

3. Brief Document

3.1. KARAIVETTI 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:* Karaivetti Bird Sanctuary
- 1.2 *Name of the Village (s), Tehsil (s), Municipal area (s):* Karaivetti, Kunthapuram, Vettankudi, Avansuthamalli, Tirupayar, Keezhakavattankurichi, Venganur, Ariyalur
- 1.3 *Name of the District (s) in which Wetlands complex located:* Ariyalur
- 1.4 *Geographical coordinates:*
 - ▶ Latitude: 10°58'53.8824" N
 - ▶ Longitude: 79°2'43.0368" 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:* 456 ha
- 2.2 *Wetland type:*

Category	Subcategory
✓ Natural (Inland)	✓ Permanent lakes ☐ Seasonal/ intermittent lakes ☐ Permanent streams/ creeks ☐ Seasonal/ intermittent streams/ creeks ☐ Oxbow ☐ River floodplain ☐ Permanent freshwater marshes ☐ Seasonal/ intermittent freshwater marshes ☐ Shrub-dominated Wetlands

	☐ Tree-dominated Wetlands ☐ Geothermal Wetlands ☐ Karst and other subterranean hydrological systems
☐ Natural (Coastal)	☐ Coastal lagoon ☐ Estuary ☐ Intertidal mud, sand or salt flats ☐ Mangroves ☐ Coral reefs
☐ Human-made	☐ Aquaculture pond ☐ Tank ☐ Saltpan ☐ Dam/ Reservoir

2.3 *Depth (m)*: Average - 2; Maximum - 3.5

2.4 *Elevation (m above mean sea level)*: 52

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 (5.5-7.4)
- ☐ Alkaline (> 7.4)

e) Water salinity

- ☐ Fresh (< 0.5 g/l)
- ☒ Brackish (0.5-30 g/l)
- ☐ Euhaline (30-40 g/l)

- ☐ Hypersaline (> 40 g/l)
- ☐ Not known
- f) Nutrients in water
 - ☐ Eutrophic
 - ☒ Mesotrophic
 - ☐ Oligotrophic
 - ☐ Not known
- 2.6 *Climatic setting*
 - a) Annual rainfall/ Snowfall (mm): 184.4
 - b) Temperature (°C): Minimum 26.05 ; Maximum 36.6
 - c) Humidity (%) Minimum 69.9 ; Maximum 73.6
- 2.7 *Area of zone of influence (in ha):* 3230.56 ha (with an irregular radius of 3.42 km)
- 2.8 *Major land use within zone of influence*

Land Use	Percentage
Forest	: 0%
Vegetation (Plantation)	: 0%
Agriculture	: 85%
Settlements (Rural)	: 7%
Settlements (Urban)	: 0%
Industrial	: 0%
Waterbody	: 1%
Waste Land	: 7%

- 2.9 *Map of Wetland complex and zone of influence:* Enclosed as Annexure 1 (Fig. 3.1.1-3.1.2)

Section 3: Biodiversity

- 3.1 *Notable plant species present in Wetland:* The Wetland is home to a diverse range of plant species, totaling 70 species (refer to Table 3.1.1 in Annexure 3.1).
- 3.2 *Notable animal species present in Wetland:* The Wetland supports a variety of animal species, with a total of 158 recorded species. This includes 2 mammal species, 8 reptile species, 2 amphibian species, 100 bird species, and 46 species of butterflies (refer to Table 3.1.2-3.1.3 in Annexure 3.1).
- 3.3 *Species of conservation significance:* Highlighted in Table 3.1.1-3.1.3
- 3.4 *Major plant invasive alien species:* The Wetland supports 10 plant invasive species (refer to Table 3.1.4 in Annexure 3.1).
- 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	☐ Yes ☒ No	
Source of water for agriculture	☐ Yes ☒ No	
Fisheries	☐ Yes ☒ No	
Cultivation of aquatic food plants	☐ Yes ☒ No	
For buffalo wallowing and use of domesticated animals	☐ Yes ☒ No	
Medicinal plants	☒ Yes ☐ No	Few Medicinal plants around the Wetland. Which is listed in Table 3.1.5 in Annexure 3.1
Is a recreational site	☐ Yes ☒ No	
Buffering communities from extreme events as floods and storms	☐ Yes ☒ No	
Groundwater recharge	☒ Yes ☐ No	Major source of ground water recharge
Water purification	☒ Yes ☐ No	Results into purification
Acts as a sink for sediments	☐ Yes ☒ No	
Has significant cultural and religious values	☐ Yes ☒ No	
Is a site for recreation and tourism	☐ Yes ☒ No	
Supports noteworthy plants species	☐ Yes ☒ No	
Support noteworthy animal species	☐ Yes ☒ No	
Site of high congregation of migratory water birds	☒ Yes ☐ No	Provides a suitable site for the high congregation of migratory water birds.

