
WWT
For wetlands. For life.

From Satellites to Stewardship: Innovative Mapping, Modelling, and Mobilizing for Wetland Conservation

Monysocheata Chea, Project Coordinator
The Wildfowl & Wetlands Trust

#November2025

WWT international conservation work

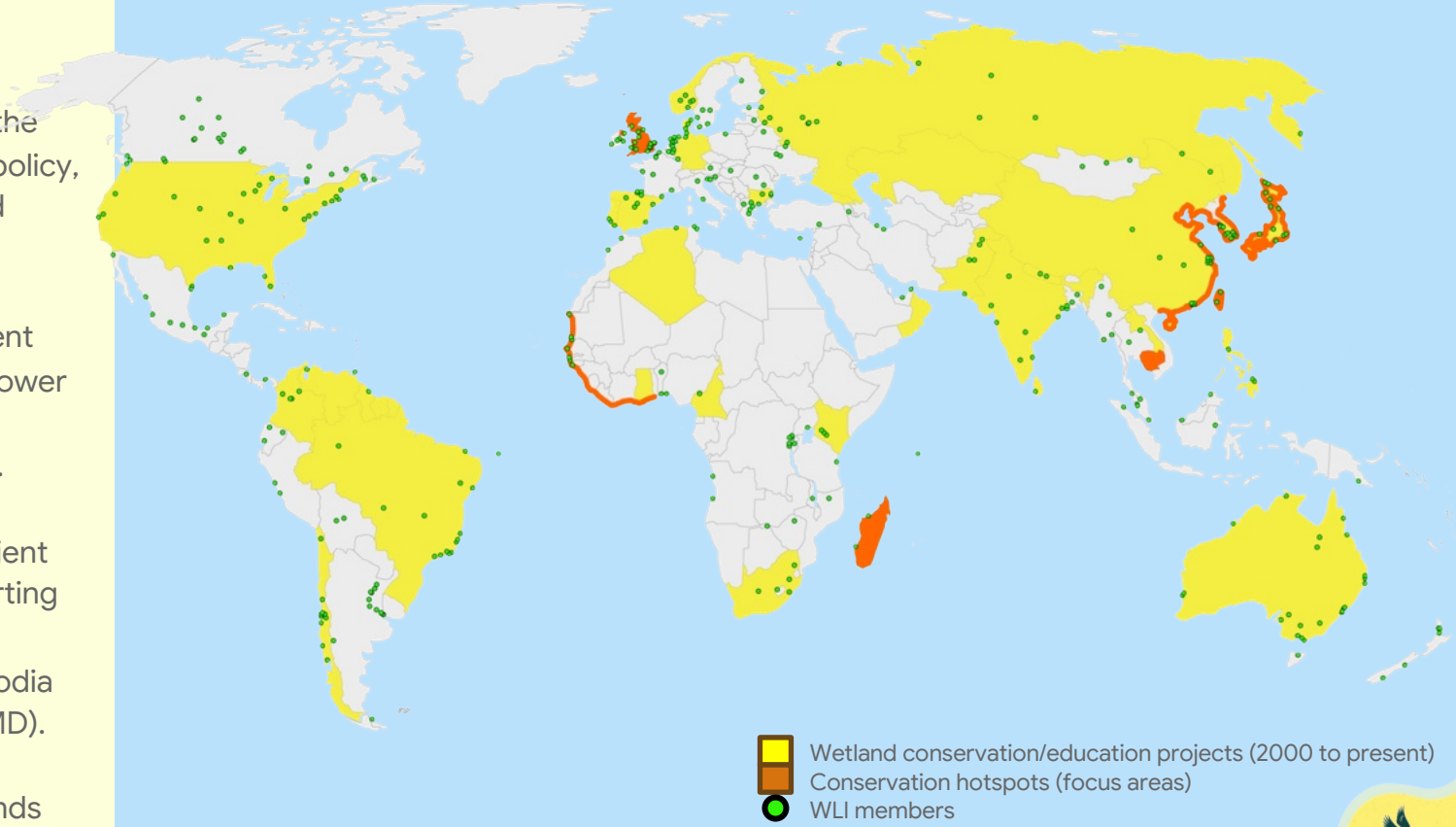
For wetlands. For life.

