

3.5. KARIKILI BIRD SANCTUARY

- ❖ **State / Union Territory:** Tamil Nadu
- ❖ **Name and address of person (s) compiling this information:**
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Section 1: Identification, Location and Jurisdiction

- 1.1 *Name of the Wetland:* Karikili Bird Sanctuary
- 1.2 *Name of the Village (s), Tehsil (s), Municipal area (s):* Karikili, Mangalam, Maduranthagam
- 1.3 *Name of the District (s) in which Wetlands complex located:* Chengalpattu
- 1.4 *Geographical coordinates:*
 - ▶ Latitude: 12°35'56" N
 - ▶ Longitude: 79°50'32" E
- 1.5 *Name of the Department/ Agency which has jurisdiction over Wetland/ Wetland complex:* Forest Department

Section 2: Site Characteristics

- 2.1 *Area of Wetland:* 58.43 ha
- 2.2 *Wetland type:*

Category	Subcategory
<ul style="list-style-type: none"> ✓ Natural (Inland) 	<ul style="list-style-type: none"> <input type="checkbox"/> Permanent lakes ✓ Seasonal/ intermittent lakes <input type="checkbox"/> Permanent streams/ creeks <input type="checkbox"/> Seasonal/ intermittent streams/ creeks <input type="checkbox"/> Oxbow <input type="checkbox"/> River floodplain <input type="checkbox"/> Permanent freshwater marshes <input type="checkbox"/> Seasonal/ intermittent freshwater marshes <input type="checkbox"/> Shrub-dominated Wetlands <input type="checkbox"/> Tree-dominated Wetlands <input type="checkbox"/> Geothermal Wetlands <input type="checkbox"/> Karst and other subterranean hydrological

	systems
<input type="checkbox"/> Natural (Coastal)	<input type="checkbox"/> Coastal lagoon <input type="checkbox"/> Estuary <input type="checkbox"/> Intertidal mud, sand or salt flats <input type="checkbox"/> Mangroves <input type="checkbox"/> Coral reefs
<input type="checkbox"/> Human-made	<input type="checkbox"/> Aquaculture pond <input type="checkbox"/> Tank <input type="checkbox"/> Saltpan <input type="checkbox"/> Dam/ Reservoir

2.3 *Depth (m):* Average - 1.5; Maximum - 3

2.4 *Elevation (m above mean sea level):* 50

2.5 *Water regimes*

a) Main source of water

- Rainfall inflow from river
- Groundwater
- Catchment runoff
- Direct/ indirect inflow from river
- Others, please specify:
- Name of River/ Canal System:

b) Water performance

- Mostly permanent
- Mostly intermittent

c) Destination of water from Wetland

- Feeds groundwater river to sea
- To downstream catchment

d) Water pH

- Acid (< 5.5)
- Circumneutral (5.5-7.5)
- Alkaline (> 7.5)

e) Water salinity

- Fresh (< 0.5 g/l)
- Brackish (0.5-50 g/l)
- Euhaline (50-50 g/l)
- Hypersaline (> 50 g/l)
- Not known

- f) Nutrients in water
 - Eutrophic
 - Mesotrophic
 - Oligotrophic
 - Not known

2.6 *Climatic setting*

- a) Annual rainfall/ Snowfall (mm): 262.1
- b) Temperature (°C) Minimum 24.55 ; Maximum 39.5
- c) Humidity (%) Minimum 70 ; Maximum 75.5

2.7 *Area of zone of influence (in ha):* 618.68 ha (with an irregular radius of 146 km)

2.8 *Major land use within zone of influence*

Land Use	Percentage
Forest	: 0%
Vegetation (Plantation)	: 15%
Agriculture	: 79%
Settlements (Rural)	: 5%
Settlements (Urban)	: 0%
Industrial	: 0%
Waterbody	: 1%

2.9 *Map of Wetland complex and zone of influence:* Enclosed as Annexure 3.5 (Fig. 3.5.1-3.5.2)

Section 5: Biodiversity

- 3.1 *Notable plant species present in Wetland:* The Wetland is home to a diverse range of plant species, totaling 63 species (refer to Table 3.5.1 in Annexure 3.5).
- 3.2 *Notable animal species present in Wetland:* The Wetland supports a variety of animal species, with a total of 184 recorded species. This includes 3 mammal species, 7 reptile species, 8 amphibian species, 144 bird species, and 22 species of butterflies (refer to Table 3.5.2-3.5.3 in Annexure 3.5).
- 3.3 *Species of conservation significance:* Highlighted in Table 3.5.1-3.5.3.
- 3.4 *Major plant invasive alien species:* The Wetland supports 7 plant invasive species (refer to Table 3.5.4 in Annexure 3.5).
- 3.5 *Major animal invasive alien species:* Not available.

