Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute	Dominant	Indicator	Pasture	Dominance Test Worksheet			
		↓ /			cover (%)	species?	Status	species				_
Region	Otago	Herb	2 x 2m	JUNart	30	Yes	FACW		Number of dominant species that are OBL, FACW, or FAC	3	(A)	
Sampling Date	4-Nov-22	Herb	2 x 2m	HOLlan	26	Yes	FAC	Yes	Total number of dominant species across all strata	3	(B)	
Applicant/Owner	Clutha DC	Herb	2 x 2m	RANrep	20	Yes	FAC		Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100)
Altitude		Herb	2 x 2m	RANfla	15		FACW					
Sampling point number	А	Herb	2 x 2m	ALOgen	10		FACW		Prevalence Index Worksheet	Total % cover		
Investigator(s)	SR	Herb	2 x 2m	RUMobt	1		FAC		OBL species	0	× 1	0
Nearby town/city	Balclutha	Herb	2 x 2m	ANTodo	0.5		FACU	Yes	FACW species	55	× 2	110
Landform (concave, convex, none)		Herb	2 x 2m	TRIpra	0.5		FACU	Yes	FAC species	47	× 3	141
Slope									FACU species	1	× 4	4
Coordinates	169.761697°E								UPL species		× 5	0
	46.246074°S								Column totals	103	(C)	255
Soil Map Unit Name		1							Prevalence index = D/C =	2.48		•
Climatic/ hydrological conditionstypical for time of year? Vegetation disturbed?	N								Hydrophytic Vegetation Indicators	Yes/No		
Soil disturbed?	N								Dominance Test is >50%	Yes		
Hydrology disturbed?	N								Prevalence Index is ≤3.0	Yes		
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)			
Vegetation naturally problematic?	N								Problematic Hydrophytic Vegetation (Explain)			
Soil naturally problematic?	N	1							Hydrophytic Vegetation Present?	Yes	7	
Hydrology naturally problematic?	Ν] [
									Remarks			
Summary of Findings	Yes/No/N/A											
Hydrophytic Vegetation Present?	Yes											
	Not assessed	1										
Hydric Soil Present?									Pasture Exclusion Test	Yes/No		
•	No											
Hydric Soil Present? Wetland Hydrology Present? Site comprises pasture	No No	┨ ┢────							Summed cover of pasture species	27		

Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute cover		Indicator	Pasture	Dominance Test Worksheet				
					(%)	species?	Status	species				_	
Region	Otago	Herb	2 x 2m	ANTodo	55	Yes	FACU	Yes	Number of dominant species that are OBL, FACW, or FAC	1	(A)	_	
Sampling Date	4-Nov-22	Herb	2 x 2m	HOLlan	20	Yes	FAC	Yes	Total number of dominant species across all strata	2	(B)		
Applicant/Owner	Clutha DC	Herb	2 x 2m	JUNedg	15		FACW		Percent of dominant species that are OBL, FACW, or FAC	50	(A/B)×10	0	
Altitude		Herb	2 x 2m	RANrep	3		FAC						
Sampling point number	В	Herb	2 x 2m	TRIrep	3		FACU	Yes	Prevalence Index Worksheet	Total % cover			
nvestigator(s)	SR	Herb	2 x 2m	CREcap	1		FACU		OBL species	0	× 1	0	
Nearby town/city	Balclutha	Herb	2 x 2m	HYPrad	1		FACU		FACW species	15	× 2	30	
andform (concave, convex, none)		Herb	2 x 2m	RUMobt	0.5		FAC		FAC species	23.5	× 3	70.5	
Slope									FACU species	60	× 4	240	
Coordinates	169.761502°E								UPL species		× 5	0	
	46.246119°S								Column totals	98.5	(C)	340.5	
Soil Map Unit Name									Prevalence index = D/C =	3.46		B	
Climatic/ hydrological conditionstypical for time of year?	Y												
Vegetation disturbed?	N								Hydrophytic Vegetation Indicators	Yes/No			
Soil disturbed?	Ν								Dominance Test is >50%	No			
Hydrology disturbed?	N								Prevalence Index is ≤3.0	No			
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)				
/egetation naturally problematic?	N								Problematic Hydrophytic Vegetation (Explain)				
Soil naturally problematic?	Ν								Hydrophytic Vegetation Present?	No			
Hydrology naturally problematic?	Ν												
		_							Remarks				
Summary of Findings	Yes/No/N/A												
Hydrophytic Vegetation Present?	No												
Hydric Soil Present?	Not assessed	1											
Wetland Hydrology Present?	No	1							Pasture Exclusion Test	Yes/No			
Site comprises pasture	Yes	1							Summed cover of pasture species	78			
s the sample area within a wetland?	NO			1	I	•	•	1	Pasture species ≥50% cover	Yes			

Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute cove	r Dominant	Indicator	Pasture	Dominance Test Worksheet				
					(%)	species?	Status	species					
Region	Otago	Herb	2 x 2m	ALOgen	60	Yes	FACW		Number of dominant species that are OBL, FACW, or FAC	2	(A)		
Sampling Date	4-Nov-22	Herb	2 x 2m	GLYflu	23	Yes	OBL		Total number of dominant species across all strata	2	(B)		
Applicant/Owner	Clutha DC	Herb	2 x 2m	AGRsto	10		FACW		Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100		
Altitude		Herb	2 x 2m	RANfla	5		FACW						
Sampling point number	С	Herb	2 x 2m	HOLlan	2		FAC	Yes	Prevalence Index Worksheet	Total % cover			
Investigator(s)	SR								OBL species	23	× 1	23	
Nearby town/city	Balclutha								FACW species	75	× 2	150	
Landform (concave, convex, none)									FAC species	2	× 3	6	
Slope									FACU species		× 4	0	
Coordinates	169.761226°E								UPL species		× 5	0	
	46.245993°S								Column totals	100	(C)	179	
Soil Map Unit Name									Prevalence index = D/C =	1.79		-	
Climatic/ hydrological conditionstypical for time of year?	Y												
Vegetation disturbed?	N	-							Hydrophytic Vegetation Indicators	Yes/No			
Soil disturbed?	N								Dominance Test is >50%	Yes			
Hydrology disturbed?	N								Prevalence Index is ≤3.0	Yes			
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)				
Vegetation naturally problematic?	N								Problematic Hydrophytic Vegetation (Explain)				
Soil naturally problematic?	N								Hydrophytic Vegetation Present?	Yes			
Hydrology naturally problematic?	N	1								·			
	•	-							Remarks				
Summary of Findings	Yes/No/N/A												
Hydrophytic Vegetation Present?	Yes	┓ ┝───							71				
Hydric Soil Present?	Not assessed	1											
Wetland Hydrology Present?	No	1							Pasture Exclusion Test	Yes/No			
Site comprises pasture	No	1							Summed cover of pasture species	2			
Is the sample area within a wetland?	YES			ļ.		•	•	•	Pasture species ≥50% cover	No			

Project Site	Mt Cooee
Region	Otago
Sampling Date	4-Nov-22
Applicant/Owner	Clutha DC
Altitude	
Sampling point number	C2
Investigator(s)	SR
Nearby town/city	Balclutha
Landform (concave, convex, none)	
Slope	
Coordinates	169.761265°E
	46.245921°S
Soil Map Unit Name	
Climatic/ hydrological conditionstypical for time of year?	Y
Vegetation disturbed?	N
Soil disturbed?	Ν
Hydrology disturbed?	Ν
Normal circumstances present?	Y
Vegetation naturally problematic?	N
Soil naturally problematic?	Ν
Hydrology naturally problematic?	Ν
Summary of Findings	Yes/No/N/A

Summary of Findings	Yes/No/N/A
Hydrophytic Vegetation Present?	Yes
Hydric Soil Present?	Not assessed
Wetland Hydrology Present?	Yes: 1A Surface water
Site comprises pasture	No
Is the sample area within a wetland?	YES

