

Fast-track RFI Response 1 - Landscape

Proposed Solar Farm
The Point, Mackenzie Basin

9 February 2026



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Contents

1	Introduction	4
2	RFI Response - Landscape Mitigation	5
3	Cumulative Effects Assessment	8

1 Introduction

1.1 Purpose and Scope

Rough Milne Mitchell Landscape Architects (**RMM**) prepared a Landscape Assessment Report, dated 25 May 2023 (**the Landscape Report**) and an Addendum Landscape Assessment Report, dated 15 June 2025 (**the Addendum Report**) that formed part of Far North Solar Farm's Fast-track Application.

The Panel, by way of Minutes 3 and 4 have requested further information as detailed in Sections 1.2 and 1.3.

1.2 Minute 3: RFI – Landscape Mitigation

Minute 3 and the more detailed information in the Request 1 for Further Information (**RFI 1**) highlights changes to the proposal's landscaping that has occurred since the Landscape and Addendum Reports were prepared. The purpose of this Landscape RFI Response is to respond to the Fast-track RFI by assessing the proposal in relation to the updated landscaping.

For ease of reading, below is the official RFI from the panel, dated 23 January 2026. A response these points is included in Section 2.

3) Landscape Issues

Far North Solar appears to be relying on assessments undertaken in 2023, even though it is uncontested that the extent, configuration and density of the proposed mitigation planting have changed since that time. These changes are not reflected in either an updated report or an addendum from Rough Milne Mitchell Landscape Architects (RMM). This is why the specific matters and questions are raised. The density of planting originally proposed was 'up to 500,000' at a rate of 1 plant per 1.3m² (allowing for the reduction in planting areas from an original 89ha down to 82ha). This is reasonably similar to the normal standard for revegetation of shrubland at 1 plant per 1.0m². The situation has now changed, though, with:

- *66,100 plants now proposed across 82ha of EEC Planting at the rate of one plant for every 12m²; while*
- *62,500 plants are now proposed for 9.5ha of Screen Planting at the rate of one plant for every 1.5m².*

This means that while the Screen Planting is reasonably close to the typical standards for shrubland revegetation, most of the planting proposed for the EEC areas would be far too 'thin' and patchy to achieve canopy closure, to suppress weeds (assisted by irrigation along with the proposed planting), and to assist with screening of the proposed solar farm. In turn, such concerns lead to the following questions, which the panel requests answers to:

- a) Has the applicant discussed the revised revegetation and screen planting proposals with DoC, and are they consistent with DoC's suggestions or recommendations to the applicant?*
- b) Are the revised proposals and planting densities endorsed by Wildlands?*
- c) Are the photo simulations prepared by RRM Landscape Architects still considered to accurately reflect the level of screening shown in RMM's photo simulations, given the changes set out above?*

d) After what time period would the level of screening shown in those simulations be achieved?

1.3 Cumulative Effects Assessment

The idea of undertaking a hypothetical landscape cumulative effects assessment was raised in the Overview Conference and on the Site Visit, and Minute 4 confirms The Panels request for this a hypothetical assessment. This assessment is in Section 3.

2 RFI Response - Landscape Mitigation

2.1 Landscape Mitigation Plant Numbers

The RFI Request is incorrect stating that **62,500** native plants will be established in the Landscape Mitigation Areas. The Substantive Application, on Page 28 stated that **33,900** native plants will be planted within the Landscape Mitigation Areas.

The Applicant has provided more detailed plans of the solar farm layout and the planting areas around its periphery. The below slightly updated plant numbers have been calculated from these updated plans. Whilst there is a slight increase in numbers, the intent remains the same.

Evenly spaced plants have been used for mathematic purposes. However, some slight variations may occur where individual plant species have a larger or small spread.

Northern Boundary

Planting area is 1,467m long x 7.5m wide = 11,002.5m².

Five offset rows of plants will be established within this area. Plants will be spaced at 1.5m centres along each row. This equates to 978 plants per row, and the five offset rows will be centred at 1.0 - 1.5m centres, filling in this 7.5m wide area. This equates to **4,890 plants**.

