APPENDIX W: Collision risk assessment for Carnaby's cockatoo, fork-tailed swift and four migratory sandpiper species

Table W-1 is structured to include the heads of consideration that informed the assessment process, as follows:

- Species:
  - Each species is identified by its recognised common name
- Habitat description:
  - A brief broad characterisation of habitat in which each species frequently occurs is given as a comparative reference against the largely open habitats represented by turbine positions
- Distance to key habitats:
  - Distance from individual turbine locations to the closest wetland / habitat where migratory species have been recorded (Figure K)
  - Distance from individual turbine locations to the closest Crown reserve, DBCA managed lands and mapped Carnaby's cockatoo foraging habitat extent (Figure O)
- Abundance within the Project Area:
  - Likelihood that different species might occur within the Project Area varies with habitat requirements. Based on known records, ad hoc species observations and field study results, a qualitative (Low, Moderate or High) measure of the bird species likelihood to occur within the Project Area is provided (RPS 2010a; Ecologia Environment 2017; Ecoscape 2018; Ecoscape 2019a; Alinta Energy 2022; Alinta Energy 2024; Murdoch University 2024; BCE 2025)
- Chance of occurrence in RSA:
  - Local movements of the MNES bird species are given a qualitative (Low, Moderate or High) measure of their likelihood to occur within RSA zones 1, 2 and 3 in reference to their identified movement patterns in the local Cooljarloo and regional Dandaragan settings (RPS 2010a; Ecologia Environment 2017; Ecoscape 2018; Ecoscape 2019a; Alinta Energy 2022; Alinta Energy 2024; Murdoch University 2024; BCE 2025)
- Likelihood of Impact:
  - A qualitative (Low, Moderate or High) measure of the likelihood of collision is provided based on identified movement patterns and carcass monitoring findings from other proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024; Murdoch University 2024; BCE 2025)
- Consequences:
  - A qualitative (Unlikely to be significant, Minor, Moderate or Significant) measure of risk for each bird species is provided
- Likely level of risk:
  - Based on the preceding information an overall risk rating (Low, Moderate or High) is provided for each bird species.

Table W-1: Collision risk assessment table for Carnaby's cockatoo, fork-tailed swift and four migratory sandpiper species

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
• Turbine 1 (WTG 01) • E 358957.0013 N 6606095.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 3.1 km • Closest conservation reserve – Minyulo Nature Reserve = 2.5 km • Closest isolated vegetation / trees = 200m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024). • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 01 is anticipated to be Low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 01 is anticipated to be Low
Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Common sandpiper		Guraga >20 km (WTG 01)						Energy 2022; Alinta Energy 2024)		WTG 01 is anticipated to be Low
• Turbine 2 (WTG 02) • E 359506.0513 N 6608412.486	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 3.5 km • Closest conservation reserve – Minyulo Nature Reserve = 2.1 km • Closest isolated vegetation / trees = 300 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 02 is anticipated to be Low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 02 is anticipated to be Low
Curlew sandpiper Sharp-tailed sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Pectoral sandpiper Common sandpiper		• Lake to the north-east of Lake Guraga >20 km (WTG 01)						(Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		sandpipers from the operation of WTG 02 is anticipated to be Low
• Turbine 3 (WTG 03) • E 359106.1206 N 6608976.446	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 3.1 km • Closest conservation reserve – Minyulo Nature Reserve = 2.7 km • Closest isolated vegetation / trees = 200 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas. Noting that Carnaby's cockatoos were recorded flying approximately 250 metres north of the turbine over native vegetation	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 03 is anticipated to be Low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial		• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 03 is anticipated to be Low
Curlew sandpiper	Wetland / lake	• Sandpiper record to the north-west			Low. The closest key migratory bird habitat is	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when			Low. No migratory sandpiper mortality has	Unlikely to be significant	Based on the preceding

