# GUIDELINES FOR WESTERN PROVINCE WETLANDS ZONING & RELEVANT REGULATIONS FOR APPLICATION IN URBAN DEVELOPMENT PLAN PREPARATION

# Prepared by the Environment & Landscape Division In consultation with other Divisions of the Urban Development Authority

#### and

### all other Stakeholders such as

Sri Lanka Land Reclamation & Development Cooperation
Central Environmental Authority
Irrigation Department
Wildlife Conservation Department
Coast Conservation Department
Forest Conservation Department
Agrarian Development Department
Local Authorities in Western Province
Non Governmental Agencies

#### GUIDELINES FOR WESTERN PROVINCE WETLANDS ZONING

&

#### RELEVANT REGULATIONS

## FOR APPLICATION IN URBAN DEVELOPMENT PLAN PREPARATION 2006

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#### I INTRODUCTION

The region's wetland network is the macroscale natural drainage network affording vital stormwater drainage and flood detention, thus protecting high land from flood and making it available for intensive urban development at little or no cost. Most wetlands also serve as "green lungs" and as essential open spaces visually, spatially and climate-wise, for human health (both physical and mental), comfort and recreation. Many wetlands are high in biodiversity and some of them are significant biodiversity reserves.

However, in view of the large percentage of wetlands in the Western Province and the lack of infrastructure serving all high land available for development, some filling for development purposes has to be permitted. This could include use of wetlands for carefully planned and implemented public infrastructure projects such as highway development, solid waste management projects and sewage disposal projects, where more suitable land is not available.

Nevertheless, it is recognized that most of the wetlands should be conserved and some preserved in order to ensure that the expected urban development in the province is sustainable. This is crucially important in view of flood disaster prevention, considering the tropical monsoon climate of the region and its vulnerability to both the south-west and north-east monsoons as well as inter monsoonal rains and future increased extreme storm events to be expected because of climate change.

Approximately **20** % **of the Western Province** is composed of wetlands and the wetlands in the western province could be classified as follows:

- I. Deep freshwater marshes and swamps
- II. Shallow freshwater marsh including some abandoned clay pits and similar abandoned mining areas.
- III. Recently abandoned paddy fields
- IV. Paddy fields
- V. Other wetland agriculture areas such as reed/rush fields, low-lying grasslands (often used as grazing grounds) "Keera-Kola" fields & certain "ovita" areas
- VI. Water bodies (such as estuaries, lagoons, lakes and some abandoned clay pits) and waterways, including sea-grass beds.
- VII. Mangrove areas.

The Goal of Wetland Zoning in the Western Province is to facilitate environmentally & economically sustainable use of wetlands considering their intrinsic potential, their ecology and the needs of the surrounding population, while maintaining essential flood storage capacity and other environmental benefits.

These guidelines should be applied to all Urban Local Authority areas in the Western Province.

#### II ZONING

A series of workshops both within the UDA and interagency, the latter involving the Ministry of Environment, Ministry of Urban Development and all other related Government and Non Government Agencies, led to **definition of 5 basic zones:** 

- 1. Wetland Protection Zone.
- 2. Wetland Nature Conservation Zone.
- 3. Wetland Agriculture Zone.
- 4. Special Paddy Cultivation Zone.
- 5. Low-lying Potential Development Zone.

#### WESTERN PROVINCE WETLAND ZONING REGULATIONS

#### ZONE – SPECIFIC DEVELOPMENT CONDITIONS

Conditions of Development	Wetland Protection Zone	Wetland Nature Conservation Zone	Wetland Agriculture Zone	Special Paddy Cultivation Zone	Low – lying Potential Development Zone
a)Flood storage capacity.	shall be maintained in accordance with a Master Plan approved by the SLLR & DC and where relevant, the ID as well				Stormwater management/drainage shall be carried out in accordance with a Master Plan approved by the SLLR & DC, the CEA, the ID, the UDA, the WLCD, the FD and the ADD.
b) Minimum plot size for the purpose of any building construction.	4 ha (10 acres) In smaller plots the permitted uses are the same but no buildings shall be allowed.	2 ha (5 acres) In smaller plots the permitted uses are the same but no buildings shall be allowed.	1 ha (2.5acres) In smaller plots the permitted uses are the same but no buildings shall be allowed.	Not relevant as buildings not permitted.	1 ha (2.5acres)
c) Maximum area where filling permitted.	2% of the site area (if needed for roads, vehicle parking, toilets and sewage disposal/treatment required for site management).	5% of the site area (if needed for roads, vehicle parking, toilets and sewage disposal/treatment required for site management).	10% of the site area, or as determined by a stormwater management master plan approved by SLLR & DC, whichever is less.	No filling permitted.	To be determined by SLLR &DC Master Plan in co- ordination with the CEA, the UDA, the WLCD, the FD, the ID and the ADD.

