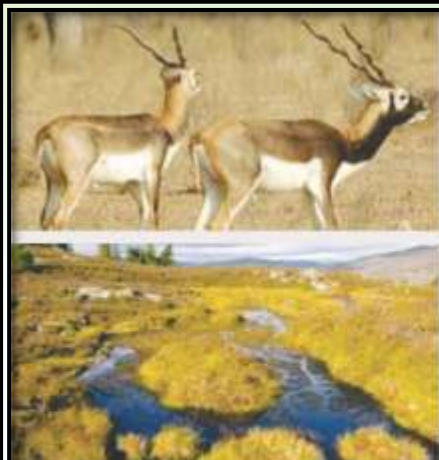


NEWSLETTER 2021-22 ENVIS Hub HARYANA

Wetlands for Conservation of Ecosystems



Greetings from Director Environment !

The year 2021, India has celebrated on Azadi ka Amrit Mahotsav (wetlands).

Wetlands are unique, productive ecosystems where terrestrial and aquatic habitats meet. Wetlands play a critical role in maintaining many natural cycles and supporting a wide range of biodiversity. They purify and replenish our ground water, and produce of wetlands substance the habitants. They serve as a natural sponge against flooding and drought, and help to provide sustaining effort to environment. Bursting with biodiversity, wetlands are a vital means of storing carbon. Wetlands are also tremendously productive ecosystems that provide good services to society worldwide.

Wetland ecosystems can have some of the highest ecosystem service values compared to other ecosystems. This is due to the importance of clean water provision, natural hazards mitigation, for example in flood plains, carbon storage, rivers, lakes, ponds, reservoirs, and marshes. A large proportion of the values reported for most types of wetlands come from their water related services.

Wetlands have played an important role in human development and there of significance value in religious and historical or archaeological are many cultures of the world. They are also often visiting places for recreational activities including hiking, fishing, bird watching, photography etc.

Sh. Pardeep Kumar, IAS
Director, Environment & Climate
Change Department, Haryana

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Wetlands

Wetlands are one of the crucial natural resources. Wetlands are areas of land that are either temporarily or permanently covered by water. This means that a wetland is neither truly aquatic nor terrestrial; it is possible that wetlands can be both at the same time depending on seasonal variability. Thus, wetlands exhibit enormous diversity according to their genesis, geographical location, water regime and chemistry, dominant plants and soil or sediment characteristics. Because of their transitional nature, the boundaries of wetlands are often difficult to define. Wetlands do, however, share a few attributes common to all forms. Of these, hydrological structure (the dynamics of water supply, throughput, storage and loss) is most fundamental to the nature of a wetland system. It is the presence of water for a significant period of time, which is principally responsible for the development of a wetland.

Introduction

Haryana state in India stands for agriculture revolution and widespread economic growth linked with govt. policies, peoples' sense of awareness, outsourcing of youth to abroad and availability of world class professional colleges in the private sector. Traditional villagers are in themidst of profound social

transformation in correlation with extensive and intensive generation of infrastructure of various hues. These developments have also resulted in destructing of erstwhile balanced façade of environmental components. One visible effect is negatively influencing the age old rural wetlands. Each village, in the earlier times and as recently as 30-40 years back used to have 4-5 self-maintained ponds. These ponds were the best natural depressions to receive run-off rainy water in a self-driven style. These ponds were the water sheets for the rural society of India since times immemorial. During lean period of availability of water (November to June), these ponds served as ready resource of water. Herds of cattle would drink and bath in these ponds. Tortoises, Pond herons, Cattle Egrets, Cormorants, Pelecypods, Gastropods, wide range of diatoms and vegetation will thrive in these ponds. During the summer season, the villagers used to excavate the silt for purposes like brick making and strengthening of Kuchha roof tops to secure against water leakage in rainy season was one self driven practice ensuring the proper maintenance of depth parameter thus leading to the perpetual existence of rural ponds – is now totally wanting.

➤ According to a statement issued by the Union Environment Ministry on August 14, 2021, two sites in Haryana, Bhindawas Wildlife Sanctuary and Sultanpur National Park have been recognized as wetlands of international importance under the Ramsar Convention.

➤ This is the first time that two sites from Haryana have been included in the Ramsar list.

➤ Bhindawas Wildlife Sanctuary is a man-made freshwater wetland. It is the largest wetland in Haryana. More than 250 species of birds use this sanctuary as a resting place throughout the year. The site is home to more than 10 globally threatened species, including the Egyptian Vulture, Steppe Eagle, Pallas's Fish Eagle and Black-bellied Tern.