Southern Boundary

Planting area 1,041m long x 40m wide = 41,640m².

The planting area being 40m wide and remote requires internal accessways for implementation and maintenance. This will include a 2m wide walkway along the security fence and two 5m wide accessways. Subsequently this will result in two 9m wide, and one 10m wide planting strips.

Six offset rows of native plants spaced at 1.5m centres can be located within each of the three planting strips. Each of the 18 rows will have 694 plants. This equates to **12,492 plants**.

Eastern Boundary

Planting area 1,548m long x 35m wide = 54,180m².¹

¹ Dimension is 40m short of the dimension in the plan, to account for overlap in the southeast corner.

The planting area being 35m wide and remote requires internal accessways for implementation and maintenance. This will include a 2m wide walkway along the security fence and two 4.5m wide accessways. Subsequently this will result in three 8m wide planting strips.

Six offset rows of native plants spaced at 1.5m centres can be located within each of the three planting strips. Each of the 18 rows will have 1,032 plants. This equates to **18,576 plants**.

Total

The total area of planting is 106,822m² (10.7ha), the number of plants will be **35,958 plants**, equating to an average of one plant for every 1.5m².

2.2 RFI Response 3.a)

a) Has the applicant discussed the revised revegetation and screen planting proposals with DoC, and are they consistent with DoC's suggestions or recommendations to the applicant?

The Applicant will respond to 3.a) in the covering letter.

2.3 RFI Response 3.b)

b) Are the revised proposals and planting densities endorsed by Wildlands?

Wildlands, in their RFI Response Report have outlined an updated approach on what is proposed to occur within Ecological Enhancement Area.

Wildlands, in their RFI Response Report have outlined that they endorse the revised proposal and planting densities, as calculated above.

2.4 RFI Response 3.c)

c) Are the photo simulations prepared by RRM Landscape Architects still considered to accurately reflect the level of screening shown in RMM's photo simulations, given the changes set out above?

The proposal consists of the two different planting areas, as illustrated on the Landscape Graphic Attachment.

- 'Ecological Enhancement' vegetation that is for environmental benefits; and
- 'Landscape Mitigation' vegetation that has been located for visual screening purposes.

The Landscape Mitigation planting is located along the site's northern, southwest and eastern boundaries, as illustrated on the Graphic Attachment and described above. For reference, the Landscape Mitigation planting is to:

- Assist with screening the solar farm from SH8 and the Alps to Ocean Trail, but was not relied upon to reduce the potential degree of adverse visual effects from these locations.
- Assist with screening the solar farm from the lower stretch of McAughtries Road, Falston Road, Haldon Road, Haldon Arm Road, Pukaki, Tekapo and Ōhau Rivers, and Lake Benmore.

It is important to highlight that the Landscape and Addendum Report's only relied on the Landscape Mitigation vegetation for screening purposes, and that has not materially altered. Therefore, the same level of visual screening and the subsequent visual effects assessment remains relevant.

For reference, the proposed native vegetation is estimated to reach 3m tall after five years of growth (discussed further in Section 2.5 below). Noting that the tilting single axis solar panels vary in height between 1.5 – 2.2m tall, therefore the vegetation does not need to be 3m tall to fully screen the solar farm from specific viewing catchments.

The visual simulations prepared by Virtual View subtly illustrated the Ecological Enhancement and Landscape Mitigation vegetation in two different colours, being a brown colour and mid-green colour, respectively. This is most easily seen on '**Viewpoint 09a - Proposed - Year 02**' and '**Viewpoint 09b - Proposed - Year 02**'. Also, the Ecological Enhancement vegetation appears sparser than the Landscape Mitigation vegetation on '**Viewpoint 09a - Proposed - Year 05**' and '**Viewpoint 09b - Proposed - Year 05**'. Therefore, a reader can visually understand what vegetation is relied upon for visual screening purposes.

