

Biodiversity Management

Biodiversity is increasingly integrated into global business strategies as organizations recognize the close link between healthy ecosystems and long-term business sustainability. Companies are adopting nature-positive approaches such as ecosystem restoration, deforestation prevention, and sustainable resource use, while strengthening biodiversity-related risk management and disclosures in line with international frameworks, including the Taskforce on Nature-related Financial Disclosures (TNFD). WHA Group integrates biodiversity and no-deforestation considerations into our corporate strategy, governance structures, and project development processes across all business lines. The Group applies risk assessments, mitigation hierarchy principles, and biodiversity action planning to manage impacts from land use, construction, utilities, power, logistics, and related activities. Through clear policies, targets, and oversight mechanisms, we aim to protect nature and ecosystem services, comply with evolving regulations, and strengthen long-term business resilience while creating shared value for stakeholders.

WHA has undertaken Environmental Impact Assessments (EIA) for all Industrial Estate developments, achieving full compliance with applicable legal and regulatory requirements. WHA Logistics facilities are exempted from EIA obligations due to their comparatively lower environmental impact. Nonetheless, WHA has conducted biodiversity impact assessments for sites covering all regions and landscapes where such evaluations are deemed relevant and applicable.

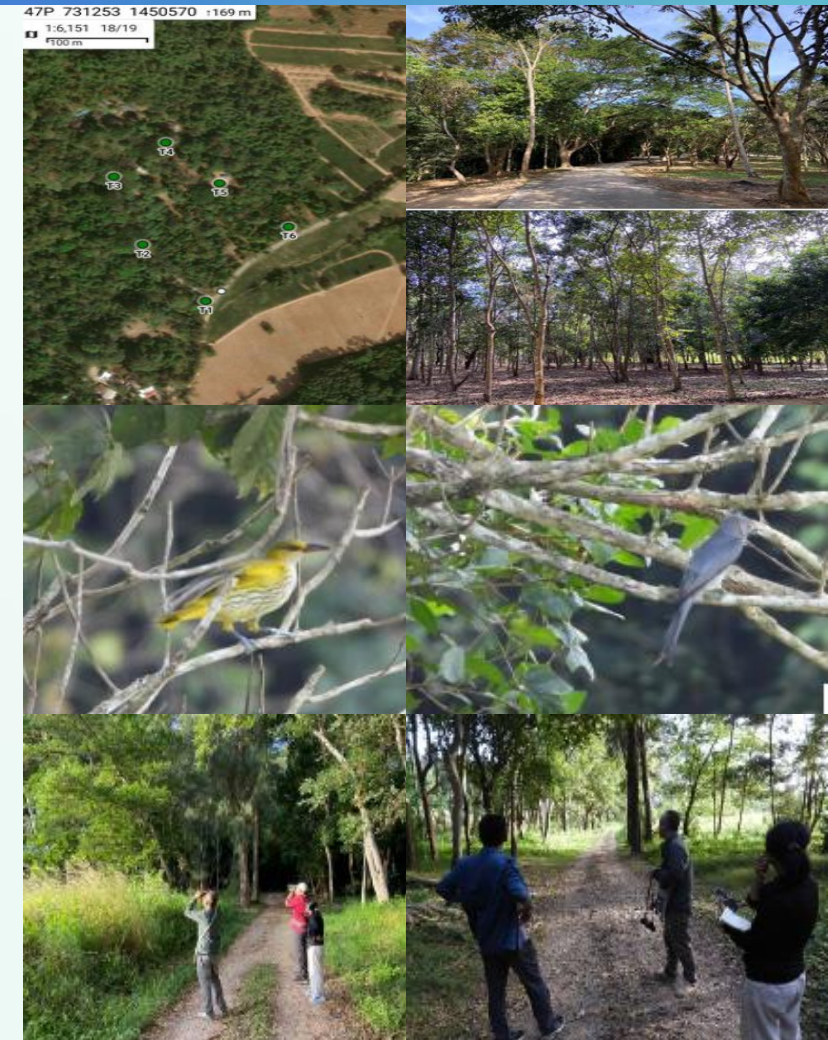
Biodiversity Exposure and Assessment	2025 Number of Industrial Estate Sites
Total number of sites and total area for operational activities that have conducted biodiversity impact assessments in past 5 years	15