➤ Sultanpur National Park is home to more than 220 species of native birds, winter migrants and local migratory waterfowl at critical stages of their life cycle. More than 10 of these species fall into the globally endangered category.

➤ The Ramsar Treaty is an international treaty for the conservation and sustainable use of wetlands. It is named after the Iranian city of Ramsar on the Caspian Sea, where the treaty was signed on February 2, 1971.

- The aim of the Ramsar List is 'to develop and maintain an international network of wetlands that are critical to the conservation of global bio-diversity and to human life through the maintenance of their ecosystem components, processes and benefits'

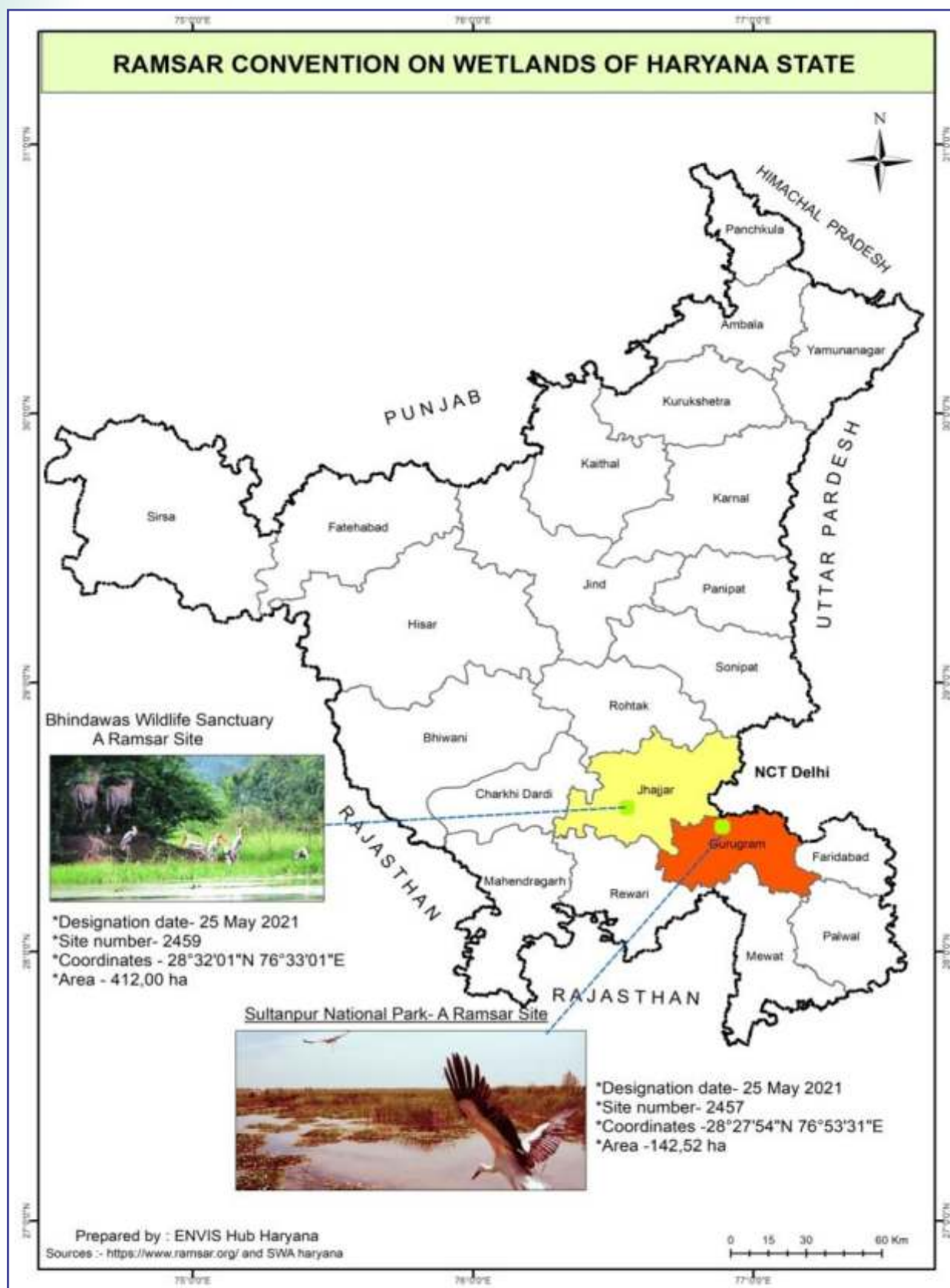
Technical Committee of the State wetland authority

In pursuance of Rule 5 (6)(i) of Wetlands (Conservation and Management) Rules. 2017 issued by Government of India, the Governor of Haryana is pleased to re-constitute a "**Technical Committee**" in place of earlier Technical Committee constituted vide order dated 28-08-2019, under advise on any technical matter in cases referred by State Wetland Authority.

