values of the river landscape. I acknowledge there is an existing 'mechanical' noise context from adjacent farming activity, nearby highways, recreational use including power boats, trail bikes, and vehicles within public areas. I also note the level and nature of existing mechanical noise is variable throughout the site.
30. From my understanding of the proposal and the landscape I consider the key landscape considerations for maintaining and enhancing landscape values are in regard to the:

- sensitivity (capacity) of the landscape to absorb the proposed landuse which I consider to be variable across the subject site,
- the larger scale of the activity (vessel size) proposed compared to permitted activities,
- and the duration of activity and associated 'temporary' effects.

### ***Landscape Effects Assessment***

31. The landscape report assessment places weight on the permitted activities but I consider the difference in scale of activity between permitted and proposed is underestimated. I disagree with the landscape report that the proposal presents an alternative configuration and intensification of an activity that is reasonably anticipated. The degree of upscaling of the size of intake and corresponding scale of vessel compared to a permitted activity is proportionally large.
32. Overall, I consider the scale of adverse effects on landscape values that contribute to landscape character would be slightly higher.
33. I agree the presence of a sediment plume of up to an additional 100m would have low adverse effect on landscape character as overall it would be a very small change to the values of the river landscape.
34. The larger scale of commercial vessel proposed is not anticipated. Its general industrial form, noise and limited movement I consider would have a moderate-low adverse effect on the natural values that contribute to landscape character of the overall river landscape of assessment, specifically in regard to values that are experiential, shared and recognised, and aesthetic.
35. I agree immediate adverse effects would be localised, but consider there would also be an association of the dredge to the river that would have a broader adverse effect on landscape values, albeit relatively small.

### ***Visual Effects Assessment***

36. The landscape report provides a list of the relevant viewing audiences, to which I concur. The additions I would suggest are:
  - Private views include properties beyond those that abut onto the river, with several elevated positions on adjacent terraces and surrounding hills with private river views from properties and dwellings.
  - Maori Point Road would include the public roads coming off that road (Bowman Road and Trevathan Way).
37. In regards to visual perception of the sediment discharge plume I agree that some viewers may not see it as necessarily offensive. I also consider that as a visible discharge from a mining vessel there would also likely be an association that is not positive particular in context of the Mata-au River and its valued water clarity and turquoise blue qualities. I agree that a plume up to 100 in length is permitted, and as such can be expected within views of the river and it is only the additional 100m that can be assessed in regard to effects.
38. The landscape report provides a detailed visual analysis from the identified viewing points and quantifies river extents.

### *Highway views*

39. For the highways section of the landscape report, I could not confirm the viewing points between Glenfoyle Road and Kane Road, and between Sandy Point Road and River Ridge Road, and also note these are not on the attached viewpoint plan attached to the landscape report. I agree views from the highways are relatively limited. I note there are other very brief glimpses of the river not noted in the report. I also note that in places the river is central in views such as at the elevated alluvial fan viewpoint along SH8a looking west near 618 Luggate Tarras Road (photo below from the site visit) and also noting a lifestyle dwelling that overlooks the river at this location.



40. The report notes the dredge as of a transient nature not remaining in one spot for extended periods. As discussed above defining a potential duration of effect would be useful to provide some supporting measurable context for temporary effects. The landscape report describes the vessel of a recessive colour, I agree it's off a muted natural tone, but ideally should be of a slightly darker tone to recede in the longer distant views from the highway. I also consider the road users should be considered in context of all road users, including vehicle passengers, and cyclists which have more time to ponder views.
41. Overall however I agree there are no substantial extent of views or vistas of the river from the highways, and where visible the vessel would be a small part of the view, and be relatively brief. I consider adverse effects on highway views would be low at most.