Supports life cycle of fish or amphibians	☐ Yes ☐ No	
Mining	☐ Yes ☒ No	
Any other	☐ Yes ☒ 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)	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Fishing under lease from government department	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Harvest of plants (without any lease or permission from government department)	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Harvest of plants under lease from government department	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Agriculture or horticulture within Wetland	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Grazing	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Religious practices	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Withdrawal of water for domestic use	☐ Yes ☒ No	☐ Yes ☐ No	

		☐ Not assessed	
Withdrawal of water for agriculture or fisheries	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Bathing or wallowing of domestic animals	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Plying of boats	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	
Any other	☐ Yes ☒ No	☐ Yes ☐ No ☐ Not assessed	

Section 6: Present and Potential Threats

Threat	Degree	Present/ Potential	Additional info.
Changes in water inflow and outflow	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Pollution	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Unsustainable harvest of biological resources	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Mining	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Siltation	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	
Encroachment	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	

Spread of invasive species	☐ High ☐ Medium ☒ Low	☒ Present ☐ Potential	Listed in Table 3.1.4 in Annexure 1
Any others	☐ High ☐ Medium ☐ Low	☐ Present ☐ Potential	

Section 7: Activities Proposed to Be Prohibited (other than those listed in Rule 4 (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		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Harvesting of resources (living / non-living)		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Grazing		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Discharge of treated sewage/ effluent / wastewater		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			

Construction of boat jetties, and facilities for temporary use, as pantoon bridges		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Aquaculture, agriculture and horticulture activities within the Wetland boundaries.		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			
Any others		☐ Wetland/ Wetland complex boundary ☐ Zone of influence			

Section 8: Activities Proposed to be permitted

Activity	Relevance	Within Wetlands or zone of influence	Additional info.
Tourism development		☒ Wetland/ Wetlands complex boundary ☐ Zone of influence	May be permitted

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.). Zoological Survey of India. Available at www.zsi.gov.in (Last update: May 2018).
2. Ali, S. (2002). *The book of Indian birds* (13th revised ed.). Oxford University Press.
3. Grimmett, R., Inskipp, C., & Inskipp, T. (2000). *Pocket guide to the birds of the Indian subcontinent*. Oxford University Press.
4. 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>