The Technical Committee will consist of the following:-

1.	Sh. M.D. Sinha, IFS, HIPA, Haryana	Chairman
2.	Member Secretary, Haryana State Pollution Control Board	Member
3.	Chief Engineer, Irrigation Department, Haryana	Member
4.	Director, Fisheries, Haryana	Member
5.	Director, Town and Country Planning Department, Haryana	Member
6.	Director, Development of Panchayats Department, Haryana	Member
7.	Director, Urban Local Bodies Department, Haryana	Member
8.	Senior Scientist, SG (Environment/Forest) HARSAC	Member
9.	Representative of Deputy Commissioner of concerned district	Member
10.	Sh. Subhash Yadav, IFS, Divisional Forest officer, Gurugram Metropolitan Development Authority	Member Secretary/ Convener

Ramsar Convention site in the state



District-wise wetland area estimates in State

The state has twenty two districts. District-wise distribution of wetlands showed that three districts could be called as wetland rich. Panchkula has highest concentration which is around 3.53 per cent of geographic area under wetland. The other two districts are: Yamunanagar and Karnal have 2.79 and 1.64 per cent area under wetland respectively. Five districts Kaithal, Fatehabad, Sirsa, and Bhiwani have least amount of wetland area.

Wetlands in the State

Table 1- Wetlands of International Significance

NO	Name	District	Area (Hectare)	Wetland Type
1	Sultanpur National Park	Gurugram	142.52	Natural
2	Bhindawas Wildlife Sanctuary	Jhajjar	412.00	human-made

Sultanpur National Park



Designation date 25 May 2021
 Site number 2457
 Coordinates 28°27'54"N 76°53'31"E
 Area 142,52 ha

<https://rsis.ramsar.org/rs/2457>
 Created by RSIS V.1.6 on - 6 August 2021

Sultanpur National Park in Gurugram district of Haryana occupies an area of 142.52 ha. It is located just off Gurugram-Farrukhnagar road, 45km southwest of Delhi. The wetland forms the core area of the National Park. This shallow wetland is fed by the

overflow from neighbouring canals and agricultural fields, and is replenished by saline groundwater. The wetland is famous for both its migratory and resident birds.

Migratory bird species reach the wetland after covering incredible distance, escaping the cold and harsh weather conditions of their breeding grounds and use Sultanpur National Park as a stopover/resting ground. The wetland has seasonal aquatic vegetation and open grass lands, dotted with artificial islands planted with *Acacia nilotica*. Sultanpur National Park now has a 1.37 m perimeter wall with 1.98 m of iron chain link on the top. The cultivated areas are outside the National Park and the wall prevents any encroachments. There are small areas of *Typha* and *Phragmites* around the wetland, and some emergent vegetation within the wetland, particularly in the core area. Extensive marshes covered with sedge, to the north of the main wetland, form a mosaic with areas of dry grassland. The natural vegetation of the region is semi-arid scrub, while 78% of the buffer zone is under cultivation. The Ministry of Environment, Forests and Climate Change, Govt. of India, New Delhi vide their Notification dated 27-01-2010 declared an area of 5 km around the park as an eco-sensitive zone. The wetland harbours a variety of life forms including plants (over 150 species), insects, birds (about 300 species), fishes, reptiles, amphibians and mammals. Among them are some globally threatened species such as the critically endangered sociable lapwing; the endangered Egyptian vulture and saker falcon; and the vulnerable lesser white-fronted goose and common pochard.

Bhindawas Wildlife Sanctuary



Bhindawas Wildlife Sanctuary is a human-made wetland ecosystem carved out from a saucer shaped depression. Spreading over 412 ha, Bhindawas is the largest wetland in the state of Haryana, India, with a periphery of 12 km (28°28'00" to 28°36'00"N; 76°28'00" to 76°38'00"E) (Bird Life International, 2021). The wetland was declared as a protected area in the year 1986 and was designated as an Eco-

