

### **Annexure III: Wetlands (Conservation and Management) Rules, 2017**

#### **MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION**

**New Delhi, the 26th September, 2017**

G.S.R. 1203(E).—Whereas the wetlands, vital parts of the hydrological cycle, are highly productive ecosystems which support rich biodiversity and provide a wide range of ecosystem services such as water storage, water purification, flood mitigation, erosion control, aquifer recharge, microclimate regulation, aesthetic enhancement of landscapes while simultaneously supporting many significant recreational, social and cultural activities, being part of our rich cultural heritage;

And whereas many wetlands are threatened by reclamation and degradation through drainage and landfill, pollution (discharge of domestic and industrial effluents, disposal of solid wastes), hydrological alteration (water withdrawal and changes in inflow and outflow), over-exploitation of their natural resources resulting in loss of biodiversity and disruption in ecosystem services provided by wetlands;

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And whereas clause (g) of article 51A of the Constitution stipulates that it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures;

And whereas the Environment (Protection) Act, 1986 is a comprehensive legislation to provide protection and improvement of the environment, including inter-alia, wetlands, and for matters connected therewith;

And whereas the National Environment Policy, 2006 recognises the ecosystem services provided by wetlands and emphasizes the need to set up a regulatory mechanism for all wetlands so as to maintain their ecological character, and ultimately support their integrated management;

And whereas India is a signatory to the Ramsar Convention on Wetlands and is committed to conservation and wise use of all wetlands within its territory;

And whereas the Central Government has published the Wetlands (Conservation and Management) Rules, 2010, vide number G.S.R. 951(E), dated the 4th December, 2010;

And whereas conservation and wise use of wetlands can provide substantial direct and indirect economic benefits to state and national economy, and thereby the Central Government stands committed to mainstreaming full range of wetland biodiversity and ecosystem services in development planning and decision making for various sectors;

And whereas the State Governments and Union Territory Administrations need to take into account wetland ecosystem services and biodiversity values likewise within their developmental programming and economic well-being, also taking into cognizance that land and water, two major ecological constituents of wetland ecosystems, are enlisted as State subjects as per the Constitution;

And whereas the Central Government considered it necessary to supersede the Wetlands (Conservation and Management) Rules, 2010 for effective conservation and management of wetlands in the country;

And whereas the Central Government had, in exercise of the powers conferred by section 25, read with subsection (1) and clause (v) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act, 1986, published the draft Wetlands (Conservation and Management) Rules, 2016, vide number G.S.R. 385 (E) dated 31st March, 2016 for information of the public likely to be affected thereby; and notice was given that the said draft rules would be taken into consideration by the Central Government after expiry of a period of sixty days from the date on which copies of the Gazette notification is made available to the public;

And whereas the Central Government has received the suggestions and objections from the State Governments, Union Territories and its organisations, individuals and civil society organisations on the draft Wetlands (Conservation and Management) Rules, 2016;

And whereas the suggestions and objections received in response to the above mentioned draft rules have been duly considered by the Central Government in consultation with State Governments and Union Territory Administrations.

Now, therefore, in exercise of the powers conferred by section 25, read with sub-section (1) and clause (v) of sub-section (2) and sub-section (3) of section 3 and section 23 of the Environment (Protection) Act, 1986 and in supersession of the Wetlands (Conservation and Management) Rules, 2010, except as respects things done or omitted to be done before such supersession, the Central Government hereby makes the following rules for conservation and management of wetlands, namely:—

#### **1. Short title and commencement.—**

- (1) These rules may be called the Wetlands (Conservation and Management) Rules, 2017.
- (2) These shall come into force from the date of their publication in the Official Gazette.