### *Māori Point Road*

42. The landscape report only discusses Maori Point Road and not the side roads down to the river. I consider the estimate of duration of effect insufficient based on information in the application and the report's quantification of visible stretches of water. The report notes only a couple of months where the activity would be in view, although based on the 1.1km view to the southwest noted in the report, and up to 3 months at each anchoring point with a 250m range, the vessel could be in view for up to a year. The Maori Point road is an elevated viewpoint and the plume would be more visible from elevation, although would be variable depending on light conditions, type of sediment discharge and water clarity. I agree there is also an existing and permitted visual context that would include other vessels, smaller dredging units and a plume up to 100m in

length. I agree that some viewers will see the vessel as a curiosity and a point of interest, rather than adversely affecting the view as such. However, in the visual context of the landscape values identified for the river and its scenic qualities I consider visibility of the proposed larger dredge for up to a year would have an adverse effect on river views from the road over the period of visibility, and would be moderate at most given that most road users would have brief views of the river.

*Users of the river, river margins, reserves, and unformed legal roads.*

43. Paragraph 63 of the report identifies the comparatively limited access to the river, which I concur. From observations access is largely of a 'locals' nature, with limited signage, informal trails and off road vehicle tracks. The formal riverside access tracks are at the sites northern stretches from Red Bridge down to Devils Nook and south to a fish and game access approximately 2.5km south of the nook, and at Sandy Point lookout with scenic panoramic views over the river and wider basin. I agree that viewer numbers in these areas from visitors appears to be relatively low compared to the regions lakes with better facilities, are easily accessed, and safer swimming waters. This however also adds to the secluded nature of the river along this section, a landscape characteristic of value to those users of the river including kayakers, anglers, trail walkers etc.
44. I agree that visibility of the river from adjacent reserves and marginal strips etc is variable, as willow lined river banks constrict views at river level. This is not consistent however and many of the reserves and trails are elevated over the river with scenic views such as at Mata-au Scientific Reserve, and along the Upper Clutha River trail, and the marginal strips include breaks in riverside vegetation.
45. The landscape reports summary of visual effects from these viewpoints, which are several and diverse, I consider to be a too narrow. The existing visual amenity values at places such as Mata-au Scientific Reserve I consider to be high as they are predominately of natural context dominated by the river, and is difficult to see how the visual presence of the scale of vessel proposed at this location would have a very low adverse visual effect on such values as concluded in the report. A visual assessment of the immediate context of the river I consider is complex. As above, the duration of effect is also of consideration. A visual element of the scale proposed that detracts from the scenic natural values for a week, month or year will have differing impact, and this will vary over the seasons of the year (i.e. after leaf fall), and the frequency that it is viewed (which becomes more relevant on static viewpoints from rural dwellings as discussed below), and sensitivity of the viewer. I consider the visual effects from the above locations, where the activity is visible, and for the duration within a view, would vary from very low to potentially moderate-high.

*Upper Clutha River Track*

46. Adverse visual effects are determined to be low at most with the landscape report. I note on this trail within QLDC:
  - an observed higher level of use compared to within CODC,
  - it is in proximity to the recently expanded residential area of Luggate,
  - easily accessed from the highway,
  - and adjacent to the QLDC freedom camping area at Red Bridge.
47. The exclusion area of Devils Nook removes an area where views of the river are particular dramatic and scenic, and frequented by the public. The Luggate Rural industrial sub zone detracts from wider river views to a small degree, the dredge would have an adverse cumulative effect where both are viewed, but such views are limited to small section of the trail. I also note the trail has elevated viewpoints along the immediate river terrace crest over the river where the plume would be more visible. As above I agree there would be diversity to the visual perception and associations of the dredge in context of river views, both positive and negative. In regard to the natural and scenic

values I consider it would detract from such values where visible to a very low to moderate degree and such effect would be temporary accordingly to the duration present in a view which I estimate could be more than a year.