The Wildfowl and Wetlands Trust (WWT) was established in 1946. Working globally on wetland conservation by restoring, conserving, and creating wetlands across the word through combining policy, practices, technology, and scientific research.

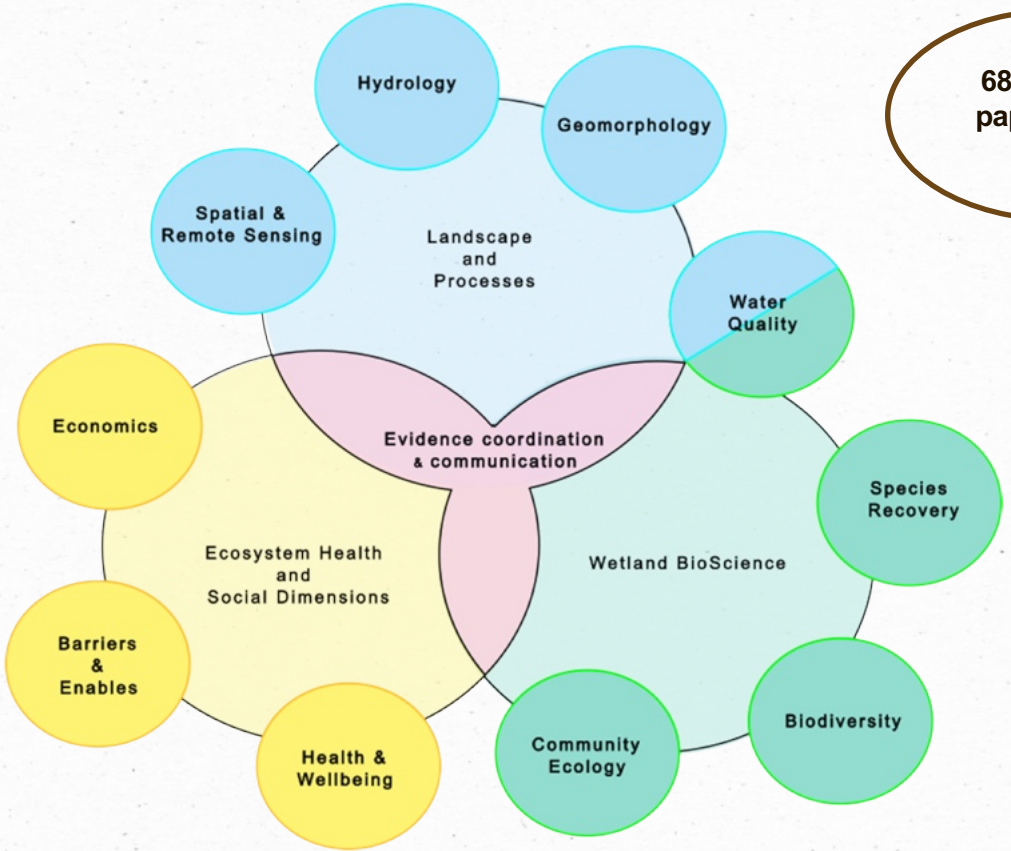
Since 2010, WWT implement project in the Cambodia Lower Mekong Delta (CLMD) at national and regional level.

Vision: A healthy and resilient wetland landscape supporting biodiversity and local communities in the Cambodia Lower Mekong Delta (CLMD).

Mission: To restore wetlands and unlock their power.