#### **2. Definitions.—**

- (1) In these rules, unless the context otherwise requires,-
  - (a) "Act" means the Environment (Protection) Act, 1986;
  - (b) "Authority" means the State Wetlands Authority or Union Territory Wetlands Authority, as the case may be;
  - (c) "Committee" means the National Wetlands Committee referred to in rule 6;
  - (d) "ecological character" means the sum of ecosystem components, processes and services that characterise the wetlands;
  - (e) "integrated management plan" means a document which describes strategies and actions for achieving wise use of the wetland and the plan shall include objectives of site management; management actions required to achieve the objectives; factors that affect, or may affect, the various site features; monitoring requirements for detecting changes in ecological character and for measuring the effectiveness of management; and resources for management implementation;
  - (f) "Ramsar Convention" means the Convention on Wetlands signed at Ramsar, Iran in 1971;
  - (g) "wetland" means an area of marsh, fen, peatland or water; whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters, but does not include river channels, paddy fields, human-made water bodies/tanks specifically constructed for drinking

water purposes and structures specifically constructed for aquaculture, salt production, recreation and irrigation purposes;

- (h) “wetlands complexes” means two or more ecologically and hydrologically contiguous wetlands and may include their connecting channels/ducts;
- (i) “wise use of wetlands” means maintenance of their ecological character, achieved through implementation of ecosystem approach within the context of sustainable development;
- (j) “zone of influence” means that part of the catchment area of the wetland or wetland complex, developmental activities in which induce adverse changes in ecosystem structure, and ecosystem services.

(2) The words and expressions used in these rules and not defined, but defined in the Act, shall have the meanings assigned to them in the Act.

**3. Applicability of rules.—** These rules shall apply to the following wetlands or wetlands complexes, namely:—

- (a) wetlands categorised as 'wetlands of international importance' under the Ramsar Convention;
- (b) wetlands as notified by the Central Government, State Government and Union Territory Administration:

Provided that these rules shall not apply to the wetlands falling in areas covered under the Indian Forest Act, 1927, the Wild Life (Protection) Act, 1972, the Forest (Conservation) Act, 1980, the State Forest Acts, and the Coastal Regulation Zone Notification, 2011 as amended from time to time.

**4. Restrictions of activities in wetlands.—**

- (1) The wetlands shall be conserved and managed in accordance with the principle of 'wise use' as determined by the Wetlands Authority.
- (2) The following activities shall be prohibited within the wetlands, namely,-
  - (i) conversion for non-wetland uses including encroachment of any kind;
  - (ii) setting up of any industry and expansion of existing industries;
  - (iii) manufacture or handling or storage or disposal of construction and demolition waste covered under the Construction and Demolition Waste Management Rules, 2016; hazardous substances covered under the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 or the Rules for Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms Genetically engineered organisms or cells, 1989 or the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008; electronic waste covered under the E-Waste (Management) Rules, 2016;
  - (iv) solid waste dumping;
  - (v) discharge of untreated wastes and effluents from industries, cities, towns, villages and other human settlements;
  - (vi) any construction of a permanent nature except for boat jetties within fifty metres from the mean high flood level observed in the past ten years calculated from the date of commencement of these rules; and,
  - (vii) poaching.

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Provided that the Central Government may consider proposals from the State Government or Union Territory Administration for omitting any of the activities on the recommendation of the Authority.

**5. Wetlands Authorities.—**

- (1) The Central Government hereby constitutes the State Wetlands Authority in each State with the following members, namely:—
  - (i) Minister In-charge of the Department of Environment/Forests of the State Government or Minister Incharge of the Department handling wetlands - Chairperson;
  - (ii) Chief Secretary of the State or Additional Chief Secretary equivalent - Vice Chairperson;
  - (iii) Secretary in-charge of the Department of Environment - Member ex-officio;
  - (iv) Secretary in-charge of the Department of Forests - Member ex-officio;
  - (v) Secretary in-charge of the Department of Urban Development - Member ex-officio;
  - (vi) Secretary in-charge of the Department of Rural Development - Member ex-officio;
  - (vii) Secretary in-charge of the Department of Water Resources - Member ex-officio;
  - (viii) Secretary in-charge of the Department of Fisheries - Member ex-officio;
  - (ix) Secretary in-charge of the Department of Irrigation and Flood Control - Member ex-officio;
  - (x) Secretary in-charge of the Department of Tourism - Member ex-officio;
  - (xi) Secretary in-charge of the Department of Revenue - Member ex-officio;
  - (xii) Director, State Remote Sensing Centre - Member ex-officio;
  - (xiii) Chief Wildlife Warden - Member ex-officio;
  - (xiv) Member Secretary, State Biodiversity Board - Member ex-officio;
  - (xv) Member Secretary, State Pollution Control Board - Member ex-officio;
  - (xvi) Additional Principal Chief Conservator of Forests of the Regional Office of Ministry of Environment, Forest and Climate Change - Member ex-officio;
  - (xvii) One expert each in the fields of wetland ecology, hydrology, fisheries, landscape planning and socioeconomics to be nominated by the State Government; and
  - (xviii) Additional Secretary/Joint Secretary/Director in the Department of Environment/Forests or Department handling wetlands - Member Secretary.
  
