
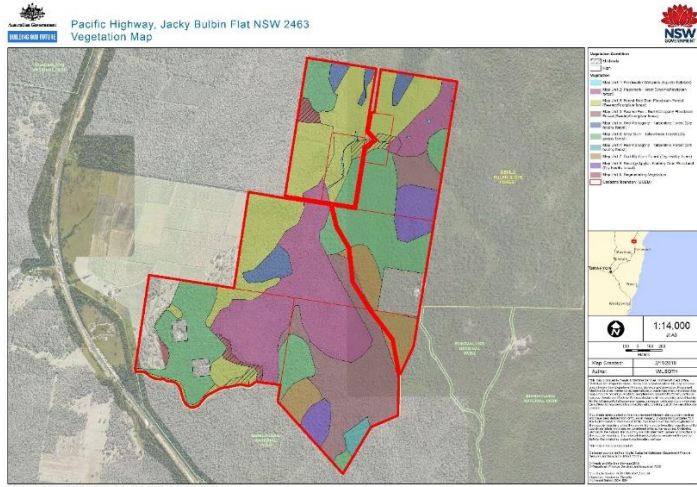
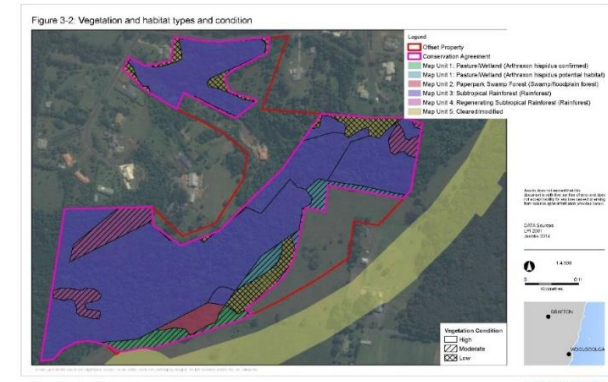
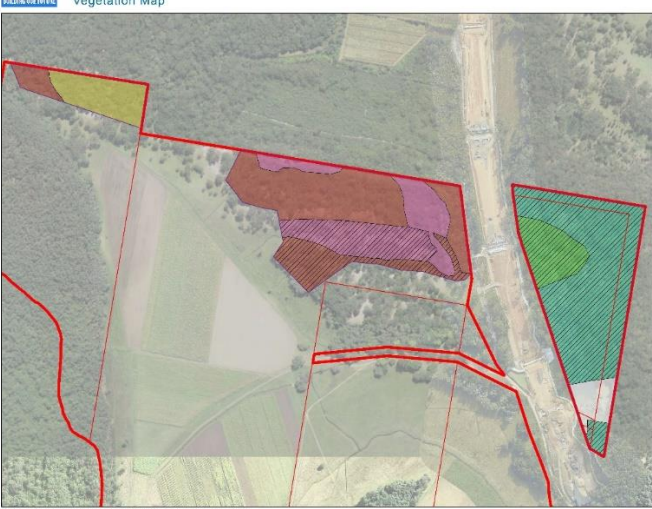
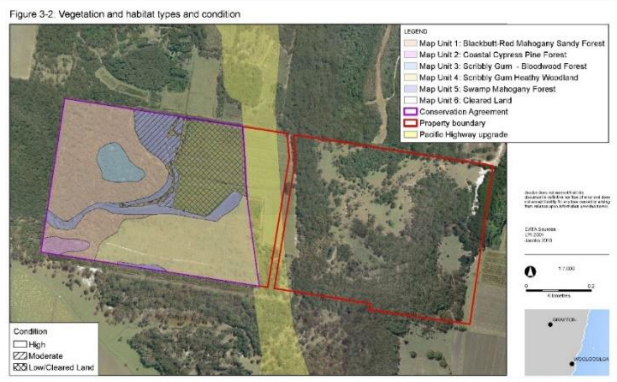