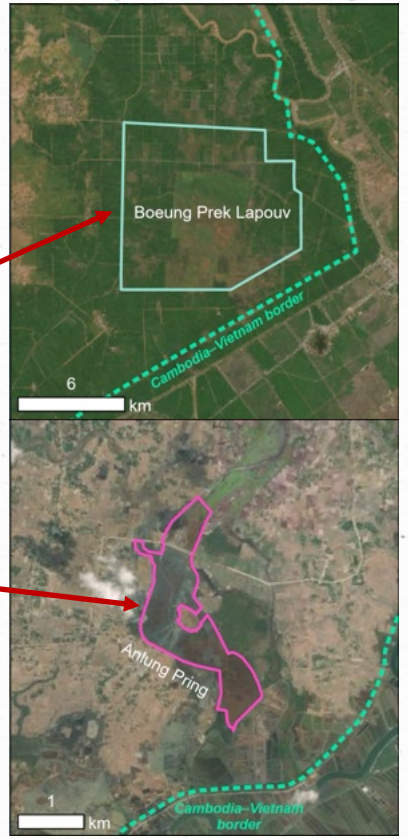
Conservation Evidence



68 scientific papers since 2021

WWT: Science & Technology for Wetlands Conservation

For wetlands. For life.



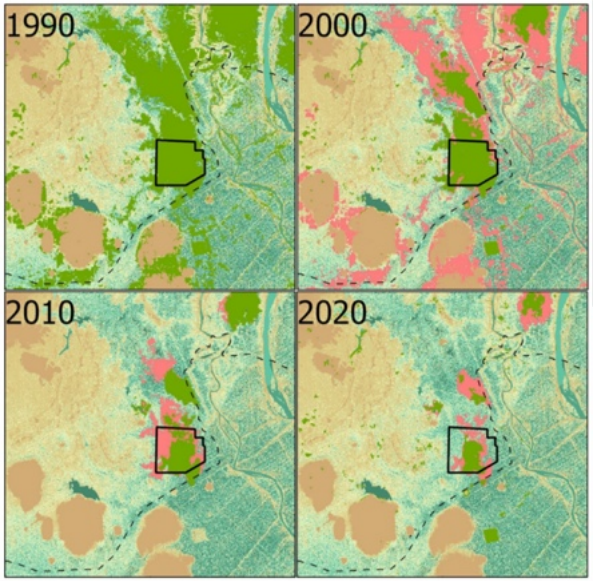
Boeng Prek Lpov wetland is recognized as the Protected Landscape (BPL) by Ministry of Environment in 2016 covered an areas of 8,305Ha

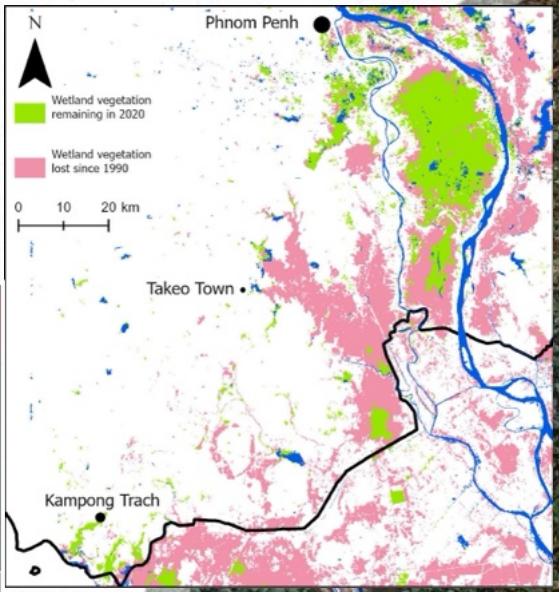
Anlung Pring wetland is recognized as the Protected Landscape (BPL) by Ministry of Environment in 2016 covered an areas of 217Ha and revised sub-degree in 2023 to 219Ha

WWT: Science & Technology for Wetlands Conservation

For wetlands. For life.

Boeng Prek Lpov Protected Landscape (BPL) is one of the few remaining areas of seasonally flooded grassland. Over the past 20 years, this habitat has declined significantly *(CLMD Report 2023, WWT)*. Altered hydrological patterns, together with climate change impacts *(Ly 2019; WWT 2021)*, have caused the wetland to stay dry for longer periods, impact in wetland ecosystem, habitat lose, water provision, flood resilience, natural resource harvesting (fishing).