tratum	Plot size	Species	Absolute cover (%)	Dominant species?	Indicator Status	Pasture species	Dominance Test Worksheet				
lerb	2 x 2m	ALOgen	45	Yes	FACW		Number of dominant species that are OBL, FACW, or FAC	2	(A)		
lerb	2 x 2m	AGRsto	35	Yes	FACW		Total number of dominant species across all strata	2	(B)		
lerb	2 x 2m	JUNart	10		FACW		Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×1	00	
erb	2 x 2m	RANfla	4		FACW						
erb	2 x 2m	HOLlan	3		FAC	Yes	Prevalence Index Worksheet	Total % cover			
erb	2 x 2m	ELEacu	3		OBL		OBL species	3	× 1	3	
							FACW species	94	× 2	188	
							FAC species	3	× 3	9	
							FACU species		× 4	0	
							UPL species		× 5	0	
							Column totals	100	(C)	200	
							Prevalence index = D/C =	2			
							Hydrophytic Vegetation Indicators Dominance Test is >50%	Yes/No Yes			
				_			Hydrophytic Vegetation Indicators	Yes/No			
							Prevalence Index is ≤ 3.0	Yes			
							Morphological Adaptations (Provide supporting data in Remarks)				
							Problematic Hydrophytic Vegetation (Explain)				
							Hydrophytic Vegetation Present?	Yes			
	<u> </u>										
							Remarks				
							Remarks				
							Remarks				
							Remarks				
							Remarks Pasture Exclusion Test	Yes/No			
								Yes/No 3			

Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute cover (%)	Dominant species?	Indicator Status	Pasture species	Dominance Test Worksheet				
Region	Otago	Herb	2 x 2m	ALOgen	40	Yes	FACW		Number of dominant species that are OBL, FACW, or FAC	3	(A)	7	
Sampling Date	4-Nov-22	Herb	2 x 2m	JUNedg	35	Yes	FACW		Total number of dominant species across all strata	3	(B)		
Applicant/Owner	Clutha DC	Herb	2 x 2m	HOLlan	30	Yes	FAC	Yes	Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100		
Altitude		Herb	2 x 2m	RANrep	3		FAC					_	
Sampling point number	D	Herb	2 x 2m	TRIrep	2		FACU	Yes	Prevalence Index Worksheet	Total % cover			
nvestigator(s)	SR								OBL species	0	× 1	0	
Nearby town/city	Balclutha								FACW species	75	× 2	150	
andform (concave, convex, none)									FAC species	33	× 3	99	
Slope									FACU species	2	× 4	8	
Coordinates	169.760834°E								UPL species		× 5	0	
	46.245926°S								Column totals	110	(C)	257	
Soil Map Unit Name									Prevalence index = D/C =	2.34			
	N N								Hydrophytic Vegetation Indicators Dominance Test is >50%	Yes/No Yes			
Soil disturbed?	Ν								Dominance Test is >50%	Yes			
Hydrology disturbed?	N								Prevalence Index is ≤3.0	Yes			
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)				
Vegetation naturally problematic?	Ν								Problematic Hydrophytic Vegetation (Explain)				
Soil naturally problematic?	Ν								Hydrophytic Vegetation Present?	Yes			
Hydrology naturally problematic?	Ν									-	_		
									Remarks				
Summary of Findings	Yes/No/N/A												
Hydrophytic Vegetation Present?	Yes												
Hydric Soil Present?	Not assessed												
Wetland Hydrology Present?	No								Pasture Exclusion Test	Yes/No			
Site comprises pasture	No								Summed cover of pasture species	32			
Is the sample area within a wetland?	YES												

Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute	Dominant	Indicator	Pasture	Dominance Test Worksheet				
					cover (%)	species?	Status	species					
Region	Otago	Herb	2 x 2m	JUNeff	60	Yes	FACW		Number of dominant species that are OBL, FACW, or FAC	2	(A)		
Sampling Date	4-Nov-22	Herb	2 x 2m	HOLlan	25	Yes	FAC	Yes	Total number of dominant species across all strata	2	(B)		
Applicant/Owner	Clutha DC	Herb	2 x 2m	TRIrep	8		FACU	Yes	Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100)	
Altitude		Herb	2 x 2m	ANTodo	6		FACU	Yes					
Sampling point number	E	Herb	2 x 2m	RANrep	2		FAC		Prevalence Index Worksheet	Total % cover			
Investigator(s)	SR	Herb	2 x 2m	AGRsto	1		FACW		OBL species	0	× 1	0	
Nearby town/city	Balclutha	Herb	2 x 2m	JUNart	1		FACW		FACW species	62	× 2	124	
Landform (concave, convex, none)									FAC species	27	× 3	81	
Slope									FACU species	14	× 4	56	
Coordinates	169.761265°E								UPL species		× 5	0	
	46.245921°S								Column totals	103	(C)	261	
Soil Map Unit Name									Prevalence index = D/C =	2.53		-	_
Climatic/ hydrological conditionstypical for time of year?	Y												
Vegetation disturbed?	N	-							Hydrophytic Vegetation Indicators	Yes/No			
Soil disturbed?	N	_						_	Dominance Test is >50%	Yes			
Hydrology disturbed?	N								Prevalence Index is ≤3.0	Yes			
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)				
Vegetation naturally problematic?	N								Problematic Hydrophytic Vegetation (Explain)				
Soil naturally problematic?	N								Hydrophytic Vegetation Present?	Yes			
Hydrology naturally problematic?	Ν] [
									Remarks				
Summary of Findings	Yes/No/N/A												
Hydrophytic Vegetation Present?	Yes]											
Hydric Soil Present?	Not assessed												
Wetland Hydrology Present?	No								Pasture Exclusion Test	Yes/No			
Site comprises pasture	No								Summed cover of pasture species	39			
Is the sample area within a wetland?	YES								Pasture species ≥50% cover	No			

Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute	Dominant	Indicator	Pasture	Dominance Test Worksheet				
					cover (%)	species?	Status	species					
Region	Otago	Herb	2 x 2m	ANTodo	60	Yes	FACU	Yes	Number of dominant species that are OBL, FACW, or FAC	2	(A)		
Sampling Date	4-Nov-22	Herb	2 x 2m	JUNedg	25	Yes	FACW		Total number of dominant species across all strata	2	(B)		
Applicant/Owner	Clutha DC	Herb	2 x 2m	HOLlan	10		FAC	Yes	Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100)	
Altitude		Herb	2 x 2m	PRUvul	3		FACU						
Sampling point number	F	Herb	2 x 2m	TRIrep	2		FACU	Yes	Prevalence Index Worksheet	Total % cover			
nvestigator(s)	SR	Herb	2 x 2m	CERfon	1		FACU		OBL species	0	× 1	0	
Nearby town/city	Balclutha	Herb	2 x 2m	RANrep	1		FAC		FACW species	25.5	× 2	51	
Landform (concave, convex, none)		Herb	2 x 2m	CREcap	0.5		FACU		FAC species	11	× 3	33	
Slope		Herb	2 x 2m	PLAlan	0.5		FACU		FACU species	67	× 4	268	_
Coordinates	169.761169°E	Herb	2 x 2m	JUNart	0.5		FACW		UPL species		× 5	0	
	46.246119°S								Column totals	103.5	(C)	352	
Soil Map Unit Name									Prevalence index = D/C =	3.4			_
Climatic/ hydrological conditionstypical for time of year?	Ŷ												
Vegetation disturbed?	N								Hydrophytic Vegetation Indicators	Yes/No			
Soil disturbed?	N								Dominance Test is >50%	Yes			
Hydrology disturbed?	Ν	_							Prevalence Index is ≤3.0	No			
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)				
Vegetation naturally problematic?	N								Problematic Hydrophytic Vegetation (Explain)				
Soil naturally problematic?	Ν								Hydrophytic Vegetation Present?	No			
Hydrology naturally problematic?	Ν												
									Remarks				
Summary of Findings	Yes/No/N/A												
Hydrophytic Vegetation Present?	No												
Hydric Soil Present?	Not assessed												
Wetland Hydrology Present?	No								Pasture Exclusion Test	Yes/No			
Site comprises pasture	Yes								Summed cover of pasture species	72			
s the sample area within a wetland?	NO								Pasture species ≥50% cover	Yes			