*Private land abutting the Mata-au / Clutha River*

48. I consider this definition too narrow in regard to effects on private views as there several dwellings with river views and orientated towards river views that do not abut onto the river. Several of these are along the terrace crest within the COD. Most dwellings in the rural zone of QLD do not have river views, particular those that are close to riverside reserves and margins reflecting the ONF status and more restrictive planning framework for such development within or adjacent to the ONF.
49. Lifestyle developments are described as ad-hoc in the landscape report, but from observation and the concentrated nature of development they appear to be part of comprehensively designed lifestyle subdivisions.
50. I do not fully agree with the description in the report that visibility of the river from lifestyle dwellings is limited, as in several instances buildings are orientated to maximise desirable attractive views of the river, and in some places there is a reduction in riverside vegetation. The landscape report does not provide photos from private viewpoints from lifestyle dwellings which would have been useful to understand the visual context. I suspect, similar to myself, given the number of dwellings and time constraints to produce a report that private views were determined from off-site observation.
51. The report includes a more detailed comment on plume visibility and compares the potential for multiple plumes form smaller permitted activities versus one larger plume proposed. I understand from the landscape report there is a 500m operating separation requirement. Without a full understanding on the exclusivity of mining licences, and navigational safety requirements on the river, there could be a context where the proposed plume could be viewed in addition to the other permitted plumes in the same view but at a minimum 300m proposed separation between potential plumes any accumulative effect would be negligible.
52. I consider the static or fixed viewpoints from private properties and dwellings different in nature to the passing visitor views as discussed above. The duration of the visual effect is more lasting rather than in passing where you may have many viewpoints along the river. The effects on visual amenity on the views from a private dwelling are longer and more present in the degree of change to that view. Again it is the duration of effect that is perhaps more relevant, as a larger than anticipated commercial dredge within the same private view for potentially over a year would have a more lasting visual effect on that viewer compared to an infrequent visitor. This also depends on the sensitivity of the viewer.
53. In context of the natural landscape values of the river, and the existing and permitted visual context, I consider the visual presence of the dredge from private viewpoints, where visible, would range between very low to moderate for the duration of visibility within a view.

*Submissions*

54. The landscape provides a summary of submissions, identification of changes to the application following submissions, and reiteration of assessment made within the landscape report.
55. There are matters raised in submissions that differ to the landscape assessment made, and perhaps warrant a more direct response within the landscape report. These are, with following comment:

- *a diversity of river users to include shooters (assumed to be hunters), campers, rafting, canoeists, bikers, commercial guiding, jet skis, and birders.*

Noted on my site visit were a few informal camping sites, I however am not aware if there are any legal constraints on use of such sites for camping and shooting within marginal strips or public reserves.

- *land based landscape effects from the slipway and access, storage facilities, fuel tanks, parking*

I recommend that many of these smaller structures such as the fuel tank bundle be painted a dark recessive grey with a colour LRV of between 7% and 20% to ensure they are not visually prominent. I also recommend a landscape reinstatement condition for the slipway to be reshaped to a natural contour and re-grassed, and associated structures removed.

- *reinstate measures regarding failure of the dredge or dredge company,*

I consider this relevant as potential temporary visual effects in sections of the river may become longer term if the company of dredge fails but could be addressed by a bond attached for the duration of the consent to ensure at the end of the consent and in the event of any failures that the vessel and structures can be removed off site, and the slipway reinstated to its pre-existing condition.

- *visual prominence of the vessel and colour,*

I agree that the vessel would be visually obvious on the water in closer range views (approximately within a kilometre) given its form and size, and the open nature of the waterway. I also agree the dredge colour is on the paler side, particular in regard to the rural colour guidelines within the PDP of the QLDC. I consider the colour is however a muted earthy tone and avoids strong contrast with the surrounding landscape. A darker grey tone with a light reflectivity value of between 7% and 20% would be more effective to integrate into the year round colours of the landscape, it would still be obvious in close range views due to its form and size and landscape context.

- *Adverse visual effects form the visible plume*

I agree, but can only be assessed in regard to the additional 100m length of plume proposed and noting this will be vary in the degree of visibility. Potentially a review condition could be applied for the first year of operation to monitor the frequency and prominence of the additional length of plume in response to councils inquiries.

- *Sense of seclusion ( peace and tranquillity)*

As discussed there is a permitted baseline that enables a degree of disturbance to existing levels of peace and tranquillity. The proposed noise levels would comply. I agree however that there would none the less be mechanical type noise that would degrade the existing landscape values regarding a sense of seclusion, peace and tranquillity, but this is to be considered in context of existing background mechanical noise levels from activity on the river and from surrounding land uses. As noted in my review I consider the level of degradation will vary depending on location and duration.