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper		of the Project Area >6.6 km • Lake to the north-east of Lake Guraga >20 km	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Lake Guraga, over 18 km to the south of the Project Area	limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		information, the overall risk to the migratory sandpipers from the operation of WTG 03 is anticipated to be Low
• Turbine 4 (WTG 04) • E 359828.0015 N 6609356.496	Carnaby's cockatoo	Banksia woodland, proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 3.9 km • Closest conservation reserve – Minyulo nature reserve = 2.3 km • Closest isolated vegetation / trees = 100 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas. Noting that Carnaby's cockatoos were recorded flying approximately 250 metres north of the turbine over native vegetation	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 04 is anticipated to be low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial		• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 04 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of WTG 04 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
• Turbine 5 (WTG 05) • E 359204.502 N 6611980.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Cro1wn reserve – Crown reserve 27216 = 3.6 km • Closest conservation reserve – Minyulo Nature Reserve = 4.8 km • Closest isolated vegetation / trees = 100 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 05 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 05 is anticipated to be Low
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Common sandpiper		Guraga >20 km (WTG 01)						Energy 2022; Alinta Energy 2024)		WTG 05 is anticipated to be Low
• Turbine 6 (WTG 06) • E 359866.0015 N 6612096.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 4.3 km • Closest conservation reserve – Minyulo Nature Reserve = 4.5 km • Closest isolated vegetation / trees = 350 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 06 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 06 is anticipated to be Low
	Curlew sandpiper Sharp-tailed sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Pectoral sandpiper Common sandpiper		• Lake to the north-east of Lake Guraga >20 km (WTG 01)						(Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		sandpipers from the operation of WTG 06 is anticipated to be Low
• Turbine 7 (WTG 07) • E 361218.0015 N 6612121.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 5.6 km • Closest conservation reserve – Minyulo Nature Reserve = 3.6 km • Closest isolated vegetation / trees = 50 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas. • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 07 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 07 is anticipated to be Low
	Curlew sandpiper	Wetland / lake	• Sandpiper record to the north-west		Low. The closest key migratory bird habitat is	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when			Low. No migratory sandpiper mortality has	Unlikely to be significant	Based on the preceding

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper		of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Lake Guraga, over 18 km to the south of the Project Area	limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		information, the overall risk to the migratory sandpipers from the operation of WTG 07 is anticipated to be Low
• Turbine 8 (WTG 08) • E 360868.0016 N 6612828.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 5.5 km • Closest conservation reserve – Minyulo Nature Reserve = 4.3 km • Closest isolated vegetation / trees = 250 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas. • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025)	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 08 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 08 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of WTG 08 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
• Turbine 9 (WTG 09) • E 360890 N 6613532.637	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 5.9 km • Closest conservation reserve – Minyulo Nature Reserve = 4.8 km • Closest isolated vegetation / trees = 50 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas. • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025)	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 09 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 09 is anticipated to be Low
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Common sandpiper		Guraga >20 km (WTG 01)						Energy 2022; Alinta Energy 2024)		WTG 09 is anticipated to be Low
• Turbine 10 (WTG 10) • E 358590.0855 N 6614440.341	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 4.9 km • Closest conservation reserve – Conservation Park = 5.7 km • Closest isolated vegetation / trees = 120 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 10 is anticipated to be Low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial		• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 10 is anticipated to be Low
Curlew sandpiper Sharp-tailed sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Pectoral sandpiper Common sandpiper		• Lake to the north-east of Lake Guraga >20 km (WTG 01)						(Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		sandpipers from the operation of WTG 10 is anticipated to be Low
• Turbine 11 (WTG 11) • E 358937 N 6615418	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 5.9 km • Closest conservation reserve – Badgingarra National Park = 6.3 km • Closest isolated vegetation / trees = 15 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025)	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 11 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 11 is anticipated to be Low
	Curlew sandpiper	Wetland / lake	• Sandpiper record to the north-west		Low. The closest key migratory bird habitat is	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when			Low. No migratory sandpiper mortality has	Unlikely to be significant	Based on the preceding

