

**BEFORE THE ENVIRONMENT COURT
I MUA I TE KOOTI TAIAO O AOTEAROA**

UNDER the Resource Management Act 1991

IN THE MATTER of appeals under Clause 14 of the First Schedule of the Act

BETWEEN

TRANSPower NEW ZEALAND LIMITED
(ENV-2018-CHC-26)

FONterra CO-OPERATIVE GROUP
(ENV-2018-CHC-27)

HORTICULTURE NEW ZEALAND
(ENV-2018-CHC-28)

ARATIATIA LIVESTOCK LIMITED
(ENV-2018-CHC-29)

WILKINS FARMING CO
(ENV-2018-CHC-30)

(Continued next page)

**MEMORANDUM OF COUNSEL FOR SOUTHLAND REGIONAL COUNCIL IN
RESPONSE TO THE COURT'S MINUTE DATED 9 JULY 2019
19 July 2019**

Judicial Officer: Judge Borthwick

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WYNNWILLIAMS

**GORE DISTRICT COUNCIL, SOUTHLAND DISTRICT
COUNCIL & INVERCARGILL DISTRICT COUNCIL**
(ENV-2018-CHC-31)

DAIRYNZ LIMITED
(ENV-2018-CHC-32)

H W RICHARDSON GROUP
(ENV-2018-CHC-33)

BEEF + LAMB NEW ZEALAND
(ENV-2018-CHC-34 & 35)

DIRECTOR-GENERAL OF CONSERVATION
(ENV-2018-CHC-36)

SOUTHLAND FISH AND GAME COUNCIL
(ENV-2018-CHC-37)

MERIDIAN ENERGY LIMITED
(ENV-2018-CHC-38)

ALLIANCE GROUP LIMITED
(ENV-2018-CHC-39)

FEDERATED FARMERS OF NEW ZEALAND
(ENV-2018-CHC-40)

HERITAGE NEW ZEALAND POUHERE TAONGA
(ENV-2018-CHC-41)

STONEY CREEK STATION LIMITED
(ENV-2018-CHC-42)

THE TERRACES LIMITED
(ENV-2018-CHC-43)

CAMPBELL'S BLOCK LIMITED
(ENV-2018-CHC-44)

ROBERT GRANT
(ENV-2018-CHC-45)

**SOUTHWOOD EXPORT LIMITED, KODANSHA
TREEFARM NEW ZEALAND LIMITED, SOUTHLAND
PLANTATION FOREST COMPANY OF NEW ZEALAND**
(ENV-2018-CHC-46)

**TE RUNANGA O NGAI TAHU, HOKONUI RUNAKA,
WAIHOPAI RUNAKA, TE RUNANGA O AWARUA & TE
RUNANGA O ORAKA APARIMA**
(ENV-2018-CHC-47)

PETER CHARTRES
(ENV-2018-CHC-48)

RAYONIER NEW ZEALAND LIMITED
(ENV-2018-CHC-49)

**ROYAL FOREST AND BIRD PROTECTION SOCIETY
OF NEW ZEALAND**
(ENV-2018-CHC-50)

Appellants

AND

SOUTHLAND REGIONAL COUNCIL

Respondent

MAY IT PLEASE THE COURT

- 1 This Memorandum of Counsel is filed on behalf of the Southland Regional Council (**Council**) in respect of the appeals against the Council's decision on the proposed Southland Water and Land Plan (**pSWLP**).
- 2 This Memorandum addresses the Court's Minute dated 9 July 2019, in relation to the following matters:¹
 - (a) Proposing an itinerary for the Court's site visit;
 - (b) Identifying documents that the parties wish the Court to have to hand during the hearing;
 - (c) Proposing the order of closing submissions; and
 - (d) Responding to the draft outline of work in support of the cultural and ecological indicators of health and on the reconvening of a facilitated expert conference.
- 3 This Memorandum also seeks leave for Mr Maw to be absent on the morning of Monday 29 July 2019.

Site visit

- 4 The Court is undertaking a site visit on Saturday 27 and Sunday 28 July 2019. The Court directed the parties to confer and advise of any view or site they may wish to take in. The Court also directed the Council to propose an itinerary for the Court's site visit.
- 5 Counsel for the Council has conferred with the parties and the Council has prepared a proposed itinerary based on the parties' responses and the Court's proposed route as set out in paragraph [3] of its Minute. The proposed itinerary, an overall route map, and site-specific detailed maps are set out at **Appendix A** (along with the party that requested the particular site / view).
- 6 Due to the number and variety of locations of the suggestions from the parties, combined with the travel times and short daylight hours, the Council was unable to include all of the parties' suggestions in the proposed itinerary. The full list of the parties' suggestions (and

¹ Minute of the Environment Court dated 9 July 2019.

associated maps), with those suggestions that have been included in the proposed itinerary highlighted yellow, are set out in **Appendix B** for the Court's consideration.

- 7 Fish & Game and Forest & Bird propose that the Court includes a helicopter flight to look at typical wintering activities as part of its site visit. If the Court is amenable to that suggestion, Fish & Game and Forest & Bird would be willing to cover the cost. The helicopter trip would start from Te Anau going south through the Te Anau Basin and part way down the Waiau River and return. This would be an hour return flight (back to Te Anau). DoC supports this suggestion.
- 8 Wilkins Farming has also advised it is "prepared to fund a helicopter for the Court to fly on any course it desires not to sites window shopped to show worst case scenarios".
- 9 Federated Farmers has a concern about the use of helicopters flying too low, and animal welfare. Federated Farmers also consider that there may be an element of fairness to parties, given this was a late suggestion by one of the Appellants.
- 10 The proposed itinerary does not include any possible helicopter flight time.

Documentation for the resumed hearing

- 11 The Court directed the parties to identify the documents and/or bundles that they wish the Court to have on hand for closing submissions. The parties have requested that the Court have the following documents at the resumed hearing:
 - (a) National Policy Statement for Renewable Electricity Generation 2011 - set out in the Common Bundle, Volume 1, Tab 2;
 - (b) National Policy Statement for Freshwater Management 2014 (amended 2017) - set out in the Common Bundle, Volume 1, Tab 4;
 - (c) Southland Regional Policy Statement - set out in the Common Bundle, Volume 1, Tab 5; and
 - (d) Mr McCallum-Clark's revised provisions, as appended to his Supplementary Statement of Evidence dated 20 July 2019.

Order of closing submissions

- 12 Counsel for the Council has conferred with the parties as to the order for closing submissions. The order largely reflects the reverse order to the cases presented, subject to the availability of Counsel / parties.
- 13 Counsel notes that Dairy Holdings Limited is proposing not to give closing legal submissions, and will separately be seeking leave in this respect.
- 14 A proposed order of closing submissions is set out at **Appendix C**.

Ecological and cultural Indicators of health – draft work programme

- 15 The Court has proposed, unless any party has an objection in principle to the inclusion of interim thresholds in the pSWLP, to put into place directions enabling the work commenced at the expert witness conference to continue, rather than to wait on the Court's decision on Topic A.
- 16 The Court has indicated that Mr McCallum-Clark's revised wording for Objective 6 has merit (in respect of maintaining water quality where it is not degraded and improving water quality where it is degraded). The Court considers that the description of the current state of water quality by reference to its numeric and attribute state would be helpful in relation to this Objective. The Court has also stated that the term "interim thresholds" (as used in the JWS and at the hearing) may not be appropriate and it has used the term "indicators of health" instead.
- 17 The Court has directed that the parties confer and respond on the completion of the work started at the expert conference on the topic of cultural and ecological indicators of waterbody health (i.e., previously referred to as "interim thresholds"). The Court attached a draft outline of the work that may support the development of these indicators (see Attachment A to the Minute). This includes (in summary):
- (a) the identification and distribution of information to develop indicators;
 - (b) holding an expert conference to agree on a proposed plan of work to develop the indicators;
 - (c) the experts developing the indicators; and

(d) a further expert conference to complete recommendations on appropriate cultural and ecological indicators of health.

- 18 The Court has directed that the parties confer with their experts that were involved in the expert conferencing and respond to this suggested outline of work in support of the cultural and ecological indicators of health and on the reconvening of a facilitated expert conference.
- 19 Counsel for the Council has conferred with the parties and has received responses to the draft outline of work and on the reconvening of a facilitated expert conference.
- 20 Counsel for the Council has considered whether a single response could be provided to the Court, but given the divergence in the responses from the parties, this has not been possible. Counsel also notes that while some of the parties have responded to issues raised by other parties, that not all parties have had the opportunity to, or have done so (including the Council). The responses received from the parties are contained in **Appendix D**.
- 21 Based on the responses from the parties, further discussion on this issue may be appropriate, after the closing legal submissions have been heard (for example, by way of teleconference).

Leave sought

- 22 Counsel seek leave for Mr Maw to be excused for the morning of Monday 29 July 2019. Ms Wyss will be in attendance during his absence.

DATED this 19th day of July 2019



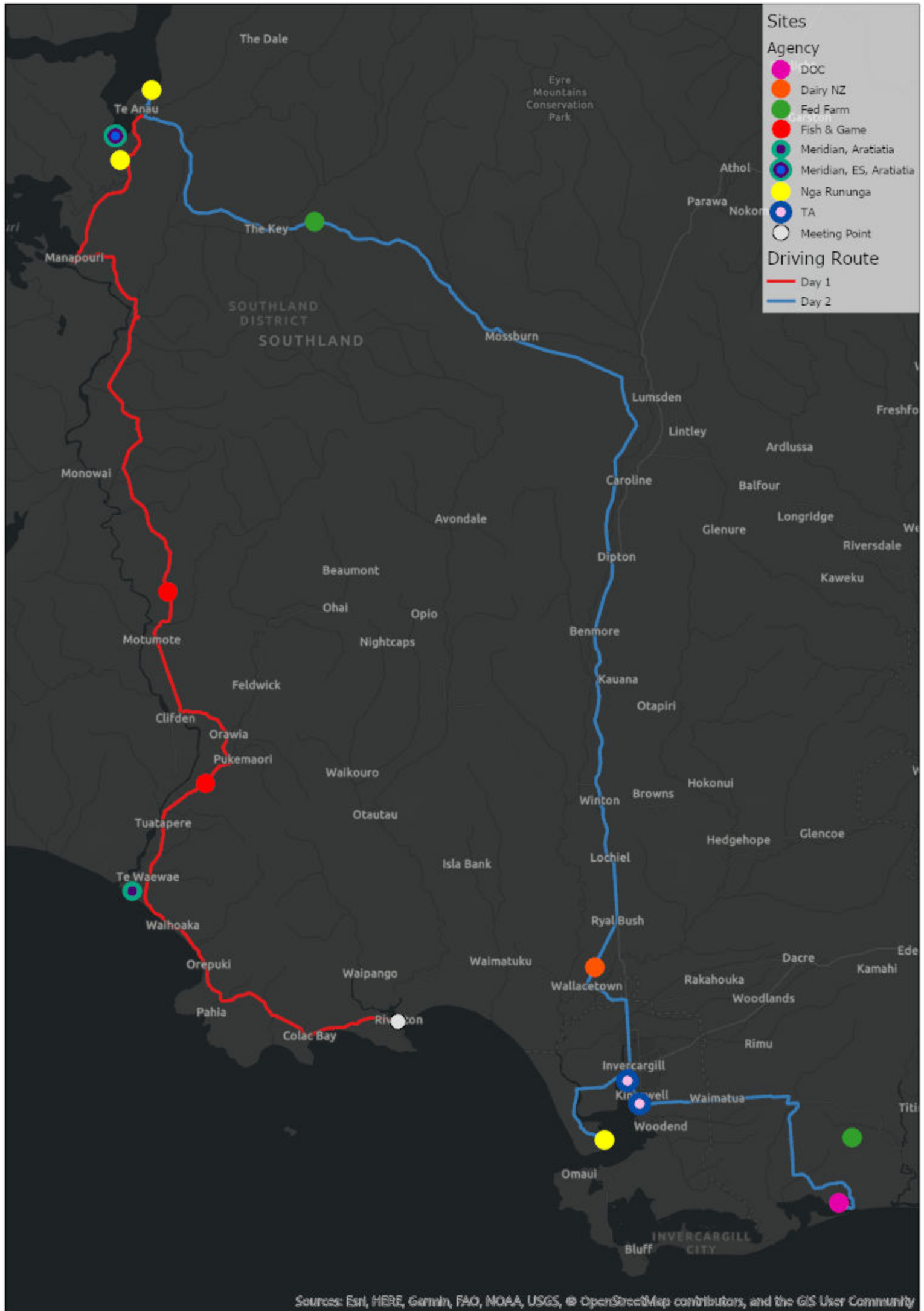
.....
P A C Maw / K J Wyss
Counsel for the Southland Regional Council