Project Site	Mt Cooee	Stratum	Plot size	Species	Absolute	Dominant	Indicator	Pasture	Dominance Test Worksheet				
					cover (%)	species?	Status	species				_	
Region	Otago	Herb	2 x 2m	JUNeff	50	Yes	FACW		Number of dominant species that are OBL, FACW, or FAC	3	(A)		
Sampling Date	4-Nov-22	Herb	2 x 2m	HOLlan	20	Yes	FAC	Yes	Total number of dominant species across all strata	3	(B)		
Applicant/Owner	Clutha DC	Herb	2 x 2m	RANrep	20	Yes	FAC		Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100)	
Altitude		Herb	2 x 2m	ANTodo	8		FACU	Yes					
Sampling point number	G	Herb	2 x 2m	TRIrep	5		FACU	Yes	Prevalence Index Worksheet	Total % cover			
Investigator(s)	SR	Herb	2 x 2m	AGRsto	3		FACW		OBL species	0.5	× 1	0.5	
Nearby town/city	Balclutha	Herb	2 x 2m	RUMobt	0.5		FAC		FACW species	53.5	× 2	107	
andform (concave, convex, none)		Herb	2 x 2m	JUNart	0.5		FACW		FAC species	40.5	× 3	121.5	
Slope		Herb	2 x 2m	CALsta	0.5		OBL		FACU species	13	× 4	52	
Coordinates	169.761426°E								UPL species		× 5	0	
	46.246063°S								Column totals	107.5	(C)	281	_
Soil Map Unit Name									Prevalence index = D/C =	2.61		-	_
Climatic/ hydrological conditionstypical for time of year? Vegetation disturbed?	N								Hydrophytic Vegetation Indicators	Yes/No			
Soil disturbed?	Ν								Dominance Test is >50%	Yes			
Hydrology disturbed?	Ν								Prevalence Index is ≤3.0	Yes			
Normal circumstances present?	Y								Morphological Adaptations (Provide supporting data in Remarks)				
/egetation naturally problematic?	N								Problematic Hydrophytic Vegetation (Explain)				
Soil naturally problematic?	Ν								Hydrophytic Vegetation Present?	Yes			
Hydrology naturally problematic?	Ν												
									Remarks				
Summary of Findings	Yes/No/N/A												
Hydrophytic Vegetation Present?	Yes												
Hydric Soil Present?	Not assessed												
Wetland Hydrology Present?	No								Pasture Exclusion Test	Yes/No			
Site comprises pasture	No								Summed cover of pasture species	33			
Is the sample area within a wetland?	YES								Pasture species ≥50% cover	No			

Project Site	Mt Cooee
Region	Otago
Sampling Date	4-Nov-22
Applicant/Owner	Clutha DC
Altitude	
Sampling point number	Н
Investigator(s)	SR
Nearby town/city	Balclutha
Landform (concave, convex, none)	
Slope	
Coordinates	169.760469°E
	46.245413°S
Soil Map Unit Name	
Climatic/ hydrological conditionstypical for time of year?	Y
Vegetation disturbed?	N
Soil disturbed?	Ν
Hydrology disturbed?	Ν
Normal circumstances present?	Y
Vegetation naturally problematic?	N
Soil naturally problematic?	Ν
Hydrology naturally problematic?	Ν
Summary of Findings	Yes/No/N/A

tratum	Plot size	Species	Absolute cover (%)	Dominant species?	Indicator Status	Pasture species	Dominance Test Worksheet				
lerb	2 x 2m	Glyceria fluitans	95	Yes	OBL		Number of dominant species that are OBL, FACW, or FAC	1	(A)		
lerb	2 x 2m	JUNeff	3		FACW		Total number of dominant species across all strata	1	(B)		
lerb	2 x 2m	(open water)	3		-		Percent of dominant species that are OBL, FACW, or FAC	100	(A/B)×100	2	
							Prevalence Index Worksheet	Total % cover			
							OBL species	95	× 1	95	
							FACW species	3	× 2	6	
							FAC species		× 3	0	
							FACU species		× 4	0	
							UPL species		× 5	0	
							Column totals	98	(C)	101	
							Prevalence index = D/C =	1.03			
						_	Hydrophytic Vegetation Indicators	Yes/No			
					-		Dominance Test is >50%	Yes			
							Prevalence Index is ≤3.0	Yes			
							Morphological Adaptations (Provide supporting data in Remarks)				
							Problematic Hydrophytic Vegetation (Explain)		_		
							Hydrophytic Vegetation Present?	Yes			
							Remarks				
					_						
							Pasture Exclusion Test Summed cover of pasture species	Yes/No			

Hydrology naturally problematic?	Ν
Summary of Findings	Yes/No/N/A
Hydrophytic Vegetation Present?	Yes
Hydric Soil Present?	Not assessed
Wetland Hydrology Present?	Yes: 1A Surface water
Site comprises pasture	No
Is the sample area within a wetland?	YES