## SOUTHLAND WIND FARM – PROPOSED COMPLEX FRESHWATER FISHERIES ACTIVITY APPROVALS CONDITIONS

No.	Со	Condition		
1	a)	All culverts constructed for the Southland Wind Farm shall comply with the following conditions in accordance with Rule 70 of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020:		
		i.	The culvert shall provide for the same passage of fish upstream and downstream as would exist without the culvert, except as required to carry out the works to place, alter, extend, or reconstruct the culvert;	
		ii.	The culvert shall be laid parallel to the slope of the bed of the river or connected area;	
		iii.	The mean cross-sectional water velocity in the culvert shall be no greater than that in all immediately adjoining river reaches;	
		iv.	The culvert's width where it intersects with the bed of the river or connected area(s) and the width of the bed at that location (w), both measured in metres, shall compare as follows:	
			1. Where $w \le 3$ , $s \ge 1.3 \times w$ ;	
			2. Where $w > 3$ , $s \ge (1.2 \times w) + 0.6$ ;	
		٧.	The culvert shall be open-bottomed or its invert must be placed so that at least 25% of the culvert's diameter is below the level of the bed;	
		vi.	The bed substrate shall be present over the full length of the culvert and stable at the flow rate at or below which the water flows for 80% of the time; and	
		vii.	The culvert shall provide for continuity of geomorphic processes (such as the movement of sediment and debris).	
	b) Condition (1)(a) shall not apply to culverts NSC1, NSC3 and NSC6, as identified on the map included in Appendix 1 to these conditions. Fish passage at these culverts will be impeded in accordance with this approval.			
2	for for ( <u>htt</u> Too	Within twenty (20) working days following the completion of the construction of all culverts required for the Southland Wind Farm, the Approval Holder shall complete a fish passage risk assessment for each of these culverts using the Fish Passage Assessment Tool ( <a href="https://niwa.co.nz/freshwater/management-tools/fish-passage-assessment-tool">https://niwa.co.nz/freshwater/management-tools/fish-passage-assessment-tool</a> ). In the event the Tool indicates risk to fish passage of medium or greater at the location of any culvert where there is known fish habitat upstream, excluding at culverts NSC1, NSC3 and NSC6, the Approval Holder		
	shall undertake an assessment of the culvert to ensure fish passage is provided for.			

## Following the completion of the construction of culverts NSC1, NSC3 and NSC6, the Approval Holder shall undertake inspections of these culverts annually to ensure the barrier to fish passage is maintained for the life of the operation of the Southland Wind Farm. In the event of an extreme rainfall event during the operation of the Southland Wind Farm (>100mm in a 24-hour period as recorded at a meteorological mast within the Project Site), the Approval Holder shall undertake an inspection of the culverts identified as NSC1, NSC3 and NSC6 to ensure the fish barrier at each of these culverts has not been breached. If it is discovered that one or more invasive fish species have breached the barrier and are upstream of any one of these culverts, the Approval Holder shall engage a Suitably Qualified and Experienced Person to remove the invasive fish species and undertake any required enhancements to the existing barrier to ensure exotic fish passage is impeded.



## **APPENDIX 1**

Location of Notable Stream Crossings within the Project Site