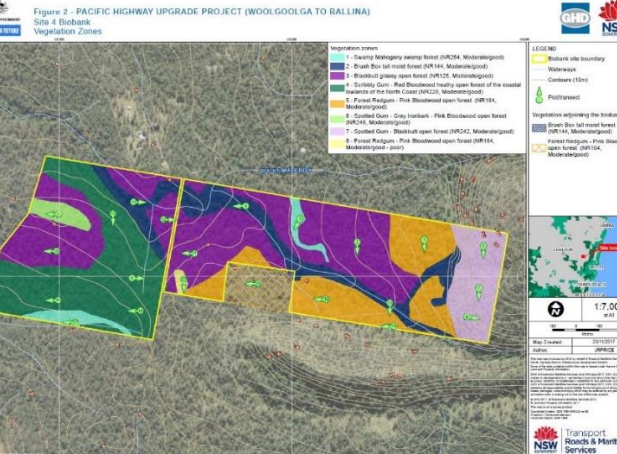
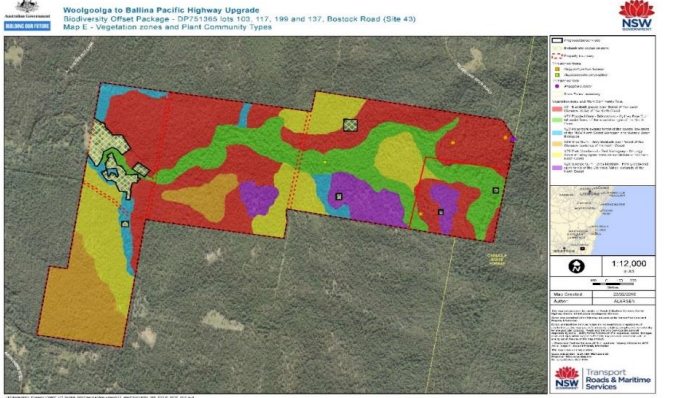
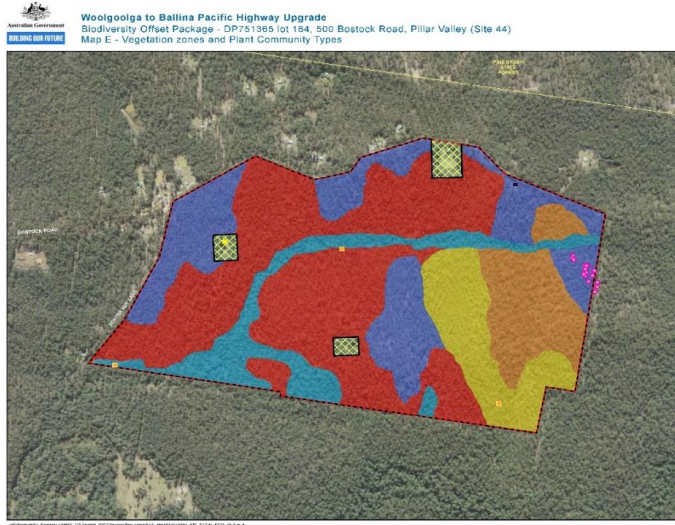


