

Title: Assessment of vegetation and peat soil characteristics of a fire-impacted tropical peatland in Costa Rica

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Table 1S Plant species identified in LRS (MQW Costa Rica) in November 2019 and October 2021

Scientific name	Family	Group ^a	2019	2021
<i>Acrostichum danaeifolium</i>	Pteridaceae	OBL	X	X
<i>Aeschynomene sensitive</i>	Fabaceae	FACW	X	X
<i>Caperonia castaneifolia</i>	Euphorbiaceae	OBL	X	X
<i>Ceratopteris thalictroides</i>	Pteridaceae	OBL	X	
<i>Cyperus luzulae</i>	Cyperaceae	FACU	X	X
<i>Eichhornia azurea</i>	Pontederiaceae	OBL	X	X
<i>Eichhornia heterosperma</i>	Pontederiaceae	OBL	X	X
<i>Elaeis oleifera</i>	Arecaceae	OBL	X	X
<i>Eleocharis interstincta</i>	Cyperaceae	OBL	X	X
<i>Eleocharis retroflexa</i>	Cyperaceae	OBL	X	X
<i>Fuirena umbellata</i>	Cyperaceae	OBL	X	X
<i>Heteranthera reniformis</i>	Pontederiaceae	OBL	X	X
<i>Hydrilla verticillata</i>	Hydrocharitaceae	OBL	X	X
<i>Hydrolea spinosa</i>	Hydrophyllaceae	OBL	X	
<i>Hyptis capitata</i>	Lamiaceae	FAC	X	
<i>Ludwigia affinis</i>	Onagraceae	OBL		X
<i>Ludwigia hyssopifolia</i>	Onagraceae	FACW	X	
<i>Ludwigia sedoides</i>	Onagraceae	OBL	X	X
<i>Marsilea polycarpa</i>	Marsileaceae	OBL	X	X
<i>Mimosa pigra</i>	Fabaceae	FACW	X	X
<i>Nymphaea ampla</i>	Nymphaeaceae	OBL	X	X

<i>Nymphoides indica</i>	Menyanthaceae	OBL	X	X
<i>Oryza glumaepatula</i>	Poaceae	FACW	X	X
<i>Pontederia rotundifolia</i>	Pontederiaceae	OBL	X	X
<i>Rhynchospora corymbosa</i>	Cyperaceae	FACW	X	X
<i>Sagittaria guayanensis</i>	Alismataceae	OBL	X	X
<i>Salvinia auriculata</i>	Salviniaceae	OBL	X	X
<i>Scleria melaleuca</i>	Cyperaceae	FACW	X	X
<i>Senna reticulate</i>	Fabaceae	FACW	X	X
<i>Sesbania exasperata</i>	Fabaceae	OBL	X	X
<i>Thalia geniculate</i>	Marantaceae	OBL	X	X
<i>Thelypteris interrupta</i>	Thelypteridaceae	OBL	X	X
<i>Utricularia foliosa</i>	Lentibulariaceae	OBL	X	X

^aOBL: Obligate Wetland Plants. FACW: Facultative Wetland Plants. FAC: Facultative Plants. FACU: Facultative Upland Plants.

Table 2S Tree species on land bordering the LRS, MQW. November, 2019 and October, 2021

Scientific name	Family	2019	2021
<i>Ceiba pentandra</i>	Bombacaceae	X	X
<i>Ceiba speciosa</i>	Malvaceae	X	X
<i>Pachira aquatica</i>	Malvaceae	X	X
<i>Tabebuia rosea</i>	Bignoniaceae	X	X

Description

In the flatland, *Aeschynomene sensitive*, *Hydrolea spinosa*, *Hyptis capitata*, *Ludwigia hyssopifolia*, *Mimosa pigra*, *Senna reticulate*, *Thelypteris interrupta*, and *Utricularia foliosa* were found. Also, *Oryza glumaepatula* (wild rice species) was found as patches of individuals.

Towards the edges (highest and driest part of the peatland) and the channels next to the dike (Route 1856) the physical conditions of the wetland changed, allowing the colonization of other plant species, between facultative on the driest edge and floating or OBL near the river and the channels along the Route 1856. These species included *Acrostichum danaeifolium*, *Caperonia castaneifolia*, *Ceratopteris thalictroides*, *Eichhornia heterosperma*, *Heteranthera*

reniformis, *Ludwigia sedoides*, *Marsilea polycarpa*, *Nymphoides indica*, *Nymphaea ampla*,
Pontederia rotundifolia, *Sagittaria guayanensis*, *Salvinia auriculata*, *Thalia geniculata*