As a part of our current operations, we strictly adhere to legal requirements and regulations specified in Environmental Impact Assessment (EIA) reports. To ensure fully compliance, we have implemented the “Biodiversity Assessment and Monitoring System”, which is divided into two main stages as follows:

Pre-Project Development and Construction Phase	Project Operation Phase
WHA Group conducts location-specific biodiversity assessments in accordance with the National Environmental Protection and Preservation Act B.E. 2535 and its amendments in B.E. 2561, as well as other biodiversity tools and frameworks like the Integrated Biodiversity Assessment Tool (IBAT) and the Species Threat Abatement and Restoration Metric (STAR). Biodiversity data in the area is collected through geological and land-use studies, surveys of plant species and forests, as well as ecological studies of plants and animals, including food sources in the food chain. It is used to support EIA report and the development of mitigation and prevention plans.	WHA Group follows mitigation and prevention measures outlined in EIA reports for each industrial estate and implements a Biodiversity Action Plan (BAP) to manage potential impacts on plants, wildlife, and surrounding ecosystems. Biodiversity monitoring and reporting is conducted biennially, such as checking the number and diversity of species in the industrial area and surrounding zones. The results are reported to local authorities and the industrial estate EIA committee. The Group also engages through tripartite committees to communicate with stakeholders and raise awareness of ecosystem conservation within our industrial estates.

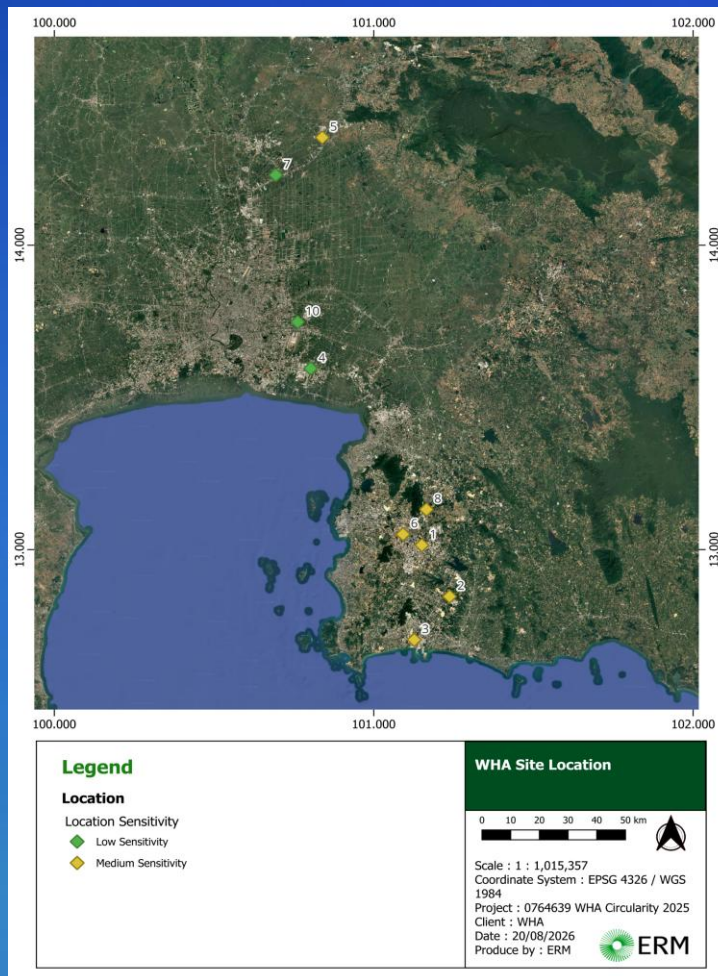
Biodiversity Assessment and Monitoring System