TfNSW biodiversity offset case studies: Version 2, Updated March 2023

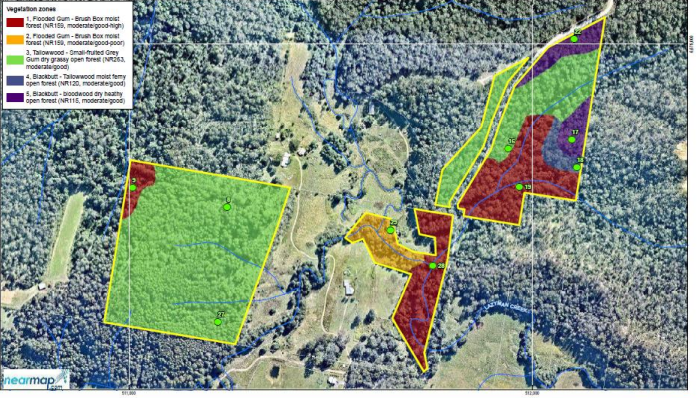
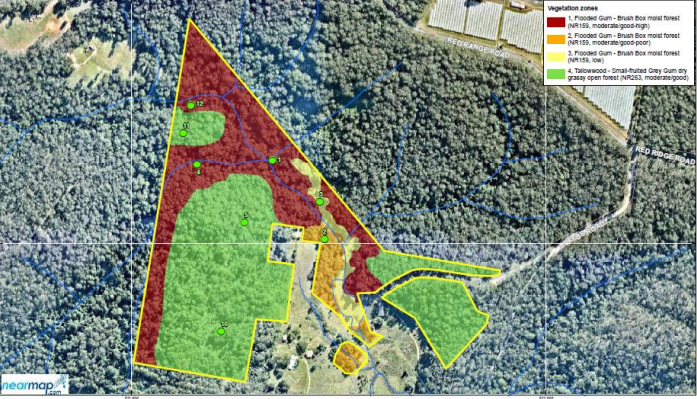
	Infrastructure project	Agreement name	Credits/ hectares	Biodiversity values present	Map of agreement
Sponsored agreements with landholders					
1	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 438 (Site 13A)	778 credits 80 ha	Grassy Woodlands Wet Sclerophyll Forests	 <p>Pacific Highway, Jacky Bulbin Flat NSW 2463 Vegetation Map</p>
2	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 439 (Site 13B)	4959 credits 437 ha	Forested Wetlands Dry Sclerophyll Forest Grassy Woodlands Wet Sclerophyll Forests Oxleyan Pygmy Perch	 <p>Pacific Highway, Jacky Bulbin Flat NSW 2463 Vegetation Map</p>

3	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 437 (Site 23)	185 credits 15.3 ha	Rainforests Forested Wetlands	
4	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 434 (Site 29)	190 credits 18 ha	Forested wetlands Wet Sclerophyll Forest (Grassy sub-formation) Wet Sclerophyll Forest (Shrubby sub-formation) Koala	

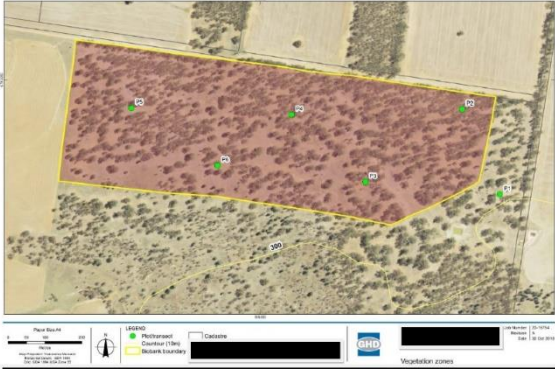

5	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 433 (Site 30)	376 credits 33 ha	<p>Dry Sclerophyll Forest</p> <p>Forested Wetlands</p> <p>Wet Sclerophyll Forests (Shrubby sub-formation)</p> <p>Koala</p>	 <p>Figure 3-2: Vegetation and habitat types and condition</p> <p>Biodiversity Offset Assessment</p> <p>JACOBS</p>
6	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 431 (Site 4)	1215 credits 111 ha	<p>Dry Sclerophyll Forest</p> <p>Forested Wetlands</p> <p>Wet Sclerophyll Forest (Grassy sub-formation)</p>	 <p>Figure 2 - PACIFIC HIGHWAY UPGRADE PROJECT (WOOLGOOLGA TO BALLINA) Site 4 Biobank Vegetation Zones</p> <p>NSW Government NSW Transport Roads & Maritime Services</p>