- (2) The Central Government hereby constitutes the Union Territory Wetlands Authority for each Union Territory with the following members, namely:—
  - (i) Administrator or Chief Secretary of the Union Territory - Chairperson;
  - (ii) Secretary in-charge of the Department of Environment - Vice Chairperson;
  - (iii) Secretary in-charge of the Department of Forests - Member ex-officio;
  - (iv) Secretary in-charge of the Department of Urban Development - Member ex-officio;
  - (v) Secretary in-charge of the Department of Rural Development - Member ex-officio;
  - (vi) Secretary in-charge of the Department of Water Resources - Member ex-officio;
  - (vii) Secretary in-charge of the Department of Fisheries - Member ex-officio;
  - (viii) Secretary in-charge of the Department of Irrigation and Flood Control - Member ex-officio;

- (ix) Secretary in-charge of the Department of Tourism - Member ex-officio;
  - (x) Secretary in-charge of the Departments of Revenue - Member ex-officio;
  - (xi) Director, Remote Sensing Centre - Member ex-officio;
  - (xii) Member Secretary, Union Territory Pollution Control Committee - Member ex-officio;
  - (xiii) Member Secretary, Biodiversity Board of the UT - Member ex-officio;
  - (xiv) Chief Wildlife Warden - Member ex-officio;
  - (xv) Additional Principal Chief Conservator of Forests of the Regional Office of Ministry of Environment, Forest and Climate Change- Member ex-officio;
  - (xvi) One expert each in the fields of wetland ecology, hydrology, fisheries, landscape planning and socioeconomics to be nominated by the Union Territory Administration; and
  - (xvii) Additional Secretary/Joint Secretary/Director in the Department of Environment/Forests or Department handling wetlands - Member Secretary.
- (3) The State Wetlands Authority or Union Territory Wetlands Authority may co-opt other members, not exceeding three in number, if required.
- (4) The State Wetlands Authority or Union Territory Wetlands Authority shall exercise the following powers and perform the following functions, namely:-
- (a) prepare a list of all wetlands of the State or Union Territory within three months from the date of publication of these rules;
  - (b) prepare a list of wetlands to be notified, within six months from the date of publication of these rules; taking into cognizance any existing list of wetlands prepared/notified under other relevant State Acts;
  - (c) recommend identified wetlands, based on their brief documents, for regulation under these rules;
  - (d) prepare a comprehensive digital inventory of all wetlands within a period of one year from the date of publication of these rules and upload the same on a dedicated web portal to be developed by the Central Government for the said purpose; the inventory to be updated every ten years;
  - (e) develop a comprehensive list of activities to be regulated and permitted within the notified wetlands and their zone of influence;
  - (f) recommend additions, if any, to the list of prohibited activities for specific wetlands;
  - (g) define strategies for conservation and wise use of wetlands within their jurisdiction; wise use being a principle for managing these ecosystems which incorporates sustainable uses (such as capture fisheries at subsistence level or harvest of aquatic plants) as being compatible with conservation, if ecosystem functions (such as water storage, groundwater recharge, flood buffering) and values (such as recreation and cultural) are maintained or enhanced;
  - (h) review integrated management plan for each of the notified wetlands (including trans-boundary wetlands in coordination with Central Government), and within these plans consider continuation and support to traditional uses of wetlands which are harmonized with ecological character;
  - (i) in cases wherein lands within boundary of notified wetlands or wetlands complex have private tenancy rights, recommend mechanisms for maintenance of ecological character through promotional activities;
  - (j) identify mechanisms for convergence of implementation of the management plan with the existing State/Union Territory level development plans and programmes;
  - (k) ensure enforcement of these rules and other relevant Acts, rules and regulations and on half-yearly basis (June and December of each calendar year) inform the concerned State Government or