ANNEXURE 3.1

Fig 3.1.1. Zone of Influence of Karaivetti Bird Sanctuary

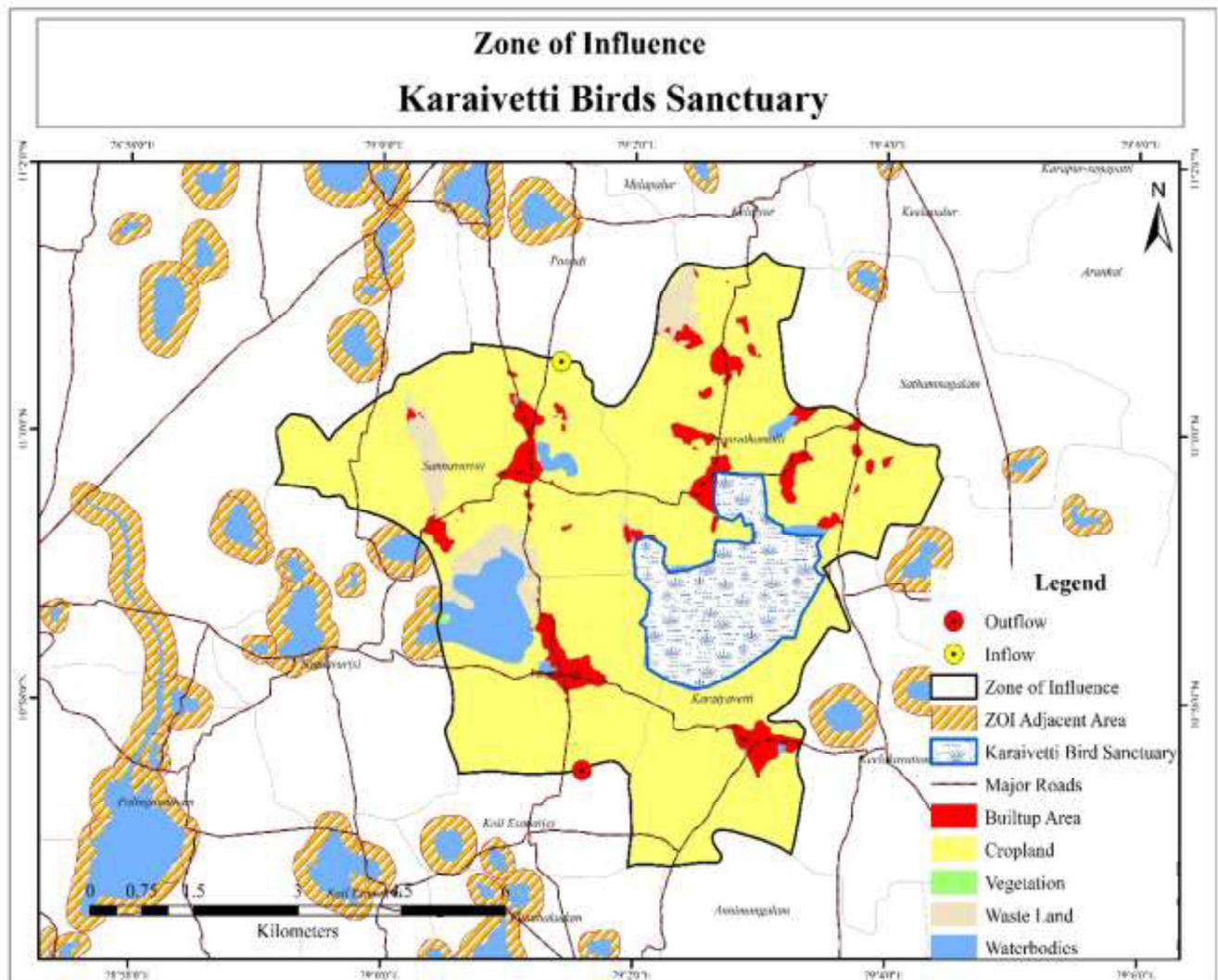


Fig 3.1.2. Map (2014 vs. 2024) and Land Use/ Land Cover of Karaivetti Bird Sanctuary