Appendix A

Proposed itinerary for the Court's site visit

Appendix A
Proposed itinerary for the Court's site visit

Approx. time	Sites suggested	Party suggesting
2pm	Depart Riverton	Court
2.45pm	Te Wae Wae Lagoon – Whitebait ponds and Lagoon (see Map 1)	Aratiatia, Meridian and Waiau Rivercare Group
3.15pm	Pukemaori, Otautau Tuatapere Rd. (see Map 2)	Forest & Bird / Fish & Game
3.30pm	Otau Flat, Feldwick Rd. Driving North to the West is the large wetland area of Marsh Burn (see Map 3)	Forest & Bird / Fish & Game
4.30pm	Te Anau Control structure (see Map 4)	Meridian, Environment Southland, Aratiatia and Waiau Rivercare Group
DAY 2	Route - Te Anau to Lumsden SH99 and then onto SH6	Ngā Rūnanga
8am	Te Kowhai (Upukerora confluence with Lake Te Anau) (see Map 5)	Ngā Rūnanga
9am	Burwood Station 2934 Te Anau, Mossburn Hwy. (Visible from the roadside.)	Federated Farmers
11.30am	Southern Dairy Hub, Wallacetown. (This could alternatively be done on Saturday 27 th July, on the way to Riverton, if there was sufficient time)	DairyNZ/Fonterra and Federated Farmers
12.30pm	Waituna Lagoon – (view from the Boardwalk Track and viewing shelter overlooking the Lagoon) Website includes map showing how to access the site - https://www.doc.govt.nz/parks-and-recreation/places-to-go/southland/places/awarua-waituna-wetlands/things-to-do/waituna-lagoon-tracks/	Court DoC additions
1.15pm	Farm visit - Tony and Raewyn Van Gool, 158 Waituna Road ph 021631319; a dairy farm in Waituna; they've undertaken significant fencing and plantings, covenanted a QEII area, and have a crop paddock ready for the cows when come home.	Federated Farmers
2.30pm	Clifton treatment facility (wastewater treatment facility for Invercargill) If the Court would like to visit this site it is located in Lake Street, Invercargill and this will need to be arranged with ICC staff to guide the Court through the site and ensure all relevant health and safety precautions are followed. (See map 6)	Territorial Authorities
3.30pm	New River Estuary – viewpoint suggested = boardwalk located off Bond Street, Invercargill (see map 7).	Territorial Authorities
4.30pm	Oue - Historical kainga and Nature Reserve Sandy point (see map 8).	Ngā Rūnanga



