

15 APPROVALS RELATING TO COMPLEX FRESHWATER FISHERIES ACTIVITIES

15.1 COMPLEX FRESHWATER FISHERIES ACTIVITY APPROVAL

Schedule 9 (Clause 3) of the FTAA sets out the information requirements for complex freshwater fisheries activity dispensations and approvals. Applications must include the information identified in the following.

15.1.1 In relation to the structure and any fish facility:

- (i) A description of the type of structure or fish facility:
- (ii) The dimensions of the structure or fish facility:
- (iii) The dimensions of the structure or fish facility:
- (iv) The design of the structure or fish facility:
- (v) The placement of the structure or fish facility:
- (vi) The water flows:
- (vii) The operating regime:

Freshwater dams are proposed across Coal Creek and Camp Creek. The information requirements in relation to these structures are provided in Viridis (2026c) (Appendix A).

15.1.2 The freshwater species and values present (with particular focus on threatened, data-deficient, and at-risk species as defined in the New Zealand threat classification system):

The following freshwater species and values are present with Camp Creek and Coal Creek and habitat description, provided in Viridis (2026c):

- > Taieri flathead galaxiid (*Galaxias depressiceps*; At Risk – Declining);
- > Longfin eel (*Anguilla dieffenbachii*; At Risk – Declining);
- > Shortfin eel (*Anguilla australis*; Not Threatened); and
- > Brown trout (*Salmo trutta*; Introduced and Naturalised).

15.1.3 The water quality and quantity in the surrounding habitat (at the proposed structure location, upstream and downstream):

Water quality is discussed in Viridis (2026c) (including Appendix A). Water quality in Camp Creek is moderately degraded (elevated nutrients, average water clarity) due to stock access and the large amount of exposed soft sediment. In Coal Creek it is characterised by elevated sediment loads and nutrient concentrations, as a result of stock access, and warm temperatures during summer due to a lack of riparian shading.

Technical assessments provided in support of the resource consent applications for camp creek and coal creek dams described water quantity within the vicinity of the streams as follows.

Ryder Consulting (2011)³²⁶ assessed the tributaries in Camp Creek in 2010 and the area is shown in **Figure 15-1**. Ryder Consulting (2011) describes the tributaries of Camp Creek as having low gradients with only occasional surface water present in the channels with large areas likely to dry up in periods of dry weather.

Ryder Consulting (2016)³²⁷ surveyed the Coal Creek Catchments in 2016 and the survey area is shown in **Figure 15-2**. Trib A, assumed to be the main tributary of the Coal Creek Catchment, carries the greatest flow estimated at less than 1 L/s. The gully to the southeast called Trib B was dry throughout its mid reaches and surface water was not observed until some distance downstream toward the reservoir footprint and even then, no obvious surface flow was observed. The reach through the reservoir footprint was observed to have a confined channel due to the physical nature of the surrounding gorge landform. Trib C enters the main channel and comprises a series of small pools separated by sections of channel with almost no surface flow. The bottom end of Coal Creek was observed to alternate between primarily dry with isolated pools of water and deep water. Trib D was observed to be dry. In summary, a lack of flowing water is characteristic of large parts of this catchment.

Appendix F of GHD (2026a) includes the storage capacity of the proposed dams and the proposed discharge regime from the dams including residual flows to Camp Creek (2 L/s) and Coal Creek (3 L/s) unless the respective dam inflows are less.

³²⁶ Aquatic Ecology Assessment, Ryder Consulting (2011) submitted with the Macraes Phase III Resource Consent Application.

³²⁷ Aquatic Ecology Assessment, Ryder Consulting (2016) submitted with the Coronation Project Resource Consent Application.