Union Territory Administration or Central Government on the status of such notified wetlands through a reporting mechanism;

- (l) coordinate implementation of integrated management plans based on wise use principle through various line departments and other concerned agencies;
- (m) function as nodal authority for all wetland specific authorities within the State or Union Territory Administration;
- (n) issue necessary directions for conservation and sustainable management of wetlands to the respective implementing agencies;

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- (o) undertake measures for enhancing awareness within stakeholders and local communities on values and functions of wetlands; and
  - (p) Advise on any other matter suo-motu, or as referred by the State Government/Union Territory Administration.
- (5) The concerned Department of the State Government or Union Territory shall provide all necessary support and act as nodal Department and Secretariat to the Authority.
- (6) The Authority shall, within ninety days of publication of these rules, shall constitute,—
- (a) a technical committee to review brief documents, management plans and advise on any technical matter referred by the Wetland Authority; and
  - (b) a grievance committee consisting of four members to provide a mechanism for hearing and forwarding the grievances raised by public to the Authority;
- (7) The Committees referred to in sub-rule (6) shall meet at least once in every quarter to perform their functions.
- (8) The Authority shall meet at least thrice in a year.
- (9) The term of non-official members of the Authority nominated by State Government or Union Territory Administration, shall be for a period not exceeding three years.

### **6. Constitution of National Wetlands Committee.—**

- (1) The Central Government, hereby constitutes the National Wetlands Committee with the following members, namely:—
- (i) Secretary, Ministry of Environment, Forest and Climate Change, Government of India - Chairperson;
  - (ii) Special Secretary or Additional Secretary dealing with wetlands, Ministry of Environment, Forest and Climate Change, Government of India-Vice Chairperson;
  - (iii) Additional Director General, Wildlife, Ministry of Environment, Forest and Climate Change, Government of India - Member ex-officio;
  - (iv) Adviser or Joint Secretary dealing with wetlands, Ministry of Environment, Forest and Climate Change - Member ex-officio;

- (v) Joint Secretary, Ministry of Tourism, Government of India- Member ex-officio;
  - (vi) Joint Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India- Member ex-officio;
  - (vii) Joint Secretary, Ministry of Agriculture and Farmers Welfare, Government of India- Member ex-officio;
  - (viii) Joint Secretary, Ministry of Social Justice and Empowerment, Government of India- Member ex-officio;
  - (ix) Joint Secretary, Ministry of Urban Development, Government of India- Member ex-officio;
  - (x) Joint Secretary, Ministry of Rural Development, Government of India- Member ex-officio;
  - (xi) The Chairman, Central Pollution Control Board - Member ex-officio;
  - (xii) Director, Zoological Survey of India or Scientist F- Member ex-officio;
  - (xiii) Director, Botanical Survey of India or Scientist F- Member ex-officio;
  - (xiv) Director, Space Application Centre, Ahmedabad or Scientist F- Member ex-officio;
  - (xv) Member, Central Water Commission - Member ex-officio;
  - (xvi) Adviser, Niti Aayog - Member ex-officio;
  - (xvii) Three representatives of State Government or Union Territory Administration on a rotational basis for a tenure of two years each;
  - (xviii) One expert each in the fields of wetland ecology, hydrology, fisheries, landscape planning & socioeconomics; and
  - (xix) Director/Additional Director/Joint Director dealing with wetlands, Ministry of Environment, Forest and Climate Change - Member Secretary.
- (2) The National Wetlands Committee may co-opt other members, not exceeding three in number, if required.
- (3) The National Wetlands Committee shall perform the following functions, namely:-
- (a) advise the Central Government on appropriate policies and action programmes for conservation and wise use of wetlands;
  - (b) evolve norms and guidelines for integrated management of wetlands based on wise use principle;
  - (c) monitor implementation of these rules by the Authority;
  - (d) advise the Central Government on proposals received from State Governments or Union Territory Administrations for omission of the prohibited activities as referred in sub-rule (2) of rule 4;
  - (e) recommend designation of wetlands of international importance under Ramsar Convention;
  - (f) recommend trans-boundary wetlands for notification;
  - (g) review progress of integrated management of Ramsar sites and transboundary wetlands;
  - (h) advise on collaboration with international agencies on issues related to wetlands; and
  - (i) advise on any other matter suo-moto, or as referred by the Central Government.
- (4) The tenure of non-official members of the Committee shall not exceed three years.
- (5) The Committee shall meet at least once in every six months.