- *Changes to natural shape of the river from extraction.*

I'm not a hydrologist so cannot provide an expert comment. I would however expect that the natural shape changing power of the river would remain dominant over dredge activity.

- *Fumes*

An effect the landscape report and my review have not considered. Given permitted recreational boating activity there is likely to be an existing and expected element of this. Whilst visiting the vessel in operation at Beaumont I was not struck by any excessive amounts of visible or smelly fumes at the time.

- *Difference between the existing consented operation landscape context in the lower reaches versus the proposed upper reaches.*

I have not reviewed the landscape context of the lower reaches of the river of consented mining operations so cannot provide a landscape comparison.

- *Lingering effects of the dredge at one location*

I agree there is a clear difference between boating activity that passes relatively quickly through a location and the proposed 'lingering' of the dredge. The duration of temporary effects are discussed above and I consider to be relevant to this application. I note the *Otago Fish and Game Council* recommendation for the dredge to avoid areas within 150m from an angler already fishing at a location, and it would not support a condition requiring the dredge to move from an existing location if an angler were to arrive. Suggesting a degree of compromise and agreement to avoid effects on an angler's sense of solitude etc. Also noted a recommendation to avoid operating on public holidays, an avoidance measure that would potentially avoid adverse effects on such users at peak times. Given the flexible nature of locations for operation, and potential to avoid public holidays I consider this managed approach for avoidance of specific location based adverse landscape effects could also potentially be applied to other areas such as areas of concentrated rural lifestyle lots.

56. I acknowledge the landscape related matters regarding statutory obligations, spiritual beliefs, cultural traditions and practices of Tangata whenua. These are matters to be addressed by the planners, and are detailed in the submission from Te Runanga o Moeraki, Kati Huirapa Runaka ki Puketeraki, Te Runga o Takou and Hokonui Runganga. Paragraph 5.4 of their submission identifies the aesthetic qualities in regard to health of a water body. The visual interpretation of landscape from a tangata whenua perspective is a matter for tangata whenua. I have not had any engagement with tangata whenua through this review process and have no authority to comment on their behalf. The river is identified as wahi tupuna within the QLDC PDP, and has statutory acknowledgment throughout. The sensitivity to adverse visual effects I expect would be high given the significant cultural values of the river and the visual associations of the activity to the river.

## CONCLUSION

57. The submitted landscape report follows best practice as set out in *Te Tangi a te Manu*. Further details of COD landscape values would be useful. In general, there is a consistency of river-based landscape values across the two districts within the subject site applied within the landscape report. These values are recognised as supporting an identified Outstanding Natural Feature (ONF) classification with the Queenstown Lake District Council's (QLDC) Proposed District Plan (PDP). The experiential and shared and recognised landscape values are rated as high. As evident from submissions the landscape attribute relating to a sense of seclusion, peace and tranquilly is of relevance, but not identified within the set of landscape values.