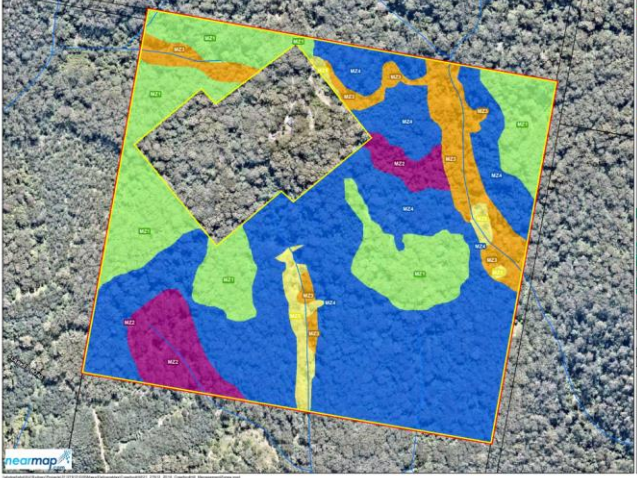
7	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 481 (Site 43)	3648 credits 387 ha	<p>Dry Sclerophyll Forest</p> <p>Forested Wetlands</p> <p>Wet Sclerophyll Forest (Grassy sub-formation)</p> <p>Wet Sclerophyll Forest (Shrubby sub-formation)</p>	 <p>Woolgoolga to Ballina Pacific Highway Upgrade Biodiversity Offset Package - DP751365 lots 103, 117, 196 and 137, Bostock Road (Site 43) Map E - Vegetation zones and Plant Community Types</p>
8	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 432 (Site 44)	1208 credits 177 ha	<p>Dry Sclerophyll Forest</p> <p>Forested Wetlands</p> <p>Wet Sclerophyll Forest (Grassy sub-formation)</p>	 <p>Woolgoolga to Ballina Pacific Highway Upgrade Biodiversity Offset Package - DP751365 lot 164, 500 Bostock Road, Pillar Valley (Site 44) Map E - Vegetation zones and Plant Community Types</p>

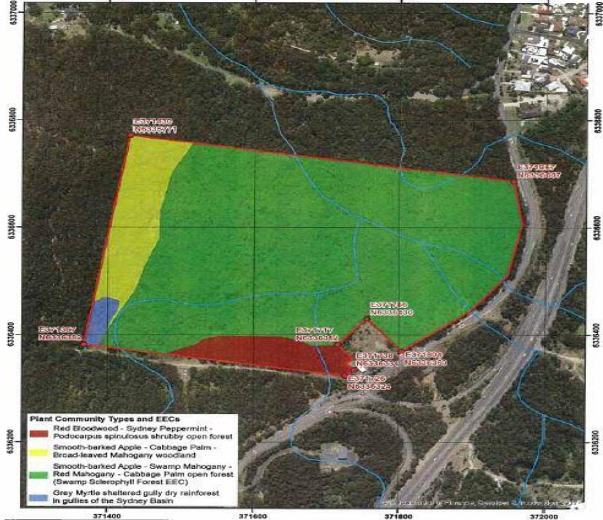
9	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 430 (Site 46)	1766 credits 180 ha	Dry Sclerophyll Forest Grassy Woodland	<p>Figure 2 - PACIFIC HIGHWAY UPGRADE PROJECT (WOOLGOOLGA TO BALLINA) Site 46 Biobank Vegetation Zones</p> <p>LEGEND Biobank site box Waterways Contours (10m) Plot/asset</p> <p>Vegetation zones 1 - Swampy Gum - Grey Ironbark - Pink Bloodwood open forest (NR246, Moderate/good) 2 - Scrubby Gum - Needle Lark Stringybark healthy open forest (NR227, Moderate/good) 3 - Heedebark Stringybark - Red Bloodwood healthy woodland (NR222, Moderate/good) 4 - Angophora sphaerandra forest and woodland (NR122, Moderate/good) 5 - Heedebark Stringybark - Large-fruited Blackbutt healthy open forest (NR120, Moderate/good) 6 - Flower Red Gum - Swampy Gum (NR121, Moderate/good)</p>
10	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 429 (Site 52)	352 credits 52ha	Dry Sclerophyll Forest Rainforests	<p>Figure 2 - PACIFIC HIGHWAY UPGRADE PROJECT (WOOLGOOLGA TO BALLINA) Site 52 Biobank Vegetation Zones</p> <p>LEGEND Biobank site box Waterways Contours (10m) Plot/asset</p> <p>Vegetation zones 1 - Blackbutt - bloodwood dry healthy open forest (NR115, Moderate/good) 2 - Black Bear - Hoopring Lily Shy Sparrow rainforest (NR110, Moderate/good) 3 - Giant Stringybark - Fig dry subtropical rainforest (NR166, Moderate/good)</p>