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper		of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Lake Guraga, over 18 km to the south of the Project Area	limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species			been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		information, the overall risk to the migratory sandpipers from the operation of WTG 11 is anticipated to be Low
• Turbine 12 (WTG 12) • E 358853.0017 N 6616050.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 41985 = 6.3 km • Closest conservation reserve – Badgingarra National Park = 5.9 km • Closest isolated vegetation / trees = 250 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 12 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 12 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of WTG 12 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
• Turbine 13 (WTG 13) • E 359854.0017 N 6616184.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 7.0 km • Closest conservation reserve – Badgingarra National Park = 6.8 km • Closest isolated vegetation / trees = 100 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 13 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 13 is anticipated to be Low
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Common sandpiper		Guraga >20 km (WTG 01)						Energy 2022; Alinta Energy 2024)		WTG 13 is anticipated to be Low
• Turbine 14 (WTG 14) • E 361896.0017 N 6616801.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 8.8 km • Closest conservation reserve – Minyulo Nature Reserve= 7.2 km • Closest isolated vegetation / trees = 180 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025)	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 14 is anticipated to be Low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial		• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 14 is anticipated to be Low
Curlew sandpiper Sharp-tailed sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Pectoral sandpiper Common sandpiper		• Lake to the north-east of Lake Guraga >20 km (WTG 01)						(Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		sandpipers from the operation of WTG 14 is anticipated to be Low
• Turbine 15 (WTG 15) • E 361266.0017 N 6616955.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 27216 = 8.5 km • Closest conservation reserve – Minyulo Nature Reserve= 7.5 km • Closest isolated vegetation / trees = 50 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025)	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 15 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 15 is anticipated to be Low
	Curlew sandpiper	Wetland / lake	• Sandpiper record to the north-west		Low. The closest key migratory bird habitat is	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when			Low. No migratory sandpiper mortality has	Unlikely to be significant	Based on the preceding

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper		of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Lake Guraga, over 18 km to the south of the Project Area	limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		information, the overall risk to the migratory sandpipers from the operation of WTG 15 is anticipated to be Low
• Turbine 16 (WTG 16) • E 359683.364 N 6617433.141	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 41985 = 7.2 km • Closest conservation reserve – Badgingarra National Park = 6.3 km • Closest isolated vegetation / trees = 50 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas. • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 16 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 16 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper Common sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake Guraga >20 km (WTG 01)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of WTG 16 is anticipated to be Low

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
• Turbine 17 (WTG 17) • E 360845.0018 N 6619471.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 41985 = 8.5 km • Closest conservation reserve – Badgingarra National Park = 7.3 km • Closest isolated vegetation / trees = 300 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas. • High. There are eight night-roosts sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025).	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 17 is anticipated to be Low
	Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 17 is anticipated to be Low
	Curlew sandpiper Sharp-tailed sandpiper Pectoral sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17) • Lake to the north-east of Lake	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory sandpipers from the operation of