Also, it is important to recognise that the Landscape Mitigation vegetation is located on a generally flat terrace, with no noticeable alteration to the height of vegetation when considering a cross-section through these planting areas.

Due to the above, the visual simulations continue to illustrate the level of screening that will be provided by the Landscape Mitigation vegetation.

2.5

RFI Response 3.d)

d) After what time period would the level of screening shown in those simulations be achieved?

The proposed Landscape Mitigation vegetation illustrated in the visual simulations is modelled at 3m tall. This is 0.8m taller than the solar panels at full tilt, and 1.5m taller when the panels are parallel with the grounds surface.

The landscape mitigation is to screen the proposal from the above-mentioned public places, which can be categorised into two groups:

- Public places at a similar elevation – The lower stretch of McAughtries Road, Haldon Road, and Haldon Arm Road.
- Public places at a lower elevation – Falston Road, Pukaki, Tekapo and Ōhau Rivers, and Lake Benmore.

When seen from a similar elevation point, planting will need to be 2.2 - 3m tall being similar in height but also factoring in plants growing outwards as much as upward.

When seen from a lower elevation point, planting will need to be 1.5 – 2.2m tall because the viewing angle coupled with the escarpment face and planting angle assists in reducing visibility.

Wildlands have provided further discussion into growth rates in the Mackenzie Basin, leveraging off their experience in the basin, as well as Central Otago, which also has a similar climate. Wildlands have confirmed that Kānuka, Ribbonwood, Olearia and Kowhai (despite kowhai being spindly) are the faster growing plant species selected. When taking into consideration the proposed irrigation scheme and a best-case scenario for weather, Wildlands are comfortable that these faster growing plant species can reach 3m tall within five years. The other chosen plant species will take slightly longer. When considering a poor weather scenario, Wildlands opines that it will take seven to 10 years both the fast and slower plant species to achieve a height of 3m.

Overall, it is estimated that the proposed native landscape mitigation vegetation will take four to seven-ten years to reach the level of screening shown in the visual simulations.

3 Cumulative Effects Assessment

3.1 Cumulative effects

“Cumulative effects are the effects of a proposal in combination with those of previous developments. This might relate to such things as s127 variations to a resource consent (e.g. further additions to an approved development), expansion of a facility (e.g. shopping mall), intensification of an element of infrastructure (e.g. ‘four-laning’ a two-lane highway), or additional projects of a certain type in an area (e.g. further rural subdivision, wind farms, marine farms).

Cumulative effects should be considered carefully because in one sense all effects are cumulative. Previous lawfully established activities are part of the existing environment against which the effects of a new activity are assessed. Mostly, the effects of a proposal are simply the effects on the existing environment. Likewise, a proposal’s different types of effect (for instance noise and visual effects) are simply the proposal’s combined effects rather than what is meant by cumulative effects.

Cumulative effects come into play in circumstances where an additional effect takes a landscape beyond a ‘tipping point’ —which would normally require a benchmark against which the effects are to be measured. Such benchmarks might include the character envisaged in the district plan or the ‘capacity’ of a landscape to accommodate development before compromising its landscape values (its valued attributes). This is a matter of context and judgement. As with all matters of professional judgement, the key is in the reasons.”²

When considering actual and potential adverse cumulative effects, this assessment has taken into consideration visual amenity effects resulting from simultaneous and sequential views, and effects on the Mackenzie Basin’s local and wider landscape character and its ONL values.

3.2 Potential Issues

As outlined in Section 5 of the Landscape Report, the potential adverse landscape and visual effects arising from the proposed solar farm include the following:

- *Effects on the openness and vastness of the Mackenzie Basin, including the long open views.*
- *Effects on the sense of naturalness given by the golden-brown vegetation.*
- *Effects on the legibility of the outwash plain and the sense of landform continuity.*
- *Effects on the high degree of visual coherence, apparent naturalness and spectacular nature in views, in particular from SH8.*

Regarding this, the five SFs proposed within the basin have the potential to cumulatively contribute to adverse landscape effects, and the Panel has requested this be considered.