58. The landscape report concludes that the proposed operational area over this stretch of the river would be considerably screened from public and private views, the dredge and viewing audience would be transient in nature, and as that dredging is a permitted activity that can reasonably anticipated in views.
59. From my observations public visual access to the waters of the river are relatively limited across the 25km stretch of river, but there are several public and private viewpoints that would be affected by the visibility of the proposal.
60. The dredge would be transient in nature, but a very slow pace compared to over water-based activities, and has potential to occupy single views for over a year.
61. Public views from roads and water-based activities such as boating, kayaking etc are transient in nature but at variable durations. There are several fixed viewpoints from public reserves and private properties / dwellings that potentially would have the dredge and activity in view for over a year.
62. In this context the duration of temporary effects would be variable and would affect viewers to varying degrees depending on viewer sensitivity and relative and variable presence of landscape values at locations across the subject site.
63. The proposed scale of dredge and activity is larger than that anticipated within the statutory frameworks. Whilst there are several identified permitted activities that have or have the potential to have an anticipated influence of landscape visual amenity and character, the proposal is sufficiently differing in scale to generate adverse effects on the landscape values of the Mata-au River landscape.
64. I agree with the landscape report that the permitted activities in regard to visual contribution to river views have a moderating influence on potential adverse effects, as does the variability of the sensitivity of the viewer. The river visual amenity is not a pristine wilderness, is diverse in its level of visible modification and perception of natural, and is a valued resource appreciated by an assortment of river users that also have a visual presence within the river landscape.
65. I differ to the assessment made of landscape effects largely in regard to visual effects because of the above reasons. The report has determined visual effects to be low at most whereas I consider they would be up very low to moderate high on specific views where the proposal is visible. I agree visual effects would be temporary. The duration of temporary effects would however vary depending on length of visible stretch of water and the occupancy of the activity in such views which I consider potentially could be over year on the longer stretches. This would be the worst-case scenario and I understand would be dependent on potential yields at various locations warranting ongoing productive mining at successive spots.
66. Landscape character effects are concluded as low, and on an assessment scale of the entirety of this stretch of water over the ten-year period I would have a similar conclusion due to the overall scale of the activity in the wider context of the river landscape. From a localised perspective effects on character would be higher but temporary as the dredge and activity move along the river from location to location over a ten-year period.
67. I consider the proposal would not maintain, protect or enhance the landscape values of the river, but adverse effects would be variable, localised and temporary between locations along the river.
68. Relatively small adverse effects from land-based structures, activity and earthworks of the proposal could be mitigated by simple measures as recessive colours of structures and reinstatement of ground and grassland once complete. Adverse effects from the



water-based part of the proposal could be minimised by an exclusion area along the Mata-au scientific reserve, and defining a duration limit and restricting duration of activities along other sensitive areas of the river such as riverside rural lifestyle developments, and along formal public trails. The proposal also has the potential to contribute towards indigenous riparian vegetation restoration to enhance natural values as part of environmental compensation for council consideration (QLDC, PDP), but this is not offered as part of the application.

## RECOMMENDED CONDITIONS

69. Should consent be granted I recommend the following conditions of consent.
- i. All temporary land-based structures and buildings are to be coloured a dark recessive earthy grey, green or brown colour with a colour light reflectivity value (LRV) of between 7% and 20%.
  - ii. All areas of earthworks for the spillway and access track shall be re-grassed to establish a healthy pastoral grass sward within three months of earthworks beginning.
  - iii. All land-based structures and buildings, including all tethering wires and buoys shall be removed from the site within one month of completion of activity and/ or expiry of consent.
  - iv. The consent holder shall submit to the Central Otago District Council the details of the listed archaeological sites within the vicinity of the consented spillway site and shall confirm that earthworks are not within such sites (which may affect landscape heritage values) unless an archaeological authority from *Heritage NZ Te Pouhere Taonga* is obtained permitting such works within a heritage site.
  - v. All lighting associated with the vessel shall be for the purpose of regulatory navigational lighting, and internal lighting only. There shall be no use of external flood lighting or any other external lighting directed beyond the immediate riverbank. All external lighting shall be downlighting only, and not be used to highlight the vessel.

In addition, I recommend the following amendments (bold) to the submitted volunteered conditions of consent:

### *Exclusion areas and times*

*3. This consent authorises the use of the bed of the Clutha River / Mata-Au for suction dredge mining, between the downstream of the Luggate Bridge (NZTM 2000: E1305697 N5040203) and the confluence with Lake Dunstan (NZTM 2000: E1307834 N5018386), with the following exclusion areas where suction dredge mining is prohibited:*

**To include the Mata-au Scientific Reserve along the stretch of the river parallel to the riverside reserve boundary.**

**The dredge shall not occupy a single 250m stretch of the river for a duration longer than three months or relocate back within that 250m stretch from the date of first anchoring within the ten year life span of the consent:**

- **within 1km of any visible rural dwelling from the river that is accessed from Maori Point Road and associated side roads (public and private), and River Ridge Road and associated side roads (public and private),**
- **and within 500m of the Upper Clutha River Trail.**

**This is to ensure the duration of adverse effects on views from these locations is within an assured duration limit.**

Report written by  
**Richard Denney**

LANDSCAPE ARCHITECT  
B.L.A. hons, B. Sc Earth Science and Environmental Planning

**DLA**

Landscape

Tāhuna Aotearoa Queenstown New Zealand