Code Global Challenge (IBM, 2021)

# Introduction

## ¿Why we must save wetlands?

Wetlands are water bodies which do not exceed 6 meters in depth. They could be rivers, lakes, swamps, ponds, marshesor bogs. [1]. Wetlands present a lot of ecosystem services to living beings, like flood control, carbón capture, water quality improvement, source of food to human and animals, birds biodiversity reservoir and much more [2] [3]. However, around the world, wetlands are dissapearing due to pollution, overexploitation of wetland´s resources and buildings [1]. Colombia is not alien to this reality. For this, there are some laws that order the wetlands protection like Law 357/1997 or Resolution 0157/2004 [4] which are based on Ramsar Convention. In addition, more and more wetlands are being declared as Ramsar Convention Wetlands which have not only local but international protection [4] [5].

In spite of the local and global normativity, wetlands pollution is still valid [7] and many academic institutions and research organizations are looking different ways to recover water quality wetlands and water ecosystem in general, proposing physical / chemical / biological treatment.

# Referencies

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| [1] | Ramsar Convention, An introduction to the Ramsar Convention on Wetlands, Gland, Switzerland: Ramsar Convention Secretariat , 2016. |
| [2] | Wetlands International, «Wetland Resilience,» [En línea]. Available: https://www.wetlands.org/casestudy/urban/wetland-resilience/. [Último acceso: 26 07 2021]. |
| [3] | National Park Service, «Wetlands,» 16 05 2016. [En línea]. Available: https://www.nps.gov/subjects/wetlands/why.htm. [Último acceso: 27 07 2021]. |
| [4] | Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, «Insumos para la delimitación de Ecosistemas estratégicos: Páramos y Humedales.,» [En línea]. Available: http://repository.humboldt.org.co/bitstream/handle/20.500.11761/9888/Anexo%201\_Marco?sequence=2#:~:text=Los%20humedales%20son%20bienes%20de,aguas%20no%20mar%C3%ADtimas%20o%20continentales.. [Último acceso: 26 07 2021]. |
| [5] | Fundación Humedales de Bogotá, «Humedales Ramsar en Colombia,» [En línea]. Available: https://humedalesbogota.com/2018/01/25/humedales-ramsar-colombia/. [Último acceso: 29 07 2021]. |
| [6] | Asociacion Ambiente y Sociedad, «Colombia tiene más de 30 mil humedales,» [En línea]. Available: https://www.ambienteysociedad.org.co/colombia-tiene-mas-de-30-mil-humedales/. [Último acceso: 29 07 2021]. |
| [7] | L. Ardila, S. Mora y R. Flórez, «Ecological Assessment by Physical Chemical and Biological Interactions Analysis in Trophic State of Libelula´s Wetland – Bogotá - Colombia,» *International Journal of Environmental Science and Development,* vol. 9, nº 9, pp. 236 - 242, 2018. |