#### Waitaha National Park Proposal – Waitaha Upper Catchment and Riverbeds and Flood plains

This discusses Forest and Bird's assessment of the Waitaha catchment as encompassed by the following river and river bed steward ship areas and the entire upper catchment.

Hok 19 Conservation Area - Wanganui / Otira Catchments (South) #2805713, Hok 45 Waitaha pasture #2805514, Hok 48 Waitaha River/Kakapotahi River' #2805517, Hok 49 Little Waitaha River #2805518 & 2805635, Hok 50 Waitaha Riverbed' #2805634 & #2805643), Hok 52 Conservation Area - Waitaha Forest #2805641, TWP 01 Kakapotahi #2805519, TWP 02 Duffers Creek western and eastern units #2809701, TWP 03 Waitaha River Mouth 2805515 & 5516, TWP 04 Duffers Creek #2809717

Forest and Bird **oppose** the National Panel recommendations for Hok 52 #2805641 for a Waitaha Conservation Park and Hok 19 #2805713 for a Hokitika Conservation Park, (southern part of the Wanganui/Otira Catchments) in the Upper Waitaha and also oppose the Mana Whenua Panel recommendation to retain Hok 52 #2805641 as Stewardship land.

Forest and Bird also **oppose** the National Panel recommendation for Conservation Park and most Scenic Reserve additions and oppose any partial disposals for any of the riverbed and flood plain Stewardship areas as detailed in Table 2.

Forest and Bird **recommend** managing the entire Waitaha Catchment from the alps to the sea, holistically as a National Park either as a stand-alone park or being added to Westland Tai Poutini National Park along with the Waitangi Conservation Area, TWP 05 Waitangi Forest #2809665. In time the Park could be linked across the main divide to the Rangitata/Rakaia Headwaters Conservation Area in Canterbury which is also likely to have National Park values.

The National Panel recommendation follows an historical straight line boundary of convenience. This splits the headwaters of the Waitaha catchment between the southern portion of the Wanganui/Otira Conservation Area HOK 19, #2805713, containing most of the Bloomfield Range, Ivory Glacier, Artist Dome and Park Dome, and Mount Evans (which are entirely within the headwaters of the Waitaha catchment) and the Waitaha Forest Conservation Area HOK 52 #2805641. This entire landscape would be better managed as a holistic catchment unit. See **Figures 2 and 3.** 



Figure 1 Ivory Lake looking towards Seddon Saddle, Park Dome and Mt Evans obscured by cloud. Photo Warren Chinn

Forest and Bird consider that the extent of this dramatic near pristine area backing onto the Adams Wilderness with its range of ecological, scientific, scenic, and natural features is so distinctive and beautiful that it warrants National Park classification. The public recreation values centre on its remoteness and wilderness values for extreme kayaking and challenging tramping and hunting which are best protected and provided for under National Park status.

The Waitaha River and flood plains are an integral part of this landscape unit and while encompassing areas of highly modified and rough pasture they are capable of restoration and natural regeneration, thereby enhancing biodiversity, building climate resilience, and providing opportunities for mitigating emissions and sequestering carbon.

#### **Description of Proposed National Park Area**

The Waitaha Catchment is in the Wilberg Ecological District and includes the Lange, Bloomfield and Smythe Ranges, numerous peaks above 1200m with areas of permanent ice and snow. The catchment rises to the Southern Alps Kā Tiritiri o te Moana at Mt Evans 2,620m, where it adjoins the Adams Wilderness Area. There are nineteen small glaciers in the upper reaches of the Waitaha, including Ivory Glacier and its associated cirque; and Ivory Lake.

The Waitaha River flows through three gorges; the Windhover Gorge, the longer Waitaha Gorge down to a short, braided river section at Kiwi Flat, then cuts through the Morgan Gorge, before opening out to braided channels on the gravel outwash plains and entering the Tasman Sea. Running parallel to the beach are shore dunes and lagoons. A delta has formed at the mouth in recent times, perhaps fed by debris from the massive active landslide on Headlong Spur.

The highway runs along the top of the terminal moraine of the last Waitaha Glacier. This glacier did not reach the modern shoreline, unlike the South Westland glaciers.