3.3 Parameters of the Cumulative Effects Assessment

Currently, there are five proposed solar farms within the Mackenzie Basin that are ‘listed’ or ‘referred’ projects on the Fast Track website. Therefore, these five projects are considered in this Cumulative

² TTatM, Para 6.46 – 6.48

Effects Assessment. Their locations within the Mackenzie Basin are illustrated on **Appendix 1** to this RFI Response.

1. The Twizel Solar Farm - <https://www.fasttrack.govt.nz/projects/twizel-solar-project>
2. The Point Solar Farm, being this proposal.
3. The Haldon Solar Farm - <https://www.fasttrack.govt.nz/projects/haldon-solar>
4. Grampions - <https://www.fasttrack.govt.nz/projects/grampions-solar-project>
5. Balmoral Station Solar Farm - <https://www.fasttrack.govt.nz/projects/balmoral-station-solar-array>

Detailed information on each of the first four projects is included on the Fast-track website. Information on the Balmoral Solar Farm is on the <https://www.mackenzie.govt.nz/rates-building-and-property/resource-consents-information-and-applications/notified-resource-consents> (RM220048).

A landscape and visual effects assessment has been undertaken for all five projects, albeit the Grampions assessment is at a high-level, i.e. is less detailed than the others. These five reports identify where each Solar Farm may be seen from and include panorama photographs and visual simulations to assist with illustrating this. These five assessments have been relied upon to inform these cumulative effects assessment. This information is not repeated, or included in this report, rather a summary of where the five solar farms may be seen from is included below.

For reference, this assessment does not review / fact check those landscape assessments, rather it relies upon the quantifiable information that has been included.

3.4 **Visibility of the Five Solar Farms**

The visibility description below focuses on where these five SFs may be seen from. If a SF is not mentioned, it has been assessed by the respective authors as not being visible from that public place. Comment has been included if mitigation vegetation provides screening.

These locations have been mapped with corresponding 'numbers' on Appendix 1.

Also, the public places have been grouped to assist with understanding the different viewing audiences and the sequential views of SFs as people travel through different parts of the basin.

3.4.1 **Centralised Locations within the Mackenzie Basin**

State Highway 8 – Scenic Highway

1. Twizel SF will be seen from two stretches, 650m and 500m of SH8 between the Lake Ruataniwha Dam and the entry to that SF.
2. Haldon SF will be difficult to distinguish from the stretch of SH8 between Lake Ruataniwha and the Pukaki Airport, at distances of 13kms away.
3. The Point SF will be difficult to distinguish from a short stretch of SH8 north of Lake Pukaki, at distances between 7 – 13kms.
4. Grampions SF will be seen from a short stretch of SH8 midway between Lake's Pukaki and Tekapo, at a distance of 15 - 20kms.

Mount John Conservatory / Summit

5. Grampions SF will be seen at a distance of 24kms away.

The Alps to Ocean Trail

6. The Point SF will be difficult to distinguish from a short stretch of the A2O Trail south of the Pukaki Airport, at distances between 7 – 13kms.

Haldon SF will be difficult to distinguish from the trail between Twizel and Pukaki, at distances of 13km away.

3.4.2 Western Side of the Mackenzie Basin

Braemar Road

7. Balmoral SF will be seen from a 900m stretch of Braemar Road.

3.4.3 Eastern Side of the Mackenzie Basin

Haldon Road

8. The Point SF will be screened by the proposed native vegetation.
9. Grampions SF will be seen from sections of Haldon Road, near Mackenzie Pass Road.
10. Haldon SF will be seen when travelling between Haldon Station farm base and Black Forest.

Haldon Arm Road

11. The Point SF will be screened by the proposed native vegetation.

Haldon SF will be seen prior to descending the scarp face to the Haldon Arm Campground.