1. Whitebait Ponds & Te Waewae Lagoon (mid reach)

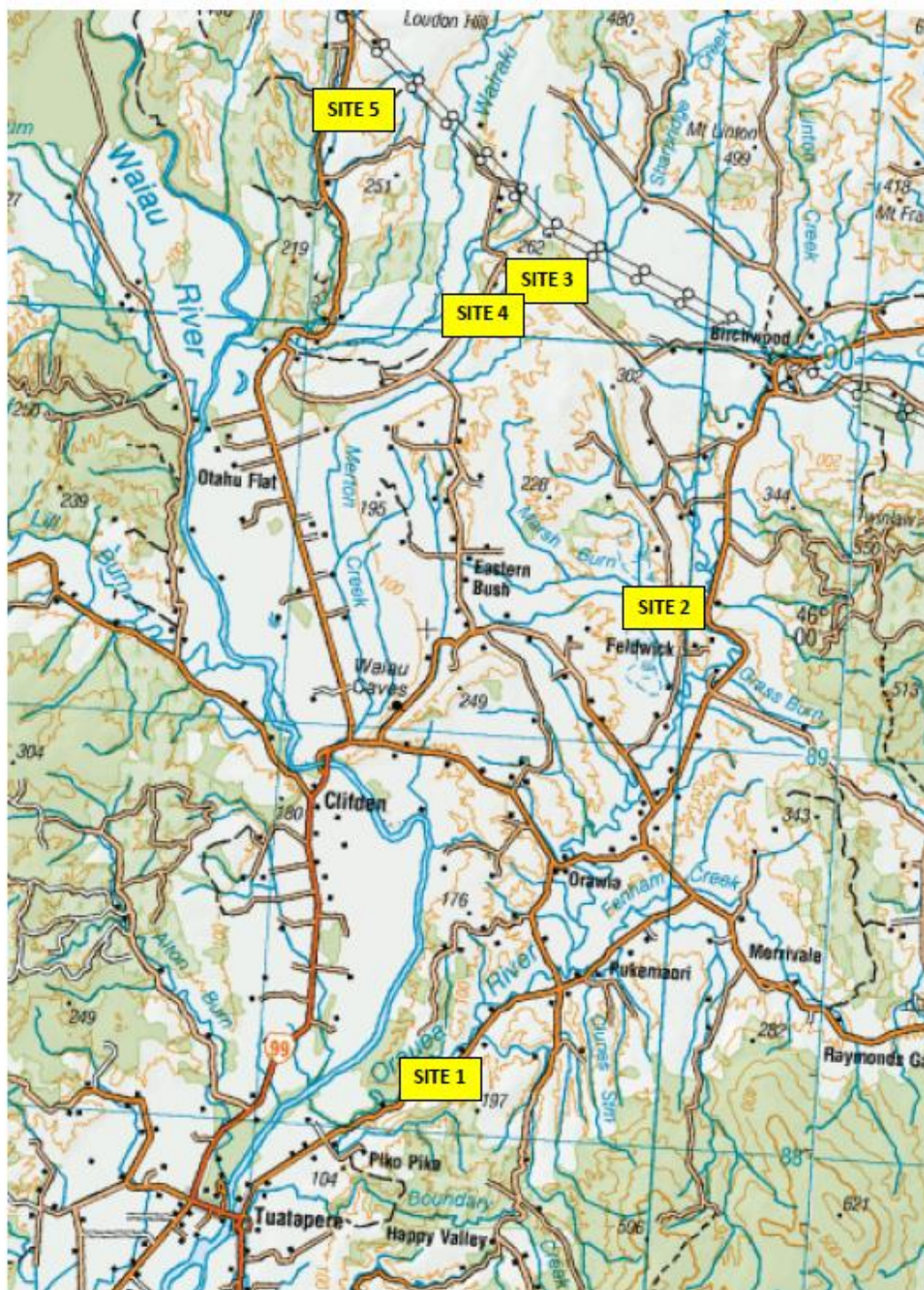


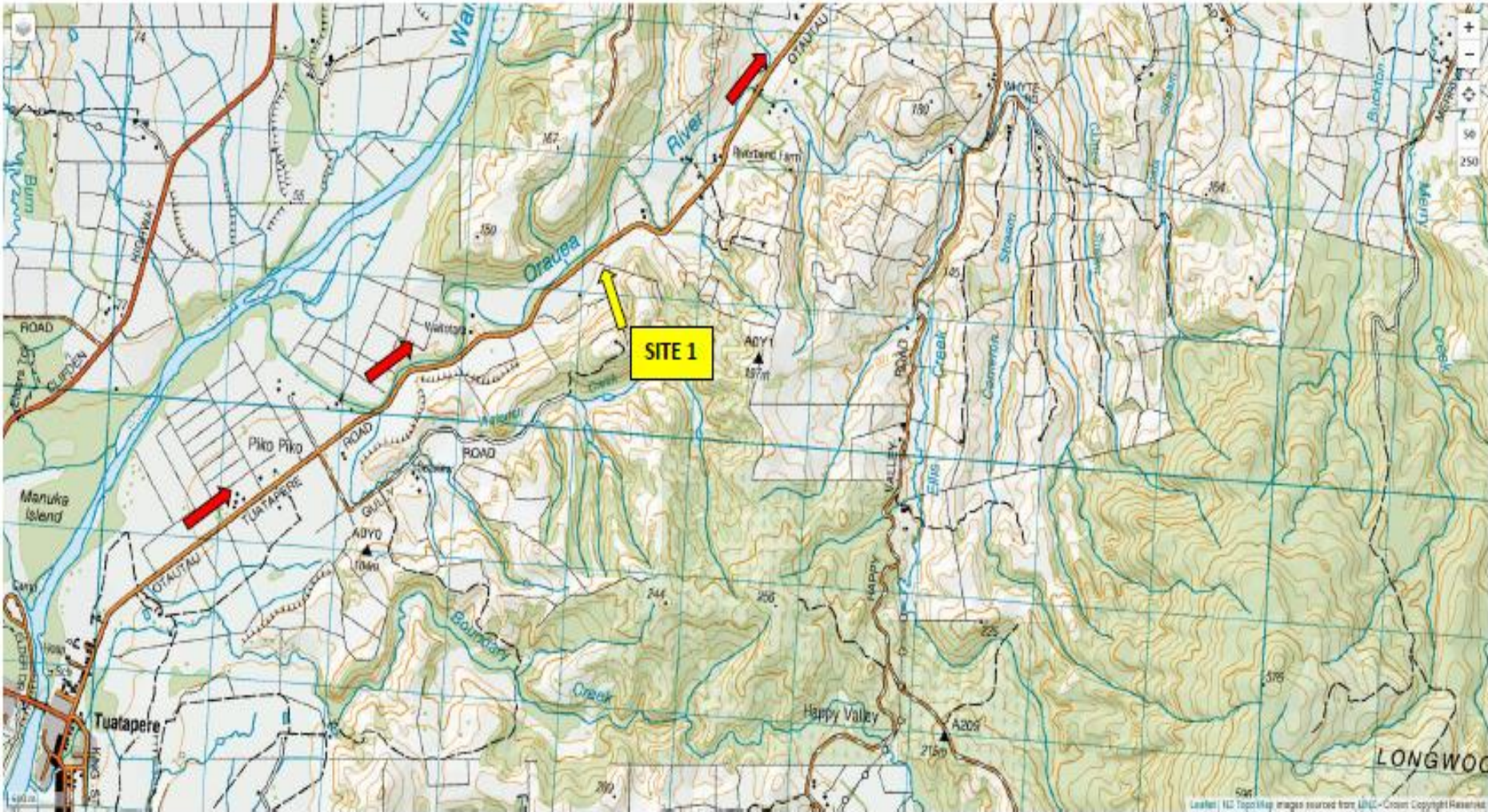
Access via Fishing Camp Road

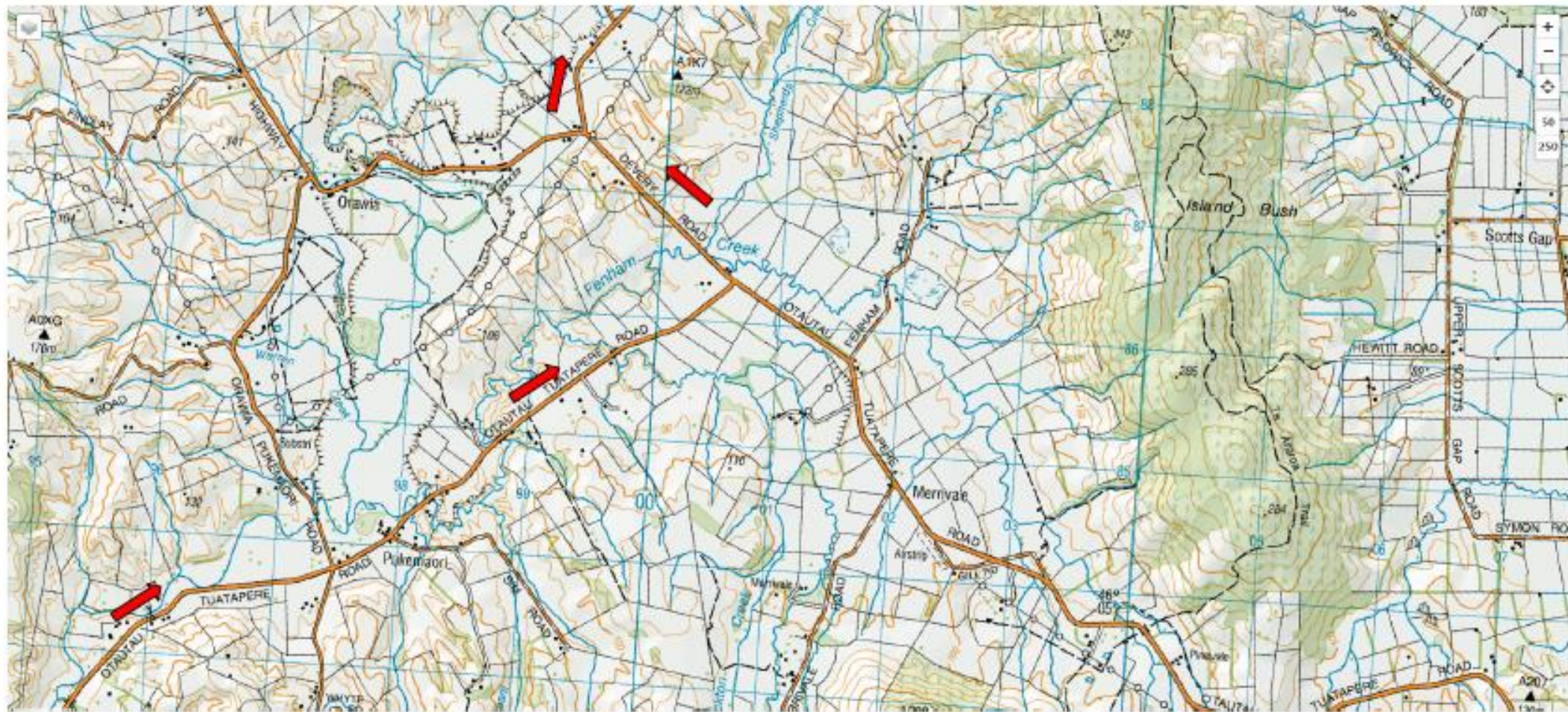
Background

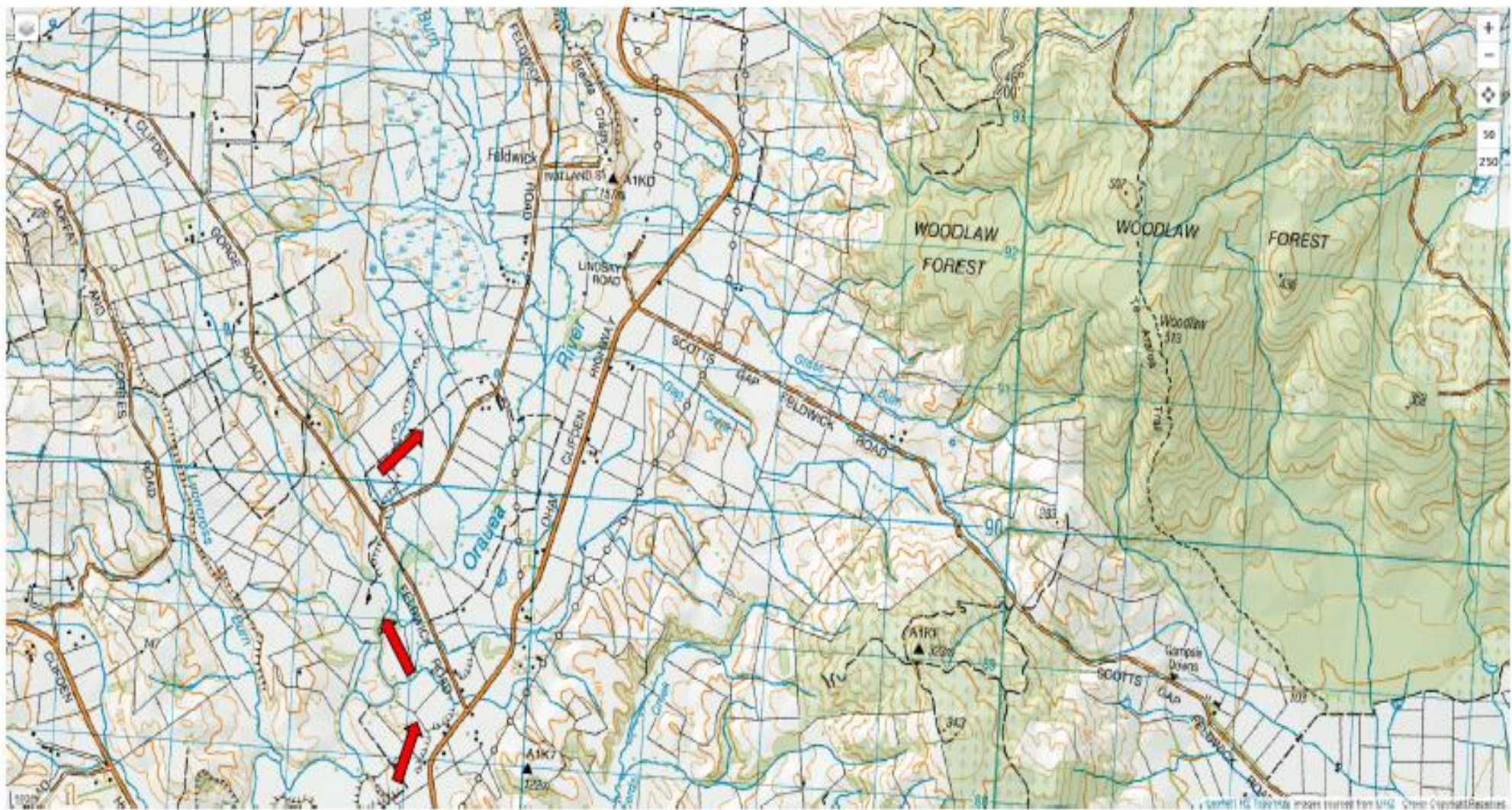
Site 1 - Te Waewae Lagoon Wetland Project – Fishing Camp Road off SH - 99

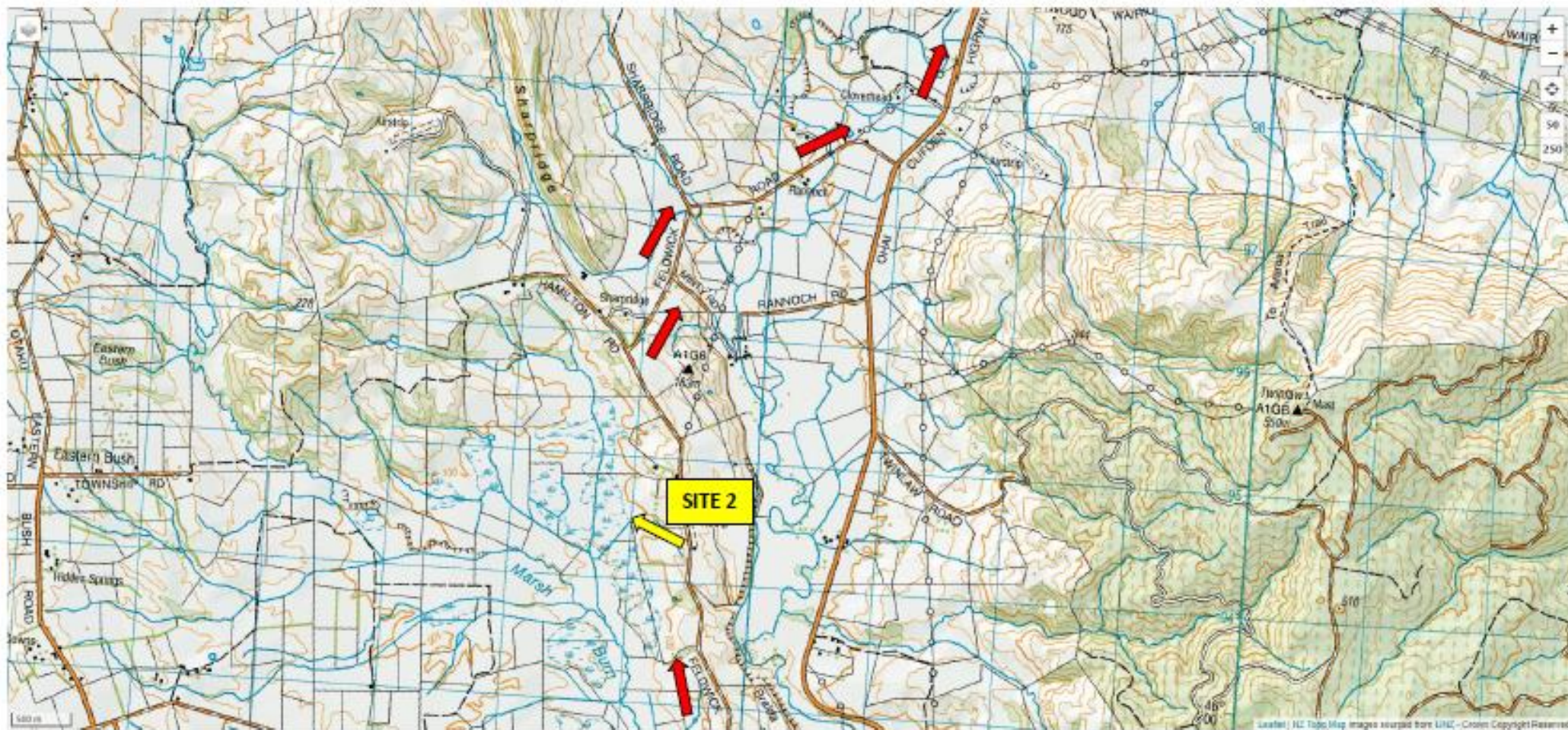
The Waiou Fisheries and Wildlife Habitat Trust is a mitigation outcome of the 1996 consenting process under the Resource Management Act 1991 as described in Mr Feierabend's Evidence in chief at paragraphs 47 -49.











5. Te Anau Lake Control (TLC) structure



Take Golf Course Road (Te Anau township end). Park in the Kepler car park and information kiosk. 2 minute walk to TLC structure.





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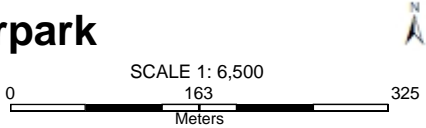


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Estuary Carpark




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Suggested sites

Oue - off Dunns Road, Sandy Point Road, Road to Daffodil Bay (&/or) to Whalers Bay

Legend

Map 8


 Suggested sites to visit

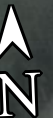
New River Estuary

Daffodil Bay

Oue 

Whalers Bay

Sandy Point 



2 km

Google Earth

Image © 2019 TerraMetrics
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Appendix B

Responses from the parties in relation to the Court's site visit (with those suggestions included in the proposed itinerary highlighted yellow)

Appendix B

Responses from the parties in relation to the Court's site visit (with those suggestions included in the proposed itinerary highlighted yellow)

Sites suggested	Party suggesting
While in Te Anau it would be useful for the Court to inspect the Te Anau wastewater treatment facility. This can be viewed to the left of the road heading north on Upukerora Road, off the Te Anau-Milford Highway.	Territorial Authorities
In Invercargill a good view of the New River estuary is from the closed landfill that has a public boardwalk located off Bond Street, Invercargill. (See map labelled Territorial Authorities 1)	Territorial Authorities
If the Court would like to see the main wastewater treatment facility for Invercargill it could visit the Clifton treatment facility located in Lake Street, Invercargill. Visiting this site will need to be arranged in advance with Council staff to ensure the Court is guided through this site with a trained operator to ensure access to this secure facility and all relevant health and safety precautions are followed. (See map labelled Territorial Authorities 2)	Territorial Authorities
Meridian has prepared [a plan] showing a number of places of relevance to Meridian's interests in the pSWLP particularly in the Waiau Catchment which the Court can take in as it moves around part of the region on 27 and 28 July (see maps labelled Meridian 1) . The only places Meridian requests the Court to stop is at the lookout above the Manapouri Lake Control structure and at the Te Anau Lake Control structure . The other places identified on the attached plan can either be observed from the road or a short diversion off it as the Court moves around. Meridian does want the Court to visit the Manapouri Power Station at some point, but this can be addressed as part of Topic B.	Meridian
The Court is to visit Waituna Lagoon . DOC recommends the Court take a view from the Boardwalk Track and viewing shelter overlooking the Lagoon. If the Court has time, other options include the Loop Track and Beach Access. Link to the DOC website page, which includes a map showing how to access the site and a description of the track for the Court's information - https://www.doc.govt.nz/parks-and-recreation/places-to-go/southland/places/awarua-waituna-wetlands/things-to-do/waituna-lagoon-tracks/ .	DOC
DairyNZ would like to suggest that the Bench includes a visit to the Southern Dairy Hub (SDH) at Wallacetown on Saturday 27 th July, enroute to Riverton. The Dairy interests consider that it may be helpful for the Court to incorporate a visit to a working dairy farm (in addition to the Southern Dairy Hub research farm) as part of its field trip itinerary. The Dairy interests will co-ordinate with Federated Farmers on site(s), timing and dates if the Court considers this would be of assistance.	DairyNZ/Fonterra