11	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 442 (Lot 2)	473 credits 29.7 ha	<p>Dry Sclerophyll Forests</p> <p>Wet Sclerophyll Forests (Grassy sub-formation)</p> <p>Wet Sclerophyll Forests (Shrubby sub-formation)</p> <p>Giant Barred Frog</p>	 <p>Vegetation zones</p> <ul style="list-style-type: none"> 1. Fopped Gum - Brush Box moist forest (NR155, moderate-good-high) 2. Fopped Gum - Brush Box moist forest (NR155, moderate-good-poor) 3. Tallwood - Small-fruited dry Gum dry grassy open forest (NP253, moderate-good) 4. Blackbutt - Tallwood moist fern open forest (NR125, moderate-good) 5. Blackbutt - Sclerophyll dry heathy open forest (NR110, moderate-good) <p>Legend: Lot 2 boundary, Cobaste, Waterways, Posttransect</p> <p>Scale: 0 100 200 Meters</p> <p>Map Projection: Transverse Mercator Datum: GDA 1984 Units: GDA 1984 Meters</p> <p>Roads and Maritime Services Coastal Lot 2 Biodiversity Assessment Job Number: 21-0247 Revision: 1 Date: 27 Sep 2017</p> <p>Vegetation zones Figure 2</p>
12	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 441 (Lot 712)	445 credits 30.9 ha	<p>Wet Sclerophyll Forests (Grassy sub-formation)</p> <p>Wet Sclerophyll Forests (Shrubby sub-formation)</p> <p>Giant Barred Frog</p>	 <p>Vegetation zones</p> <ul style="list-style-type: none"> 1. Fopped Gum - Brush Box moist forest (NR155, moderate-good-high) 2. Fopped Gum - Brush Box moist forest (NR155, moderate-good-poor) 3. Fopped Gum - Brush Box moist forest (NR155, low) 4. Tallwood - Small-fruited dry Gum dry grassy open forest (NP253, moderate-good) <p>Legend: Lot 712 boundary, Cobaste, Waterways, Posttransect</p> <p>Scale: 0 100 200 Meters</p> <p>Map Projection: Transverse Mercator Datum: GDA 1984 Units: GDA 1984 Meters</p> <p>Roads and Maritime Services Coastal Lot 712 Biodiversity Assessment Job Number: 21-0247 Revision: 1 Date: 27 Sep 2017</p> <p>Vegetation zones Figure 2</p>

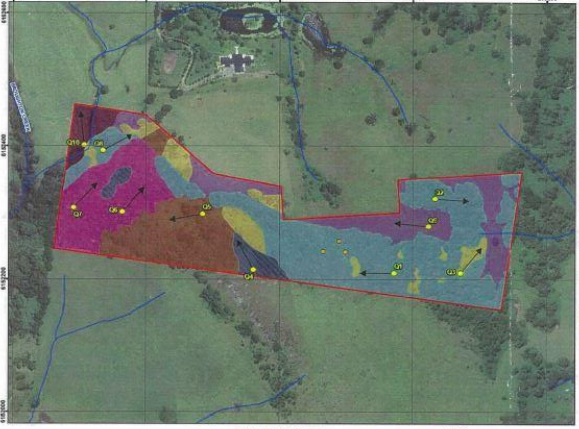

13	Foxground to Berry Bypass	BA 445 (Site 7)	249 credits 394 ha	Wet Sclerophyll Forests	
14	Foxground to Berry Bypass	BA 369 (Site 30)	181 credits 23ha	Wet Sclerophyll Coastal Swamp Forests	