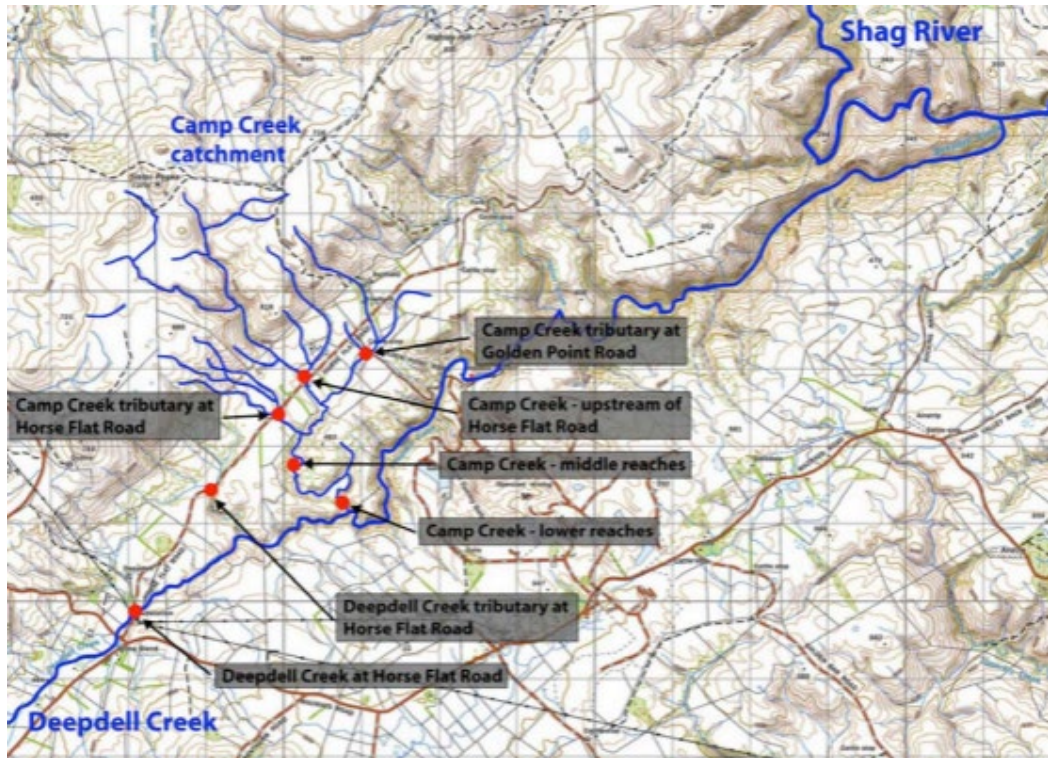


Figure 15-1: Camp Creek Catchment Showing Areas Assessed in 2010 (Source: Ryder Consulting, 2010)

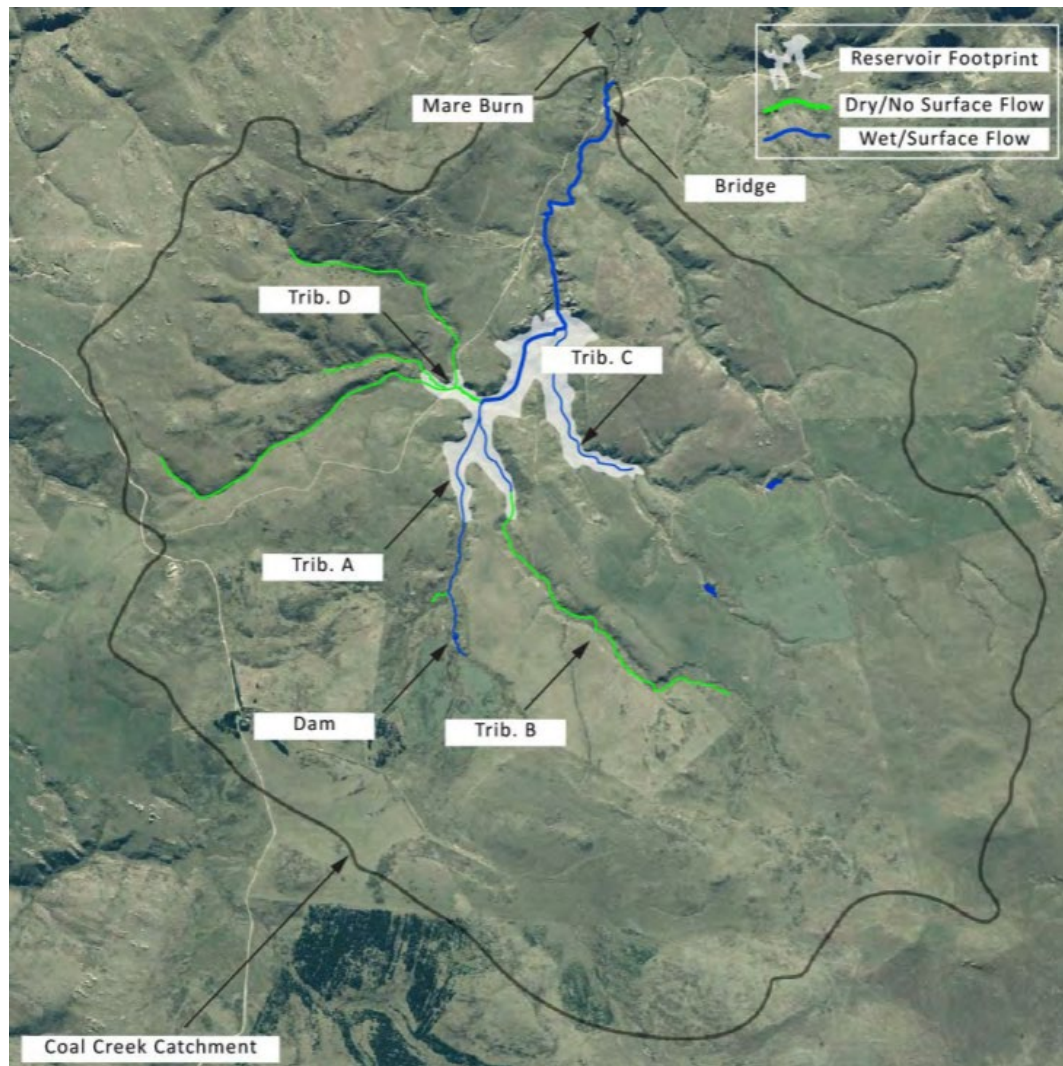


Figure 15-2: Coal Creek Catchment Showing Areas Surveyed in 2016 (Source: Ryder Consulting, 2016)

15.1.4 How the passage of fish will be provided for or impeded:

Viridis (2026c) (pp.3-6 and Appendix A) addresses how fish passage may be impacted. While fish passage for eels will be impacted, the barrier will not impact eel populations due to the very limited habitat (limited by both quality and quantity) upstream of the dams, and Taieri flathead galaxiid populations are non-migratory by nature meaning barriers will have little to no impact on their populations.