West of the Alpine Fault towards the coast in the Harihari Ecological District lies the Devonian age granites and gneiss of the Bonar Range which adjoins part of Lake Ianthe-Matahi Scenic Reserve. The Southern boundary follows the Wanganui River and joins the Waitangi Forest TWP 05 - Waitangi Forest #2809665. The Waitangi block also separates the Waitaha from the Adams Wilderness which should be remedied, either by including both the Waitaha and Waitangi in Westland Tai Poutini National Park or amending the Waitaha block boundary so that the proposed Waitaha National Park follows the Adams Wilderness Boundary. The Waitaha also shares a boundary with Totara-Mikonui Forest Conservation Area to North West, an area Forest and Bird is recommending be classified as an Ecological Area.

Forest and Bird's proposed Waitaha National Park area is contiguous with public conservation lands and is large, being more than 38,800 ha.

We first assess the values against National Park criteria for the large forest blocks in HOK 52 #2805641 and HOK19 #2805713. Conservation Area- Wanganui/Otira Catchments South followed by an assessment of all the Waitaha Riverbed parcels.



Figure 2 Map of all Stewardship Areas Forest and Bird proposes for National Park in the Lower Waitaha showing linkages with existing Scenic Reserves



Figure 3 Map of all Stewardship Areas Forest and Bird proposes for National Park in the Upper Waitaha

#### Assessment of potential National Park values

#### **Scenic Values**

This section relies on information provided to the Panels, including by Paula Smith *Hokitika Place Landscape Values*, based on the West Coast Regional Council's studies by Brown Ltd, which are currently being updated as part of the new Te Tai o Poutini Plan. In the absence of any assessment of the national significance of the areas scenery, Forest and Bird submits that areas identified as Outstanding Natural Landscape, (ONL) or Natural Character at the West Coast regional scale, should be given weight and considered significant at the national scale.

## HOK 19 #2805713 – 90,074ha Wanganui/Ōtira Catchments Conservation Area

"All of Wanganui/Ōtira Catchments Conservation Area is included in the extensive Outstanding Natural Landscape ONL24 Kea Pass-Arthurs Pass-Amuri Pass"<sup>1</sup>

The southernmost third of the Wanganui/Ōtira Catchments Conservation Area, proposed for inclusion in Forest and Bird's Waitaha National Park or Westland Tai Poutini National Park extension proposals includes the Bloomfield Range with numerous peaks including the distinctive symmetrical triangular peaks of Artist Dome (2,128m) and Park Dome (2,340m), and the characteristically rugged Mt Evans (2,620m), viewable from Hokitika and Ross. There are nineteen small glaciers in the head of the catchment.<sup>2</sup> The relevant outstanding values cited in the report include extensive landscapes with incised valley systems high altitude peaks, glaciers, glacial lakes, permanent ice flows, and highly natural vegetation sequences from upper montane forests and shrubs to the nival Zone.

We add other distinctive features including the deeply incised Stag Creek with its series of small canyons<sup>3</sup> and rugged Reid Creek both draining high cirque basins with glacial lakes. We also note that the well-known, much studied and photographed Ivory Lake ringed by Lange Range, Park Dome, and Seddon Col and what remains of the once more extensive Ivory Glacier, are distinctive scenic features of this outstanding natural landscape. Ivory Lake and the Ivory glaciered surfaces are listed as a Geological Site in the West Coast Te Tai o Poutini Conservation Management Strategy. Of note is the similarly listed Waitaha Hot spring in the Morgan Gorge.

# HOK 52 #2805641 – 30,815 ha Waitaha Forest Conservation Area

The Waitaha Forest Conservation Area is all included in the extensive main divide Outstanding Natural Landscape ONL24 Kea Pass-Arthurs Pass-Amuri Pass.

This area includes north of the upper Wanganui River and the Upper Waitaha catchments which are described as remote steep dissected forested catchments with very high natural character with noted features of the Morgan and Waitaha Gorges.

# We add the 'Windhover Gorge with its large waterfalls and extreme gradients".4

The relevant outstanding values cited in the report also include mature indigenous forest and vegetated sequences from lowland podocarp hardwood forests, rata, kamahi, rimu – (not beech forests as stated in the report) through to alpine scrub communities, permanent ice flows, mountain peaks and ridges. We note that these are contiguous with the rugged mountains, snowfields, and glaciers of the Adams Wilderness Area.