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Common sandpiper		Guraga >20 km (WTG 01)						Energy 2022; Alinta Energy 2024)		WTG 17 is anticipated to be Low
• Turbine 18 (WTG 18) • E 360775.0018 N 6620118.496	Carnaby's cockatoo	Banksia woodland, Proteaceous heath	• Closest Crown reserve – Crown reserve 41985 = 8.5 km • Closest conservation reserve – Badgingarra National Park = 7.3 km • Closest isolated vegetation / trees = 350 m	• Seasonal roosting and foraging visitor and potential breeding visitor to the Project Area • High within the transmission line alignment, which contains large, consolidated extents of high-quality foraging habitat • Low proximate to the turbine locations, which are situated in cleared agricultural paddocks and spatially separated from the key foraging areas	• Carnaby's cockatoo is a seasonal foraging, breeding and roosting visitor to the Cooljarloo, Cataby and Badgingarra areas. • High. There are eight night-roost sites and five roost areas within 6 km of the Project Area and an additional six night-roost sites within 12 km. The Badgingarra and Cataby important breeding areas are located with 6 km of the Project Area, and breeding trees are recorded in Minyulo Nature Reserve	• Low. Carnaby's cockatoo flock movements generally occur along lowland vegetation corridors within valleys (RPS 2010a; Murdoch University 2024) • For over 148 separate flights, Carnaby's cockatoos were observed flying below 44 metres for 99.60% of the recorded bird time (BCE 2025)	• Low. For over 148 separate flights, Carnaby's cockatoos were observed flying above 44 metres for 0.40% of the recorded bird time. Furthermore, these four flights were recorded of single birds flying at 40 metres or above and were in the lower areas of the landscape (BCE 2025). There were no records of Carnaby's cockatoo occurring within the assessed RSA (i.e. 40–152 metres) in ridge top contexts RPS (2010a). • Low. There is a low risk that the species may traverse turbine locations when migrating west from the Moora breeding area	Low. There were no reports of Carnaby's cockatoo flying above 152 metres by RPS (2010a) and BCE (2025)	Low. No Carnaby's cockatoo bird strikes have been reported by proximate Dandaragan wind farms (Ecoscape 2019b; Ecoscape 2022; Alinta Energy 2022; Alinta Energy 2024), which have significant seasonal populations. This may be due to Carnaby's cockatoo's visual detection of the turbine blades (Smales 2006) and avoidance of moderate to high wind velocities (RPS 2010a) or operating turbines (Mike Bamford pers. obs.).	Unlikely to be significant	Based on the preceding information, the overall risk to Carnaby's cockatoo from the operation of WTG 18 is anticipated to be Low
Fork-tailed swift	Aerial	N/A. Fork-tailed swift is almost exclusively aerial	• No fork-tailed swifts were seen or heard during the 2024-2025 site utilisation survey (BCE 2025). No fork-tailed swifts have been encountered during a 30-year monitoring project in the adjacent Cooljarloo Mine, and Dr Mike Bamford has observed the species twice in the region during a bird-watching career spanning nearly half a century. • Low. Likely to occur very infrequently over the Project Area.	Low. . Likely to occur very infrequently over the Project Area.	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. There is potential for this species to fly at RSA height if flocks were to move through the area under some seasonal conditions	Low. Fork-tailed swifts fly from less than 1 metre to at least 300 metres above ground and higher	Low. Fork-tailed swift has considerable aerial ability and is likely to easily avoid collision. No fork-tailed swift mortality has been reported at either the Badgingarra or Yandin wind farms (Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024). Fork-tailed swifts have not been recorded at the Project Area, or during a 30-year monitoring project in the adjacent Cooljarloo Mine and has been observed twice by Dr Mike Bamford in the region during a bird-watching career spanning nearly half a century (BCE 2025). The species is likely to occur very infrequently over the Project Area.	Unlikely to be significant	Based on the preceding information, the overall risk to the fork-tailed swift from the operation of WTG 18 is anticipated to be Low
Curlew sandpiper Sharp-tailed sandpiper	Wetland / lake	• Sandpiper record to the north-west of the Project Area >6.6 km (WTG 17)	Unlikely. There is no habitat within the Project Area for migratory sandpipers	Low. The closest key migratory bird habitat is Lake Guraga, over 18 km to the south of the Project Area	Unlikely. Migratory sandpipers are likely to follow the open water habitats through the Moore River catchment from the north when limited open water resources are available and are extremely unlikely to traverse the Project Area where no habitat exists for these species.			Low. No migratory sandpiper mortality has been reported at either the Badgingarra or Yandin wind farms	Unlikely to be significant	Based on the preceding information, the overall risk to the migratory

Turbine no. and location	MNES	Habitat description	Distance to key habitat (ha)	Abundance within Project Area	Chance of occurrence within Project Area vicinity	Chance of occurrence in Zone 1 (anticipated 0 – 44 metres)	Chance of occurrence in Zone 2 (anticipated 44 – 206 metres) / RSA	Chance of occurrence in Zone 3 (anticipated above 206 metres)	Likelihood of impact	Consequence	Likely level of risk
	Pectoral sandpiper Common sandpiper		• Lake to the north-east of Lake Guraga >20 km (WTG 01)						(Ecoscape 2019b; Ecoscape 2020; Alinta Energy 2022; Alinta Energy 2024)		sandpipers from the operation of WTG 18 is anticipated to be Low