Section 4: Ecosystem Services

Importance	Relevance	Details
Source of drinking water for people living and around	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Source of water for agriculture	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Surplused from the Wetland and then supplied to the fields, only when it reaches full supply level (FSL)
Fisheries	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Cultivation of aquatic food plants	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
For buffalo wallowing and use of domesticated animals	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Medicinal plants	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Few Medicinal plants around the Wetland. Which is listed in Table 3.5.5 in Annexure 3.5
Is a recreational site	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Receives a good population of nature enthusiasts
Buffering communities from extreme events as floods and storms	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Groundwater recharge	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Major source of ground water recharge
Water purification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Acts as a sink for sediments	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	significant runoff from the surrounding catchment area
Has significant cultural and religious values	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Is a site for recreation and tourism	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Receives a good population of nature enthusiasts as tourists
Supports noteworthy plants species	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Support noteworthy animal species	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Site of high congregation of migratory water birds	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Provides a suitable site for the high congregation of migratory water birds.

Supports life cycle of fish or amphibians	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Almost 8 variants of amphibians has been surviving
Mining	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Any other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Section 5: Pre-Existing Rights and Privileges

Nature of right and privilege	Relevant for the site	Does this negatively impact the Wetland's ecological health?	Brief description
Community Fishing (without any lease or permission from government department)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Fishing under lease from government department	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Harvest of plants (without any lease or permission from government department)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Harvest of plants under lease from government department	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Agriculture or horticulture within Wetland	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Grazing	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Religious practices	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Withdrawal of water for domestic use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	

Withdrawal of water for agriculture or fisheries	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	When it reaches the FSL
Bathing or wallowing of domestic animals	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Plying of boats	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Any other	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	

Section 6: Present and Potential Threats

Threat	Degree	Present/ Potential	Additional info.
Changes in water inflow and outflow	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Pollution	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Unsustainable harvest of biological resources	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Mining	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Siltation	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Encroachment	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Spread of invasive species	<input type="checkbox"/> High	<input checked="" type="checkbox"/> Present	Listed in Table 3.5.5 in Annexure 3.5

	<input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	<input type="checkbox"/> Potential	
Any others	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	

Section 7: Activities Proposed to Be Prohibited (other than those listed in Rule 5 (2) of Wetlands Rules and Regulated

Activity	Whether prohibited or regulated	Regulation within Wetlands zone of influence	If regulated indicates the level of regulation	Name of department/ agency responsible for regulation/ prohibition	Additional info.
Withdrawal of water / impoundment/diversion or any other hydrological intervention		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			
Harvesting of resources (living / non-living)		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			
Grazing		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			
Discharge of treated sewage/ effluent / wastewater		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			

Construction of boat jetties, and facilities for temporary use, as pantoon bridges		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			
Aquaculture, agriculture and horticulture activities within the Wetland boundaries.		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			
Any others		<input type="checkbox"/> Wetland/ Wetland complex boundary <input type="checkbox"/> Zone of influence			

Section 8: Activities Proposed to be permitted

Activity	Relevance	Within Wetlands or zone of influence	Additional info.
Withdrawal of water for agriculture		<input type="checkbox"/> Wetland/ Wetlands complex boundary <input checked="" type="checkbox"/> Zone of influence	May permitted, since the surrounding area is rich in agriculture

Section 9: Listing of Available Scientific Resources Used

1. Aengals, R., Sathish Kumar, V. M., Palot, M. J., & Ganesh, S. R. (2018). *A checklist of reptiles of India* (Version 3.0). 35 pp. Online publication available at www.zsi.gov.in (Last update: May 2018).
2. Ali, S. (2002). *The book of Indian birds* (13th Revised Edition). Oxford University Press, New Delhi, 326 pp.
3. Bibby, C. J., Burgess, N. D., & Hill, D. A. (1993). *Bird census techniques*. Academic Press Limited, London, 257 pp.
4. Gamble, J. S., & Fischer, C. E. C. (1915–1935). *Flora of Presidency of Madras*. Adlard and Son, London, pp. 1–3.
5. Grimmet, R., Inskipp, C., & Inskipp, T. (2000). *Pocket guide to the birds of the Indian subcontinent*. Oxford University Press, New York, 384 pp.

6. Henry, A. N., Chithra, V. N., & Balakrishnan, P. (1989). *Flora of Tamil Nadu India. Series I: Analysis. Vol. III*. Botanical Survey of India, Coimbatore.
7. Kamalakannan, M., & Nameer, P. O. (2019). A checklist of mammals of Tamil Nadu, India. *Journal of Threatened Taxa*, 11(8), 13992–14009. [https://doi.org/10.11609/jott.4705.11.8.13992–14009](https://doi.org/10.11609/jott.4705.11.8.13992-14009).
8. Kehimkar, I. (2008). *The book of Indian butterflies*. Bombay Natural History Society, 497 pp.
9. Matthew, K. M. (1981). *The material for the flora of the Tamilnadu Carnatic*, Madras, India.
10. Matthew, K. M. (1982). *Illustrations on the flora of the Tamilnadu Carnatic* (Vol. II). The Diocesan Press, Madras, India.
11. Matthew, K. M. (1983). *The flora of Tamilnadu Carnatic* (Vol. III). The Diocesan Press, Madras, India.
12. Matthew, K. M. (1988). *Further illustrations on the flora of the Tamilnadu Carnatic* (Vol. IV). The Diocesan Press, Madras, India.
13. Nair, N. C., & Henry, A. N. (1983). *Flora of Tamil Nadu, India. Series I, Vol. 1*. Botanical Survey of India, Southern Circle, Coimbatore, 1–184.

