

# HOK\_25 – Otira – Ōtira River (26.4803 ha)

Protected Area(s)	Area (ha)	NaPALIS #	# of Primary Parcels
Otira Conservation Area	26.139	2806322	3
Ōtira River Conservation Area	0.3413	2806321	1

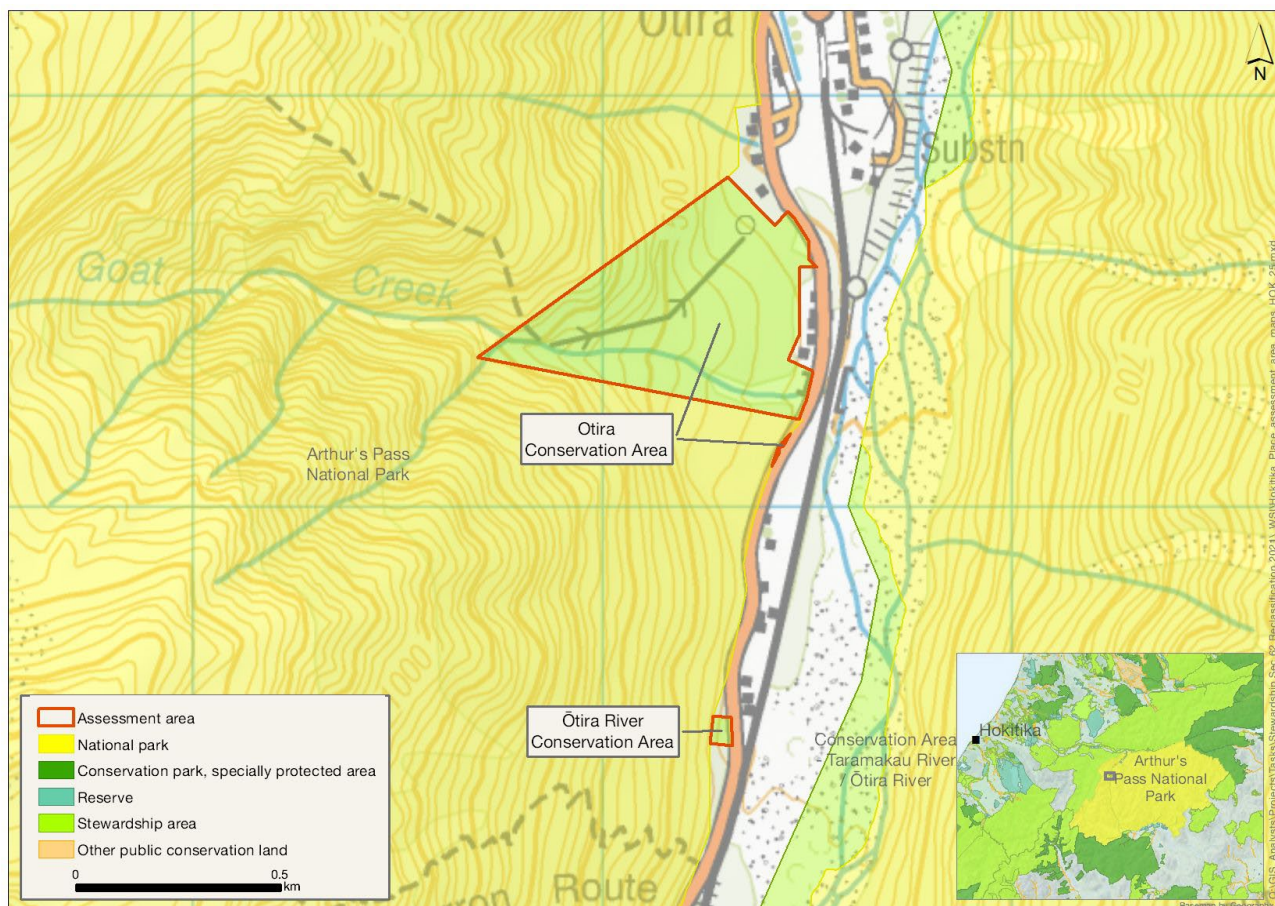
## Location

Immediately south and west of Otira township.

## Brief Description

The main part of this assessment area is a wedge-shaped tract of lowland forest on the lower slopes and alluvial fan of Goat Creek, near Otira settlement. It is surrounded on two sides by Arthur’s Pass National Park and includes a small strip of forest edge beside SH73, backed by the national park. As part of the Otira Ecological Management Unit, this area has been treated aerially for possums to protect the rātā/kamāhi forest. Water intake and associated infrastructure for the Otira township is here. The areas are likely to get low levels of recreation use, with the occasional local hunter. There is some heritage value, and one current water permission.

## Map



# Ngāi Tahu Values and Interests

*Mo tātou, a, mo ka uri, a muri ake nei – for us and our children after us*

From the preliminary desk top assessments, there do not appear to be any site specific Ngāi Tahu values identified. However, there is a deep connection between Ngāi Tahu and all of the whenua in the Ngāi Tahu takiwā, and the absence of site-specific values in the preliminary analysis does not detract from that connection, nor does it confirm that site specific values are not present. Further, a section 4 Conservation Act and Te Tiriti principles perspective is required as well, and it may be that areas of land are significant to Ngāi Tahu from that broader perspective. To avoid doubt, nothing in the proposed classification affects, limits or derogates from the rangatiratanga of Ngāi Tahu over its takiwā, including in relation to freshwater; and/or any other rights or interests Ngāi Tahu may have.