Map of the Wetland in 2014



Map of the Wetland in 2024



Land Use/ Land Cover of the Wetland

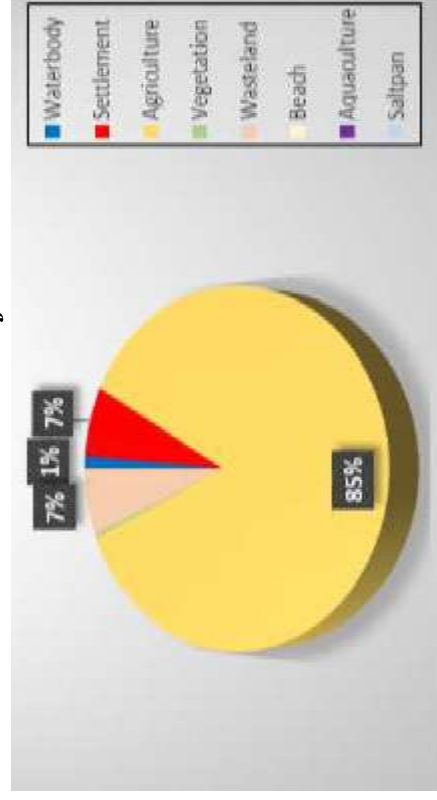


Table 3.1.1. IUCN Status of Floral Species in Karaivetti Bird Sanctuary

S. No.	Scientific Name of the Species	Family	Tamil Name	Habit	IUCN
1.	<i>Amorphophallus paeoniifolius</i>	Araceae		Herb	LC
2.	<i>Brachiaria ramosa</i>	Poaceae		Grass	NE
3.	<i>Boswellia serrate</i>	Burseraceae		Tree	LC
4.	<i>Cassia fistula</i>	Caesalpinaceae		Tree	LC
5.	<i>Caryota urens</i>	Arecaceae	Koonthapanai	Tree	LC
6.	<i>Commelina benghalensis</i>	Commelinaceae	Kanaangozhai	Herb	LC
7.	<i>Cordia domestica</i>	Cordiaceae		Tree	LC
8.	<i>Corallocarpus epigaeus</i>	Cucurbitaceae	Akasha karuden	Climber	Lc
9.	<i>Crateva magna</i>	Capparaceae		Tree	LC
10.	<i>Cyperus alternifolius</i>	Cyperaceae		Sedge	NE
11.	<i>Cyperus iria</i>	Cyperaceae		Sedge	NE
12.	<i>Dolichandrone atrovirens</i>	Bignoniaceae		Tree	LC
13.	<i>Diospyros montana</i>	Ebenaceae		Tree	LC
14.	<i>Diospyros malabarica</i>	Ebenaceae		Tree	LC
15.	<i>Drosera burmannii</i>	Droseraceae	Alukanni	Herb	LC
16.	<i>Drymaria cordata</i>	Caryophyllaceae	Puliarai	Herb	LC
17.	<i>Eragrostis viscosa</i>	Poaceae	-	Grass	LC
18.	<i>Erythrina suberosa</i>	Papilionaceae		Tree	LC
19.	<i>Ficus tinctoria</i>	Moraceae	Kallathi	Tree	LC
20.	<i>Isachne miliacea</i>	Poaceae	-	Grass	LC
21.	<i>Ischaemum indicum</i>	Poaceae	-	Grass	LC
22.	<i>Ludwigia adscendens</i>	Onagraceae		Herb	NE
23.	<i>Mallotus nudiflorus</i>	Euphorbiaceae		Tree	LC
24.	<i>Mitragyna parvifolia</i>	Rubiaceae		Tree	LC
25.	<i>Pandanus amaryllifolius</i>	Pandanaceae		Tree	LC
26.	<i>Pongamia pinnata</i>	Papilionaceae	Pungai	Tree	LC

27.	<i>Phyllanthus reticulatus</i>	Euphorbiaceae	Inki pazham	Shrub	LC
28.	<i>Ruta graveolans</i>	Rutaceae	Aruvathampatch	Shrub	LC
29.	<i>Syzygium cumini</i>	Myrtaceae	Naval	Tree	LC
30.	<i>Terminalia arjuna</i>	Combretaceae		Tree	LC
31.	<i>Terminalia chebula</i>	Combretaceae		Tree	LC
32.	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber	NE
33.	<i>Tridax procumbens</i>	Compositae	Vettukkaaya-thazhai	Herb	LC
34.	<i>Tylophora indica</i>	Asclepiadaceae	Naippalai	Climber	NE
35.	<i>Amorphophallus paeoniifolius</i>	Araceae		Herb	LC
36.	<i>Brachiaria ramosa</i>	Poaceae		Grass	NE
37.	<i>Boswellia serrata</i>	Burseraceae		Tree	LC
38.	<i>Cassia fistula</i>	Caesalpinaceae		Tree	LC
39.	<i>Caryota urens</i>	Arecaceae	Koonthapanai	Tree	LC
40.	<i>Commelina benghalensis</i>	Commelinaceae	Kanaangozhai	Herb	LC
41.	<i>Cordia domestica</i>	Cordiaceae		Tree	LC
42.	<i>Corallocarpus epigaeus</i>	Cucurbitaceae	Akasha karuden	Climber	Lc
43.	<i>Crateva magna</i>	Capparaceae		Tree	LC
44.	<i>Cyperus alternifolius</i>	Cyperaceae		Sedge	NE
45.	<i>Cyperus iria</i>	Cyperaceae		Sedge	NE
46.	<i>Dolichandrone atrovirens</i>	Bignoniaceae		Tree	LC
47.	<i>Diospyros montana</i>	Ebenaceae		Tree	LC
48.	<i>Diospyros malabarica</i>	Ebenaceae		Tree	LC
49.	<i>Drosera burmannii</i>	Droseraceae	Alukanni	Herb	LC
50.	<i>Drymaria cordata</i>	Caryophyllaceae	Puliarai	Herb	LC
51.	<i>Eragrostis viscosa</i>	Poaceae	-	Grass	LC
52.	<i>Erythrina suberosa</i>	Papilionaceae		Tree	LC
53.	<i>Ficus tinctoria</i>	Moraceae	Kallathi	Tree	LC

54.	<i>Isachne miliacea</i>	Poaceae	-	Grass	LC
55.	<i>Ischaemum indicum</i>	Poaceae	-	Grass	LC
56.	<i>Ludwigia adscendens</i>	Onagraceae		Herb	NE
57.	<i>Mallotus nudiflorus</i>	Euphorbiaceae		Tree	LC
58.	<i>Mitragyna parvifolia</i>	Rubiaceae		Tree	LC
59.	<i>Pandanus amaryllifolius</i>	Pandanaceae		Tree	LC
60.	<i>Pongamia pinnata</i>	Papilionaceae	Pungai	Tree	LC
61.	<i>Phyllanthus reticulatus</i>	Euphorbiaceae	Inki pazham	Shrub	LC
62.	<i>Ruta graveolans</i>	Rutaceae	Aruvathampatch	Shrub	LC
63.	<i>Syzygium cumini</i>	Myrtaceae	Naval	Tree	LC
64.	<i>Terminalia arjuna</i>	Combretaceae		Tree	LC
65.	<i>Terminalia chebula</i>	Combretaceae		Tree	LC
66.	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber	NE
67.	<i>Tridax procumbens</i>	Compositae	Vettukkaaya-thazhai	Herb	LC
68.	<i>Tylophora indica</i>	Asclepiadaceae	Naippalai	Climber	NE
69.	<i>Amorphophallus paeoniifolius</i>	Araceae		Herb	LC
70.	<i>Brachiaria ramosa</i>	Poaceae		Grass	NE

