

Vegetation Disturbance (calculated by FMG using vegetation mapping provided by Biota)

Disturbance to Vegetation as mapped by Biota by Stage B Infrastructure						
Veg ID - Biota	Descripton	Rail Corridor*	Mt Lewin	Mt Nicholas	Christmas Creek	Mindy Mindy
		(hectares)	(hectares)	(hectares)	(hectares)	(hectares)
Cc19	<i>Corymbia candida</i> , <i>C. hamersleyana</i> , <i>Acacia aneura</i> low woodland over <i>Acacia tumida</i> var. <i>pilbarensis</i> open scrub over <i>Dodonaea petiolaris</i> open shrubland over <i>Eriachne mucronata</i> , <i>Triodia epactia</i> open tussock / hummock grassland	0.45				
Cc20	<i>Corymbia</i> spp. scattered low trees over <i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>A. ancistrocarpa</i> , <i>A. tenuissima</i> tall open shrubland over <i>Triodia epactia</i> mid-dense hummock grassland and open tussock grasses			18.8		
Cc22	<i>Grevillea wickhamii</i> scattered tall shrubs over <i>Acacia monticola</i> closed scrub over scattered hummock grasses			3.2		
Ch2	<i>Acacia inaequilatera</i> , <i>Cassia</i> spp. scattered tall shrubs over <i>Triodia wiseana</i> mid-dense hummock grassland			18.7		
Ch13	<i>Triodia brizoides</i> , <i>T. longiceps</i> mid-dense hummock grassland				175.2	
Ch15	<i>Acacia bivenosa</i> , <i>A. synchronicia</i> scattered shrubs over <i>Triodia longiceps</i> mid-dense hummock grassland			168		
Ch16	<i>Acacia aneura</i> , <i>A. paraneura</i> scattered low trees over <i>Cassia</i> spp. scattered tall shrubs over <i>Triodia longiceps</i> hummock grassland		9.4			9.2
Ch17	<i>Acacia aneura</i> , <i>A. adsurgens</i> , <i>G. wickhamii</i> , <i>Cassia glutinosa</i> , <i>C. luerssenii</i> scattered shrubs over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland	14.30	453.3	1126.7		4346.9
Ch18	<i>Eucalyptus leucophloia</i> , <i>Hakea</i> spp. scattered low trees over <i>Acacia atkinsiana</i> , <i>Grevillea wickhamii</i> scattered tall shrubs over <i>Triodia epactia</i> mid-dense hummock grassland	95.53		21		
Ch19	<i>Cassia luerssenii</i> scattered shrubs over <i>Triodia epactia</i> , <i>T. aff. basedowii</i> mid-dense hummock grassland	20.10				
Ch20	<i>Grevillea wickhamii</i> tall shrubland over <i>Acacia adsurgens</i> , <i>A. ancistrocarpa</i> shrubland over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland			43.8		
Ch21	<i>Grevillea wickhamii</i> tall open shrubland over <i>Triodia epactia</i> , <i>T. aff. basedowii</i> mid-dense hummock grassland					3.9
Ch22	<i>Acacia arida</i> open shrubland over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland			173.2		
Ch23	<i>Cassia luerssenii</i> scattered tall shrubs over <i>Eremophila cuneifolia</i> low open shrubland over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland	3.60				
Ch23/Fa24	See Ch23 and Fa24		1.4			
Ch24	<i>Acacia bivenosa</i> open shrubland over <i>Triodia wiseana</i> mid-dense hummock grassland	80.77				
Ch25	<i>Acacia aneura</i> low woodland to low open forest over <i>Acacia rhodophloia</i> scattered tall shrubs over <i>Eremophila forrestii</i> , <i>E. latrobei</i> , <i>E. cuneifolia</i> scattered shrubs over <i>Triodia epactia</i> , <i>T. brizoides</i> open hummock grassland	6.24				
Ch26	<i>Eucalyptus leucophloia</i> scattered low trees over <i>Acacia rhodophloia</i> tall open scrub over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland		12.9			
Ch28	<i>Acacia aneura</i> tall open shrubland over <i>Dodonaea petiolaris</i> open shrubland over <i>Ptilotus obovatus</i> var. <i>obovatus</i> low shrubland over <i>Eriachne mucronata</i> , <i>Paspalidium clementii</i> grassland			1.9		
Ch30	<i>Acacia aneura</i> low woodland over <i>Eremophila forrestii</i> subsp. <i>forrestii</i> scattered shrubs over <i>Triodia epactia</i> hummock grassland and <i>Enneapogon polyphyllus</i> very open annual grassland	5.57				