sensitive zone by the Ministry of Environment, Forests and Climate change, Govt. of India in 2011 (Saluja & Garg, 2015). Bhindawas Wildlife Sanctuary is situated in Jhajjar district of the state of Haryana and is about 80 km from the city of Gurugram and about 105 km from New Delhi, the capital of India. The villages Kanwah, Niwada, Shahjanpur, Chadwana, Bilochpura and Reduwas surround the wetland. Bhindawas wetland receives its water supply from an escape channel constructed to receive water from Jawahar Lal Nehru (JLN) canal. Excess water from the wetland exits through drain no. 8, an outlet (two ways regulator) located at south east corner. The wetland is surrounded by private agricultural lands and is separated from these fields by a 12 km long elevated bund, circumscribing this lake. The site boundary is the same as the existing wildlife sanctuary. The wetland ecosystem is home to thousands of migratory as well as resident birds. Bhindawas wetland lies on the western route of migratory birds, and is used as a stopover by birds heading towards Keoladeo National Park, Bharatpur. Several birds use Bhindawas wetland as their resting and roosting site. Over 250 species visit Bhindawas Wildlife Sanctuary throughout the year. This wetland supports globally threatened species including four endangered species (Egyptian vulture, steppe eagle, Pallas's fish eagle and black-bellied tern) and seven vulnerable species (greater spotted eagle, eastern imperial eagle, Indian spotted eagle, common pochard, lesser white-fronted goose, sarus crane and Asian woollyneck).

Bhindawas Wildlife Sanctuary is a human-made freshwater wetland in Jhajjar district of Haryana. Spreading across 412 ha, Bhindawas is the largest wetland in the state of Haryana supporting a rich diversity of floral and faunal species. The overall topography of the area is marked by alluvial plain and at some places by undulating dunes. The average plain elevation of the area is about 215 meters above mean sea level. The climate of the area can be classified as subtropical steppe, semi-arid and hot which is mainly characterized by extreme dryness of air except during monsoon months. The main habitat types of the wetland include large open deep water areas and shallow water area with emergent vegetation which include *Typha* sp. and various sedges of *Scirpus* and *Cyperus* species. The edges of the wetland consist of areas with swamps with emergent vegetation. The wetland ecosystem is home to thousands of migratory as well as resident birds. Bhindawas wetland lies on the western route of migratory birds, and is used as a stopover by birds heading towards Keoladeo National Park, Bharatpur. More than 30,000 migratory birds belonging to over 250 species visit Bhindawas Wildlife Sanctuary throughout the year. A total of 265 species of birds have been reported from the site. Notable species of birds are mallard (*Anas platyrhynchos*), red-crested pochard (*Rhodonessa rufina*), ferruginous duck (*Aythya nyroca*) and Baer's Pochard (*A. baeri*), white pelicans (*Pelecanus onocrotalus*), glossy ibis (*Plegadis falcinellus*), Eurasian Spoonbill (*Platalea leucorodia*) and greater flamingos (*Phoenicopterus ruber*). The wetland supports globally threatened species including four endangered species (Egyptian vulture, steppe eagle, Pallas's fish eagle and black-bellied tern) and seven vulnerable species (greater spotted eagle, eastern imperial eagle, Indian spotted

eagle, common pochard, lesser white-fronted goose, sarus crane and Asian woollyneck). Some of the mammals reported from the site include nilgai (*Boselaphus tragocamelus*), golden jackal (*Canis aureus*), common mongoose (*Herpestes edwardsi*), and black-naped hare (*Lepus nigricollis*). The wetland helps in maintaining the water table by recharging groundwater and is a natural flood buffer. At times when lift irrigation system does not work due to power failure, the water is diverted towards the lake which could otherwise flood the fields.

Ponds Water body

Ponds Status in the State as per Haryana Pond and Waste Water Management Authority.

1.	Total Ponds :19415	Rural :- 18517 (Historical :509, Religious : 591)	Urban :- 898 (Historical:103, Religious : 80)
2.	Ponds having area=> 0.5 Acre :18481	Rural :- 17663 (Historical :505, Religious : 574)	Urban :- 818 (Historical :93, Religious : 79)
3.	Ponds having area <0.5 Acre :934	Rural :- 854 (Historical :4, Religious : 17)	Urban :- 80 (Historical :10, Religious : 1)

References:-

- <https://www.ramsar.org/country-profile/india>
- <https://haryanaforest.gov.in/>
- <https://swa.haryana.gov.in/>
- <http://hpwwma.org.in/>
- <https://sbb.haryanaforest.gov.in/>
- <https://www.google.com/search?q=haryana+wetlands+photos>

Celebration of World Wetlands Day and conducted the irrelated activity

भारत का अमृत महोत्सव (आर्द्रभूमि) - ऑनलाइन प्रश्नावली प्रतियोगिता

भारत का अमृत महोत्सव (आर्द्रभूमि) के अवसर पर इतिहास राज्य आर्द्रभूमि परिषद तथा ऑनलाइन प्रश्नावली प्रतियोगिता आयोजित कर रहे हैं।