<sup>&</sup>lt;sup>1</sup> Smith, Paula 2022. Hokitika Place – Landscape Values Report – DOC. March 2022

<sup>&</sup>lt;sup>2</sup> West Coast Planning, 2014 WAITAHA HYDRO SCHEME Application for Concessions and Assessment of Effects <sup>3</sup> remotehuts.co.nz/ivory-lake-hut.html

<sup>&</sup>lt;sup>4</sup>Rankin, Douglas A., Orchard, Shane, 2015. Impacts of the Proposed Waitaha Westpower Hydro Scheme and White Water and Kayaking values

https://www.researchgate.net/publication/343062648\_Impacts\_of\_the\_proposed\_Waitaha\_River\_Westpower\_Hydro\_Sc heme\_on\_whitewater\_and\_kayaking\_values

Landscape experts assessing and peer reviewing the Westpower hydro application also considered the upper Waitaha catchment meets the test of an outstanding natural landscape.<sup>5</sup>

The Waitaha Forest Conservation Area also includes the upstream parts of two outstanding natural character units identified in the West Coast Regional Natural Character Study, (Brown 2013). *Unit T68 Upper Kakapotahi River (part, the south side) Unit T67 Upper Waitaha River* 

Some of the key attributes cited for the Upper Waitaha include deeply entrenched river valley and series of gorges, braided river channels, expansive gravel beds, bluffs, numerous waterfalls flanked by pristine indigenous forests and high-altitude mountain ranges.

The Morgan Gorge was considered to be an outstanding natural feature due to its exceptional biophysical and perceptual values by Boffa Miskell.<sup>6</sup>



Figure 4 Morgan Gorge. Photo Zak Shaw Photography

Kayakers describe different reaches of the river as "varying from the alpine character of the Upper River above the Windhover Gorge to the very high gradient Windhover Gorge with large waterfalls and steep sided bush clad valley walls, to the enclosed constricted water worn fluted bedrock structures in the Morgan Gorge."<sup>7</sup>

The lower altitude mature rimu/kamahi/rata forested hill country on Bonar Range are also assessed as an "Outstanding Natural Landscape."

The Upper Waitaha Catchment is steep, wild, and rugged. It is a place where natural processes dominate, sculpting gorges and cirques, where earthquake scars remain visible and near pristine native forests meet rugged ridges, icefields and snowy peaks that are visually and physically contiguous with the Adams Wilderness area. This scenery is equally significant to that found in Westland Tai Poutini National Park and contains features like the Morgan and Windhover Gorges that are so beautiful and of such distinctive quality that they warrant National Park status.

<sup>&</sup>lt;sup>5</sup> Head, Jeremy. 2016. Proposed Waitaha Hydro Scheme. Peer Review of Applicants Assessment of Natural Character, Landscape and Visual Amenity Effects.

https://www.doc.govt.nz/contentassets/f573d030e09e4a24b36c5d403dc0cf19/waitaha-landscape-peer-review-2016.pdf <sup>6</sup> West Coast Planning, 2014 WAITAHA HYDRO SCHEME Application for Concessions and Assessment of Effects

<sup>&</sup>lt;sup>7</sup> Rankin, Douglas A., Orchard, Shane, 2015. Impacts of the Proposed Waitaha Westpower Hydro Scheme and White Water and Kayaking values

#### **Ecological Systems**

The Technical Report that forms the basis of the Panel's recommendation for Conservation Park while recognising the areas high ecological values, undervalues the ecological significance of the Waitaha as it failed to reference a number of threatened and distinctive species which were noted by Rhys Buckingham in 2014. These include two Nationally Critical species, the Long-tailed bat, and the alpine snail, and two Nationally Endangered parrots, Kea, and Kaka. In addition to Blue duck, three other Nationally Vulnerable bird species also occur in the Waitaha.

*Powelliphanta rossina rossina* has been recorded from Mt Bonar on the Bonar Range and the shells were smaller than those found at Mt Greenland the nearby Type Locality. As of 2003 the genetic make-up of *P. r. rossiana* had yet to be examined, as no live snails have been found in recent years. The snails have been recorded at some other nearby mountain tops. We note there is an EMU on Mt Bonar so the Department should have more up to date information.