ANNEXURE 3.5

Fig. 3.5.1. Zone of Influence of Karikili Bird Sanctuary

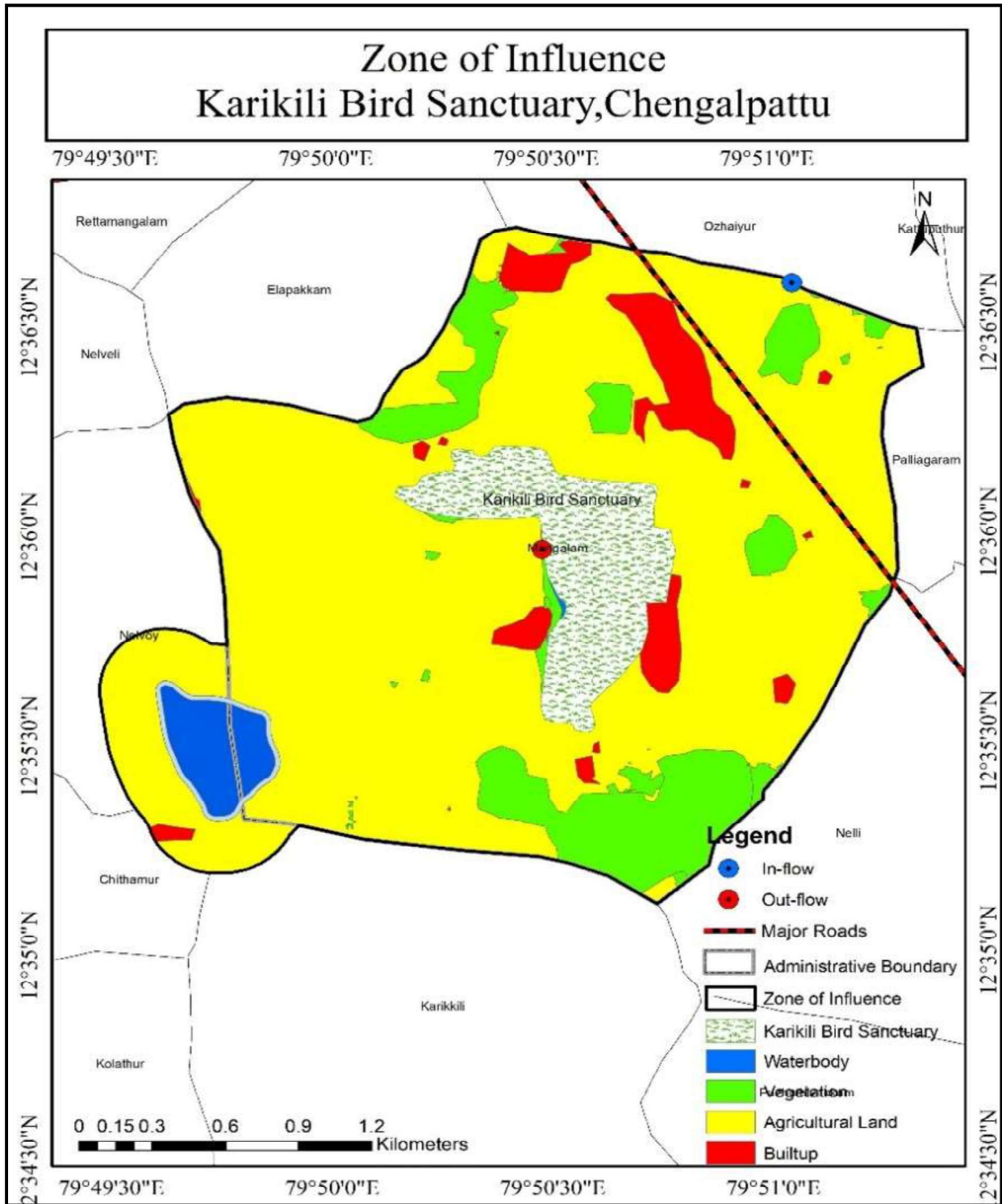


Fig. 3.5.2. Map (2015 vs. 2024) and Land Use/ Land Cover of Karikili Bird Sanctuary