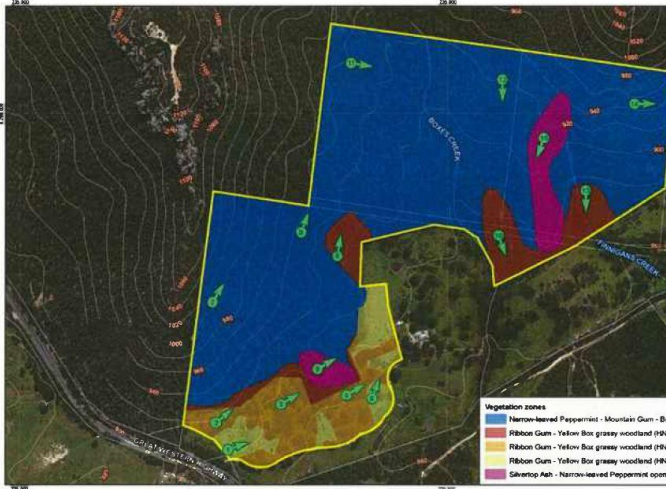
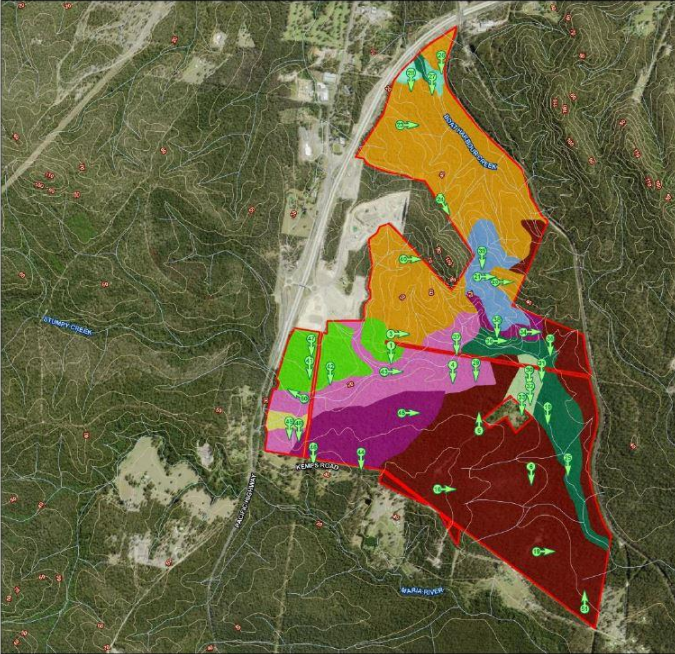
15	<p>Realignment of the Newell Highway at Grong Grong and Trewilga</p>	BA 426	<p>382 credits 41.8 ha</p>	Grassy Woodlands	<p>Vegetation zones map dated 2 October 2018</p> 
16	<p>Lisarow3B Central Coast</p>	BS0037	<p>80 credits 12.4 ha</p>	<p>Forested wetlands Melaleuca biconvexa</p>	<p>Plant Community Types, TEC, survey effort and vegetation zones</p>  <p>Proposed BSA BSM Plot locations Additional Melaleuca biconvexa plots Swamp Sclerophyll Forest EEC Zone 1: PCT 1723 Melaleuca biconvexa - Swamp Mahogany - Cabbage Palm swamp forest of the Central Coast (good) Zone 2: PCT 1723 Melaleuca biconvexa - Swamp Mahogany - Cabbage Palm swamp forest of the Central Coast (moderate) Zone 3: PCT 1723 Melaleuca biconvexa - Swamp Mahogany - Cabbage Palm swamp forest of the Central Coast (moderate) Zone 4: Cleared land</p> <p>Location: Darling Valley, NSW Lot 5P 100/29/2018 1/27/2015 1/27/2015 Data prepared: 7 August 2015 Projection: GDA 1994 MGA 2004 94 Scale: 1:10000 www.ecosys.com.au</p>