Science & Technology for Wetlands Conservation

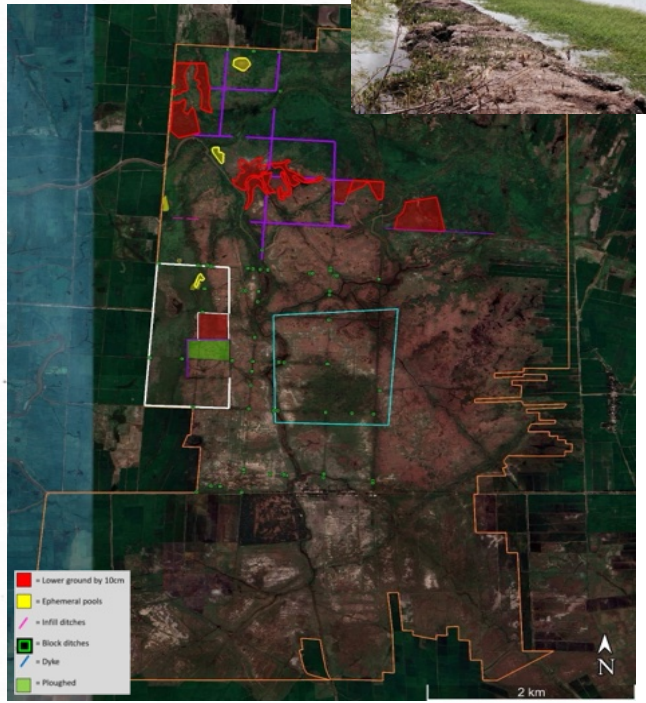
1. Grassland Restoration
2. Flooded Forest Restoration
3. Water Quality Monitoring
4. Hydrological Monitoring
5. Vegetation Survey
6. Invasive Species Control

WWT: Science & Technology for Wetlands Conservation

For wetlands. For life.

1. Grassland restoration

- **Block ditch:** ditches around the boundary and interior of the core conservation area.
- **Lowered ground:** lowered ground by a minimum of 10cm. The total area of 60.7ha is revegetating well and now has an improved groundwater level.
- **Ploughed:** ploughed of degraded grassland to trial a different restoration technique.
- **Created pools:** create pools dimensions inside the core conservation zone.
- **Built dyke:** these enclosed areas are proving attractive to a range of waterbird species, including Sarus crane and many thousands of Garganey.
- **Infilled ditches:** Infilled ditches near lowered ground to further prevent the loss of floodwater.
- **Constructed mini bund:** construct around lowered grounds and ephemeral pools. These serve to retain floodwater beyond the post-flood period and will improve groundwater levels compared to surrounding areas.



WWT: Science & Technology for Wetlands Conservation

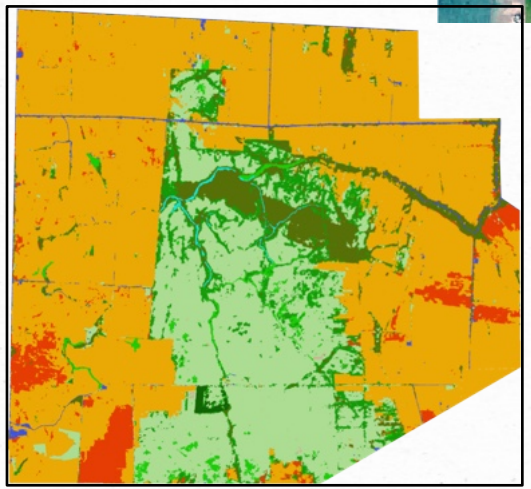
For wetlands. For life.

2. Flooded forest restoration

The overview of project to restore the habitats, ecosystem service to ensure the wetland is healthy and functioning of soil, the shelter and food of many other species such as fish food and bird's species.