Map of the Wetland in 2015



Map of the Wetland in 2024



Land Use/ Land Cover of the Wetland

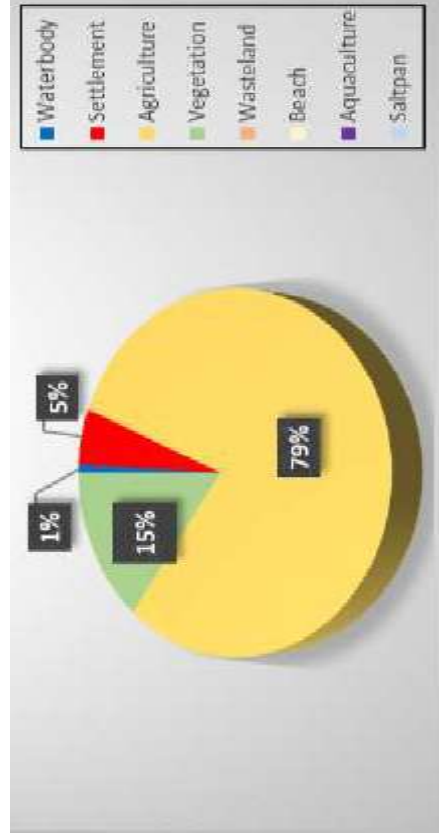


Table 3.5.1. IUCN Status of Floral Species in Karikili Bird Sanctuary

S. No.	Scientific Name of the Species	Family	Tamil Name	Habit	IUCN
1.	<i>Abrus precatorius</i>	Fabaceae	Kundumani	Climber	NE
2.	<i>Abutilon indicum</i>	Malvaceae	Thuthi	Shrub	LC
3.	<i>Acacia nilotica</i>	Fabaceae	Karuvel	Tree	LC
4.	<i>Acalypha indica</i>	Euphorbiaceae	Kuppaimeni	Herb	NE
5.	<i>Acanthospermum hispidum</i>	Compositae		Herb	NE
6.	<i>Achyranthes aspera</i>	Amaranthaceae	Nayurivi	Herb	NE
7.	<i>Aerva lanata</i>	Amaranthaceae	Peelai	Herb	NE
8.	<i>Alangium salvifolium</i>	Alangiaceae	Azhinjil	Tree	LC
9.	<i>Albizia lebbeck</i>	Mimosaceae	Vaagai	Tree	LC
10.	<i>Albizia saman</i>	Fabaceae	Rain tree	Tree	LC
11.	<i>Alternanthera pungens</i>	Amaranthaceae		Herb	NE
12.	<i>Alternanthera sessilis</i>	Amaranthaceae	Ponnanganni	Herb	NE
13.	<i>Barringtonia acutangula</i>	Lecythidaceae	Neerkadambu	Tree	LC
14.	<i>Boerhavia diffusa</i>	Nyctaginaceae	Mookarattai	Herb	NE
15.	<i>Borassus flabellifer</i>	Arecaceae	Panai	Tree	LC
16.	<i>Brachiaria ramosa</i>	Poaceae		Grass	NE
17.	<i>Calotropis gigantea</i>	Asclepiadaceae	Erukku	Shrub	NE
18.	<i>Cardiospermum halicacabum</i>	Sapindaceae	Mudakotthan	Herb	NE
19.	<i>Chloris barbata</i>	Poaceae	Kodaipul	Grass	NE
20.	<i>Cleome viscosa</i>	Capparidaceae	Nai vaelai	Herb	NE
21.	<i>Commelina benghalensis</i>	Commelinaceae	Kanaangozhai	Herb	LC
22.	<i>Corchorus capsularis</i>	Tiliaceae	Sanal	Herb	NE
23.	<i>Cynodon dactylon</i>	Poaceae	Aruhampul	Grass	NE
24.	<i>Datura metal</i>	Solanaceae	Karu Oomatthai	Herb	NE
25.	<i>Digitaria abludens</i>	Poaceae		Grass	NE

26.	<i>Digitaria ciliaris</i>	Poaceae		Grass	NE
27.	<i>Eragrostis viscosa</i>	Poaceae	-	Grass	LC
28.	<i>Ficus benghalensis</i>	Moraceae	Aal	Tree	LC
29.	<i>Ficus hispida</i>	Moraceae	Peyatthi	Tree	LC
30.	<i>Ficus racemosa</i>	Moraceae	Atthi	Tree	LC
31.	<i>Ficus religiosa</i>	Moraceae	Arasu	Tree	LC
32.	<i>Hyptis suaveolens</i>	Labiatae		Shrub	NE
33.	<i>Ipomoea carnea</i>	Convolvulaceae		Shrub	NE
34.	<i>Ischaemum indicum</i>	Poaceae	-	Grass	LC
35.	<i>Jatropha gossypifolia</i>	Euphorbiaceae	Kaatu-amanakku	Shrub	NE
36.	<i>Justicia procumbens</i>	Acanthaceae	Ottupillu	Herb	NE
37.	<i>Justicia prostrata</i>	Acanthaceae		Herb	NE
38.	<i>Lantana camara</i>	Verbenaceae	Unnichedi	Shrub	LC
39.	<i>Lansium parasiticum</i>	Meliaceae	Ootuuni maram	Tree	LC
40.	<i>Leucas aspera</i>	Labiatae	Thumbai	Herb	LC
41.	<i>Mollugo cerviana</i>	Molluginaceae	Parpaadagam	Herb	NE
42.	<i>Morinda tinctoria</i>	Rubiaceae	Manjanathi	Tree	NE
43.	<i>Mukia leiosperma</i>	Cucurbitaceae		Climber	NE
44.	<i>Passiflora foetida</i>	Passifloraceae	Poonaipidukku	Climber	NE
45.	<i>Phyllanthus reticulatus</i>	Euphorbiaceae	Inki pazham	Shrub	LC
46.	<i>Senna occidentalis</i>	Caesalpiniaceae	Thagarai	Shrub	NE
47.	<i>Senna tora</i>	Caesalpiniaceae	Oosi thagarai	Herb	NE
48.	<i>Solanum trilobatum</i>	Solanaceae	Thoodhuvalai	Herb	NE
49.	<i>Spermacoce hispida</i>	Rubiaceae	Nathaichoori	Herb	NE
50.	<i>Sphaeranthus amaranthoides</i>	Compositae	Siva karandhai	Herb	LC
51.	<i>Streblus asper</i>	Moraceae	Kuruvipala	Tree	LC
52.	<i>Syzygium cumini</i>	Myrtaceae	Naval	Tree	LC