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Ch31	<i>Acacia aneura</i> low woodland over <i>Triodia aff. basedowii</i> hummock grassland		88.5		33.0	
Fa1	<i>Acacia aneura</i> open scrub to low open forest over <i>Dodonaea petiolaris</i> , <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Cassia helmsii</i> , <i>Sida calyxhymentia</i> open heath with <i>Enneapogon polyphyllus</i> annual very open grassland	6.86	15.5	6.9	3.3	
Fa1/Fa1a	See Fa1 and Fa1a	343.49	327.1		1722.7	
Fa10	<i>Acacia aneura</i> low open forest over <i>Chrysopogon fallax</i> very open tussock grassland over <i>Centipeda minima</i> herbland and open annual grassland	3.06	1.3			
Fa10/Fa1a	See Fa10 and Fa1a		12.2			
Fa11	<i>Acacia aneura</i> low closed forest over <i>Eremophila lanceolata</i> low open shrubland over <i>Aristida contorta</i> , <i>Enneapogon polyphyllus</i> open annual grassland and <i>Goodenia prostrata</i> very open herbland				4.8	
Fa11/Fa1a	See Fa11 and Fa1a	45.25			742.3	
Fa12/Fa1a	See Fa12 and Fa1a	101.09				
Fa12	<i>Acacia aneura</i> low forest over <i>Chrysopogon fallax</i> , <i>Digitaria brownii</i> open tussock grassland and <i>*Bidens bipinnata</i> open herbland					
Fa13	<i>Acacia aneura</i> low open forest over <i>Chrysopogon fallax</i> , <i>Digitaria brownii</i> open tussock grassland	12.90	47.5			
Fa14	<i>Acacia aneura</i> low open forest to low woodland over <i>*Cenchrus ciliaris</i> tussock grassland	63.22	107.0		596.2	
Fa14/Fx10	See Fa14 and Fx10				158.3	
Fa19	<i>Acacia aneura</i> low woodland over <i>Acacia rhodophloia</i> high shrubland over <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Dodonaea petiolaris</i> , <i>Sida</i> sp. unisexual open shrubland over open grassland	16.35	83.9			
Fa1a	<i>Acacia aneura</i> scattered tall shrubs to low open woodland over <i>Aristida contorta</i> , <i>Enneapogon polyphyllus</i> , <i>Eragrostis pergracilis</i> , <i>Eriachne pulchella</i> and/or <i>Fimbristylis dichotoma</i> closed annual grassland / sedgeland	191.69	518.3		255.4	
Fa1a/Fx11/Fx12	See Fa1a, Fx11 and Fx12	60.36				
Fa20	<i>Acacia catenulata</i> , <i>A. aneura</i> low open forest over <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Sida</i> sp. unisexual open shrubland with open annual grassland			1.1		
Fa20/Fa1a	See Fa20 and Fa1a		1.6	141.5		
Fa21	<i>Acacia catenulata</i> , <i>A. aneura</i> low closed forest over <i>Sida</i> sp. unisexual, <i>Eremophila forrestii</i> subsp. <i>forrestii</i> , <i>Dodonaea petiolaris</i> open heath to open shrubland		9.7	10.8	136.5	
Fa22	<i>Acacia catenulata</i> (<i>A. aneura</i>) low open forest over <i>Eriachne mucronata</i> , <i>Paspalidium clementii</i> , <i>Triodia epactia</i> very open tussock / hummock grassland			2.4		
Fa23	<i>Acacia aneura</i> (<i>A. pruinocarpa</i> , <i>A. catenulata</i>) low open woodland to low open forest over <i>Acacia wanyu</i> tall shrubland over <i>Eremophila forrestii</i> subsp. <i>forrestii</i> shrubland over <i>Triodia</i> spp. very open hummock grassland			32.6		
Fa24	<i>Acacia aneura</i> , <i>A. ayersiana</i> low woodland over <i>Triodia</i> spp. open hummock grassland		1.3			
Fa25	<i>Acacia aneura</i> low open woodland over <i>Themeda triandra</i> open tussock grassland and <i>Eragrostis leptocarpa</i> , <i>E. tenellula</i> annual grassland			97.5		

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Fa26	<i>Acacia aneura</i> , <i>A. catenulata</i> tall open shrubland over <i>Eremophila forrestii</i> open shrubland over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland			109.4		
Fa27	<i>Acacia aneura</i> , <i>A. catenulata</i> tall open shrubland over <i>Aristida inaequiglumis</i> , <i>A. contorta</i> grassland			94.8		