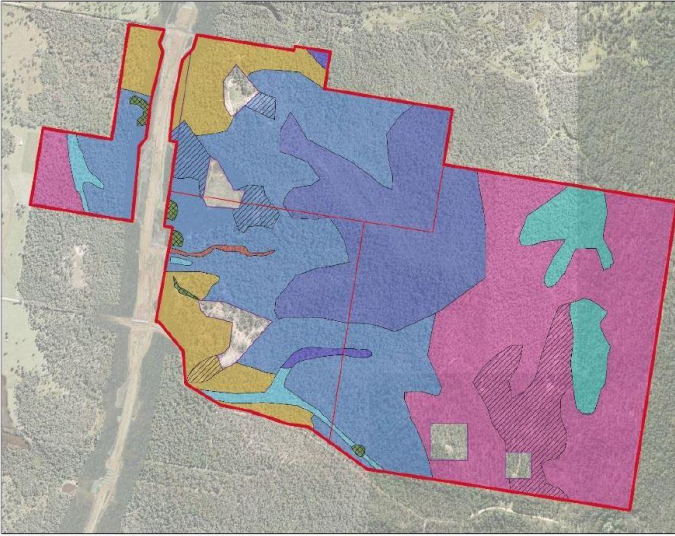

17	Coffs Harbour Bypass	BS0067	547 credits 37.8 ha	Wet Sclerophyll Forests Slender Marsdenia Koala	 <p>The map displays the Crawford Hill Stewardship Site, divided into several management zones. The legend identifies the following zones:</p> <ul style="list-style-type: none"> Wet Sclerophyll Forest (Green) Slender Marsdenia (Blue) Koala (Orange) Other zones (Purple, Yellow, etc.) <p>The map also includes a scale bar and a north arrow.</p>
	Total private land sponsorship		17,034credits 2060ha		

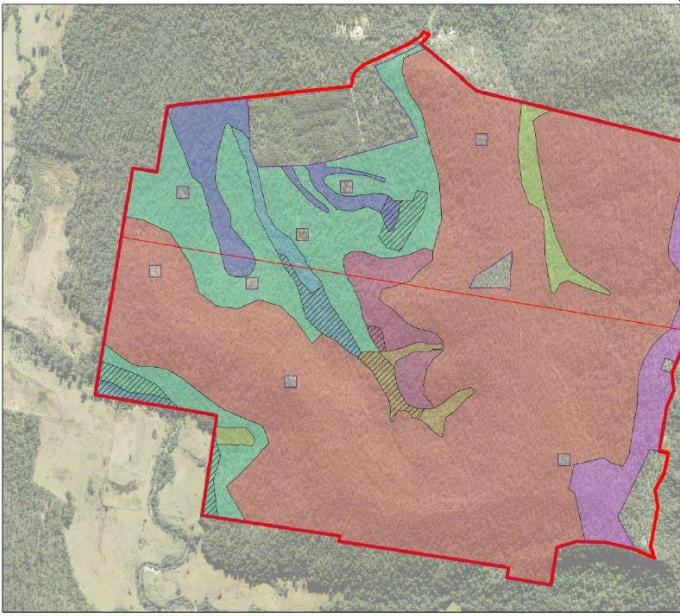
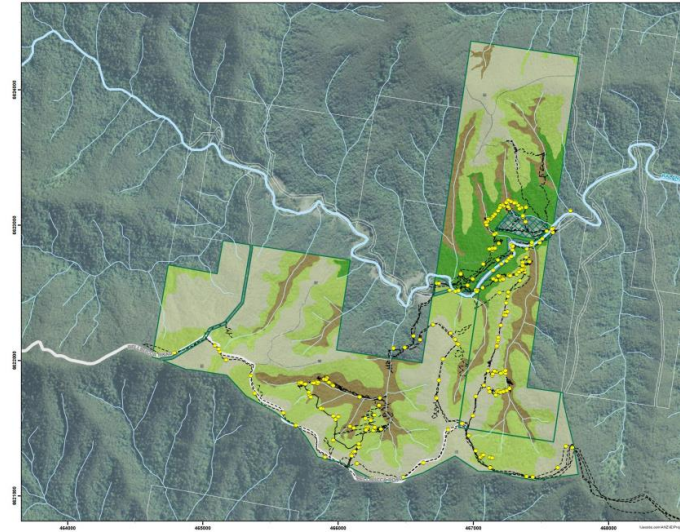
	Infrastructure project requiring offset	Agreement name	Credits generated/ hectares under agreement	Biodiversity values present	Map of agreement
Agreements over TfNSW owned lands¹					
1	Rankin Park to Jesmond, Central Coast	BA 340 (Murrays Beach)	268 credits 19.68ha	Rainforests Dry Sclerophyll Forests	