53.	<i>Terminalia arujuna</i>	Combretaceae		Tree	LC
54.	<i>Terminalia catappa</i>	Combretaceae	Naattu Badaam	Tree	NE
55.	<i>Tephrosia purpurea</i>	Fabaceae	Kozhinji	Herb	NE
56.	<i>Thevetia peruviana</i>	Apocynaceae	Ponnarali	Shrub	NE
57.	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber	NE
58.	<i>Trachys muricata</i>	Poaceae	-	Grass	LC
59.	<i>Trianthema portulacastrum</i>	Aizoaceae		Herb	NE
60.	<i>Tridax procumbens</i>	Compositae	Vettukkaaya-thazhai	Herb	LC
61.	<i>Tylophora indica</i>	Asclepiadaceae	Naippalai	Climber	NE
62.	<i>Typha angustifolia</i>	Typhaceae	Sambu	Herb	LC
63.	<i>Xanthium indicum</i>	Compositae	Marul oomatham	Herb	LC

Table 3.5.2. IUCN Status of Selected Fauna Species in Karikili Bird Sanctuary

S. No.	Scientific Name of the Species	Family	Common Name	IUCN
<i>A. Mammal</i>				
4.	<i>Funambulus pennantii</i>	Sciuridae	Five striped Palm squirrel	LC
5.	<i>Urva edwardsii</i>	Herpestidae	Indian grey mongoose	LC
6.	<i>Rattus argentiventer</i>	Muridae	Field Rat	LC
<i>B. Reptile</i>				
1.	<i>Calotes versicolor</i>	Agamidae	Oriental Garden lizard	LC
2.	<i>Ptyas mucosa</i>	Colubridae	Indian Rat Snake	LC
3.	<i>Psammophilus dorsalis</i>	Agamidae	Peninsular Rock Agama	LC
4.	<i>Xenochrophis piscator</i>	Colubridae	Checkered keelback	LC
5.	<i>Ophisops leschenaultii</i>	Lacertidae	Leschenault's snake-eye	LC

6.	<i>Sitana ponticeriana</i>	Agamidae	Fan-throated lizard	LC
7.	<i>Bungarus caeruleus</i>	Elapidae	Common krait	LC
<i>C. Amphibian</i>				
1.	<i>Bufo scaber</i>	Bufoidea	Fergusons toad	LC
2.	<i>Duttaphrymus melanostictus</i>	Bufoidea	Common indian toad	LC
3.	<i>Kaloula taprobanica</i>	Microhylidae	Painted frog	LC
4.	<i>Uperodon systoma</i>	Microhylidae	Marbled ballon frog	LC
5.	<i>Polypedates maculatus</i>	Rhacophoridae	Common tree frog	LC
6.	<i>Euphlyctis cyanophlyctis</i>	Dicroglossidae	Indian skipper frog	LC
7.	<i>Fejervarya caperata</i>	Dicroglossidae	Cricket frog	LC
8.	<i>Fejervarya limnocharis</i>	Dicroglossidae	Paddy field frog	LC
<i>D. Butterfly</i>				
1.	<i>Euthalia nais</i>	Nymphalidae	Baronet	LC
2.	<i>Tirumala limniace</i>	Nymphalidae	Blue Tiger	LC
3.	<i>Euploea core</i>	Nymphalidae	Common crow	LC
4.	<i>Catopsilia pomona</i>	Pieridae	Common Emigrant	NE
5.	<i>Melanitis leda</i>	Nymphalidae	Common evening brown	LC
6.	<i>Eurema hecabe</i>	Pieridae	Common grass yellow	LC
7.	<i>Delias eucharis</i>	Pieridae	Common jezebel	LC
8.	<i>Phalanta phalantha</i>	Nymphalidae	Common leopard	LC
9.	<i>Papilio demoleus</i>	Papilionidae	Common lime	NE
10.	<i>Papilio polytes</i>	Papilionidae	Common mormon	NE
11.	<i>Atrophaneura hector</i>	Papilionidae	Crimson rose	LC
12.	<i>Hypolimnas misippus</i>	Nymphalidae	Danaid eggfly	LC

13.	<i>Euchrysops cnejus</i>	Lycaenidae	Gram Blue	LC
14.	<i>Hypolimnas bolina</i>	Nymphalidae	Great eggfly	LC
15.	<i>Junonia atlites</i>	Nymphalidae	Grey pansy	LC
16.	<i>Junonia lemonias</i>	Nymphalidae	Lemon pansy	NE
17.	<i>Catopsilia pyranthe</i>	Pieridae	Mottled Emigrant	NE
18.	<i>Pseudozizeeria maha</i>	Lycaenidae	Pale Grass Blue	NE
19.	<i>Junonia almana</i>	Nymphalidae	Peacock pansy	LC
20.	<i>Belenoisaurota</i>	Pieridae	Pioneer	LC
21.	<i>Danaus chrysippus</i>	Nymphalidae	Plain tiger	LC
22.	<i>Euthalia nais</i>	Nymphalidae	Baronet	LC