## 7. Delegation of powers and functions to the State Governments and Union Territory Administrations.—

- (1) The concerned Department of the State Government or Union Territory Administration shall, within a period of one year from the date of publication of these rules, prepare a Brief Document for each of the wetland identified for notification, providing:—
  - (a) demarcation of wetland boundary supported by accurate digital maps with coordinates and validated by ground truthing;
  - (b) demarcation of its zone of influence and land use and land cover thereof indicated in a digital map;
  - (c) ecological character description;
  - (d) account of pre-existing rights and privileges;
  - (e) list of site-specific activities to be permitted within the wetland and its zone of influence;
  - (f) list of site specific activities to be regulated within the wetland and its zone of influence; and
  - (g) modalities for enforcement of regulation;
- (2) Based on the Brief Document, the Authority shall make recommendations to the State Government or Union Territory Administration for notifying the wetlands.
- (3) The State Government or Union Territory Administration shall, after considering the objections, if any, from the concerned and affected persons, notify the wetlands in the Official Gazette, within a period not exceeding 240 days from the date of recommendation by the Authority.
- (4)
  - (a) In case of trans-boundary wetlands, the Central Government shall coordinate with concerned State Governments and Union Territory Administrations to prepare the Brief Document containing information as listed in sub-rule (1).
  - (b) Based on the Brief Document, the National Wetlands Committee shall make recommendations to the Central Government for notification of the wetland.
  - (c) The Central Government shall, after considering the objections, if any, from the concerned and affected persons, notify the wetlands in the Official Gazette, within a period not exceeding 240 days from the date of recommendation by the Committee.

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- (5)
  - (a) The Central Government shall create a dedicated web portal for information relating to wetlands.
  - (b) The Central Government, State Government and Union Territory Administration shall upload all relevant information and documents pertaining to wetlands in their jurisdiction.

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**Annexure IV: Designated Best Use Criteria for Surface Waters as Recommended by CPCB**

Designated Best Use	Class of Criteria	Criteria
Drinking Water Source without conventional treatment but after disinfection	A	<ol style="list-style-type: none"> <li>Total Coliforms Organism MPN/100ml Shall be 50 or less</li> <li>pH between 6.5 and 8.5</li> <li>Dissolved Oxygen 6mg/1 or more</li> <li>Biochemical Oxygen Demand 5 days 20°C 2mg/1 or less</li> </ol>
Outdoor bathing (Organised)	B	<ol style="list-style-type: none"> <li>Fecal Coliforms organism MPN/100 ml shall be 500 or less</li> <li>pH between 6.5 and 8.5</li> <li>Dissolved Oxygen Demand 5 mg/1 or more</li> <li>Biochemical Oxygen Demand 5 days 20°C 3 mg/1 or less</li> </ol>
Drinking water source after conventional treatment and disinfection	C	<ol style="list-style-type: none"> <li>Total coliforms organism MPN/100 ml shall be 5000 or less</li> <li>pH between 6 to 9</li> <li>Dissolved oxygen 4 mg/1 or more</li> <li>Biochemical Oxygen Demand 5 days 20°C 3mg/1 or less</li> </ol>
Propagation of Wild life and Fisheries	D	<ol style="list-style-type: none"> <li>pH between 6.5 to 8.5</li> <li>Dissolved Oxygen 4mg/1 or more</li> <li>Free Ammonia (as N) 1.2 mg/1 or less</li> </ol>
Irrigation, Industrial Cooling, Controlled Waste disposal	E	<ol style="list-style-type: none"> <li>pH between 6.0 to 8.5</li> <li>Electrical Conductivity at 25°C micro mhos/cm Max 2250</li> <li>Sodium absorption Ratio Max 26</li> <li>Boron Max 2 mg/1</li> </ol>
	Below E	Not Meeting A, B, C, D, & E Criteria