¹ TfNSW pursues a divestment strategy over these lands once the biodiversity credits are generated and the Total Fund Deposit is paid. Future landholders receive all ongoing payments from the TFD.

2	Foxground to Berry, Southern Highlands	BA 417 (site 45)	88 credits 11.2ha	<i>Zieria granulata</i> <i>Daphnandra johnsonii</i> Heathlands Rainforest Forested Wetlands	 <p>Map of Biobanking site 45 showing various habitat types and proposed areas. The map includes a legend with categories such as Proposed biobanking site, River Oak open forest, Heathlands, Rainforest, and Forested Wetlands. It also shows proposed roads and other features.</p>
3	Foxground to Berry, Southern Highlands	BA 418 (site 47)	52 credits 5.83 ha	Forested wetlands	 <p>Map of Biobanking site 47 showing forested wetlands and proposed areas. The map includes a legend with categories such as Proposed biobanking site, River Oak open forest, and Forested wetlands. It also shows proposed roads and other features.</p>

4	40 Bends Upgrade to Great Western Highway, Blue Mountains/ Central West	BA 424 (40 bends)	976 credits 60.5ha	Purple Copper Butterfly Greater Glider Southern Myotis bat Wet and Dry Sclerophyll Forests Grassy Woodlands	 <p>Vegetation zones</p> <ul style="list-style-type: none"> Narrow-leaved Peppermint - Mountain Gum - Blue Ribbon Gum - Yellow Box grassy woodland (P/N) Ribbon Gum - Yellow Box grassy woodland (P/N) Ribbon Gum - Yellow Box grassy woodland (P/N) Silvertop Ash - Narrow-leaved Peppermint zone
5	Warrel Creek to Urunga/ Oxley Highway to Kempsey	BA 428	6517 credits 499 ha	Wet Sclerophyll Forests Grassy Woodlands Dry Sclerophyll Forests Koala	

5	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 440 (Site 10)	4629 credits 394 ha	<p>Forested Wetlands</p> <p>Wet Sclerophyll Forests (Grassy sub-formation)</p> <p>Dry Sclerophyll Forests (Shrubby sub-formation)</p>	
6	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA 436 (Site 17)	331 credits 29 ha	<p>Rainforests</p> <p>Wet Sclerophyll Forests (Shrubby sub-formation)</p> <p>Koala</p>	

7	Woolgoolga to Ballina Upgrade of the Pacific Highway	BA435 Mahogany Drive (Site 25)	4467 credits 395ha	<p>Forested Wetlands</p> <p>Dry Sclerophyll Forests (Shrubby & Shrub/grass sub-formations)</p> <p>Wet Sclerophyll Forests (Grassy sub-formation)</p> <p>Moonee Quassia</p> <p>Angophora robur</p>	
8	Coffs Harbour Bypass	BS0083 Kalang River	7,258 credits 457 ha	<p>Lowland Rainforest</p> <p>Wet Sclerophyll Forests</p> <p>Koala</p> <p>Giant Barred Frog</p> <p>Southern Myotis</p> <p>Slender Marsdenia</p>	
Total TFNSW owned lands			24,586 credits 1871ha		