Buckingham found a regionally significant population of Long tailed bats, that he considered denser than populations in other parts of the West Coast and suggested that the Waitaha Valley appears to be a strong hold for this Nationally Critical species.

The Blue duck population is also considered significant. Overmars in April 2007<sup>8</sup> recorded a total of thirty-one Blue ducks with breeding populations in three locations, which represent c.1.0% of the national total of c.1000 breeding pairs. Kiwi Flat has a particularly high density of breeding pairs compared with other waterways in New Zealand, thought to be a result of the coherence and diversity of fresh water and riparian habitats in the Waitaha providing for the range of blue duck habitat requirements. Overmars considered the Kiwi Flats Morgan Gorge area to be one of the best examples of an association of species which is typical of the ecological district.

The table below summarises the ecological values provided in the HOK 52 Technical Report and adds further information of values and features that should be considered to collectively contribute to the area being assessed as containing ecological systems, or natural features so beautiful, unique, or scientifically important that their preservation is in the national interest.

	HOK 52 Summary of values	Additional Information
Representativeness	<ul> <li>Hox 52 summary of values</li> <li>The area is largely within the Wilberg Ecological District (ED); however, it extends into the Harihari ED closer to the coast. The area is highly representative of the Wilberg ED and moderately representative of the Harihari ED.</li> <li>Very high level of naturalness</li> </ul>	Additional information These stewardship lands traverse the geographies of the Mt Evans offshoot of the Southern Alps made of Triassic schists, the crushed Silurian rocks of the collision zone Alpine and Fraser Faults in the Wilberg Ecological District (ED) onto the Devonian age granites and gneiss of the Bonar Range in the Harihari ED. The Bonar Range has been selected as an EMU and is described as "a lowland to montane sequence of conifer-broadleaved forest and scrub on granite; and includes a small area of wetland at middle elevation in the south."

Table 1 HOK 52 Summary of Assessment Values

<sup>&</sup>lt;sup>88</sup> Overmars, Fred. 2014. Assessment of Environmental Effects of Proposed Waitaha Hydro Scheme on Whio/Blue duck *Hymenolaimus malacorhynchos* 

		· · · · · ·		
		This landform and associated		
		ecosystems are not represented in a		
		National Park or protected in reserves		
		within the Harihari ED.		
		The landforms and ecosystems of the		
		Wilhorg ED are also not protosted in a		
		Wilberg ED are also not protected in a		
		National Park. A small area is in the Mit		
		Hercules Scenic Reserve.		
Diversity and pattern	<ul> <li>Hugely diverse landforms and</li> </ul>	The Waitaha includes one of the more		
	vegetation zones with a high	significant rainfall gradients in		
	level of environmental	Aotearoa New Zealand. It is in a region		
	diversity	of extremely high rainfall and erosion.		
	• Complete and intact	'The Mean annual precipitation at Ivory		
		Pagin is 0200mm with 75% falling as rain		
	attitudinal ecological	Busin is 92001111, with 75% julling us full		
	sequences including forest	auring frequent, mainly high-intensity		
	patterns, geology, soils, and	storms.'		
	rainfall gradients and from the			
	lowlands (c. 60 m) to the high	Groves of mountain Cedar Libocedrus		
	alpine zone (2074m)	bidwilli, Kawaka are a feature around		
	<ul> <li>Predicted= 1 Nationally</li> </ul>	Moonbeam Hut. <sup>10</sup>		
	vulnerable: and expected =9			
	At Risk-declining native fish			
	• Fourteen Lever 4 LENZ units =			
	high level of environmental			
	diversity			
Rarity and	• Four naturally rare ecosystems	<sup>11</sup> Recorded Threatened bird species		
distinctiveness	<ul> <li>Small area at risk environment</li> </ul>	include:		
	-threatened habitat	Nationally Critical		
	<ul> <li>Records of threatened species</li> </ul>	<ul> <li>Long tailed bat</li> </ul>		
	Nationally Vulnerable	Powelliphanta rossina rossina <sup>12</sup>		
	1 gecko species	Nationally Endangered		
	• 1 broom species			
	• I broom species			
	At Risk- Recovering	• South Island faicon		
	• 1 buttercup.	Nationally vulnerable		
		Blue duck - whio		
	Expect 1 Nationally Endangered	Grey duck		
	herb and 1 At Risk – Naturally	• Kaka		
	Uncommon shrub.	<ul> <li>Long-tailed cuckoo</li> </ul>		
	<ul> <li>Very important for Whio –</li> </ul>	At Risk – declining		
	Nationally Vulnerable	SI Pied ovster catcher		
		Vollow crownod parakost		
		• renow crowned parakeet –		
		NZ Pipit		
		Data poor		
		<ul> <li>Black shag – Relict</li> </ul>		
		NZ Robin – declining		