- Site selection
- Implementation
- Monitoring Evaluation

>> Fire break



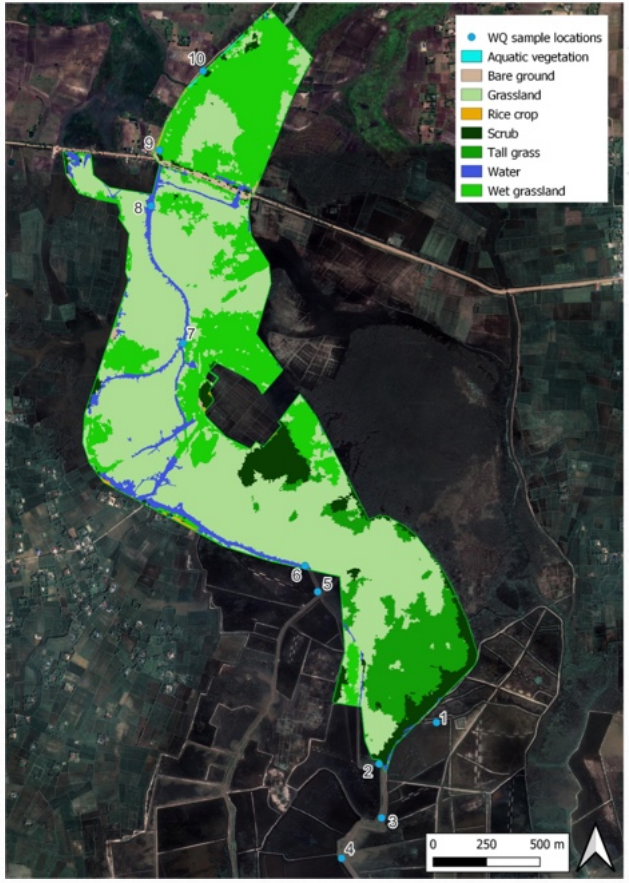
WWT: Science & Technology for Wetlands Conservation

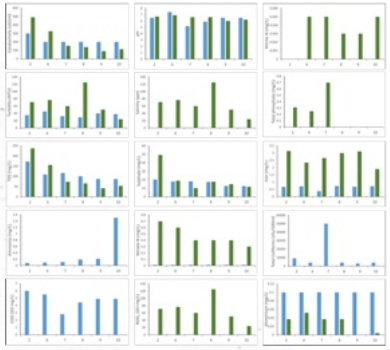
For wetlands. For life.

3. Water quality monitoring is conducted every 3 months since 2016.

Water quality parameter:

- pH
- Temperature
- Dissolved Oxygen
- Electronic Conductivity
- Total Dissolved Solids
- Water Turbidity
- Phosphorus
- Ammonium





WWT: Science & Technology for Wetlands Conservation

For wetlands. For life.

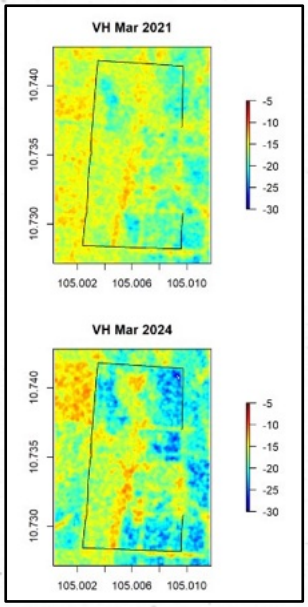
4. Hydrological monitoring is conducted every day and every week since 2020.