<p>DairyNZ and Fonterra note that the field trip will include a visit to the Waituna catchment.</p>	
<ol style="list-style-type: none"> 1. David Diprose, Pourakino area, can show buffer zone plantings, wetlands, sediment traps on a dairy farm. 10 mins off main highway from Riverton racecourse. Ermedale Farm, 794 Omutu Rd, Riverton. Ph 0274962066 2. Burwood Station, 2934 Te Anau – Mossburn Hwy. Visible from the roadside. They will have or had large mobs of ewes grazing on winter crop both just before and after this address. 3. Dale Farm, 133 Takaro Road, RD1, Te Anau; Manager Ian Matthews ph 0274375599; this is a Pamu (Landcorp) deer block which has undertaken significant fencing of waterways - it is useful to show the scale of work involved and which farmers are undertaking to protect waterways; winter grazing available here to see if required too. 4. Tony and Raewyn Van Gool, 158 Waituna Road, Waituna; ph 021631319; a dairy farm in Waituna; they've undertaken significant fencing and plantings, covenanted a QEII area, and have a crop paddock ready for the cows when come home. 5. The location of the recently granted ICC stormwater discharge consent (15 year duration) – I assume that ES have a copy of this available to find the exact location? Invercargill City – multiple discharge points Waihopai, Otepunu and Kingswell Streams. 6. An Alliance discharge – either the Lorneville or Mataura plant – could see from the bridge. <p>Federated Farmers would also like the Court to visit the Dairy Hub near Winton (as suggested by DairyNZ).</p>	<p>Federated Farmers</p>
<p>Aratiatia suggests that the site visit include:</p> <ol style="list-style-type: none"> 1) The tail race discharge at Deep Cove (as that is essential to understanding the scale of the Manapouri Power Scheme's effect on the Waiau catchment). 2) The Manapouri Lake Control Structure. 3) Rainbow Reach bridge (to see the Upper Waiau as a point of comparison). 4) Bluecliffs Beach. 5) Te Wae Wae Lagoon. 	<p>Aratiatia</p>
<p>Fish & Game and Forest & Bird propose that the Court includes a helicopter flight to look at typical wintering activities as part of its site visit. If the Court is amenable to that suggestion, our organisations would be willing to cover the cost. The helicopter trip would start from Te Anau going south through the Te Anau Basin and part way down the Waiau River and return. This would be an hour return flight (back to Te Anau).</p> <p>In terms of areas to see from the road on the site visit, Fish & Game and Forest & Bird respectfully suggest that the Court would be</p>	<p>Forest & Bird / Fish & Game</p>

assisted by viewing examples of typical wintering activities and critical source areas. The attached document sets out suggested locations of these practices (see attachment labelled F&G + F&B 1):

Site 1 - Otautau Tuatapere Road. As you pass Piko Piko, the road borders the Oraura River. To the east (right) is an example of a large fodder crop area and a critical source area.

Site 2 – Feldwick Road. Driving north, to the west (left) are multiple fodder crop paddocks in the large wetland area of the Marsh Burn and a large critical source area.

Site 3 – Struan Flat Road, opposite a Eucalyptus forest, includes critical source areas.

Site 4 – Run 47 Road. To the north (to the right) towards the Wairaki River are large critical source areas which have been grazed.

Site 5 – Clifden Blackmount Road. Travelling north, to the east (right) is a steep slope that has been fodder crop grazed.

Site One Fish and Game – Pukemaori

Site Two Fish and Game – Otau Flat (approximate area)

Ngā Rūnanga's position is that the site visits should aim to help to illustrate Ki Uta Ki Tai and cumulative effects. As such, Ngā Rūnanga proposes that the Court continuously travel the length of the Statutory Acknowledgement rivers, Waiau and Oreti. This could be achieved by following the Court's proposed route to Te Anau via SH99, then, on the return trip, turning off SH 94 at Lumsden to follow SH6 down the Oreti River, rather than continuing on SH94. The Court may wish to refer to Kā Huru Manu (www.kahurumanu.co.nz), the Ngāi Tahu Atlas, during their travels.

Following the draft itinerary in the Minute of 9 July 2019, Ngā Rūnanga also suggests that the Court visit the following four sites, the first two of which are monitored using the cultural health methodologies (in the Nga Kete o Te Wananga research):

1. Te Kowhai, an unmarked historical nohoanga used until the late 1800s near the confluence of Lake Te Anau and Upukeroa River - Upukeroa Road, Te Anau.
2. Queens Reach nohoanga (provided for in the Ngāi Tahu Claims Settlement Act 1998 adjacent to waterbodies to enable Ngai Tahu camp temporarily and undertake customary fishing and collection of natural resources) - Queens Reach Recreational Area, Queens Reach Road, Te Anau.
3. Oue, a historical kainga and Native Reserve, referred to in Michael Skerrett's evidence - Sandy Point Road, Invercargill.

See the attached three relevant maps: (1) Map of nohoanga sites, suggested sites to visit, and locations of cultural monitoring sites for

Ngā Rūnanga

<p>the Nga Kete o te Wananga (labelled Ngā Rūnanga 1); (2) Close up of Te Kowhai and Queens Reach sites (labelled Ngā Rūnanga 2); (3) Close up of Oue (labelled Ngā Rūnanga 3).</p>	
<p>The tail race discharge at Deep Cove.</p> <ul style="list-style-type: none"> • Bluecliffs beach. • The Te Wae Wae Lagoon. • The Wier/Manapouri Lake Control Structure. • Rainbow Reach bridge. <p>I think the offer by DOC re the helicopter flight will see a big part of the areas of interest to the Waiau Group seen by the members of the Court. Combined with the suggestion of Nga Runanga I think these points should be ticked off.</p>	<p>Waiau Rivercare Group</p>
<p>Wilkins Farming are prepared to fund a helicopter for the Court to fly on any course it desires not to sites window shopped to show worst case scenarios.</p> <p>Main Wendonside Road - location where Wilkins farming undertakes intensive dairy grazing and where there is also a modern dairy shed and effluent system set up within a few minutes of each location. (see attachment labelled Wilkins 1). These sites could be visited and viewed without leaving the road. Obviously they would be more easily accessible by use of a helicopter. Our client is more than happy to host the visit if that is seen as appropriate.</p>	<p>Wilkins Farming</p>

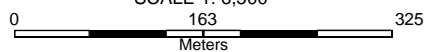


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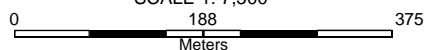


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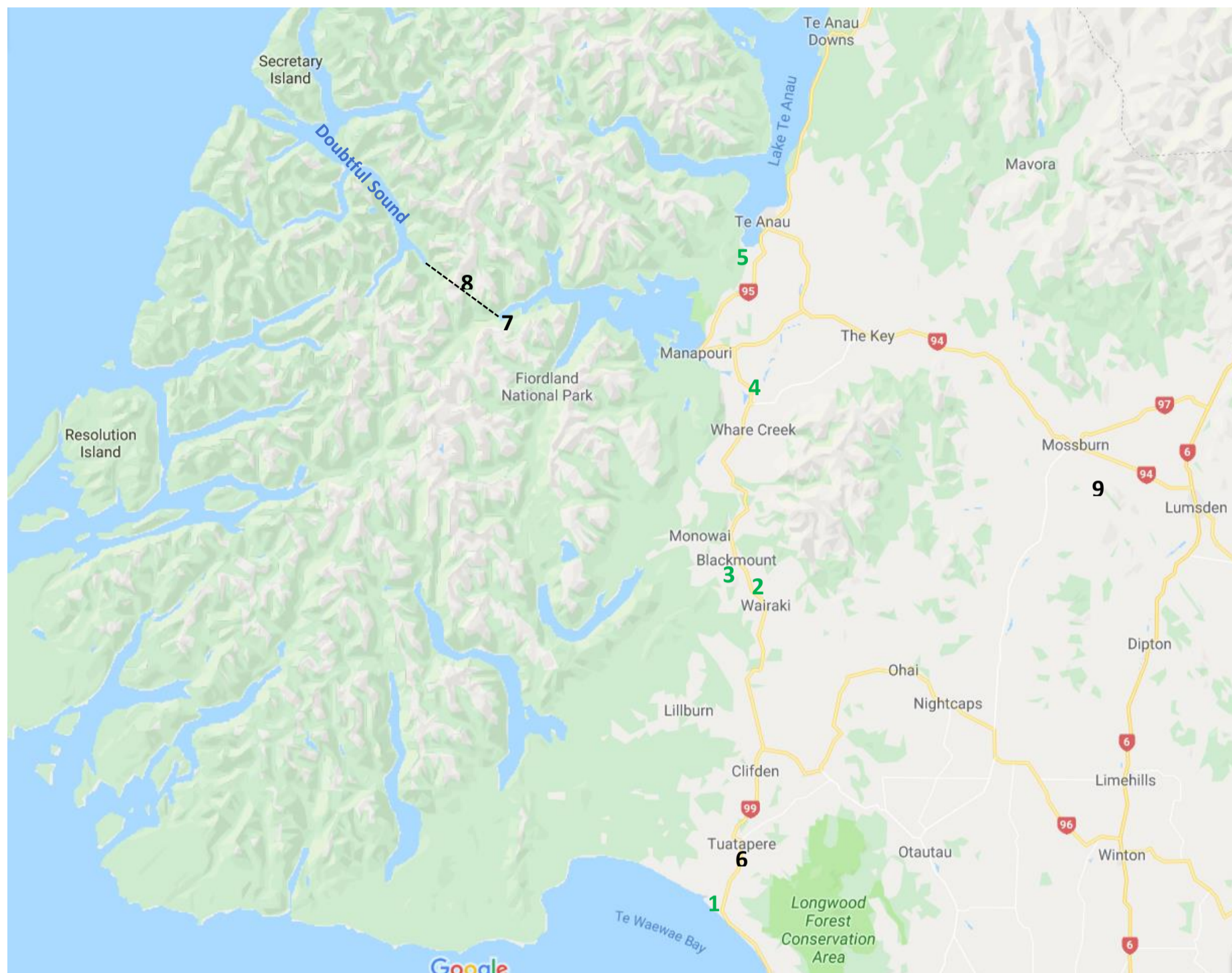
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Environment Court - SLWP Site Visit, 27 & 28 July 2019

Potential Sites of interest – Manapouri Power Scheme & White Hill Wind Farm



LEGEND

Recommended sites of interest

1. Whitebait Ponds & Te Waewae Lagoon
2. Te Koawa Tūroa o Takitimu
3. Rakatu Wetlands
4. MLC – Manapouri Lake Control Structure
5. TLC – Te Anau Lake Control Structure

Other points of interest

6. Waiou River at Tuatapere Bridge – Observation point for seeing Waiou River flow at this point
7. West Arm / Manapouri Power Station
8. 2 x 10km tunnels to Deep Cove
9. White Hill Wind Farm owned by Meridian and consists of 29 turbines (58MWH output).

The following maps for sites 1-5 assume a south-north route up the Waiou Valley.



Denotes viewing spot

1. Whitebait Ponds & Te Waewae Lagoon (mid reach)



Access via Fishing Camp Road

Background

Site 1 - Te Waewae Lagoon Wetland Project – Fishing Camp Road off SH - 99

The Waiau Fisheries and Wildlife Habitat Trust is a mitigation outcome of the 1996 consenting process under the Resource Management Act 1991 as described in Mr Feierabend's Evidence in chief at paragraphs 47 -49.

2. Te Koawa Tūroa o Takitimu



Viewing/pull over area on eastern side of the highway just over top of the hill (take caution pull onto/off roadside)

Background

Site 2 Te Kōawa Tūroa o Takitimu 3023 Blackmount Redcliff Road Blackmount

This property is owned by the Te Waiiau Mahika Kai Trust. The Trust is a mitigation outcome of the 1996 consenting process under the Resource Management Act 1991 as described in Mr Feierabend's Evidence in chief at paragraphs 47 -49.

3. Rakatu Wetlands



Red car identifies turn off and car park. Wetlands are a 5 minute walk from the car park.

Background

Site 3 Rakatu Wetlands off Blackmount Road Redcliffs SH-99 signposted.

The Waiiau Fisheries and Wildlife Habitat Trust has developed the Rakatu Wetlands. This 278-ha property is located, on the flood plain of the Lower Waiiau River. The Fiordland National Park forms the western backdrop to the property. The Rakatu wetlands is a wetland/small stream ecosystem complex as seen from the viewing platform on the site.

4. Manapouri Lake Control (MLC) Structure



View MLC structure from the lookout layby and information panels on Weir Road

Background

Site 4 Manapouri Lake Control Structure SH -99 Lookout before the Mararoa River Bridge

The Manapouri Lake Control Structure enables the lake level at Lake Manapouri to be managed in accordance with its legislative authorisations as described in Mr Feierabend's Evidence in chief at paragraphs 29 – 34 and paragraph 44 - 49. The structure can also direct that part of the Mararoa flow not required to support the minimum flow to Lake Manapouri for generation purposes.