<sup>&</sup>lt;sup>9</sup> D. Murray Hicks, M. J. McSaveney and T. J. H. Chinn, 1990. Sedimentation in Proglacial Ivory Lake, Southern Alps, New Zealand. Arctic and Alpine Research Vol. 22, No. 1 (pp. 26-42 (17 pages)

<sup>&</sup>lt;sup>10</sup> Graeme Loh Pers Com.

<sup>&</sup>lt;sup>11</sup> Rhys Buckingham, 2014. Assessment of the Potential Effects of the Proposed Waitaha Hydro Scheme

on Vertebrate Fauna (Birds and Bats). Note threat catergories updated 2021 Threat Classifications <sup>12</sup> Kath Walker Recovery plans for Powelliphanta land snails 2003–2013 THREATENED SPECIES RECOVERY PLAN

		2021 Threat Classifications <sup>13</sup>
Ecological context	<ul> <li>Integral part of a huge expanse of protected land extending to Tiritiri o Te Moana/Southern Alps.</li> <li>Includes much of the Bonar Range EMU (EMU no. 300375) and a small part of the Upper Wanganui River SMU (SMU no. 409567).</li> </ul>	<ul> <li>Is linked from the alps to the sea by public conservation lands and LINZ managed riverbeds to the coast.</li> </ul>

# **Scientific Values**

Studies in this valley are a baseline for understanding the advance of Climate Change in New Zealand. The Ivory Glacier was the foundation member of fifty-one representative "index" glaciers where snowlines are measured each year to calculate the changing ice volume of the Southern Alps.<sup>14</sup> It was originally identified by Glaciologist Trevor Chinn in 1967 as an ideal candidate to carry out mass balance studies and became incorporated into Ivory Glacier programme which generated several reports and numerous papers on the mass balance, meteorology, and glacial erosion rates. These 1969-1975 studies were part of New Zealand's contribution to the International Hydrological Decade.<sup>15</sup>

The Ivory Glacier was chosen largely because it had an excellent rain gauging site. Chinn also established a series of gauges across the Alps and recorded a remarkable rainfall profile with the highest year rainfall of eighteen meters recorded near Ivory Lake. NIWA continue to run a Compact Weather Station here to monitor snow depth as part of their snow and ice program.<sup>16</sup>

# **Recreation Values**

As noted in the Technical Report this vast area is enjoyed by trampers, climbers, kayakers, rafters, and hunters seeking remote wild challenging experiences. There are six huts in the Waitaha catchment. Of particular note is the Ivory Hut which is generally considered "one of the jewels in the crown of NZ remote high-country destinations"<sup>17</sup> and which has earned the title of "The Best Hut in The World" by American Back Packer.<sup>18</sup>

The website run by Remote Huts and Permolat describes: "Many of the challenges encountered in the Waitaha are unique to New Zealand and include dense lowland rain forest, extremely rough, gorged rivers, unbridged side-creeks, impenetrable alpine scrub, permanent snow and glaciated tops."<sup>19</sup>

<sup>&</sup>lt;sup>13</sup> Hugh A. Robertson, Karen A. Baird, Graeme P. Elliott, R. et.al 2021. Conservation status of birds in Aotearoa New Zealand, 2021 https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs36entire.pdf <sup>14</sup> https://www.stuff.co.nz/environment/109932454/life-story-trevor-chinn-the-man-who-saved-glaciology

<sup>&</sup>lt;sup>15</sup> https://www.cambridge.org/core/journals/journal-of-glaciology/article/ivory-glacier-new-zealand-an-ihdrepresentative-basin-study/0ABCB6D601B7CD393ECD3F442D5FF89F