Conditions of Development	Wetland Protection Zone	Wetland Nature Conservation Zone	Wetland Agriculture Zone	Special Paddy Cultivation Zone	Low – lying Potential Development Zone
d) Maximum plot coverage (area covered by buildings).	1% of the total project area; all buildings on stilts excepting toilets, which may be on filled land.	3% of the total project area; all buildings on stilts excepting toilets which may be on filled land.	5% of the total project area.	Buildings not permitted.	To be determined in accordance with the overall Urban Development Plan for the relevant Local Authority Area.
e) Maximum area permitted for project infrastructure, i.e. Electricity/Water Supply/Telecommunication/Roads.	4% of the total project area.	7% of the total project area.	7% of the total project area.	Not permitted.	Not limited as extent depends on type of project
f) Maximum permitted ground floor area of an individual building.	100 sq. m.	300 sq. m.	300 sq. m.	Buildings not permitted.	Will be decided on a site-specific basis.
g) Maximum permitted building height.	7 m from the natural ground level (except in the case of a few look-out posts/observation towers/tower hides which are compatible with the overall concept)	7 m from the natural ground level (except in the case of a few look-out posts/observation towers/tower hides which are compatible with the overall concept)	7 m from the natural or filled ground level.	Buildings not permitted.	Will be determined and approved on a site specific basis.

Conditions of Development	Wetland Protection Zone	Wetland Nature Conservation Zone	Wetland Agriculture Zone	Special Paddy Cultivation Zone	Low – lying Potential Development Zone
h)Building type.	All buildings except toilets shall be on stilts in wetland (not filled area). They shall be isolated or in aesthetically pleasing clusters, with visually compatible, attractive "roof-scapes". They shall not block views of the open area from adjoining public roads and other public areas and they should be environmentally friendly.		Buildings shall be isolated or in aesthetically pleasing clusters, with visually compatible, attractive "roof-scapes". They shall not block views of the open area from adjoining public roads and other public areas and they should be environmentally friendly.	Buildings not permitted.	To be determined in accordance with the overall Urban Development Plan.
i) Sub-division	Not permitted	Not permitted	Not permitted	Not permitted.	Permitted
j) Boundary demarcation.	Boundary walls not permitted. Visually compatible boundary fencing which does not hamper stormwater flow may be permitted only along the boundary with adjoining existing high land. Any other boundaries may be demarcated only by visually compatible boundary markers at minimum intervals of 10m. Both the above will be subject to approval of	Boundary walls not permitted. Visually compatible boundary fencing which does not hamper stormwater flow may be permitted only along the boundary with adjoining existing high land.  Any other boundaries may be demarcated only by visually compatible boundary markers at	Boundary walls not permitted. Visually compatible boundary fencing which does not hamper stormwater flow may be permitted only along the boundary with adjoining existing high land. Any other boundaries may be demarcated only by visually compatible boundary markers at minimum intervals of 10m. Both the above	Boundary walls not permitted. Visually compatible boundary fencing which does not hamper stormwater flow may be permitted only along the boundary with adjoining existing high land. Any other boundaries may be demarcated only by visually compatible boundary markers at minimum intervals	Boundary walls/fences/markers permitted, without causing any obstruction to the stormwater drainage system, subject to the approval of the UDA.