**Annexure V: Format for preparing brief document**

State / Union Territory: \_\_\_\_\_

Name and address of person(s) compiling this information \_\_\_\_\_

**Section 1: Identification, Location and Jurisdiction**

1.1 Name of the Wetland (Alternative names, including in local language should be given in parenthesis after official name)  
\_\_\_\_\_

1.2 Name of the Village(s) , Tehsil(s), Municipal area (s)  
\_\_\_\_\_

1.3 Name of the District(s) in which wetland complex is located  
\_\_\_\_\_

1.4 Geographical coordinates (Latitude and Longitude, to degree, minutes and second)

Latitude: From \_\_\_\_\_ to \_\_\_\_\_

Longitude: From \_\_\_\_\_ to \_\_\_\_\_

1.5 Name of the Department / Agency which has jurisdiction over the wetland / wetlands complex  
\_\_\_\_\_

**Section 2: Site Characteristics**

2.1 Area of wetland / wetlands category (ha) \_\_\_\_\_

Wetland type (Please tick appropriate categories and sub-categories)

Category	Subcategory
<input type="checkbox"/> <b>Natural (Inland)</b>	<input type="checkbox"/> Permanent lakes
	<input type="checkbox"/> 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

Category	Subcategory
<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

2.2 Depth (m) Average \_\_\_\_\_ Maximum \_\_\_\_\_

2.3 Elevation (m above mean sea level) \_\_\_\_\_ m

2.4 Water regimes

a) Main source of water (tick all applicable)

- Rainfall                       Groundwater  
 Catchment runoff               Direct / indirect inflow from river

Others, please specify \_\_\_\_\_

b) Water permanence

- Mostly permanent               Mostly intermittent

c) Destination of water from wetland

- Feeds groundwater               To downstream catchment  
 To river                               To sea

d) Water pH

- Acid (< 5.5)                       Circumneutral (5.5 – 7.4)  
 Alkaline (> 7.4)                   Not known

e) Water salinity

- Fresh (< 0.5 g/l)                   Brackish (0.5 – 30 g/l)  
 Euhaline (30- 40 g/l)               Hypersaline (>40g/l)  
 Not known

f) Nutrient in water

- Eutrophic                       Mesotrophic  
 Oligotrophic                       Not known