<sup>&</sup>lt;sup>16</sup> Snow and Ice Network | NIWA

<sup>&</sup>lt;sup>17</sup> https://www.remotehuts.co.nz/ivory-lake-hut.html

<sup>&</sup>lt;sup>18</sup> Zuher, Rachel. 2014 Hike to the Best Backcountry Hut in the World backpacker.com/trips/best-backcountry-hut-in-the-world/

<sup>&</sup>lt;sup>19</sup> <u>https://www.remotehuts.co.nz/ivory-lake-hut.html</u>

Rob Greenaway and Associates classified the upper valley and particularly Ivory Lake as being of national significance for tramping.<sup>20</sup> It is also now gaining an international reputation, with pressure for helicopter tourism access.



Figure 5 Ivory Lake Hut described by American Back Packer as the Best Back Country Hut in the World. Photo Andrew Buglass

The international and national significance of the Waitaha for kayaking and rafting was not adequately recognised in Technical Report HOK 52.

Rob Greenaway and Associates classified the Waitaha as: "Internationally and nationally significant (in association with the other high grade West Coast kayaking rivers) for advanced kayaking in grade five and grade six settings."<sup>21</sup>

Kayakers accord the Waitaha a "pinnacle status" often referring to it as the Mount Cook of rivers as it has runs that are more challenging than its nearest rival the Hokitika and some of its tributaries. No other river offers the same mix and level of extremely challenging white water.<sup>22</sup>

## Waitaha River Bed and Flood Plains

Hok 45 Waitaha pasture #2805514, Hok 48 Waitaha River/Kakapotahi River' #2805517, Hok 49 Little Waitaha River' #2805518 & 2805635, Hok 50 Waitaha Riverbed' #2805634 & #2805643), TWP 01

<sup>&</sup>lt;sup>20</sup> Rob Greenaway & Associates 2014 Westpower Waitaha Hydro Scheme Investigations Recreation and Tourism Assessment of Effects https://www.westpower.co.nz/system/files/resources/Appendix%2019%20-%20WHS%20-%20Recreation%20Report.pdf

<sup>&</sup>lt;sup>21</sup> Rob Greenaway & Associates 2014 (Ibid)

<sup>&</sup>lt;sup>22</sup> Rankin, Douglas A., Orchard, Shane, 2015. Impacts of the Proposed Waitaha Westpower Hydro Scheme and White Water and Kayaking values

# Kakapotahi #2805519, TWP 02 Duffers Creek western and eastern units #2809701, TWP 03 Waitaha River Mouth 2805515 & 5516, TWP 04 Duffers Creek #2809717

Forest and Bird oppose both the National Panel recommendations for a Waitaha Conservation Park and various Scenic Reserve additions and the recommendations for Disposal by the Mana Whenua Panel. See Table 2 for details.

The Waitaha Forest Conservation Area, which we propose as National Park can be linked by a continuous corridor of forest and public river bed to the coast as shown in Figure 3. These lands are geographically linked and complete the glacier story of the Waitaha Valley.

The Bonar Range in the Waitaha Forest Conservation Area adjoins the terminal moraine protected by the lanthe, Pukekura and Waitaha Scenic Reserves which provide a continuous corridor of tall forest. The lowland Podocarp/hardwood forest of Duffers Conservation Area, TWP 04 #2809717 backs on to the Pukekura Scenic Reserve. There is a small block of Stewardship land TWP 01 #2805519 between part of the Waitaha Scenic Reserve and Stewardship HOK50 #2805634, recommended by the National Panel to be added to the Waitaha Scenic Reserve which we support.

The river bed in Stewardship HOK 50 #2805634 is bounded by the terminal moraine in the Waitaha Scenic Reserve. It includes active channels and river bed where the Waitaha River enters the moraine gorge at the high way. This block also includes an estimated thirty-six hectares of developed pasture and some rough pasture, and lands used for silage within the flood zone. Some remnant stands of mature kahikatea and totara are present.

On the north side, the terminal moraine is largely protected by Kakopotahi Scenic Reserve and Stewardship HOK 49 #2805635 and HOK 49 #2805518. After the river breaks through the moraine gorge it meets Stewardship block HOK 48 #2805517 and various parcels of LINZ Riverbed coming down from the Kakapotahi River.