Table 3.1.2. IUCN Status of Selected Fauna Species in Karaivetti Bird Sanctuary

S. No.	Scientific Name of the Species	Family	Common Name	IUCN
<i>A. Mammal</i>				
1.	<i>Funambulus pennantii</i>	Sciuridae	Five striped Palm squirrel	LC
2.	<i>Urva edwardsii</i>	Herpestidae	Indian grey mongoose	LC
<i>B. Reptile</i>				
1.	<i>Cnemaspis yercaudensis</i>	Gekkonidae		LC
2.	<i>Cnemaspis mysoriensis</i>	Gekkonidae		LC

3.	<i>Cyrtodactylus speciosus</i>	Gekkonidae	Forest spotted gecko	LC
4.	<i>Hemidactylus graniticolus</i>	Gekkonidae		LC
5.	<i>Calotes versicolor</i>	Agamidae	Oriental garden lizard	LC
6.	<i>Eutropis allapallensis</i>	Scincidae		LC
7.	<i>Uropeltis dindigalensis</i>	Uropeltidae		LC
8.	<i>Trimeresurus gramineus</i>	Viperidae		LC
<i>C. Amphibian</i>				
1.	<i>Duttaphrynus melanostictus</i>	Bufonidae		LC
2.	<i>Indosylvirana sreeni</i>	Ranidae		LC
<i>D. Butterfly</i>				
1.	<i>Common rose</i>	<i>Pachliopta aristolochiae</i>	Papilionidae	LC
2.	<i>Crimson rose</i>	<i>Pachliopta hector</i>	Papilionidae	LC
3.	<i>Common Mormon</i>	<i>Papilio polymnestor cramer</i>	Papilionidae	LC
4.	<i>Great Eggfly</i>	<i>Hypolimnys bolina</i>	Papilionidae	LC
5.	<i>Common bluebottle</i>	<i>Graphium sarpedon</i>	Papilionidae	LC
6.	<i>Common emigrant</i>	<i>catopsilia Pomona</i>	Peridae	LC
7.	<i>Psyche</i>	<i>Leptosia nina</i>	Peridae	LC
8.	<i>Mottled emigrant</i>	<i>Catopsilia pyranthe</i>	Peridae	LC
9.	<i>Common grass yellow</i>	<i>Eurema hecabe</i>	Peridae	LC
10.	<i>Common Gull</i>	<i>Cepora nerissa</i>	Peridae	LC
11.	<i>Small Salmon Arab</i>	<i>Colotis amata</i>	Peridae	LC
12.	<i>Pioneer</i>	<i>Belenois aurota</i>	Peridae	LC
13.	<i>Small grass yellow</i>	<i>Eurema brigitta</i>	Lycaenidae	LC
14.	<i>Dark grass blue</i>	<i>Zizeeria karsandra</i>	Lycaenidae	LC
15.	<i>Tiny grass blue</i>	<i>Zizula hylax</i>	Lycaenidae	LC
16.	<i>Zebra blue</i>	<i>Leptotus plinius</i>	Lycaenidae	LC
17.	<i>Forget –me –not</i>	<i>Catochrysops Strabo</i>	Lycaenidae	LC
18.	<i>Small grass jewel</i>	<i>Chilades putli</i>	Lycaenidae	LC
19.	<i>Plain hedge blue</i>	<i>Celastrina lavendularis</i>	Lycaenidae	LC
20.	<i>Tailless line blue</i>	<i>Prosotas dubiosa</i>	Lycaenidae	LC