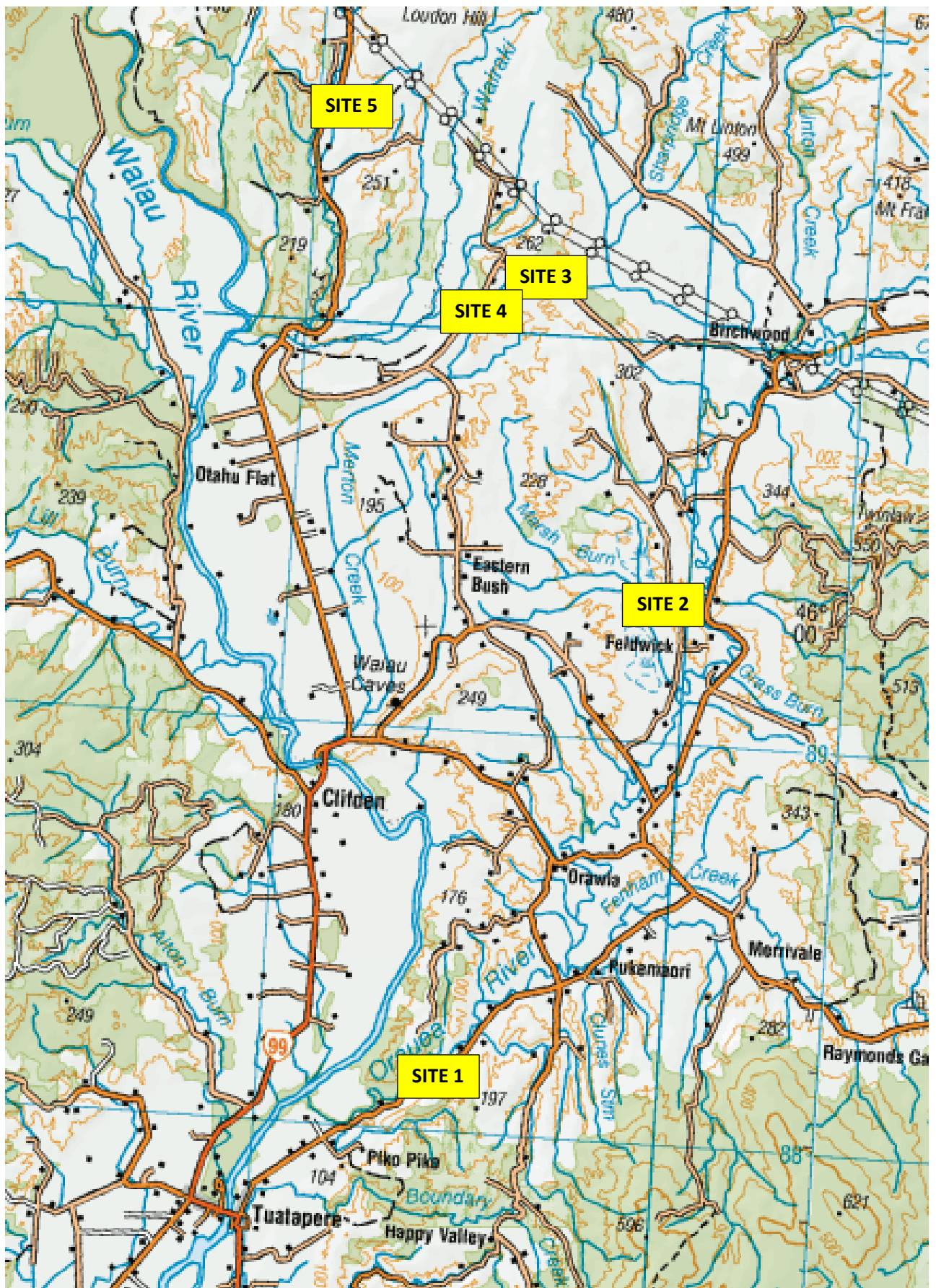
5. Te Anau Lake Control (TLC) structure

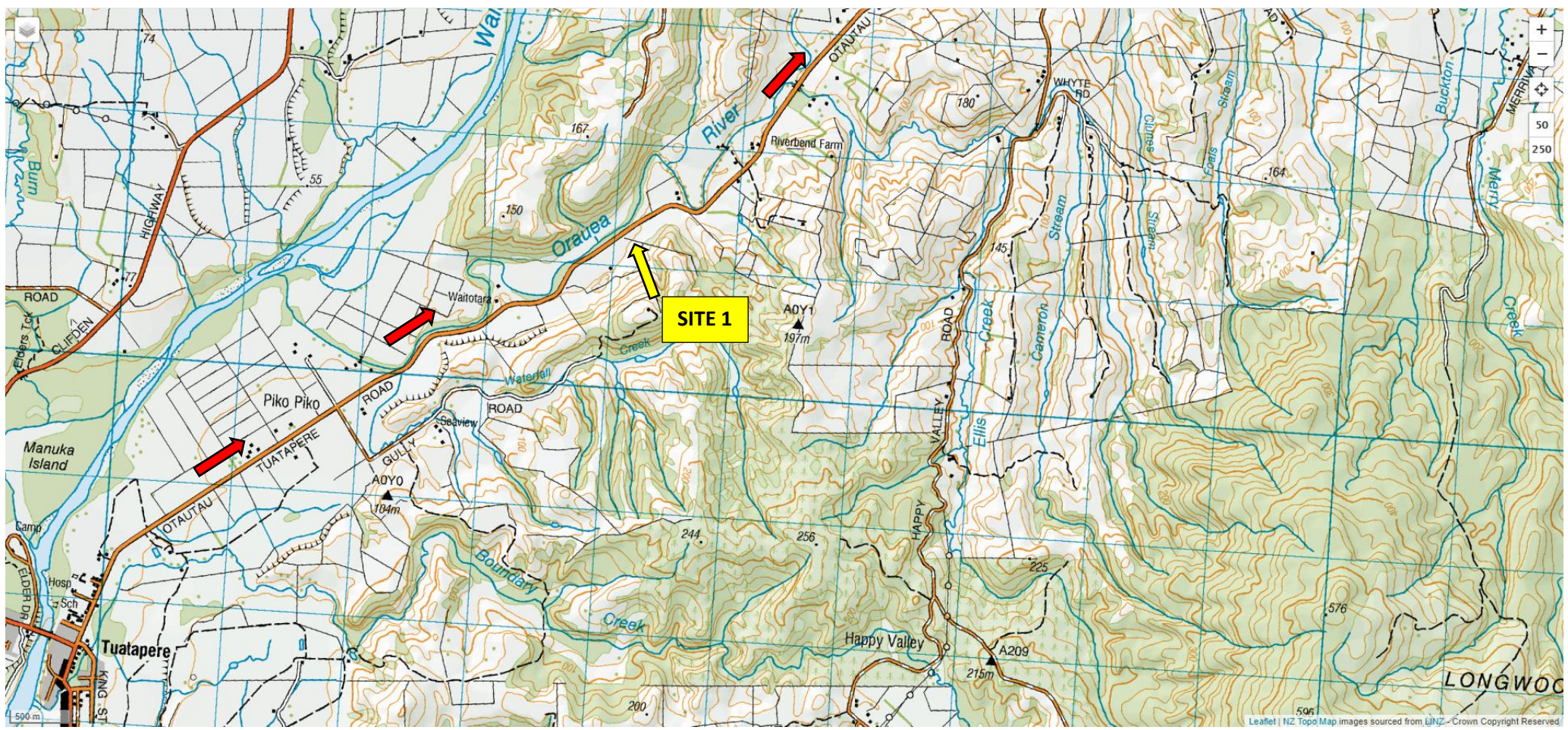


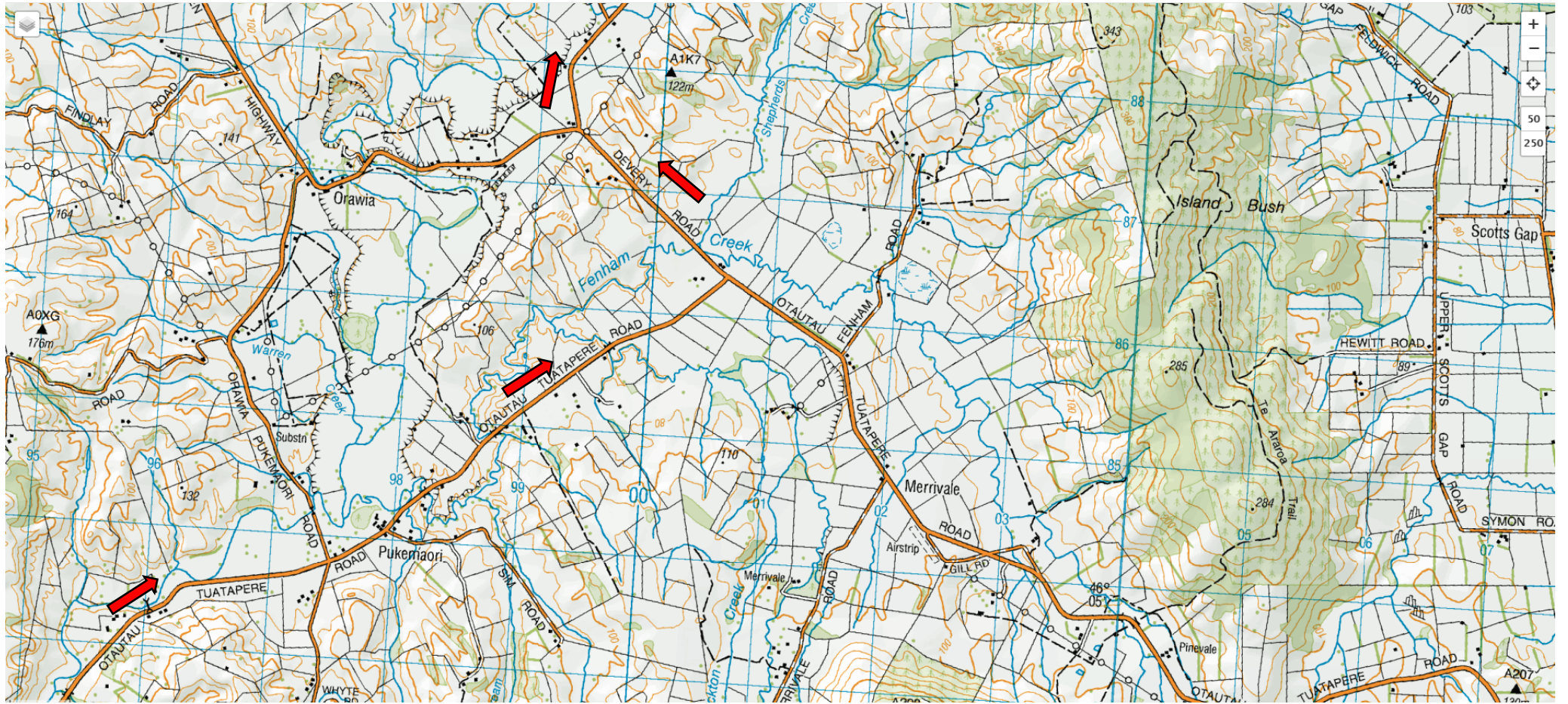
Take Golf Course Road (Te Anau township end). Park in the Kepler car park and information kiosk. 2 minute walk to TLC structure.