Fc4	<i>Eucalyptus victrix</i> open woodland over <i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>A. aneura</i> , <i>Atalaya hemiglauca</i> low woodland over <i>Cenchrus ciliaris</i> tussock grassland	0.87	2.2		1.4	
Fc4/Fa14	See Fc4 and Fa14	5.50			270.9	
Fc5	<i>Acacia coriacea</i> subsp. <i>pendens</i> low woodland over <i>Hakea lorea</i> subsp. <i>lorea</i> , <i>Acacia tetragonophylla</i> , <i>A. pyrifolia</i> , <i>Atalaya hemiglauca</i> tall open shrubland over <i>Cenchrus ciliaris</i> closed tussock grassland	19.45				
Fc6	<i>Eucalyptus victrix</i> low open woodland over <i>Grevillea wickhamii</i> , <i>Acacia pyrifolia</i> tall open scrub over <i>Cenchrus ciliaris</i> tussock grassland and <i>Triodia longiceps</i> , <i>T. epactia</i> scattered hummock grasses	52.30				
Fc7	<i>Eucalyptus leucophloia</i> , <i>Corymbia</i> spp. scattered low trees over <i>Acacia tumida</i> var. <i>pilbarensis</i> tall open scrub over <i>Themeda triandra</i> , <i>Triodia epactia</i> scattered tussock / hummock grasses	12.27			37.1	
Fc8	<i>Corymbia hamersleyana</i> scattered low mallees over <i>Grevillea wickhamii</i> , <i>Acacia tumida</i> , <i>A. pyrifolia</i> tall open shrubland over <i>Cassia luerssenii</i> , <i>C. glutinosa</i> open shrubland over <i>Triodia epactia</i> mid-dense hummock grassland	10.47				
Fc9	<i>Acacia aneura</i> scattered low trees over <i>Acacia pyrifolia</i> , <i>Grevillea wickhamii</i> tall open scrub over <i>Indigofera monophylla</i> open heath over <i>Enneapogon polyphyllus</i> open annual grassland				123.9	
Fc10	<i>Acacia pyrifolia</i> tall open scrub over <i>Triodia longiceps</i> mid-dense hummock grassland				59.2	
Fc11	<i>Corymbia hamersleyana</i> , <i>Eucalyptus leucophloia</i> , <i>Acacia pruinocarpa</i> scattered low trees over <i>Acacia atkinsiana</i> , <i>A. bivenosa</i> , <i>A. maitlandii</i> , <i>A. ancistrocarpa</i> , <i>Petalostylis labicheoides</i> tall open shrubland to open scrub over <i>Triodia epactia</i> open hummock grassland	1.43				
Fc12	<i>Acacia pruinocarpa</i> , <i>A. tetragonophylla</i> , <i>A. aneura</i> , <i>Atalaya hemiglauca</i> tall shrubland over <i>Triodia longiceps</i> hummock grassland	8.52			106.8	
Fp1/Fp2	See Fp1 and Fp2	269.35		676.8		
Fp1	<i>Acacia ancistrocarpa</i> , <i>A. coriacea</i> , <i>A. melleodora</i> scattered tall shrubs over <i>Triodia schinzii</i> closed hummock grassland					
Fp2	<i>Acacia ancistrocarpa</i> , <i>A. coriacea</i> , <i>A. melleodora</i> scattered tall shrubs over <i>Triodia lanigera</i> closed hummock grassland					
Fp3	<i>Acacia ancistrocarpa</i> , <i>A. coriacea</i> , <i>A. melleodora</i> scattered tall shrubs over <i>Triodia epactia</i> hummock grassland			7.8		
Fp4	<i>Corymbia hamersleyana</i> scattered low trees over <i>Acacia ancistrocarpa</i> , <i>A. adsurgens</i> shrubland over <i>Triodia epactia</i> mid-dense hummock grassland	8.36				

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Fx1	<i>Acacia xiphophylla</i> open scrub over <i>Cassia sturtii</i> shrubland to low open heath over <i>Eragrostis xerophila</i> open tussock grassland	17.07				
Fx10	<i>Acacia synchronicia</i> tall open shrubland over <i>Aristida latifolia</i> open tussock grassland and <i>Ptilotus gomphrenoides</i> var. <i>gomphrenoides</i> , <i>Chloris pectinata</i> open annual herbland / grassland	85.71			1240.4	
Fx11	Mixed herbland and annual grassland					
Fx12	<i>Eragrostis setifolia</i> closed tussock grassland					
Fx11/Fx12	See Fx11 and Fx12	35.58	81.1			
Hc7a	<i>Corymbia hamersleyana</i> scattered low trees over <i>Acacia pyrifolia</i> tall shrubland over <i>Triodia pungens</i> mid-dense hummock grassland					20.1
Hc17	<i>Acacia tumida</i> var. <i>pilbarensis</i> open scrub over <i>Triodia pungens</i> hummock grassland					85.1