LC – Least Concern; * - Yes

Table 3.5.3. IUCN Status of Bird Species in Karikili Bird Sanctuary

S. No.	Scientific Name of the Species	Common name	Habitat	IUCN
1.	<i>Accipiter badius</i>	Shikra	T	LC
2.	<i>Acridotheres tristis</i>	Common Myna	T	LC
3.	<i>Acrocephalus dumetorum</i>	Blyth's Reed Warbler	T	LC
4.	<i>Actitis hypoleucos</i>	Common Sandpiper	A	LC
5.	<i>Aegithina tiphia</i>	Common Iora	T	LC
6.	<i>Alauda gulgula</i>	Oriental Skylark	T	LC
7.	<i>Alcedo atthis</i>	Common Kingfisher	T	LC
8.	<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	A	LC
9.	<i>Anas acuta</i>	Northern Pintail	A	LC
10.	<i>Anas clypeata</i>	Northern Shoveller	A	LC
11.	<i>Anas crecca</i>	Common Teal	A	LC
12.	<i>Anas indicus</i>	Bar-headed Goose	A	LC
13.	<i>Anas penelope</i>	Eurasian Wigeon	A	LC
14.	<i>Anas poecilorhyncha</i>	Spot-billed Duck	A	LC
15.	<i>Anas querquedula</i>	Garganey	A	LC
16.	<i>Anastomus oscitans</i>	Asian Openbill	A	LC
17.	<i>Anhinga melanogaster</i>	Darter	A	LC

18.	<i>Anthus richardi</i>	Richard's Pipit	D	LC
19.	<i>Anthus rufulus</i>	Paddy-field Pipit	D	LC
20.	<i>Apus affinis</i>	House Swift	T	LC
21.	<i>Ardea cinerea</i>	Grey Heron	A	LC
22.	<i>Ardea purpurea</i>	Purple Heron	A	LC
23.	<i>Ardeola grayii</i>	Indian Pond Heron	A	LC
24.	<i>Artamus fuscus</i>	Ashy Woodswallow	T	LC
25.	<i>Athene brama</i>	Spotted Owlet	T	LC
26.	<i>Bubulcus ibis</i>	Cattle Egret	D	LC
27.	<i>Burhinus oedicephalus</i>	Eurasian Thick-knee	A	LC
28.	<i>Burhinus recurvirostris</i>	Great Thick-knee	A	LC
29.	<i>Burhinus oedicephalus</i>	Stone Curlew	A	LC
30.	<i>Buteo buteo</i>	White-eyed Buzzard	T	LC
31.	<i>Buteo buteo</i>	Common Buzzard	T	LC
32.	<i>Butorides striatus</i>	Little Green Heron	A	LC
33.	<i>Cacomantis passerinus</i>	Indian Plaintive Cuckoo	T	LC
34.	<i>Calidris ferruginea</i>	Curlew sandpiper	A	LC
35.	<i>Calidris pugnax</i>	Ruf	A	LC
36.	<i>Calidris minuta</i>	Little Stint	A	LC
37.	<i>Calidris temminckii</i>	Temminck's stint	A	LC
38.	<i>Caprimulgus indicus</i>	Indian Jungle Nightjar	T	LC
39.	<i>Casmerodius albus</i>	Great Egret	A	LC
40.	<i>Centropus sinensis</i>	Greater Coucal	T	LC
41.	<i>Ceryle rudis</i>	Pied Kingfisher	D	LC
42.	<i>Charadrius alexandrinus</i>	Kentish Plover	A	LC
43.	<i>Charadrius dubius</i>	Little Ringed Plover	A	LC
44.	<i>Chlidonias hybridus</i>	Whiskered Tern	A	LC
45.	<i>Chlidonias leucopterus</i>	White-winged Tern	A	LC
46.	<i>Chroicocephalus brunnicephalus</i>	Brown-headed Gull	A	LC
47.	<i>Chroicocephalus ridibundus</i>	Black-headed gull	A	LC