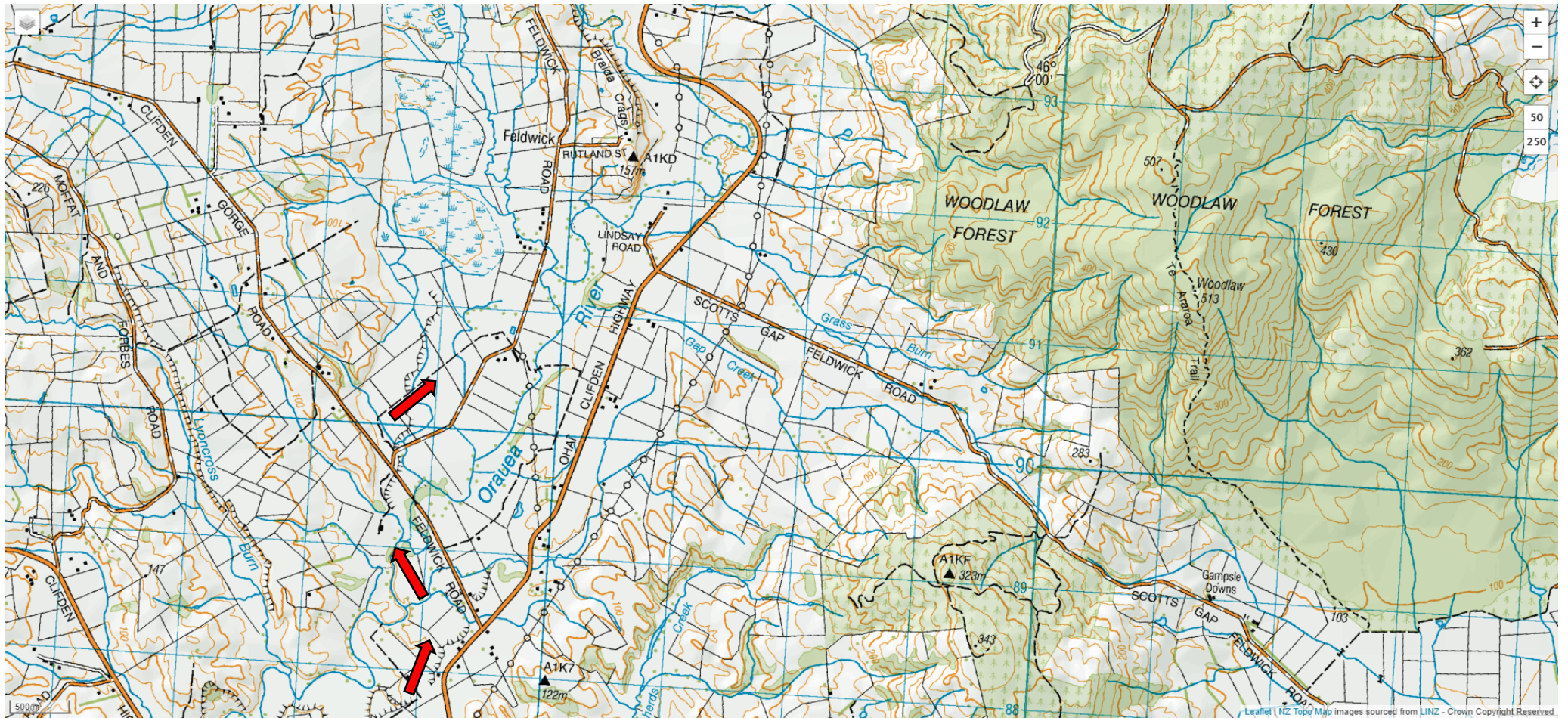
Background

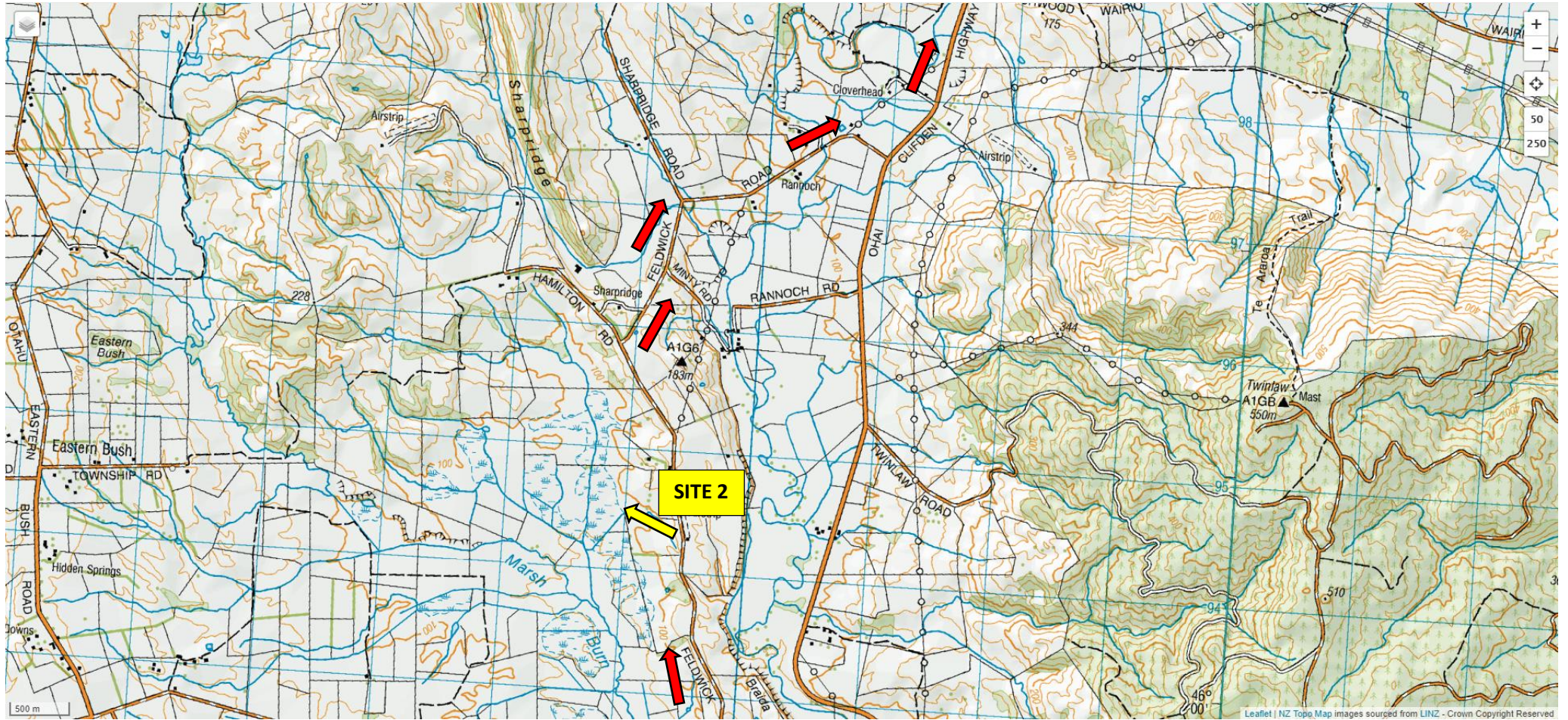
Site 5 Te Anau Lake Control Structure Golf Course Road off SH 99