Theme : आर्द्रभूमि का महत्व
 Who can participate : इतिहास राज्य के सभी स्तरीय प्रतिभाषी पात्र हैं।
 Submission Last Date : 16-फरवरी-2021

आप की प्रश्नावली जमावत करने के बाद प्रश्न पत्र आपको ईमेल पर भेजे जाएंगे। कुछ विभिन्न उपहारों के साथ शीर्ष 3 प्रतिभागियों की सराहना की जाएगी।

साथ ईमेल खींचकर लिए जाने हैं।
 उपहार: examplemail@gmail.com

Link for Questionnaire Competition- <https://forms.gle/NYMF2cCBxoQcVep48>

भारत का अमृत महोत्सव (आर्द्रभूमि) - ऑनलाइन पोस्टर/ड्राइंग/निबन्ध प्रतियोगिता

भारत का अमृत महोत्सव (आर्द्रभूमि) के अवसर पर इतिहास राज्य आर्द्रभूमि परिषद तथा ऑनलाइन पोस्टर/ड्राइंग/निबन्ध प्रतियोगिता आयोजित कर रहे हैं।

Theme : आर्द्रभूमि का महत्व
 Who can participate : इतिहास राज्य के सभी स्तरीय प्रतिभाषी पात्र हैं।
 Submission Last Date : 12-फरवरी-2021

आपका पोस्टर/निबन्ध जमावत करने के बाद प्रश्न पत्र आपको ईमेल पर भेजे जाएंगे। कुछ विभिन्न उपहारों के साथ शीर्ष 3 प्रतिभागियों की सराहना की जाएगी।

साथ ईमेल खींचकर लिए जाने हैं।
 उपहार: examplemail@gmail.com

Link for Poster Making/Drawing Competition- [Click Here](#)
 Link for Essay Writing Competition- [Click Here](#)

WORLD WETLANDS DAY 2021

2 फरवरी: विश्व आर्द्रभूमि दिवस

Wetlands are natural areas that are saturated with water or submerged by shallow surface water or groundwater. They provide a wide range of ecosystem services, including water purification, flood control, and habitat for many species of plants and animals.

Wetlands are also important for carbon sequestration and climate change mitigation. They store large amounts of carbon in their soils and vegetation, helping to reduce the amount of greenhouse gases in the atmosphere.

Wetlands are also important for biodiversity. They provide habitat for many species of plants and animals, including many rare and endangered species. Wetlands are also important for the survival of many migratory birds.

Wetlands are also important for human health and well-being. They provide a source of food and medicine, and they also provide a place for recreation and relaxation. Wetlands are also important for the cultural and spiritual life of many communities.

Wetlands are a valuable natural resource that we need to protect and restore. We can do this by reducing our use of fertilizers and pesticides, by restoring degraded wetlands, and by protecting wetlands from development and other threats.

ENVIS HUB
 DIRECTORATE OF ENVIRONMENT & CLIMATE CHANGE, HARYANA
 2nd Floor, Bais No. 52-55, Prayash Bhawan, Sector 2, Panchkula

Wetlands and Avian Diversity of Haryana

Bharat ka Amrut Mahotsav, Haryana

Agenda

11:00 - 11:05 am Welcome by State Wetland Authority, Haryana

11:05 - 12:00 pm Conversation moderated by Mr. Samir Datta, Director- Wetlands and Water Policy, WWF India

Presence of Wetlands in Haryana by Dr. K.K Chakravarty, Joint Director, Department of Environment & Climate Change, Government of Haryana

Deputy State Wetland Authority by Mr. Vinay Chandra, Senior Secretary, Chandigarh Wetland Club

Wetlands of Haryana by Mr. Abhishek Datta, Joint Director, Haryana Wetland Club

12:05 - 12:15 pm Q&A interactive and wrap-up

Be a Wetland Mitra

JOIN THE CONVERSATION ON SEPTEMBER 20, 2021 AT 11:00AM

For registration follow below link <https://forms.gle/FVbAp3BYLnpPzr8M9>

For join the meeting follow below link meet.google.com/rjm-rtoa-xzeOR

Climate Change Cell (NMSKCC) Haryana
 Directorate Environment & Climate Change, Haryana
 S.C.O. 1-3 (2nd Floor), Sector-12D, Chandigarh
 Website: hrcce.haryanaenvironment.gov.in
 Email: haryanacc@gmail.com

WORLD WETLANDS DAY 2021

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