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Biodiversity Impact and Risk Assessment

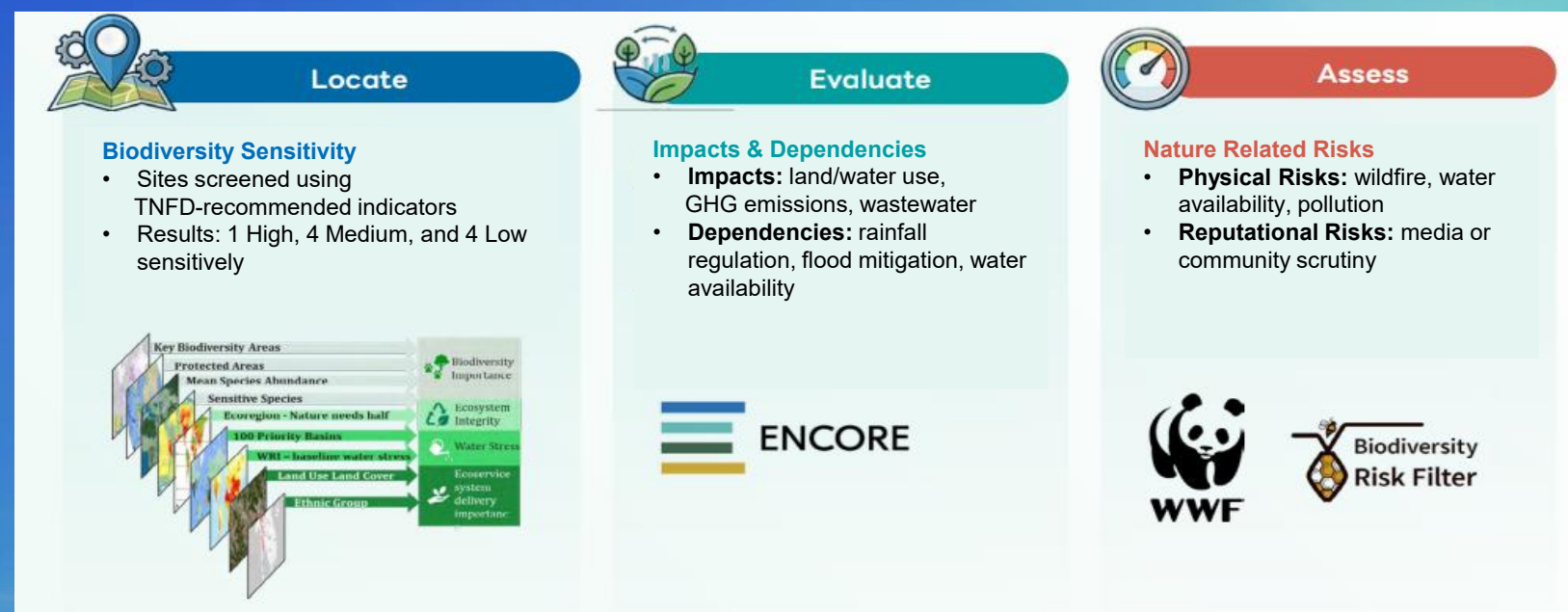
□ Location sensitivity



Remark:

- ◆ Low sensitivity operations (Offices, Warehouses, Low-input agriculture) includes three Logistics Centers.
- ◆ Medium sensitivity operations (High-input agriculture, Onshore wind, Construction, Oil and gas (terrestrial) are Industrial Estates.

WHA Group adopted the Taskforce on Nature related Financial Disclosures (TNFD) recommendations to strengthen our understanding of nature related impacts, dependencies, risks and opportunities that may affect our operations and long-term resilience. Using the TNFD LEAP approach (Locate, Evaluate, Assess, Prepare), WHA Group conducted a nature impact assessment across all locations which are majorly representatives all business which potentially has exposure on biodiversity screening biodiversity sensitivity, evaluating key impacts and dependencies, and assessing physical, transition, and reputational risks.