48.	<i>Ciconia episcopus</i>	Woolly-necked Stork	A	LC
49.	<i>Circus aeruginosus</i>	Eurasian Marsh Harrier	D	LC
50.	<i>Circus macrourus</i>	Pallid Harrier	T	LC
51.	<i>Circus melanoleucos</i>	Pied Harrier	T	LC
52.	<i>Cisticola juncidis</i>	Zitting Cisticola	T	LC
53.	<i>Clamator jacobinus</i>	Pied Cuckoo	T	LC
54.	<i>Columba livia</i>	Rock Pigeon	T	LC
55.	<i>Copsychus saularis</i>	Oriental Magpie Robin	T	LC
56.	<i>Coracias benghalensis</i>	Indian Roller	T	LC
57.	<i>Corvus macrorhynchus</i>	Large-billed Crow	T	LC
58.	<i>Corvus splendens</i>	House Crow	T	LC
59.	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	T	LC
60.	<i>Dendrocitta vagabunda</i>	Rufous Treepie	T	LC
61.	<i>Dicaeum erythrorhynchus</i>	Pale-billed Flowerpecker	T	LC
62.	<i>Dicrurus adsimilis</i>	Black Drongo	T	LC
63.	<i>Dupetor flavicollis</i>	Black Bittern	A	LC
64.	<i>Egretta garzetta</i>	Little Egret	A	LC
65.	<i>Elanus caeruleus</i>	Black-shouldered Kite	T	LC
66.	<i>Eremopterix grisea</i>	Ashy-crowned Sparrow Lark	T	LC
67.	<i>Eudynamys scolopacea</i>	Asian Koel	T	LC
68.	<i>Falco tinnunculus</i>	Common Kestrel	T	LC
69.	<i>Francolinus pondicerianus</i>	Grey Francolin	T	LC
70.	<i>Fulica atra</i>	Coot	A	LC
71.	<i>Gallinago stenura</i>	Pintail Snipe	A	LC
72.	<i>Gallicrex cinerea</i>	Watercock	A	LC
73.	<i>Gallinula chloropus</i>	Common Moorhen	A	LC
74.	<i>Gelochelidon nilotica</i>	Gull-billed Tern	A	LC
75.	<i>Glareola maldivarum</i>	Oriental Pratincole	A	LC
76.	<i>Halcyon smyrnensis</i>	White-throated Kingfisher	D	LC
77.	<i>Haliastur indus</i>	Brahminy Kite	T	LC

78.	<i>Hierococcyx varius</i>	Common Hawk Cuckoo	T	LC
79.	<i>Himantopus himantopus</i>	Black-winged Stilt	A	LC
80.	<i>Hirundo rustica</i>	Barn Swallow	T	LC
81.	<i>Hirundo smithii</i>	Wire-tailed Swallow	T	LC
82.	<i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana	A	LC
83.	<i>Ichthyophaga leucogaster</i>	White-bellied sea eagle	T	LC
84.	<i>Ixobrychus cinnamomeus</i>	Cinnamon Bittern	A	LC
85.	<i>Ixobrychus sinensis</i>	Yellow Bittern	A	LC
86.	<i>Limosa limosa</i>	Black-tailed Godwit	A	LC
87.	<i>Lonchura malacca</i>	Black-headed Munia	D	LC
88.	<i>Merops orientalis</i>	Green Bee-eater	T	LC
89.	<i>Merops philippinus</i>	Blue-tailed Bee-eater	T	LC
90.	<i>Mesophoyx intermedia</i>	Intermediate Egret	A	LC
91.	<i>Milvus migrans</i>	Black Kite	T	LC
92.	<i>Mirafra affinis</i>	Jerdon's Bushlark	T	LC
93.	<i>Motacilla flava</i>	Yellow Wagtail	D	LC
94.	<i>Motacilla maderaspatensis</i>	White-browed Wagtail	T	LC
95.	<i>Mycteria leucocephala</i>	Painted Stork	A	NT
96.	<i>Nectarinia lotenia</i>	Loten's Sunbird	T	LC
97.	<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	A	LC
98.	<i>Oriolus oriolus</i>	Eurasean Golden Oriole	T	LC
99.	<i>Orthotomus sutorius</i>	Common Tailorbird	T	LC
100.	<i>Pavo cristatus</i>	Indian Peafowl	T	LC
101.	<i>Passer domesticus</i>	House Sparrow	T	LC
102.	<i>Pelecanus philippensis</i>	Spot-billed Pelican	A	LC
103.	<i>Phalacrocorax carbo</i>	Great Cormorant	A	LC
104.	<i>Phalacrocorax fuscicollis</i>	Indian Shag	A	LC
105.	<i>Phalacrocorax niger</i>	Little Cormorant	A	LC
106.	<i>Phalaropus lobatus</i>	Red-necked Phalarope	A	LC
107.	<i>Phoenicopterus ruber</i>	Greater Flamingo	A	LC