	the UDA, on a site specific basis.	minimum intervals of 10m. Both the above will be subject to approval	will be subject to approval of the UDA, on a site specific basis.	of 10m. Both the above will be subject to approval of the design by the UDA,	
		of the UDA, on a site specific basis.		on a site specific basis.	
k) Relaxation of above conditions in exceptional cases.	Not permitted.	N.B. In the rare event of having to accommodate a vital public infrastructure project, the above conditions may be relaxed.	N.B. In the rare event of having to accommodate a vital public infrastructure project, the above conditions may be relaxed.	N.B. In the rare event of having to accommodate a vital public infrastructure project, the above conditions may be relaxed.	(Not relevant)

#### N. B.

- In the case of "prescribed" projects under the Environmental Act, additional site-specific conditions shall be imposed by the CEA, SLLR & DC, UDA, ADD & ID, if necessary.
- General conditions & guidelines for all five basic wetland zonings in Western Province should be applied.

#### PERMITTED USES

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Wetland Protection Zone	Wetland Nature Conservation Zone	Wetland Agriculture Zone	Special Paddy Cultivation Zone	Low – lying potential Development Zone				
<ul> <li>Nature Parks which conserve the natural eco-system.</li> <li>Field Study/Information Centers on stilts.</li> <li>Raised board walks, decks on stilts, shelters/rest huts on stilts.</li> <li>Nature trails, hides, observation towers, canopy walkways, carefully located cycle paths, bridleways and the like</li> <li>Camping, picnicking, bird watching and the like, while ensuring that the natural habitat is not disturbed.</li> <li>Security Posts, Ticket Booths, Site Offices.</li> <li>In exceptional circumstances only: Dry-weather, grassed, public playgrounds.</li> <li>Traditional fishing.</li> <li>Continuation of existing paddy fields.</li> </ul>	<ul> <li>Nature Parks conserving the natural eco-system.</li> <li>Eco-friendly restaurants</li> <li>Field Study/Information Centers</li> <li>Mini Conference Centers</li> <li>Raised board walks, decks on stilts, shelters/rest huts.</li> <li>Nature trails, hides, observation towers, canopy walkways, cycle paths, bridleways &amp; the like</li> <li>Camping, Picnicking, Bird watching and the like.</li> <li>Security posts, Ticket Booths, Site Offices</li> <li>Outdoor fitness/exercise facilities</li> <li>Visitor Centers</li> <li>Wetland museums</li> <li>Eco-tourism facilities (i.e. small-scale, eco-friendly, tourist development such as cabanas on stilts)</li> <li>Wetland Adventure/Theme Parks, conserving/restoring the natural ecosystem.</li> <li>Other nature based recreation activities</li> <li>Open grassed areas (as public parks/playgrounds).</li> <li>Traditional Fishing &amp; fish rearing.</li> <li>Flower collection</li> <li>Water-transport if carefully integrated and operated</li> <li>Dairies and grazing, but no other form of animal husbandry</li> <li>Wetland forestry</li> <li>Vitally important public infrastructure projects, under exceptional circumstances.</li> <li>Irrigation/flood protection structures.</li> <li>Wetland agriculture including reed cultivation.</li> </ul>	<ul> <li>All uses permitted in Wetland Nature Conservation Zone.</li> <li>Wetland Agriculture (including animal husbandry except piggeries, prawn farms, and poultry forms having a stock exceeding 200 birds</li> <li>Fisheries</li> <li>Arboriculture, agro-forestry, fuel-wood forestry and conservation forestry including natural forest communities</li> <li>Sales outlets for the produce of the plot/project</li> <li>Non-polluting agricultural processing centers</li> <li>Mining in accordance with (GS &amp; MB) and CEA guidelines, conditions and regulations, including site rehabilitation and recreation (which should be for agriculture/fisheries/forestry only)</li> <li>Public Parks and Playgrounds</li> <li>Important Public infrastructure projects.</li> </ul>	Paddy cultivation.     Agro forestry and traditional fishing, only if compatible with the main use for paddy cultivation (therefore restricted to strips/patches not needed for paddy cultivation).	All uses permitted in Wetland Nature Conservation Zone and Wetland Agriculture Zone.  Tourism, Sports and Recreation.  Residential, Commercial, Administrative and Institutional.  Industrial other than medium and high polluting industries.  Mining, in accordance with GS & MB and CEA guidelines, conditions and regulations, including those dealing with site rehabilitation. Public Infrastructure Projects.				

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