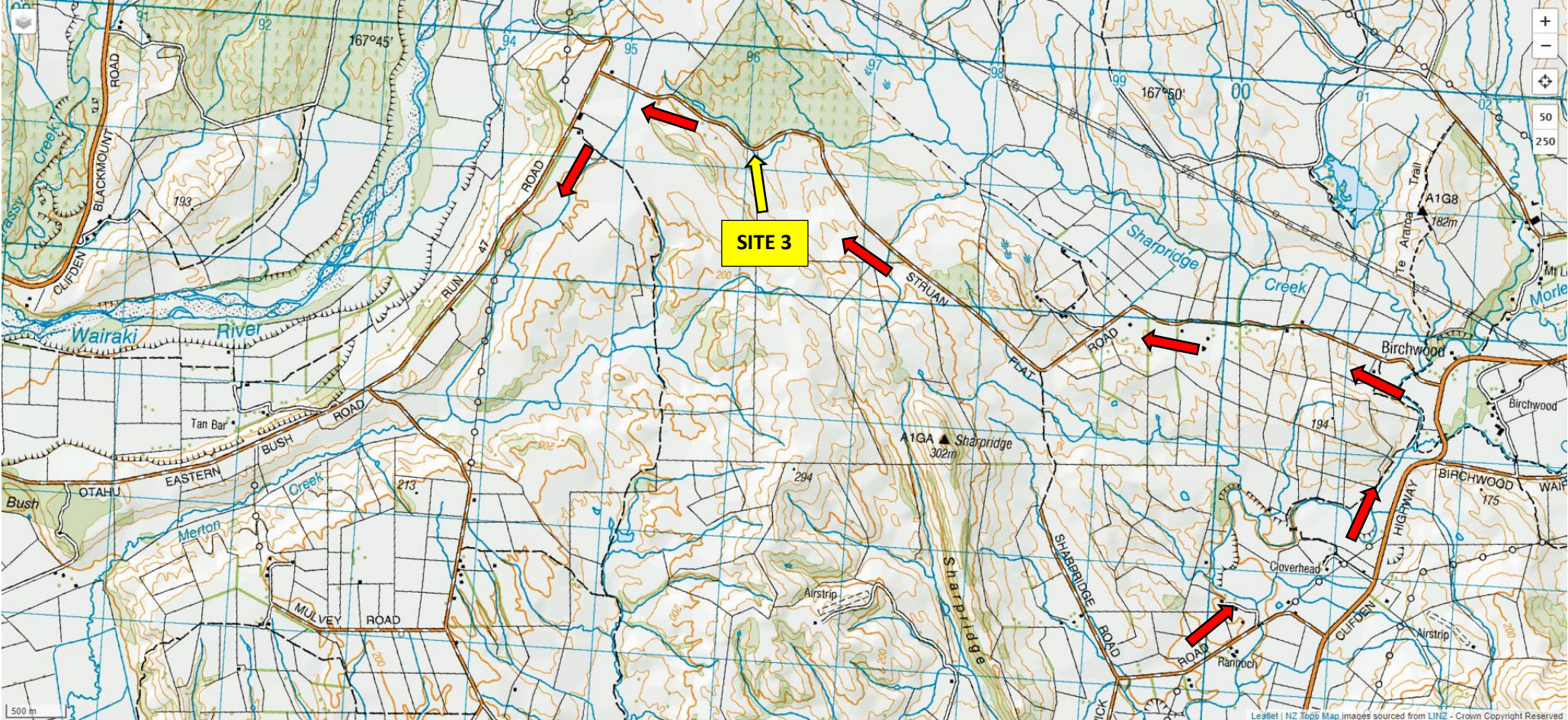




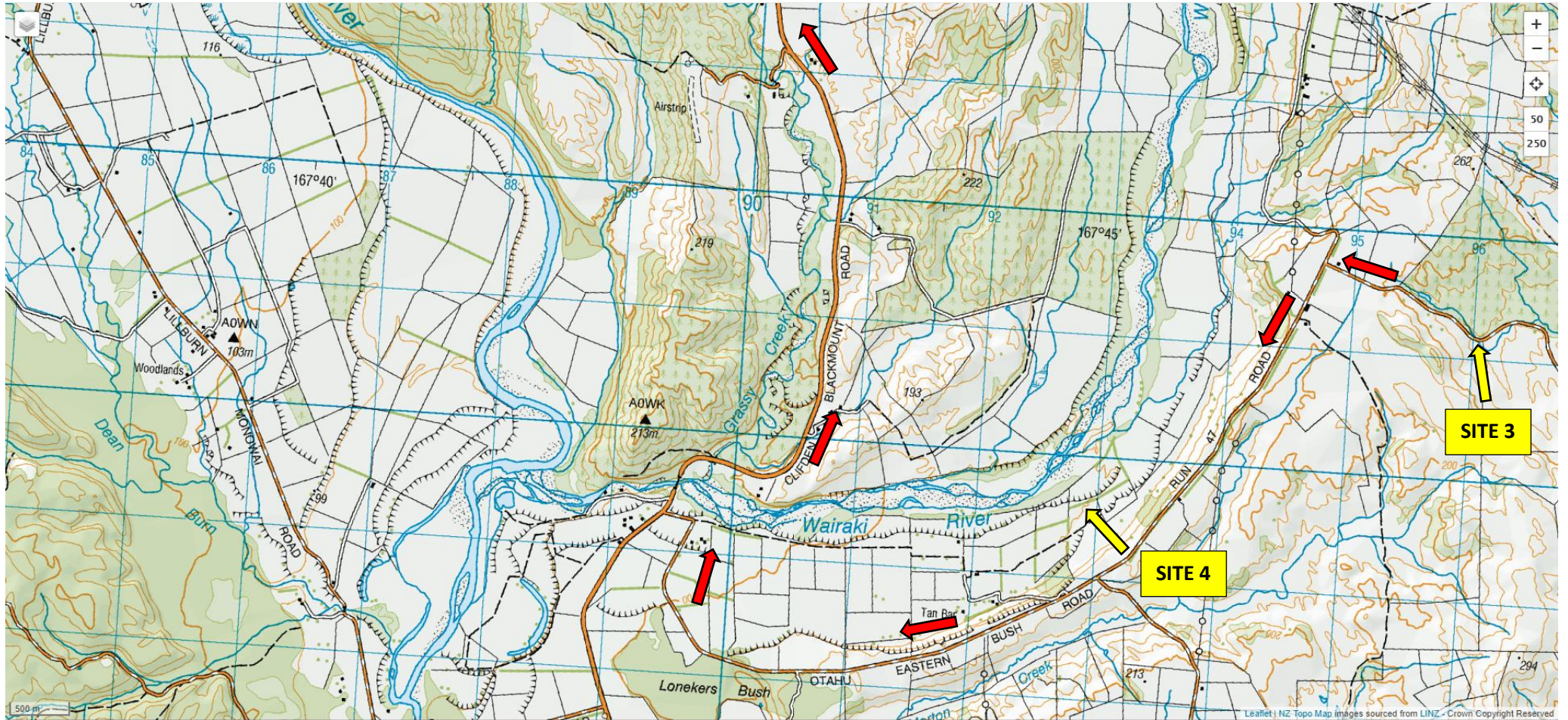


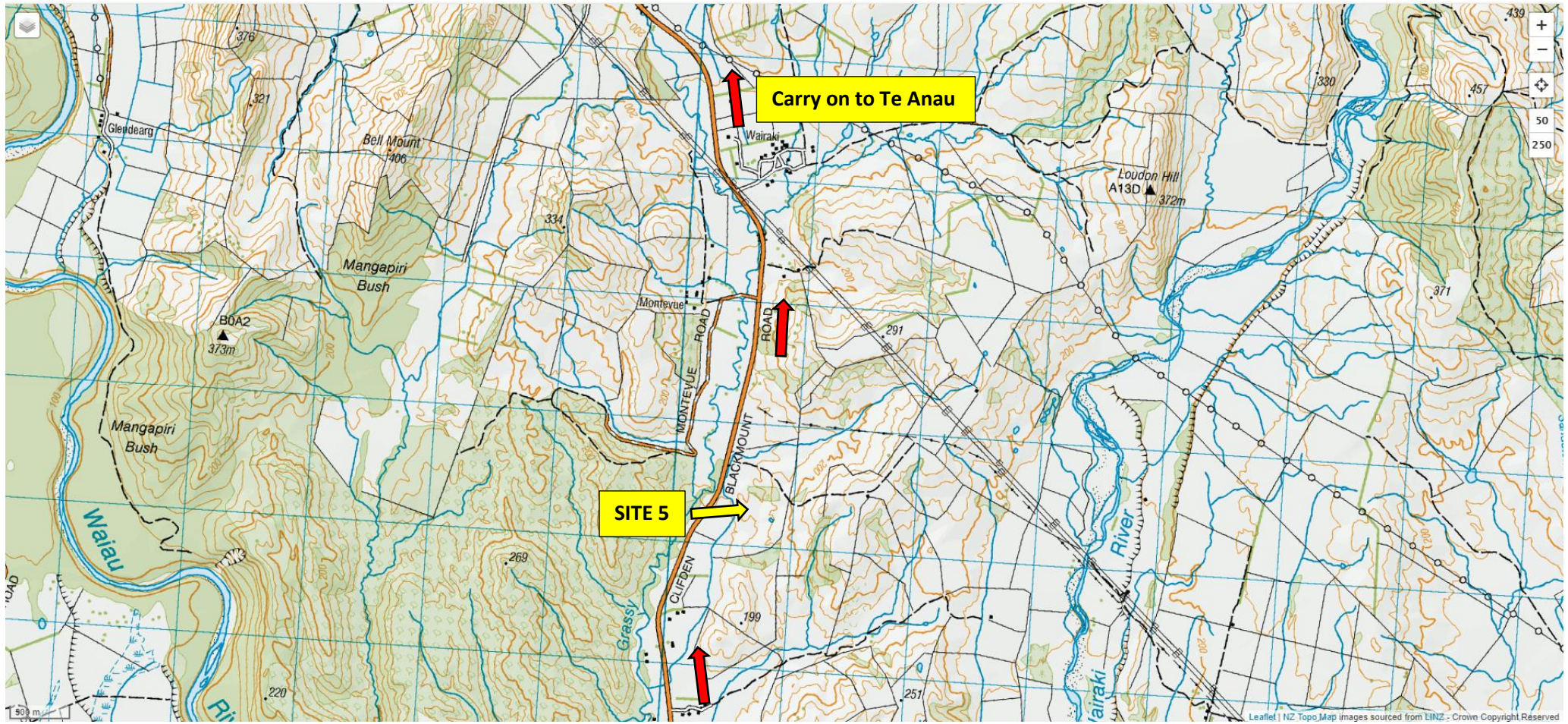






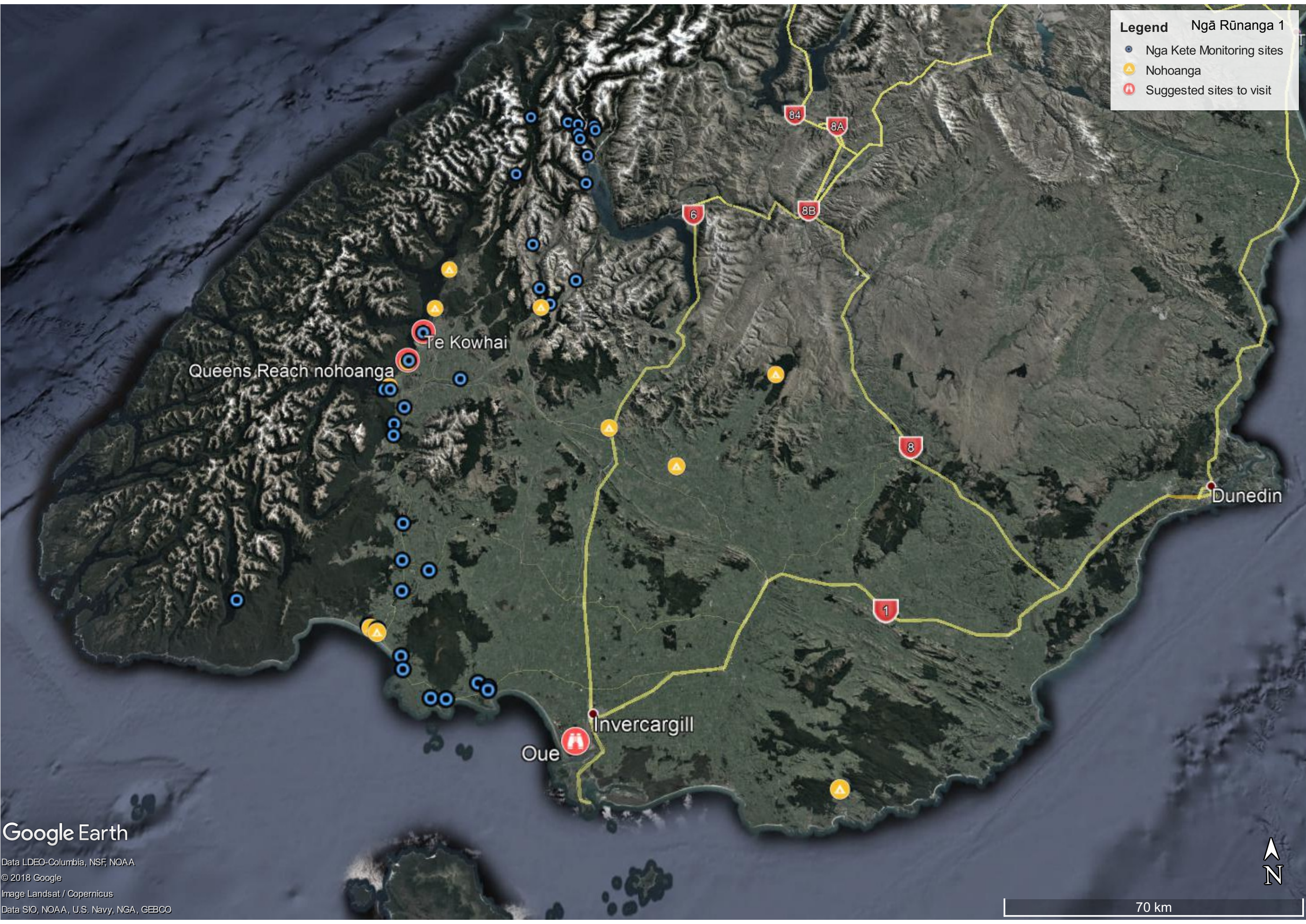
Leaflet | NZ Topo Map images sourced from LINZ - Crown Copyright Reserved





Legend Ngā Rūnanga 1

- Nga Kete Monitoring sites
- ▲ Nohoanga
- 📍 Suggested sites to visit



Google Earth

Data LDEO-Columbia, NSF, NOAA
 © 2018 Google
 Image Landsat / Copernicus
 Data SIO, NOAA, U.S. Navy, NGA, GEBCO


70 km



Suggested sites


Te Kowhai - off Upukerora Rd
Queens Reach - Golf Course Road then Queens Reach Road

Legend Ngā Rūnanga 2

 Suggested sites to visit

Google Earth

© 2018 Google
Image © 2019 DigitalGlobe

Queens Reach nohoanga 

95

94

Te Kowhai

Te Anau

Te Anau-Milford Hwy

Te Anau-Mossburn Hwy




3 km

Suggested sites

Oue - off Dunns Road, Sandy Point Road, Road to Daffodil Bay (&/or) to Whalers Bay

Legend Ngā Rūnanga 3

 Suggested sites to visit

New River Estuary

Daffodil Bay

Oue 

Whalers Bay

Sandy Point



2 km

Google Earth

Image © 2019 TerraMetrics
© 2018 Google

Appendix C

Proposed order of closing submissions

Monday 29 July 2019
Aratiatia
Waiau Rivercare Group
Wilkins Farming
Alliance
Ngā Rūnanga
Dairy NZ / Fonterra
Tuesday 30 July 2019
Fish & Game
Forest & Bird
DOC
TAs
Meridian
Ballance
Wednesday 31 July 2019
Horticulture NZ
Federated Farmers
Ravensdown
Heritage NZ
Southland Regional Council

Appendix D

Parties responses to the draft outline of work in support of the cultural and ecological indicators of health and on the reconvening of a facilitated expert conference

Party	Response
Southland Regional Council	<p>The Council supports the completion of the work started by the relevant expert witnesses on the topic of the cultural and ecological indicators of waterbody health.</p> <p>However, the Council considers that the question of whether the indicators should be used in the pSWLP, and how they should be used, cannot yet be considered / determined, and must be addressed by the parties and the Court as part of the hearing on Topic B. The Council maintains its position that no further amendments are required to the Topic A provisions to recognise or incorporate any indicators, aside from Mr McCallum-Clark's revised amendments to Objective 6, and that any incorporation of the indicators should be considered in relation to the wider policy and appendix framework in the pSWLP (as part of Topic B). Further, the Council considers that the thresholds / indicators should not be used as a type of "limit" in the pSWLP and should not pre-empt or bind the future Freshwater Management Unit process.</p> <p>In respect of the proposed programme of work outlined in Appendix A of the Court's Minute dated 9 July 2019, the Council has the following comments:</p> <ol style="list-style-type: none"> 1. The first two bullet points of the pre-conference agenda are appropriate. The Council considers that the relevant information will need to cover both information that could be used to develop indicators, and information to help identify the state of the environment (to assist with the identification of any waterbodies that are presently degraded). However, the Council considers that the third bullet point, in respect of the process to audit the sufficiency of the information (including any knowledge gaps), cannot occur in the absence of identifying the indicators.