108.	<i>Phaenicophaeus tristis</i>	Green-billed Malkoha	T	LC
109.	<i>Platalea leucorodia</i>	Eurasian Spoonbill	A	LC
110.	<i>Plegadis falcinellus</i>	Glossy Ibis	A	LC
111.	<i>Ploceus manyar</i>	Streaked Weaver	T	LC
112.	<i>Pluvialis squatarola</i>	Grey Plover	A	LC
113.	<i>Porphyrio porphyrio</i>	Purple Swamphen	A	LC
114.	<i>Prinia inornata</i>	Plain Prinia	T	LC
115.	<i>Prinia socialis</i>	Ashy Prinia	T	LC
116.	<i>Psittacula krameri</i>	Rose-ringed Parakeet	T	LC
117.	<i>Psilopogon haemacephalus</i>	Coppersmith barbet	T	LC
118.	<i>Pycnonotus cafer</i>	Red-vented Bulbul	T	LC
119.	<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	T	LC
120.	<i>Rostratula benghalensis</i>	Greater Painted-snipe	A	LC
121.	<i>Saxicola caprata</i>	Pied Bush Chat	T	LC
122.	<i>Saxicoloides fulicata</i>	Indian Robin	T	LC
123.	<i>Spilornis cheela</i>	Crested Serpent-Eagle	T	LC
124.	<i>Sterna albifrons</i>	Little Tern	A	LC
125.	<i>Sterna anaethetus</i>	Bridled Tern	A	LC
126.	<i>Sterna aurantia</i>	River Tern	A	LC
127.	<i>Sterna caspia</i>	Caspian Tern	A	LC
128.	<i>Streptopelia chinensis</i>	Spotted Dove	T	LC
129.	<i>Sturnus pagodarum</i>	Brahminy Starling	T	LC
130.	<i>Tachybaptus ruficollis</i>	Little Grebe	A	LC
131.	<i>Tachymarptis melba</i>	Alpine Swift	T	LC
132.	<i>Tephrodornis pondicerianus</i>	Common Woodshrike	T	LC
133.	<i>Terpsiphone paradisi</i>	Asian Paradise-Flycatcher	T	LC
134.	<i>Threskiornis melanocephalus</i>	Oriental White Ibis	A	LC
135.	<i>Threskiornis melanocephalus</i>	Black-headed Ibis	A	NT
136.	<i>Tringa ochropus</i>	Green Sandpiper	A	LC
137.	<i>Tringa stagnatilis</i>	Marsh Sandpiper	A	LC
138.	<i>Turdoides affinis</i>	Yellow-billed Babbler	T	LC

139.	<i>Turnix suscitator</i>	Common Buttonquail	T	LC
140.	<i>Tyto alba</i>	Barn Owl	T	LC
141.	<i>Upupa epops</i>	Hoopoe	T	LC
142.	<i>Vanellus indicus</i>	Red-wattled Lapwing	D	LC
143.	<i>Vanellus malabaricus</i>	Yellow-wattled Lapwing	D	LC
144.	<i>Zoothera citrina</i>	Orange-headed Thrush	T	LC

LC – Least Concern; * - Yes; T – Terrestrial; A – Aquatic; D – Dry/ desert; NT – Near Threatened

Table 3.5.4. IUCN Status of major plant invasive alien species in Karikili Bird Sanctuary

S. No.	Species	Family	Tamil Name
1.	<i>Albizia saman</i>	Fabaceae	Rain tree
2.	<i>Alternanthera pungens</i>	Amaranthaceae	
3.	<i>Ipomoea carnea</i>	Convolvulaceae	
4.	<i>Lantana camara</i>	Verbenaceae	Unnichedi
5.	<i>Senna occidentalis</i>	Caesalpiniaceae	Thagarai
6.	<i>Typha angustifolia</i>	Typhaceae	Sambu
7.	<i>Xanthium indicum</i>	Compositae	Marul oomatham

Table 3.5.5. IUCN Status of major medicinal plant species in Karikili Bird Sanctuary

S. No.	Species	Family	Tamil Name	Habit
1.	<i>Abrus precatorius</i>	Fabaceae	Kundumani	Climber
2.	<i>Abutilon indicum</i>	Malvaceae	Thuthi	Shrub
3.	<i>Acalypha indica</i>	Euphorbiaceae	Kuppaimeni	Herb
4.	<i>Acanthospermum hispidum</i>	Compositae		Herb
5.	<i>Achyranthes aspera</i>	Amaranthaceae	Nayurivi	Herb
6.	<i>Aerva lanata</i>	Amaranthaceae	Peelai	Herb
7.	<i>Borassus flabellifer</i>	Arecaceae	Panai	Tree
8.	<i>Cardiospermum halicacabum</i>	Sapindaceae	Mudakotthan	Herb
9.	<i>Cynodon dactylon</i>	Poaceae	Aruhampul	Grass

10.	<i>Datura metal</i>	Solanaceae	Karu Oomatthai	Herb
11.	<i>Mukia leiosperma</i>	Cucurbitaceae		Climber
12.	<i>Solanum trilobatum</i>	Solanaceae	Thoodhuvalai	Herb
13.	<i>Tephrosia purpurea</i>	Fabaceae	Kozhinji	Herb
14.	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber
15.	<i>Tridax procumbens</i>	Compositae	Vettukkaaya-thazhai	Herb
16.	<i>Tylophora indica</i>	Asclepiadaceae	Naippalai	Climber

CHECK LIST

- ✓ Responsible agency has been clearly identified and details of contact person included
- ✓ Wetland/Wetlands complex boundary has been delineated using GIS and firmed up by adequate ground truthing
- ✓ Wetland/Wetlands complex map has been provided at required scale
- ✓ Zone of influence has been delineated and included in Wetland map or a separate map
- ✓ Wetland zone of influence is sufficient to manage all activities
- ✓ Site's importance have been listed, and for major categories, justification provided
- ✓ Site's biodiversity values are listed, and for major categories, justification provided
- ✓ List of pre-existing rights and privileges provided
- ✓ Consistency or, inconsistency of pre-existing rights and privileges indicated to be best of available knowledge
- ✓ Threats to site listed, and for major categories details provided
- ✓ Activities prohibited, beyond those already listed in Rule 4 (2) have been mentioned
- ✓ List of activities to be regulated within Wetlands and zone of influence is provided
- ✓ List of activities to be permitted is provided