The Locate phase identified 1 high, 4 medium, and 4 low biodiversity sensitivity sites. The Evaluate phase assessed impacts such as land and water use, GHG emissions, and wastewater, along with dependencies like rainfall regulation, flood mitigation, and water availability using the ENCORE Tool. The Assess stage used WWF's Biodiversity Risk Filter to identify risks including wildfire, water availability, pollution, and community or media scrutiny. This structured LEAP assessment builds on existing EIA and ISO 14001 processes and provides a robust foundation for integrating nature considerations into WHA's operations and preparing for future TNFD aligned disclosures.

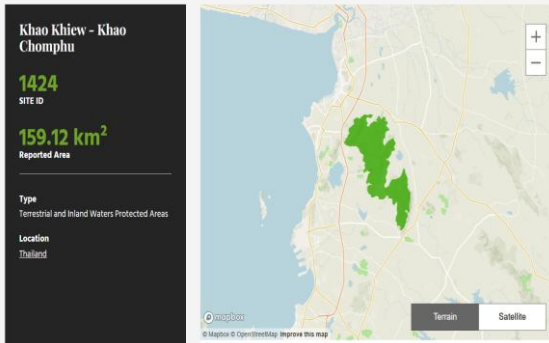
Location-Specific Assessment

Following the EIA process, it was highlighted that 2 out of 15 total WHA industrial estates in Thailand (Total 4,282 rai or 685 hectares) were identified to have biodiversity concerns due to their proximity to protected areas.

These two industrial estates are WHA Chonburi Industrial Estate 2 (WHA CIE 2) which has an area of 632 rai or 101 hectares and WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2), which has an area of 3,650 rai or 584 hectares and is located near Khao Khiew–Khao Chomphu Wildlife Sanctuary in Chonburi province.



Utilizing <https://www.protectedplanet.net> / to accurately identify and assess the geographical locations of our sites situated within or near Protected Areas and Key Biodiversity Areas.



238
Total Protected Areas ⓘ

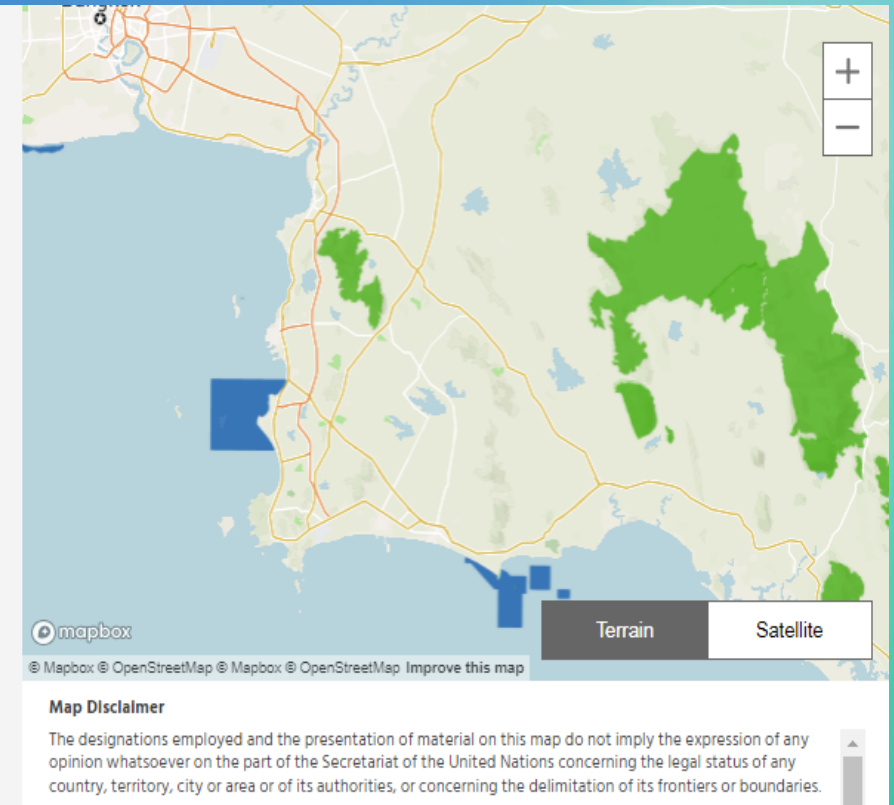
38 With management effectiveness evaluations