2.5 Climatic setting

a) Annual Rainfall /Snowfall(mm) \_\_\_\_\_

b) Temperature (°C)                      Minimum \_\_\_\_\_ Maximum \_\_\_\_\_

c) Humidity (%)                      Minimum \_\_\_\_\_ Maximum \_\_\_\_\_

2.5 Area of zone of influence (in ha) \_\_\_\_\_

2.6 Major land use within zone of influence (provide as approximate % of catchment area)

Forests                      \_\_\_\_\_ %

Plantation                      \_\_\_\_\_ %

Agriculture                      \_\_\_\_\_ %

Settlements (Rural)                      \_\_\_\_\_ %

Settlements (Urban)                      \_\_\_\_\_ %

Industrial                      \_\_\_\_\_ %

2.7 Map of wetland complex and zone of influence  
(To be enclosed as Annex I and II to this proposal)

### Section 3: Biodiversity

3.1 Notable plant species present in wetland

\_\_\_\_\_

3.2 Notable animal species present in wetland

\_\_\_\_\_

3.3 Species of conservation significance (rare, endangered, threatened, endemic species)

\_\_\_\_\_

3.4 Major plant invasive alien species

\_\_\_\_\_

3.5 Major animal invasive alien species

\_\_\_\_\_

**Section 4: Ecosystem services**

Importance	Relevant for the site (please tick yes or no)	If Yes, Details (upto 50 words for each category)
Source of drinking water for people living and around	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Source of water for agriculture	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Fisheries	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Cultivation of aquatic food plants	<input type="checkbox"/> Yes <input type="checkbox"/> No	
For buffalo wallowing and use of domesticated animals	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Medicinal plants	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is a recreational site	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Buffering communities from extreme events as floods and storms	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Groundwater recharge	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Water purification	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Acts as a sink for sediments	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Has significant cultural and religious values	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is a site for recreation and tourism	<input type="checkbox"/> Yes <input type="checkbox"/> No	

National Plan for Conservation of Aquatic Ecosystems (NPCA) Guidelines

Importance	Relevant for the site (please tick yes or no)	If Yes, Details (upto 50 words for each category)
Supports noteworthy plants species	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Supports noteworthy animal species	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Site of high congregation of migratory water birds	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Supports life cycle of fish or amphibians	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Mining	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Any other, please list		

**Section 5: Pre-Existing Rights and Privileges**

Nature of right and privilege	Relevant for the site (please tick yes or no)	Does this negatively impact the wetland's ecological health?	Brief description (upto 50 words for each category)
Community Fishing (without any lease or permission from government department)	<input type="checkbox"/> Yes <input 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 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 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 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 type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Grazing	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	

National Plan for Conservation of Aquatic Ecosystems (NPCA) Guidelines

Nature of right and privilege	Relevant for the site (please tick yes or no)	Does this negatively impact the wetland's ecological health?	Brief description (upto 50 words for each category)
Religious practices	<input type="checkbox"/> Yes <input 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 type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Withdrawal of water for agriculture or fisheries	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Bathing or wallowing of domestic animals	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Plying of boats	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not assessed	
Any other, please list here	<input type="checkbox"/> Yes <input 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 or Potential	Additional information, if any
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	

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Threat	Degree	Present or Potential	Additional information, if any
Spread of invasive species	<input type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Present <input type="checkbox"/> Potential	
Any other, please list	<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 4(2) of Wetlands Rules)**

Activity	Prohibited within wetlands or zone of influence	Details of specific area wherein activity is prohibited	Name of department / agency responsible for regulation	Additional information, if any
	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			

**Section 8: Activities Proposed to be regulated**

Activity	Place a tick mark if relevant	Regulation within wetlands or zone of influence	Level of regulation (in terms of people, restricted area or any other)	Name of department / agency responsible for regulation	Additional information, if any
Withdrawal of water / impoundment/diversion or any other hydrological intervention	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			
Harvesting of resources (living / non-living)	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			
Grazing	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			



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Activity	Place a tick mark if relevant	Regulation within wetlands or zone of influence	Level of regulation (in terms of people, restricted area or any other)	Name of department / agency responsible for regulation	Additional information , if any
Discharge of treated sewage/ effluent / wastewater	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			
Construction of boat jetties, and facilities for temporary use , as pontoon bridges	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			
Aquaculture, agriculture and horticulture activities within the wetland boundaries.	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			
Any other, please list	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence			

**Section 9: Activities Proposed to be permitted**

Activity	Place a tick mark if relevant	Within wetlands or zone of influence	Additional information, if any
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	

National Plan for Conservation of Aquatic Ecosystems (NPCA) Guidelines

Activity	Place a tick mark if relevant	Within wetlands or zone of influence	Additional information, if any
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	
	<input type="checkbox"/>	<input type="checkbox"/> Wetland / Wetlands complex boundary <input type="checkbox"/> Zone of influence	

**Section 10: Listing of Available Scientific Resources Used**

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**CHECKLIST**

- 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 is provided
- Site's biodiversity values are listed, and for major categories, justification is provided
- List of pre-existing rights and privileges is provided
- Consistency or inconsistency of pre-existing rights and privileges is indicated to be best of available knowledge
- Threats to site are listed, and for major categories details are 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