Hc22	<i>Eucalyptus victrix</i> low woodland over <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>A. pyrifolia</i> , <i>Grevillea wickhamii</i> , <i>Gossypium robinsonii</i> tall open shrubland over <i>Tephrosia rosea</i> var. <i>glabrior</i> low open shrubland over <i>Cenchrus ciliaris</i> , <i>Digitaria brownii</i> , <i>Eriachne tenuiculmis</i> , <i>Triodia pungens</i> very open tussock / hummock grassland					7.9
Hc23	<i>Corymbia hamersleyana</i> low open woodland over <i>Acacia dictyophleba</i> , <i>A. tumida</i> var. <i>pilbarensis</i> tall open shrubland over <i>Eulalia aurea</i> , <i>Themeda triandra</i> tussock grassland					30.6
Hc24	<i>Eucalyptus leucophloia</i> scattered low trees over <i>Acacia monticola</i> , <i>Grevillea wickhamii</i> , <i>Sida arenicola</i> open shrubland over <i>Triodia pungens</i> open hummock grassland					1.9
Hh14	<i>Acacia aneura</i> , <i>A. pruinocarpa</i> low woodland over <i>Cassia luerssenii</i> scattered shrubs over <i>Triodia pungens</i> mid-dense hummock grassland					42.6
Hh3	<i>Eucalyptus gamophylla</i> scattered low mallees over <i>Gossypium australe</i> , <i>Grevillea wickhamii</i> scattered tall shrubs over <i>Triodia lanigera</i> hummock grassland with <i>Aristida holathera</i> var. <i>holathera</i> annual open grassland					
Hh3/Hp5	See Hh3 and Hp5					19.1
Hh4	<i>Corymbia hamersleyana</i> , <i>Eucalyptus gamophylla</i> scattered low trees over <i>Acacia pachyacra</i> , <i>Petalostylis cassioides</i> tall open shrubland over <i>Triodia lanigera</i> (<i>T. pungens</i>) mid-dense hummock grassland					182.6
Hh5	<i>Eucalyptus leucophloia</i> scattered trees over <i>Acacia inaequilatera</i> , <i>Hakea chordophylla</i> scattered tall shrubs over <i>Acacia hilliania</i> low open shrubland over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland					172.4
Hh5b	<i>Corymbia hamersleyana</i> scattered low trees over <i>Hakea chordophylla</i> , <i>Acacia bivenosa</i> , <i>A. pachyacra</i> , <i>Grevillea wickhamii</i> scattered tall shrubs over <i>Triodia</i> aff. <i>basedowii</i> mid-dense hummock grassland					146
Hh6	<i>Acacia inaequilatera</i> scattered tall shrubs over <i>Triodia wiseana</i> mid-dense hummock grassland					40.4
Hp5	<i>Corymbia hamersleyana</i> , <i>Eucalyptus gamophylla</i> scattered low trees over <i>Acacia ancistrocarpa</i> , <i>A. dictyophleba</i> , <i>A. pachyacra</i> , <i>Hakea</i> spp. high open shrubland over <i>Triodia pungens</i> hummock grassland					
Hp7	<i>Corymbia hamersleyana</i> , <i>Eucalyptus gamophylla</i> scattered low trees over <i>Acacia dictyophleba</i> , <i>A. ancistrocarpa</i> tall shrubland to tall open shrubland over <i>Triodia schinzii</i> , <i>T. pungens</i> mid-dense hummock grassland					99.4

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TOTAL		1598	1774	2757	10027	848
<p>* To estimate the representative impact of the clearing on a local scale, the nominal centre line of the rail corridor was buffered by 50 m on either side, representing a 40 m construction corridor plus additional areas for borrow pits, laydown areas and access roads located within FMG's 2 km wide surveyed corridor. Whilst it is not possible to define the location of borrow pits until geotechnical evaluation and detailed design has been completed, the following criteria will be applied during selection to minimise impact(s): if possible locate within areas to be disturbed such as proposed mine pits; locate away from surface drainage channels; locate away from Aboriginal Heritage sites; conduct vegetation surveys to ensure they are located away from significant flora or vegetation; locate away from significant fauna habitats; determine final location in consultation with CALM; and seek approvals if required from DoIR.</p>						