All the remaining public lands including the Stewardship blocks should all be managed in one coherent protected class. These include: HOK 45 #2805514 on the north bank river mouth, where South Island Fern bird<sup>23</sup> (At Risk Declining) were recently observed; TWP 03 #2805515 – south bank river mouth and TWP 03 #2085516 Ounatai Lagoon north of Duffers Creek which are beach, foreshore, and back dunes along with the associated Ounatai Lagoon.

Forest and Bird recommend National Park status thereby including a dynamic braided river system which is a highly threatened environment within an Alps to Ocean National Park within the Hari Hari and Wilberg Ecological Districts. Forest and Bird also recommend including the Duffers Conservation Area TWP 04 #2809717 within this recommended National Park rather than adding it to the Waitaha Scenic Reserve as this would add an important landform and vegetation sequence to the National Park. It is an important example of a mature unlogged lowland Podocarp (Podocarpaceae and Phyllocladaceae)/hardwood forest on mostly flat fluvio glacial terrace with part hilly moraine which are features representative of the Harihari Ecological District.<sup>24</sup>

Further upstream is HOK50 #2805643 which includes braided river bed, (naturally rare ecosystem type and some of the M2.1a land environments, classified as At Risk, i.e., 20–30% remaining in indigenous vegetation. The Technical Report notes that of the fish species found or predicted here, shortjaw kōkopu is Nationally Vulnerable and many of the others are At Risk: Declining. An estimated four hectares of pasture have been developed in the flood zones. LINZ held riverbed links this parcel downstream with HOK 50 #2805634 and upstream to the edge of the Waitaha Forest, completing an ocean to alps sequence of publicly owned land. This would be the only major West Coast river to be included within a National Park.

 $<sup>^{\</sup>rm 23}$  Graeme Loh recorded near beach in NAPLIS 2805514 2017 July 2022

<sup>&</sup>lt;sup>24</sup> Technical Report TWP 04 Duffers Creek lanthe

Table 2 List of Stewardship Lands within the Waitaha Catchment Forest & Bird proposes as National Park

Place	Conservation	Hectares	NAPLIS	National Panel	Mana Whenua	Forest & Bird
	Area			Recommendation	Recommendation	Recommendation
HOK_19	Wanganui / Otira Catchments	Approx. 7,000ha (South)	2805713	Conservation Park (Hokitika)	Neutral	National Park
HOK_45	Waitaha (Pasture)	8ha	2805514	Wildlife Management Area	Disposal	National Park
HOK_45	Waitaha (Pasture)	8ha part of above	2805514	Wildlife Management Area	Wildlife Management Area	National Park
HOK_48	Waitaha River / Kakapotahi River	33ha	2805517	Conservation Park (Waitaha)	Neutral	National Park
HOK_49	Little Waitaha River	48ha	2805518	Conservation Park (Waitaha)	Neutral	National Park
НОК_49	Little Waitaha River (Riverbed)	88ha	2805635	Conservation Park (Waitaha)	Neutral	National Park
НОК_49	Little Waitaha River (Pasture)	88ha part of above	2805635	Conservation Park (Waitaha)	Disposal	National Park
HOK_50	Waitaha Riverbed (Pasture)	368ha	2805634	Conservation Park (Waitaha)	Disposal	National Park
HOK_50	Waitaha Riverbed (Riverbed)	368ha part of above	2805634	Conservation Park (Waitaha)	Neutral	National Park
HOK_50	Waitaha Riverbed (Pasture)	224ha	2805643	Conservation Park (Waitaha)	Disposal	National Park
HOK_50	Waitaha Riverbed (Riverbed)	224ha part of above	2805643	Conservation Park (Waitaha)	Neutral	National Park
HOK_52	Waitaha Forest	31,000ha	2805641	Conservation Park (Waitaha)	Stewardship	National Park
TWP_01	Kākāpotahi	3ha	2805519	Scenic Reserve (a)	Neutral	National Park
TWP_02	Duffers Creek (Both Units)	0.3ha	2809701	Scenic Reserve (a)	Neutral Disposal (western unit)	Scenic Reserve
TWP_03	Waitaha River Mouth	51ha	2805515 2805516	Scenic Reserve (a)	Neutral	National Park
TWP_04	Duffers Creek	285ha	2809717	Scenic Reserve (a)	Neutral	National Park