- Terrestrial and Inland Waters Protected Areas
- Marine Protected Areas
- Other effective area-based conservation measures

0
Total Other effective area-based conservation measures ⓘ

Polygons/Points ratio

Polygons 97% Points 3%



WHA Group Biodiversity Assessment and Monitoring System

Scope of the Assessment and Biodiversity Exposure

Type of Site	Location	Site	Areas	Exposure	Assessment	Management Plan
Own Operations	Rayong	WHA Chonburi Industrial Estate 2 (WHA CIE 2)	632 rai or 101 hectares	located near Khao Khiao-Khao Chompu Wildlife Sanctuary in Chonburi province.	- Impact Assessment :EIA - Terrestrial : No impact - Marine: No impact - Methodology for Location Sensitivity identification - Key Biodiversity Areas - Protected Areas - Mean Species Abundance - Sensitive Species - Ecoregion – Nature needs half - 100 Priority Basins - WRI – baseline water stress - Land Use Land Cover - Ethnic Group (all assessment with 4 criteria: Biodiversity Importance, Ecosystem Integrity, Water Stress, Ecoservice system delivery importance)	Monitoring ambient air quality and provide support for research conducted by local forest conservation organizations or educational institutions on the effects of industrial operations on the ecosystem.
	Rayong	WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2)	3,650 rai or 584 hectares			
	Rayong	WHA Eastern Industrial Estate (EIE)	3,747 rai or 600 hectares	-		-
	Rayong	WHA Eastern Seaboard Industrial Estate 5 (ESIE5)	3,416 rai or 547 hectares	-		-
	Phra Nakhon Si Ayutthaya	WHA Mega Logistics Center Wangnoi 61-63	174 rai or 28 hectares	-		-
	Bangkok	WHA Mega Logistics Center Ladkrabang	81 rai or 13 hectares	-		-

WHA Group Biodiversity Assessment and Monitoring System

Scope of the Assessment and Biodiversity Exposure

Type of Site	Location	Site	Areas	Exposure	Assessment	Management Plan
Own Operations	Rayong	WHA Eastern Seaboard Industrial Estate (ESIE)	9,688 rai or 1,550 hectares	-	- Assessment :EIA - Terrestrial : No impact - Marine: No impact - Methodology for Location Sensitivity identification - Key Biodiversity Areas - Protected Areas - Mean Species Abundance - Sensitive Species - Ecoregion – Nature needs half - 100 Priority Basins - WRI – baseline water stress - Land Use Land Cover - Ethnic Group (all assessment with 4 criteria: Biodiversity Importance, Ecosystem Integrity, Water Stress, Ecoservice system delivery importance)	-
	Saraburi	WHA Saraburi Industrial Land (SIL)	3,619 rai or 579 hectares	-		-
	Chonburi	WHA Chonburi Industrial Estate 1 (CIE1)	3,482 rai or 557 hectares	-		-
	Samut Prakan	WHA Mega Logistics Center Bangna-Trad km.23	235 rai or 38 hectares	-		-