Mackenzie Pass Road

12. Grampions SF will be screened from view by an existing shelterbelt.

Hakataramea Pass Road

13. Grampions SF will be seen from the northern end of the Hakataramea Pass Road.

3.4.4 Southern Part of the Mackenzie Basin

Pukaki, Tekapo, Ōhau Rivers

14. Twizel SF will be screened by the recommended native vegetation.
15. Haldon SF will be seen from very limited locations along the 4wd tracks alongside these rivers.

Twizel River Trail – 13kms long

16. Twizel SF will be seen from the western 1.5kms of trail, at a distance of 5-6kms away. It will be screened by the recommended native vegetation. It will not be seen from the remainder of this trail.

Old Iron Bridge Road

17. Twizel SF will be screened by the recommended native vegetation.

Ōhau River Four-Wheel Drive Track

18. Twizel SF will be screened by the recommended native vegetation.

McAughtries Road – Elevated Stretches

19. Twizel SF will be most readily visible from the upper 2.2km stretch of McAughtries Road, northwest of the Ōhau B Power Station, also from the 900m stretch of road near Ōhau C Power Station.
20. The Point SF will be seen from the lookout area beside the Ōhau C Power Station, located at the southern end of this road.

McAughtries Road – Lower Stretches

21. Twizel SF will be intermittently seen when travelling between Ōhau B and Ōhau C Power Stations.

The Point SF will be screened by the proposed vegetation.

Falston Road

22. Twizel SF will be screened by the recommended native vegetation.

The Point SF will be screened by the proposed vegetation.

Haldon SF will be seen at the far side of the lake.

Lake Benmore

23. The Point SF will be screened by the proposed vegetation.

Haldon SF will be seen from the more western half of Lake Benmore.

Lake Benmore – Ōhau C Campground

24. Haldon SF will be seen.

Falston Campground

25. Haldon SF will be seen at 4kms away.

3.4.5

Other Elevated Vantage Points

Ben Ōhau - Greta Track

26. Twizel SF will be seen at approximately 15 – 20kms away.

The Point SF's northern half will be seen at approximately 20kms away.

Benmore Range Easement Track

27. Twizel SF will be visible.

The Point SF will be visible.

Haldon SF will be visible

3.5

Simultaneous Visual Effects

Based on the above, there are five locations within the Mackenzie Basin where more than one SF may be seen at the same time or in the same view. The below numbering corresponds with the above and **Appendix 1**.

1. Twizel SF and Haldon SF will be seen from the stretch of State Highway 8 near Lake Ruataniwha Dam, albeit, the Haldon SF will be very difficult to distinguish at 13kms away.

The brevity of the view, the relatively flat viewing angle and the distance in which Haldon SF is seen means that it is unlikely that a road user will observe both SFs from this stretch of road. Therefore, whilst theoretically both visible, it is likely that a road user will only recognise the Twizel SF, subsequently cumulative effects on visual amenity will not arise.

6. The Point SF and Haldon SF will be difficult to distinguish from a short stretch of the A2O Trail south of the Pukaki Airport, at distances between 7 – 13kms. Therefore, cumulative effects on visual amenity will not arise.
20. The Twizel SF and The Point SF will be seen alongside one another from seen from the lookout area beside the Ōhau C Power Station, along McAughtries Road.

These two solar farms will be seen at the very southern end of the basin, visually clustered together and co-located with Twizel township, and the hydro infrastructure including the Benmore to Islington Powerline and Twizel Substation that assist with providing visual context within this energy generating landscape. They will not be perceived as sprawling through the basin, rather the broader open character beyond the solar arrays will remain. Due to this, cumulatively, adverse visual amenity effects will be **low to low-moderate**.

26. Twizel SF and The Point SF's northern half will be seen at approximately 15 – 20kms away from an elevated vantage point on the Ben Ōhau - Greta Track

These two solar farms will be seen at the very southern end of the basin, beyond 15-20kms away, forming a small part of the expansive views gained, visually clustered together and co-located with Twizel township, and the hydro infrastructure including the Benmore to Islington Powerline and Twizel Substation, that assist with providing visual context within this energy generating landscape. They will not be perceived as sprawling through the basin, rather the broader open character of the view will remain. Due to this, cumulatively, adverse visual amenity effects will be **very low**.