21.	<i>Gram blue</i>	<i>Euchrysops cnejus</i>	Lycaenidae	LC
22.	<i>Pale grass blue</i>	<i>Pseudozizeeria maha</i>	Lycaenidae	LC
23.	<i>Lime blue</i>	<i>Chilades lajus</i>	Lycaenidae	LC
24.	<i>Common line blue</i>	<i>Prosotas nora</i>	Lycaenidae	LC
25.	<i>Plumbeous silverline</i>	<i>Spindasis schistacea</i>	Lycaenidae	LC
26.	<i>Plains cupid</i>	<i>Chilades pandava</i>	Lycaenidae	LC
27.	<i>Bright babul blue</i>	<i>Azanus ubaldus</i>	Lycaenidae	LC
28.	<i>Lesser grass blue</i>	<i>Zizina Otis indica</i>	Lycaenidae	LC
29.	<i>Common pierrot</i>	<i>Castalius rosimon</i>	Lycaenidae	LC
30.	<i>Plain tiger</i>	<i>Danus chrysippus</i>	Nymphalidae	LC
31.	<i>Blue tiger</i>	<i>Tirumala limniace</i>	Nymphalidae	LC
32.	<i>Dark blue tiger</i>	<i>Tirumala septentrionis</i>	Nymphalidae	LC
33.	<i>Striped tiger</i>	<i>Danus genutia</i>	Nymphalidae	LC
34.	<i>Blue admiral</i>	<i>kaniska canace</i>	Nymphalidae	LC
35.	<i>Common Indian crow</i>	<i>Euploea core</i>	Nymphalidae	LC
36.	<i>Common crow</i>	<i>Euploea core</i>	Nymphalidae	LC
37.	<i>White fourring</i>	<i>Ypthima ceylonica</i>	Nymphalidae	LC
38.	<i>Common fourring</i>	<i>Ypthima huebneri</i>	Nymphalidae	LC
39.	<i>Tawny coster</i>	<i>Acraea violae</i>	Nymphalidae	LC
40.	<i>Common fivering</i>	<i>Ypthimia</i>	Nymphalidae	LC
41.	<i>Chocolate pansy</i>	<i>Junonia iphita</i>	Nymphalidae	LC
42.	<i>Lemon pansy</i>	<i>Junonia lemonias</i>	Nymphalidae	LC
43.	<i>Danaid eggfly</i>	<i>Hypolimnas misippus</i>	Nymphalidae	LC
44.	<i>Angled castor</i>	<i>Ariadne Ariadne</i>	Nymphalidae	LC
45.	<i>Hermit</i>	<i>Chazara briseis</i>	Nymphalidae	LC
46.	<i>Nigger</i>	<i>Orsotrioena medus</i>	Nymphalidae	LC

LC – Least Concern; * - Yes

Table 3.1.3. IUCN Status of Bird Species in Karaivetti Bird Sanctuary

S. No.	Scientific Name of the Species	Common name	Habitat	IUCN
1.	<i>Acridotheres tristis</i>	Common Myna	T	LC

2.	<i>Alcedo atthis</i>	Common Kingfisher	T	LC
3.	<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	D	LC
4.	<i>Anthus rufulus</i>	Paddy-field Pipit	D	LC
5.	<i>Copsychus saularis</i>	Oriental Magpie Robin	T	LC
6.	<i>Coracias benghalensis</i>	Indian Roller	T	LC
7.	<i>Ceryle rudis</i>	Lesser Pied Kingfisher	D	LC
8.	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	T	LC
9.	<i>Dendrocitta vagabunda</i>	Rufous Treepie	T	LC
10.	<i>Dicrurus adsimilis</i>	Black Drongo	T	LC
11.	<i>Dinopium benghalense</i>	Black-rumped Flameback	T	LC
12.	<i>Elanus caeruleus</i>	Black-shouldered Kite	T	LC
13.	<i>Eremopterix grisea</i>	Ashy-crowned Sparrow Lark	T	LC
14.	<i>Eudynamis scolopacea</i>	Asian Koel	T	LC
15.	<i>Falco tinnunculus</i>	Common Kestrel	T	LC
16.	<i>Francolinus pondicerianus</i>	Grey Francolin	T	LC
17.	<i>Gallinula chloropus</i>	Common Moorhen	A	LC
18.	<i>Gelochelidon nilotica</i>	Gull-billed Tern	A	LC
19.	<i>Glareola maldivarum</i>	Oriental Pratincole	A	LC
20.	<i>Halcyon smyrnensis</i>	White-throated Kingfisher	D	LC
21.	<i>Haliastur indus</i>	Brahminy Kite	T	LC
22.	<i>Hierococcyx varius</i>	Common Hawk Cuckoo	T	LC
23.	<i>Hirundo rustica</i>	Barn Swallow	T	LC
24.	<i>Hirundo smithii</i>	Wire-tailed Swallow	T	LC
25.	<i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana	A	LC
26.	<i>Lonchura malacca</i>	Black-headed Munia	D	LC
27.	<i>Merops orientalis</i>	Green Bee-eater	T	LC
28.	<i>Merops philippinus</i>	Blue-tailed Bee-eater	T	LC
29.	<i>Mesophoyx intermedia</i>	Intermediate Egret	A	LC
30.	<i>Metridius indicus</i>	Bronze- Winged Jacana	A	LC
31.	<i>Milvus migrans</i>	Black Kite	T	LC