	<p>Accordingly, the Council considers the third bullet point should be deleted from the pre-conference agenda and added to the conference agenda.</p> <ol style="list-style-type: none">2. The purpose of the first facilitated conference (as set out under the heading “Conference Agenda” is supported (being to agree on a proposed plan of work to develop indicators).3. In respect of the bullet points setting out what the draft agenda may include:<ol style="list-style-type: none">a. Bullet point 5 in respect of groundwater quality will require additional expertise beyond those experts that attended the previous expert conferences. Mr Rodway addressed groundwater quality as part of the Topic A hearing, and did not attend a conference as there was no opposing expert evidence on groundwater quality. The Council considers that it would be beneficial for Mr Rodway to be involved in the development of the indicators insofar as they relate to the quality of groundwater.b. Bullet point 6 (for the Regional Council to identify the cause of continuing reduction in the areal extent of wetlands) is a discrete issue and should be removed from the agenda and carried out separately from the proposed work to identify the indicators.c. Bullet point 7 - The identification of the cultural indicators should be separated out into a separate workstream involving the relevant experts (namely Dr Kitson, along with the appropriate cultural experts) The wider expert witness group may be able to explain data sets and existing monitoring that may assist in the development of cultural indicators; however, the direct development
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	<p>of such indicators is likely to be outside the expertise of many of the witnesses involved in the JWS. Once the cultural indicators are identified / developed, they could then be considered by the wider expert witness group, together with the ecological thresholds, to determine the relationship between the cultural and ecological indicators of health.</p> <p>d. Bullet point 8 (to put in place a programme of work and timeframe to develop the indicators) should be amended to delete “any fieldwork in support”. This is because the Council considers that the development of the indicators should be based on current information, and should not involve additional work over a longer timeframe to obtain additional information where any gaps need to be filled. This will form part of the Freshwater Management Unit process, and also appears to go beyond the scope of the current proposed plan.</p> <p>4. Step 3 provides for “subject to feedback from the parties” for the experts to undertake the agreed programme of work”. The Council considers that the purpose of the parties’ feedback and what is done in response to that feedback, will need to be further clarified.</p> <p>The Council also notes that two of its key experts involved in the previous expert conferencing, Mr Hodson and Mr Ward, have existing annual leave throughout July and August.</p> <p>Council also notes that given the overlap with Topic B, there may be parties that are not part of the Topic A hearing / conferencing that may have scope to be included in the development of any indicators.</p>
Alliance	In terms of the Court’s proposal that work continue on the

	<p>development of interim thresholds Alliance has no issue in principle. However, Alliance’s primary interest in the pSWLP relates to Topic B matters. Alliance did not engage a freshwater ecologist/water quality expert to assist it as part of its Topic A case but intends to do so for Topic B. If the ecology/water quality experts are to be asked to conference and provide advice ahead of Topic B evidence being prepared Alliance would wish to ensure that its relevant expert has the opportunity to participate in this workstream. Appendix E and its contents have always been identified as part of Topic B, and I submit in the interest of fairness parties like Alliance that may intend to engage experts on water quality issues but have not yet done so as part of Topic A should have the opportunity to have their experts involved in any future work on interim thresholds.</p>
Aratiatia	Aratiatia is not party to these parts of the hearing
Ballance	<p>The work proposed relates to ongoing science on identification of interim thresholds. Ballance Agri-Nutrients Limited did not call scientific evidence and to that extent has no comment on the suggested outline of work. However, it does query whether that work should proceed without corresponding consideration of the following related issues:</p> <ol style="list-style-type: none"> 1. Planning input on how any interim thresholds would be incorporated into the objectives and policies of the pSLWP; 2. Assessment of the economic and social implications of their inclusion in the pSLWP. <p>These substantive matters would need to be considered before making a decision on the inclusion of interim thresholds in the pSLWP.</p>
Dairy NZ / Fonterra	<p>DairyNZ and Fonterra (collectively, the Dairy interests) agree in principal to the Court’s proposal for additional work and/or expert conferencing to continue to investigate indicators of water quality “health” and appropriate health thresholds. However, experts for the Dairy interests have a</p>

	<p>number of concerns with the proposed approach.</p> <p>Firstly, there is some concern that work may be held up if Council data is not able to be provided or collated in a suitable form quickly enough. Thus, the Dairy interests agree with Ms McArthur for Forest and Bird and Fish and Game that timeframes and delivery of the proposed work plan will depend entirely on the timeframes under which Council can make the data available. Once the data is available, Council may wish to consider engaging an independent party (such as Cawthron/ NIWA) to undertake an initial review of the available data, and identify any knowledge gaps that need to be filled. This is likely to streamline and speed up the process.</p> <p>Perhaps more importantly, the Dairy interests consider that the addition of any new interim indicators of river health are considered within the context of current Water Quality Standards (Appendix E of the Plan) that are intended to act as interim limits pending the FMU process being completed. Because Appendix E will be a of significant focus in Topic B, it would seem appropriate for all the evidence relating to those indicators to be dealt with in Topic B, rather than being pre-empted at this point. That is particularly important given that, whatever indicators of health are developed by the water quality scientists and cultural experts, an important next step for any planning provisions is for them to be fully assessed against s 32, and by independent planning witnesses.</p> <p>A further procedural concern with the conferencing occurring ahead of Topic B is the risk that there will be parties yet to take part in the process who might have a strong interest in Appendix E (which represented the Proposed Plan's interim indicators/thresholds), and would want the opportunity to engage experts to participate in this conferencing.</p> <p>As the Council will also be aware, evidence presented by Rachael Millar on behalf of the Council confirmed that work on the FMU process is well underway and a plan change notifying the outcomes of the FMU process is anticipated for 2022. Accordingly, any interim indicators of health that are</p>
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	<p>developed at this stage are likely to have a limited life span before they are overtaken by the more detailed, FMU-specific limits and targets. While this does not detract from the benefit of developing indicators of health to assist with the application of the objectives and policies in Proposed Plan prior to those FMU processes being implemented through plan changes, the likely short period for which these indicators of health are likely to be applied should be considered in relation to the extent of resources that might be required to develop these indicators.</p> <p>While the Dairy Interests support the proposed expert conferencing and the development of indicators of health, for the above reasons they would suggest that:</p> <ol style="list-style-type: none"> 1. Council engage an independent 3rd party to undertake an initial review of the data, identify any gaps that might need to be filled 2. Parties with an interest in Topic B, and not currently involved in Topic A, be given the opportunity to nominate experts to be involved in this conferencing process. 3. The Court schedule a judicial conference for say, 3 months time, to assess the progress being made by the experts, relative to the need to progress the Topic B matters to a hearing.
Director-General of Conservation	DOC supports the completion of the work started on cultural and ecological indicators of waterbody health, and supports the draft outline of work to support that (Attachment A to the Court's Minute of 9 July).
Federated Farmers:	<p>Federated Farmers has no objection to the proposed work continuing as per the Court's minute, but it does have a concern with the process after that. It doesn't think the results of any work of the scientists should be included in the plan as interim thresholds/indicators of health without consideration of what should be included in the plan as a result of the further work done (including how any indicators/thresholds might apply spatially e.g. whole of waterbody or whole of catchment; and per contaminant or contaminants), and how this may flow through into the plan provisions. Further evidence (and legal submissions) will likely be required to address these issues, including the following:</p> <ol style="list-style-type: none"> a. Planning evidence on how any interim

	<p>thresholds/indicators of health would be incorporated into the objectives and policies of the pSLWP;</p> <p>b. Assessment of the economic and social implications of their inclusion in the pSLWP.</p> <p>Another issue raised by my client is there are numerous parties involved in Topic B, but not Topic A. Any changes made to the proposed Plan as a result of the further work suggested by the Court (and the suggested inclusion of interim thresholds in the proposed Plan), may have flow on issues for other Topic B parties, who may want to be involved in this part of the process. They have not been given this opportunity.</p>
<p>Forest & Bird and Fish & Game</p>	<p>Forest & Bird and Fish & Game support the Court’s proposal for work on interim thresholds/indicators of health to continue.</p> <p>Ms McArthur has reviewed the Court’s proposed approach and advises that it is in line with what the experts discussed in conferencing, but that timeframes will depend entirely on when Environment Southland have the data ready and available to undertake the work.</p> <p>In relation to the views of Dairy NZ and Fonterra (‘the Dairy Interests’), Fish & Game and Forest & Bird do not oppose the (following) 3 points but do have concerns if any suggestion is being made that delays should occur or resourcing not be allocated to the Court JWS processes due to Councils FMU processes. That is, we agree with the Court that this work should continue apace. Point (1) below should be progressed as soon as possible and if that is not possible other parties need to be advised:</p> <ol style="list-style-type: none"> 1. Council engage an independent 3rd party to undertake an initial review of the data, identify any gaps that might need to be filled 2. Parties with an interest in Topic B, and not currently involved in Topic A, be given the opportunity to nominate experts to be involved in this conferencing process. 3. The Court schedule a judicial conference for say, 3 months time, to assess the progress being made by the experts,

	<p>relative to the need to progress the Topic B matters to a hearing.</p> <p>Fish & Game has also noted that its water quality witness for Topic A, Professor Death, is not able to continue with the further conferencing proposed or with Topic B, as he has advised he has significant capacity issues in the second half of this year. Fish & Game will be intending to substitute Dr Adam Canning for the remainder of the hearing process. This will be the subject of a separate Memorandum shortly, on behalf of Fish & Game.</p>
Heritage NZ	We have no comment with regard to the interim thresholds.
Meridian	<p>Meridian is supportive of ongoing work by the experts as generally outlined in the indicative programme attached to the Minute. Meridian can see benefits in the experts advancing their thinking as to what they consider are the thresholds below which they would consider a waterbody (or parts thereof) to be clearly degraded. Meridian's support for this is predicated on the following assumptions or understandings:</p> <ul style="list-style-type: none"> • Parties to Topic B that have not called water quality/ecology evidence as part of Topic A should have the opportunity to comment on what the Court is proposing and to engage experts to be involved as part of this ongoing process if they wish. As things currently stand the contents of Appendix E are part of Topic B, and this proposed programme of work therefore needs to include any Topic B parties with an interest in the interim thresholds that have not already engaged experts. • Meridian is concerned that a move to 'indicators of health' terminology may confuse matters. That terminology may suggest scope to argue about degrees of health (for example looking at some kind of scale approach under which waterbodies are assessed as being relatively more or less healthy). Meridian submits that is not the way Appendix E is intended to work, and retention of 'interim thresholds'

	<p>is more appropriate as Meridian understands the intention is that the Appendix will define numeric values below which the experts are satisfied a waterbody (or part of it) can be said to be clearly degraded.</p> <ul style="list-style-type: none"> • The work of the experts needs to extend to describing the relevant interim thresholds for each of the different surface water quality management units, and these need to be mapped across the region. For Meridian this is particularly relevant in the Waiau FMU where at the moment the entire length of the Lower Waiau River is described as a lake fed unit whereas mean flows are significantly influenced by non-lake fed sources as the river approaches the sea. • The experts further need to work on how the relevant threshold values should apply or be adjusted to take into account the presence of the introduced pest organism didymo.
Ngā Rūnanga	<p>Ngā Rūnanga's position is that:</p> <ul style="list-style-type: none"> • Ki Uta Ki Tai is the framework of the Plan and te mana o te wai is the foundation of the Plan, and hauora is the desired outcome. The thresholds – or alternatively the indicators - need to support this, with the emphasis on robustness, resilience and vitality rather than specific attributes such as toxicity. • Further work needs to be undertaken on the matters discussed in the Court's Minute. • Before a process can be developed, a number of matters need to be considered. <p>1. Clarification of the Court's intent</p> <p>The direction refers to both thresholds and indicators, and the Court has decided to use the word "indicators" to replace the word "thresholds". These are different things, and therefore the first priority is to get clarity from the Court on what they are seeking.</p> <p>Ngā Rūnanga understand that the Court is proposing that the experts identify:</p>

- thresholds relevant to determining whether a waterbody is degraded (ecological and cultural);
- the scale (or scales) at which these assessments should be made; and
- based on establishment of the above, waterbodies that are considered degraded (in relation to achieving Objective 6).

Before confirming any process for further conferencing, it will be crucial to get clarification of whether this is a correct reading of the Court's intent.

2. Need for a separate process for the cultural component of the work

It would not be appropriate to determine cultural thresholds (or cultural indicators of health) via a conferencing process with the experts involved in this appeal process. Of the experts who participated in the pre-hearing conferencing, Dr Kitson was the only one with expertise in this area. In addition, determination of cultural indicators of health will require input from manawhenua cultural experts.

Rather than including this aspect in a conferencing process, Ngā Rūnanga's position is that it would be more appropriate for the Court to direct that a high-level report on appropriate Murihiku cultural thresholds produced by relevant experts (including cultural experts). This could then be brought back to be considered together with the ecological thresholds to look at the interface between them.

3. Scope of the work

The view of Ngā Rūnanga is that as te mana o te wai is the foundation of the plan, and hauora is the desired outcome, the thresholds – or alternatively the indicators - need to support this, with the emphasis on robustness, resilience and vitality rather than specific attributes such as toxicity.

	<p>Ngā Rūnanga consider this to be a significant piece of work and is therefore suggest that in order progress this within the current appeal process clarification of the scope is necessary. For example, the appropriate composition of the group involved in conferencing would depend on the values and scale to be focused on – whether this is specific values and sites, or whole catchment systems. It follows that expertise from outside the group of expert witnesses who are currently involved in the process will probably be required.</p> <p>It is suggested that the appropriate scope of the work and scope of experts to be involved are determined at the start of the process.</p> <p>4. Suggested steps</p> <p>The steps we suggest to implement the Court’s proposal are:</p> <ol style="list-style-type: none"> 1. Request the Court to clarify/ confirm whether the work is to identify thresholds or indicators. 2. In parallel: <ol style="list-style-type: none"> a. Commission a report identifying Murihiku cultural thresholds/indicators; and b. Convene conferencing on ecological thresholds/indicators of health as follows: <ol style="list-style-type: none"> i. Initial meeting of experts to identify questions of scope to put to the Court Identification of additional experts/participants to participate in conferencing ii. Conferencing to identify: <ul style="list-style-type: none"> ▪ Appropriate ecological thresholds (or indicators?) ▪ Scale relating to these ▪ Methodology 3. Further process to establish the relationship between ecological and cultural thresholds/ indicators of health.
Territorial Authorities	The proposed work programme is noted, with no specific

	comments on this.
Wilkins Farming	Wilkins Farming does not have any role in the continued work on interim thresholds.