27. Twizel SF, The Point SF and Haldon SF will be visible from elevated areas on the Benmore Range Easement Track.

These three solar farms will be seen by a small viewing audience, from this infrequently used trail, at the very southern end of the basin, visually clustered together and co-located with the hydro infrastructure including the Benmore to Islington Powerline and Twizel Substation that assists with providing visual context within this energy generating landscape. They will not be perceived as sprawling through the basin, rather the broader open character beyond the solar arrays will remain. Due to this, cumulatively, adverse visual amenity effects will be **very low to low**.

3.6 Sequential Views of the Five Solar Farms

Sequential views and resulting cumulative effects occur when seeing two areas of development in sequence of one another, but not necessarily alongside one another.

3.6.1 State Highway 8 – Scenic Highway

People travelling through the Mackenzie Basin on SH8, that is a scenic highway, i.e. Christchurch to Queenstown may only see the Twizel SF from the short stretch of road immediately between the Lake Ruataniwha Dam and the entry to that SF. This is because all other SFs are very difficult to distinguish being 7 – 20kms away. Therefore, it is unlikely that they will result in sequential cumulative effects.

Regarding this, sequential cumulative effects on visual amenity are more likely to adversely affect locals and tourists who travel along a sequence of 'local' roads as they visit lakes, rivers, and mountain and hill summits.

3.6.2 Centralised Locations within the Mackenzie Basin

People spending time in Tekapo and the central part of the basin may only see the Grampions SF from the top of Mt John, at 15 - 20kms away. Braemar Road is infrequently used, therefore, the people who see the Balmoral SF may not ascend Mt John, and therefore would not visually understand the spread of solar arrays within the basin. However, there may be a small population of people who do. This small group of people would understand the spread of development. The key mitigating measure to reduce effects is the 15 - 20km viewing distance of Grampions SF and the comparatively smaller size of the Balmoral SF, being 100ha. Therefore, cumulatively, adverse visual amenity effects will be of a **low to low-moderate degree**. Screening or not including the Grampions SF would remove these adverse cumulative effects.

3.6.3 Eastern Side of the Mackenzie Basin

People travelling to Haldon Arm Campground and Lake Benmore along Haldon and Haldon Arms Road will see the Grampions SF and Haldon SF. They will experience them as being some 35kms from one another, i.e. spread along this side of the basin located / reliant on where existing grid infrastructure is. These two developments will result in the perceptual spread of development within a less developed part of the basin, with the Grampions SF being disconnected from all other development. Therefore, cumulatively, this perceived spread of development will result in a **moderate degree** of adverse effects. Increased screening or not including the Grampions SF would remove these adverse cumulative effects.

3.6.4 Southern Part of the Mackenzie Basin

People travelling to the Ōhau C Campground and Lake Benmore will see the Twizel SF and The Point SF alongside one another from McAugtries Road. Once on Falston Road, those two solar farms will be out of sight as the Haldon SF is seen.

Whilst, sequentially, there will be a lot of development seen, they will appear at the very southern end of the basin, visually clustered together and co-located with Twizel township, and the hydro infrastructure that assists with providing visual context within this energy generating landscape. Positively, they will not be perceived as sprawling through the basin, rather the broader open character beyond the solar arrays will remain. Other user groups including people who holiday in the vicinity and those who spend days on the lake may feel surrounded by solar infrastructure resulting in adverse visual effects. This will be mostly influenced by the Haldon SF as it will form a regular element seen from the lake and its western foreshore, including campgrounds, whereas the Twizel SF and The Point SF are not seen.

When taking a balanced approach, cumulatively, these three SFs will result in a **moderate degree** of adverse effects. At a local scale, increased screening or not including Haldon SF would reduce these adverse cumulative effects. Noting that the perception of being surrounded by solar infrastructure would occur if Haldon SF were seen in sequence with either of the two other SFs.