WHA Group Biodiversity Assessment and Monitoring System

Scope of the Assessment and Biodiversity Exposure

Type of Site	Location	Site	Exposure	Assessment	Management Plan
Adjacent Area	Chonburi	Khao Khiew–Khao Chomphu Wildlife Sanctuary	Wildlife sanctuary located near WHA industrial estates that have biodiversity concerns.	A baseline study of each biodiversity parameter (phytoplankton, zooplankton, aquatic animals, aquatic plants, and benthos) was conducted to allow for comparison with monitoring result.	WHA ensures the business development to comply with forest and biodiversity regulations with following tools. • Procedure of Risk Assessment as ISO requirement. • Biodiversity measurement and evaluation of change. • EIA Monitoring report.
Upstream & Downstream	Chonburi, Rayong	Supply chain located in 15 Industrial Estates	Aquatic ecology within the canal into which the industrial estate withdraws water and discharges its treated wastewater.	A baseline study of each biodiversity parameter (phytoplankton, zooplankton, aquatic animals, aquatic plants, and benthos) was conducted to allow for comparison with monitoring result.	Biodiversity risks at are re-assessed every two years, as required by the EIA, to investigate changes and additional impacts caused by industrial developments on forest resources and wildlife.

WHA Group Biodiversity Assessment and Monitoring System



Impact-related Biodiversity

Using the Risk Assessment Tool, WHA has evaluated of the influence of pollution on biodiversity encompassing water, air, noise, and waste. The analysis indicates that the biodiversity risk remains minimal due to pollution levels adhering to acceptable environmental benchmarks. Furthermore, the evaluation of WHA's effects reveals that the likelihood of noteworthy impact remains low, attributed to the considerable close area between WHA and the protected or key biodiversity areas.

Impact
Area of land use
Volume of water use
Disturbance
Emission of toxic and nutrient pollutants to water and soil
Emission of GHG

Acceptable
Impact and Pollution within
environmental
standards

Associated Biodiversity Risk
"LOW"

Dependency-related Biodiversity Risk

The dependency indicators that is classified to be high priority

Risk	Forest Canopy Loss	Water Availability	Extreme Heat	Pollution	Wildfire Hazard
Mitigation Actions	- Land conversion & encroachment controls - Green areas, buffers & ecological corridors - Reforestation & ecosystem restoration - Biodiversity offsets for residual impacts	- Water efficiency, reuse & reclamation - Water-sensitive project planning - Water retention & nature-based management - Aquatic ecosystem monitoring	- Green infrastructure & tree planting - Reforestation & ecosystem restoration - Low-carbon transformation	- Environmental & biodiversity monitoring - Wastewater & effluent controls - Early detection & corrective actions - Compliance escalation & remediation	- No wildfire-specific mitigation identified - Supporting land-use & habitat controls

Biodiversity Mitigation Actions

WHA Group embraces a comprehensive strategy for **biodiversity conservation**, guided by the mitigation hierarchy.

To minimize negative impacts on biodiversity and ensure **No Net Loss** and **No Gross Deforestation**, five key mitigation actions have been implemented as follows:

AVOID

01



Avoid any operations in areas of high biodiversity importance and protected areas (e.g., UNESCO, IUCN), while safeguarding ecosystems through group-wide waste management, biodiversity risk assessment and EIA prior to construction or operations.



REDUCE / MINIMIZE

02

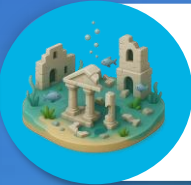


Reduce resource consumption, waste, emissions, and biodiversity impacts through green building practices, circular economy initiatives, supplier collaboration, and smart technologies across the value chain.



RESTORE

03

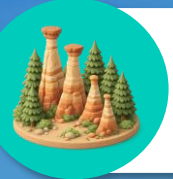


Restore degraded terrestrial and aquatic ecosystems through multi-stakeholder collaboration on forest restoration and cascade installation to enhance green space and ecosystem integrity as well as improve water quality and support aquatic life.



REGENERATE

04

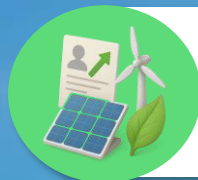


Regenerative initiatives enhance biodiversity, soil health, wildlife habitats, green areas, water quality, and long-term ecological resilience through agroforestry, native species planting, soil regenerative agriculture, nature-based wastewater treatment, and circular water reuse.



TRANSFORM

05



Transform energy, mobility, industrial decarbonization, and water systems through renewable energy trading, EV ecosystem development, CCUS collaboration and wastewater reclamation to reduce emissions and dependence on natural resources.