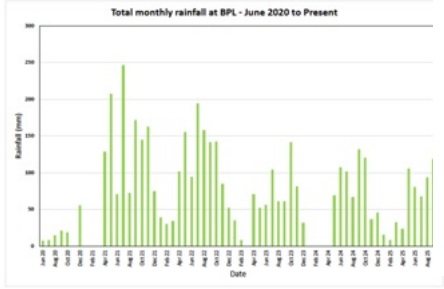
- Rainfall
- Evaporation
- Surface water
- Ground water

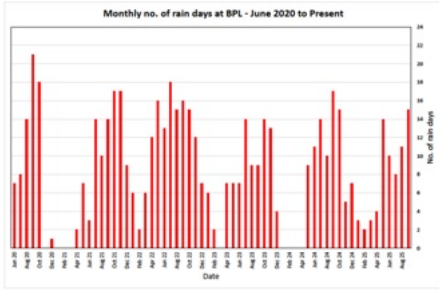
*Soil Temperature

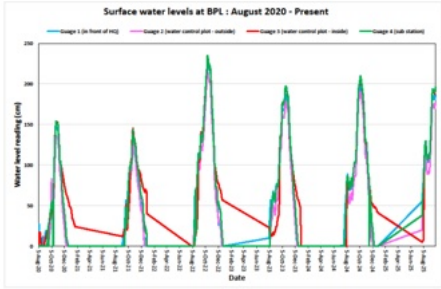
Scientific output: identified exciting new ways to measure the impact of our grassland restoration activities: namely using Radar Satellite data to assess underground water level over years

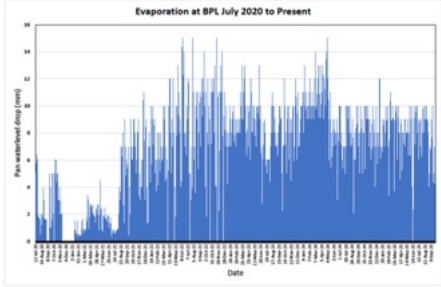
ID	X	Y	Landuse	ID	X	Y	Landuse
1	497489	1183960	Agriculture	11	501296	1183200	Grassland
2	497560	1187180	Agriculture	12	503625	1184950	Grassland
3	497678	1191470	Grassland	13	502549	1185000	Grassland
4	500492	1191980	Agriculture	14	500894	1186530	Aquatic Vegetation
5	502632	1192120	Aquatic Vegetation	15	501319	1190180	Aquatic Vegetation
6	505445	1191650	Agriculture	16	502620	1190180	Aquatic Vegetation
7	506982	1189290	Agriculture	17	503187	1188880	Aquatic Vegetation
8	507396	1187820	Agriculture	18	503270	1187340	Aquatic Vegetation
9	506887	1185260	Grassland	19	498446	1189210	Grassland
10	504689	1183800	Grassland	20	499097	1185640	Grassland









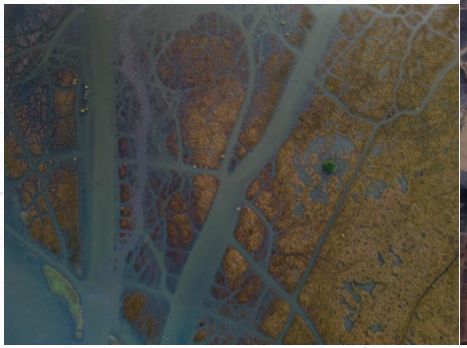


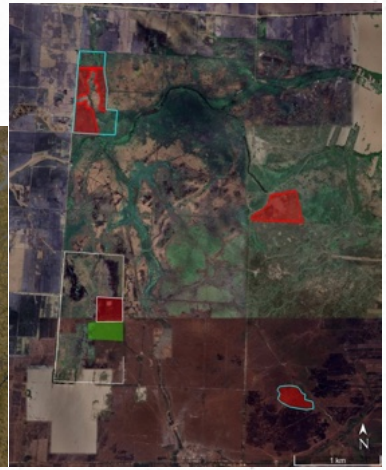
WWT: Science & Technology for Wetlands Conservation

For wetlands. For life.

5. Vegetation survey is being monitored inside 4 grassland restoration features.

- 1 time per year
- 1x1m quadrat (pvc tubes)
- Identify all plant species





WWT: Science & Technology for Wetlands Conservation

For wetlands. For life.

6. Invasive species control

To control the spreading of Mimosa pigra to minimize the negative impact on aquatic species and waterbirds especially Sarus crane.


WWT
Thank you!