3.6.5 Other Elevated Vantage Points

The Ben Ohau and Benmore Range Track are both day walks. Therefore, whilst the Twizel SF and The Point SF will be visible from elevated parts of Ben Ohau and the Benmore Range, and Haldon SF also visible from the Benmore Range, they will not be seen in sequence with the Balmoral SF or the Grampions SF. Therefore, there are no additional sequential effects above and beyond what was assessed in Section 3.5.

3.7 Assessment of Landscape Effects

Without knowing the landscape values of each site, individually, the adverse landscape effects arising from the proposed SFs on Mackenzie's distinct landscape character, its openness and naturalness appear to be all very similar. Therefore, individually the SFs may all be 'appropriate'. The issue at hand is how much SF development is too much? And does the pattern of development through the basin exacerbate the effects?

Cumulatively, all five SFs will result in approximately 2,200ha of solar panels covering open paddocks, replacing each site's rural character with a semi-industrial / renewable power generation character.

One of the key characteristics of the Mackenzie Basin's rural landscape is its open character which stems from its openness, vastness, and lack of built form. Collectively, at a wider scale, all five solar farms will remain subservient to the current openness and vastness of the Mackenzie Basin as they equate to approximately 10% land coverage of the 'South Basin'.

It is likely that there will be cumulative effects on the distinctive Mackenzie Basin character, openness and naturalness arising from a proliferation of solar farms through the basin. In particular, how they collectively alter the basin's high-country character and its perceived lack of built form.

The spread of built form will mostly result from the Balmoral SF and Grampions SF, whereas the other three SFs are clustered together. These two more distant SFs will result in SFs being seen from areas within the centre and the eastern side of the basin. This would be beyond the southern end of the basin, resulting in the perceived spread and increase in built form throughout the basin. Also, the Balmoral SF and Grampions SF are not perceptually associated with the Waitaki Hydro Scheme. Therefore, the hydro scheme, that contributes to the character of the basin does not clearly assist with mitigating their potential energy infrastructure associated effects. Therefore, when seen on face value, they will have a comparatively higher degree of adverse effects.

Regarding the above, at the broad scale of the Mackenzie Basin the clustering of the Twizel, The Point and the Haldon SFs in the southern part of the basin, alongside the existing Waitaki Hydro Scheme and Twizel township will avoid the perception of solar development spread throughout the basin, that would otherwise have **moderate-high to high adverse cumulative effects**.

At a local scale, the three solar farms will collectively contribute to a significant change to the character of the southern part of the Mackenzie Basin, due to their size and extent, and how they will be perceived from their surrounds. However, the Waitaki Hydro Scheme and Twizel township will assist with mitigating these potential landscape effects as the SFs will collectively read as being part of the renewable energy infrastructure, being a key landscape characteristic of this part of the basin. Also, clustering solar development within the southern area will maintain the existing character of the wider basin to the north.

Due to the above, the Twizel SF, The Point SF and the Haldon SF will have a **moderate to moderate-high degree** of adverse cumulative effects on the landscape character and values of the southern part of the Mackenzie Basin. Perceptually, this will be mostly influenced by the Haldon SF as it will form a regular element seen from the lake and its western foreshore, including campgrounds, whereas the Twizel SF and The Point SF are not seen. Therefore, not including Haldon SF would make the largest contribution to reducing these adverse cumulative effects. Regarding the wider Mackenzie Basin, these adverse effects will be of a **low degree**.

3.8

Conclusion

Collectively, the five proposed solar farms will have a have **moderate-high to high adverse cumulative effects** on the Mackenzie Basin's landscape character and ONL values. The primarily reason for this is the spread of development through the Basin resulting from the Balmoral SF and Grampians SF.

At a local scale, the Twizel SF, The Point SF and the Haldon SF will have a **moderate to moderate-high degree** of adverse cumulative effects on the landscape character and values of the southern part of the Mackenzie Basin. These adverse effects would be reduced if Haldon SF was not included due to perception of being surrounded by solar infrastructure that it will create on lake and campground users. Regarding the wider Mackenzie Basin, these adverse effects will a **low degree**.