32.	<i>Motacilla flava</i>	Yellow Wagtail	D	LC
33.	<i>Motacilla maderaspatensis</i>	White-browed Wagtail	T	LC
34.	<i>Nectarinia lotenia</i>	Loten's Sunbird	T	LC
35.	<i>Oriolus oriolus</i>	Eurasean Golden Oriole	T	LC
36.	<i>Orthotomus sutorius</i>	Common Tailorbird	T	LC
37.	<i>Passer domesticus</i>	House Sparrow	T	LC
38.	<i>Phalacrocorax niger</i>	Little Cormorant	A	LC
39.	<i>Plegadis falcinellus</i>	Glossy Ibis	A	LC
40.	<i>Ploceus manyar</i>	Streaked Weaver	T	LC
41.	<i>Pluvialis squatarola</i>	Grey Plover	A	LC
42.	<i>Prinia inornate</i>	Plain Prinia	T	LC
43.	<i>Psittacula krameria</i>	Rose-ringed Parakeet	T	LC
44.	<i>Pycnonotus cafer</i>	Red-vented Bulbul	T	LC
45.	<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	T	LC
46.	<i>Saxicola caprata</i>	Pied Bush Chat	T	LC
47.	<i>Streptopelia chinensis</i>	Spotted Dove	T	LC
48.	<i>Threskiornis melanocephalus</i>	Black-headed Ibis	A	NT
49.	<i>Tringa glareola</i>	Wood Sandpiper	A	LC
50.	<i>Vanellus indicus</i>	Red-wattled Lapwing	D	LC
51.	<i>Acridotheres tristis</i>	Common Myna	T	LC
52.	<i>Alcedo atthis</i>	Common Kingfisher	T	LC
53.	<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	D	LC
54.	<i>Anthus rufulus</i>	Paddy-field Pipit	D	LC
55.	<i>Copsychus saularis</i>	Oriental Magpie Robin	T	LC
56.	<i>Coracias benghalensis</i>	Indian Roller	T	LC
57.	<i>Ceryle rudis</i>	Lesser Pied Kingfisher	D	LC
58.	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	T	LC
59.	<i>Dendrocitta vagabunda</i>	Rufous Treepie	T	LC
60.	<i>Dicrurus adsimilis</i>	Black Drongo	T	LC
61.	<i>Dinopium benghalense</i>	Black-rumped Flameback	T	LC
62.	<i>Elanus caeruleus</i>	Black-shouldered Kite	T	LC

63.	<i>Eremopterix grisea</i>	Ashy-crowned Sparrow Lark	T	LC
64.	<i>Eudynamys scolopacea</i>	Asian Koel	T	LC
65.	<i>Falco tinnunculus</i>	Common Kestrel	T	LC
66.	<i>Francolinus pondicerianus</i>	Grey Francolin	T	LC
67.	<i>Gallinula chloropus</i>	Common Moorhen	A	LC
68.	<i>Gelochelidon nilotica</i>	Gull-billed Tern	A	LC
69.	<i>Glareola maldivarum</i>	Oriental Pratincole	A	LC
70.	<i>Halcyon smyrnensis</i>	White-throated Kingfisher	D	LC
71.	<i>Haliastur indus</i>	Brahminy Kite	T	LC
72.	<i>Hierococcyx varius</i>	Common Hawk Cuckoo	T	LC
73.	<i>Hirundo rustica</i>	Barn Swallow	T	LC
74.	<i>Hirundo smithii</i>	Wire-tailed Swallow	T	LC
75.	<i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana	A	LC
76.	<i>Lonchura malacca</i>	Black-headed Munia	D	LC
77.	<i>Merops orientalis</i>	Green Bee-eater	T	LC
78.	<i>Merops philippinus</i>	Blue-tailed Bee-eater	T	LC
79.	<i>Mesophoyx intermedia</i>	Intermediate Egret	A	LC
80.	<i>Metrpodius indicus</i>	Bronze- Winged Jacana	A	LC
81.	<i>Milvus migrans</i>	Black Kite	T	LC
82.	<i>Motacilla flava</i>	Yellow Wagtail	D	LC
83.	<i>Motacilla maderaspatensis</i>	White-browed Wagtail	T	LC
84.	<i>Nectarinia lotenia</i>	Loten's Sunbird	T	LC
85.	<i>Oriolus oriolus</i>	Eurasean Golden Oriole	T	LC
86.	<i>Orthotomus sutorius</i>	Common Tailorbird	T	LC
87.	<i>Passer domesticus</i>	House Sparrow	T	LC
88.	<i>Phalacrocorax niger</i>	Little Cormorant	A	LC
89.	<i>Plegadis falcinellus</i>	Glossy Ibis	A	LC
90.	<i>Ploceus manyar</i>	Streaked Weaver	T	LC
91.	<i>Pluvialis squatarola</i>	Grey Plover	A	LC
92.	<i>Prinia inornate</i>	Plain Prinia	T	LC