## Ecological Values

### Representativeness

The assessment area comprises two parts, the main one being centred on the lower reaches of Goat Creek which issues into Ōtira River just south of Otira settlement, including some of the river's lower slopes and associated alluvial fan. It occurs at the upper end of the lowland bioclimatic zone with an altitude range of 410-650 m above sea level. Around 20% of the area comprises very steep mountain toeslopes of greywacke geology, while most of the area is a gently sloping typical fan landform of greywacke rocks, gravels and silts forming headwater screes spreading out into the Ōtira valley.

The creek is a high energy system but has been long-confined to its current bed such that most of the fan is no longer active and so has become well-vegetated. Riverworks above the state highway bridge have contributed to this stability. Apart from the active part of the creek bed, all the area is covered in tall native scrub and native forest. Previously more active parts of the fan, and areas closer to the water course, are covered in native scrub of mainly mountain akeake (*Olearia avicenniifolia*), and lower-statured forest of kamāhi (*Pterophylla racemose*) with a mix of broadleaved species including: kōtukutuku (tree fuchsia, *Fuchsia excorticata*), makomako (wineberry, *Aristotelia serrata*), horoeka (lancewood, *Pseudopanax crassifolius*), tarata (lemonwood, *Pittosporum eugenioides*), kōhūhū (*Pittosporaceae*), broadleaf, mountain ribbonwood (houhere, *Hoheria glabrata*) and mountain five finger (orihou, *Pseudopanax colensoi*). These species are also present on the separate small roadside strip of stewardship area to the south.

The most stable parts of the Goat Creek fan and the lower mountain slopes behind have taller forest which, along with kamāhi (*Pterophylla racemose*), include miro (brown pine, *Prumnopitys ferruginea*), thin-barked tōtara (Hall's tōtara, *Podocarpus laetus*), *Quintinia* and southern rātā (*Metrosideros umbellata*). The small areas of forest clearance on the fan appear to be associated with infrastructure development for the collection and provision of freshwater, from Goat Creek to Otira settlement. Spanish broom and gorse are confined to the periphery and associated with the state highway. As part of the Otira Ecological Management Unit, this area has been treated aerially for possums to protect the rātā/kamāhi forest.

These forests are a good example of podocarp/hardwood forest with rātā and kamāhi, and are highly representative of lowland fan and lower mountain slope landforms in the Whitcombe Ecological District.

Goat Creek has predicted high water quality, but its naturalness is compromised by the pipeline supplying water to Otira and modifications to the river channel near the state highway bridge. It is unknown how much water is extracted to supply Otira or what effect that has on the river downstream of the intake.

## Diversity and pattern

The area is relatively uniform in physical features, the most notable variation being between the stable fan and active creek bed, and the slope contrast between mountainslope and fan. Also, the various ages of the active parts of the fan have resulted in a natural, legible vegetation sequence from relatively young forest of mixed broadleaved species to tall podocarp/broadleaf forest. Ecotones along the riparian margin of the river support species confined to this zone, such as the native broom (*Carmichaelia arborea*) and mountain ribbonwood. Ecosystem diversity is moderately low, while species richness of the forest and streamside habitats is moderately high due to its lowland position and the variety of forests of different ages with their various associated fauna, and understorey/epiphyte flora.

There are no freshwater records here, but records in similar streams nearby indicate kōaro will likely be present.

## Rarity and distinctiveness

The land environment status is Less Reduced and Better Protected (greater than 30% indigenous cover remaining nationally and greater than 20% protected). There are no nationally threatened ecosystems here, or terrestrial threatened species recorded. Kōaro (At Risk: Declining) are moderately likely to be present.

## Ecological context

The 1.5 km of northern and southern boundaries of the assessment area, i.e., two thirds in total, abut Arthur's Pass National Park, as does the small roadside strip of land to the south of the main area. The front 825 m boundary adjoins SH73 and several residential properties. Goat Creek confluences with Ōtira River just beyond the area boundary and the land status of all the main riverbed here is legal railway land.

Incongruously, the Goat Creek fan landform in its entirety has a split tenure with much of its southern part lying within Arthur's Pass National Park.

Little is known about the freshwater biota or the impact of the intake, which may be too unstable to hold aquatic values.

## Recreation Values

### Setting

These areas are in a backcountry-remote zone. There are no tracks or facilities managed by the Department.

### Visitor type and activities typically undertaken

The areas are likely to get low levels of recreation use other than occasional local hunting.

### Access

Access is via SH73.

## Heritage Values

### Historical overview

Otira was a coach stop before Otira tunnel was constructed (1907–23), at which time the town grew as a settlement for construction workers and their families. Otira township is immediately adjacent to the area to the north and east.

### Sites recorded

None, although old survey plans show a pipeline with an intake in Goat Creek and a track from the main road uphill to connect with the pipeline, e.g., SO 2420.

### Heritage values

The pipeline is presumably the water supply for the township, which is strongly associated with the construction of Otira railway tunnel.

### Permissions Summary

An easement for water – Goat Creek, Otira.

### Map (aerial photo)