93.	<i>Psittacula krameria</i>	Rose-ringed Parakeet	T	LC
94.	<i>Pycnonotus cafer</i>	Red-vented Bulbul	T	LC
95.	<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	T	LC
96.	<i>Saxicola caprata</i>	Pied Bush Chat	T	LC
97.	<i>Streptopelia chinensis</i>	Spotted Dove	T	LC
98.	<i>Threskiornis melanocephalus</i>	Black-headed Ibis	A	NT
99.	<i>Tringa glareola</i>	Wood Sandpiper	A	LC
100.	<i>Vanellus indicus</i>	Red-wattled Lapwing	D	LC

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

Table 3.1.4. IUCN Status of major plant invasive alien species in Karaivetti Bird Sanctuary

S. No.	Species	Family	Tamil Name
1.	<i>Agave americana</i>	Agavaceae	Kathazhai
2.	<i>Alternanthera sessilis</i>	Amaranthaceae	Ponnanganni
3.	<i>Cassia siamea</i>	Caesalpiniaceae	Manjakondrai
4.	<i>Casuarina equisetifolia</i>	Casuarinaceae	Savukku
5.	<i>Hyptis suaveolens</i>	Labiatae	
6.	<i>Lantana camara</i>	Verbenaceae	Unnichi
7.	<i>Leucaena leucocephala</i>	Fabaceae	
8.	<i>Nerium oleander</i>	Apocynaceae	Karaviram
9.	<i>Prosopis juliflora</i>	Fabaceae	Seemaikaruvai
10.	<i>Senna occidentalis</i>	Caesalpiniaceae	Thagarai

Table 3.1.5. IUCN Status of major medicinal plant species in Karaivetti Bird Sanctuary

S. No.	Species	Family	Tamil Name	Habit
1.	<i>Abrus precatorius</i>	Fabaceae	Kundumani	Climber
2.	<i>Acalypha ciliata</i>	Euphorbiaceae	Agal	Herb
3.	<i>Acalypha fruticosa</i>	Euphorbiaceae	Sinni	Herb
4.	<i>Acalypha indica</i>	Euphorbiaceae	Kuppaimeni	Herb
5.	<i>Acanthospermum hispidum</i>	Compositae		Herb
6.	<i>Achyranthes aspera</i>	Amaranthaceae	Nayurivi	Herb

7.	<i>Aegle marmelos</i>	Rutaceae	Vilvam	Tree
8.	<i>Azadirachta indica</i>	Meliaceae	Vaambu	Tree
9.	<i>Bacopa monnieri</i>	Scrophulariaceae	Neerbrahmi	Herb
10.	<i>Borassus flabellifer</i>	Arecaceae	Pania	Tree
11.	<i>Cissus quadrangularis</i>	Vitaceae	Pirandai	Climber
12.	<i>Citrullus colocynthis</i>	Cucurbitaceae	Aattrukumatti	Climber
13.	<i>Clitoria ternatea</i>	Fabaceae	Kaarkataan	Climber
14.	<i>Coccinia grandis</i>	Cucurbitaceae	Kovai	Climber
15.	<i>Cocculus hirsutus</i>	Menispermaceae	Kattukodi	Climber
16.	<i>Leucas aspera</i>	Labiatae	Thumbai	Herb
17.	<i>Ocimum basilicum</i>	Labiatae	Karpura thulasi	Herb
18.	<i>Ocimum sanctum</i>	Labiatae	Thulasi	Herb
19.	<i>Solanum americanum</i>	Solanaceae	Manatakkali	Herb
20.	<i>Solanum trilobatum</i>	Solanaceae	Thoodhuvalai	Herb
21.	<i>Tinospora cordifolia</i>	Menispermaceae	Seendhil	Climber
22.	<i>Tridax procumbens</i>	Compositae	Vettukkaayam	Herb
23.	<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