Water Stress Risk Assessment

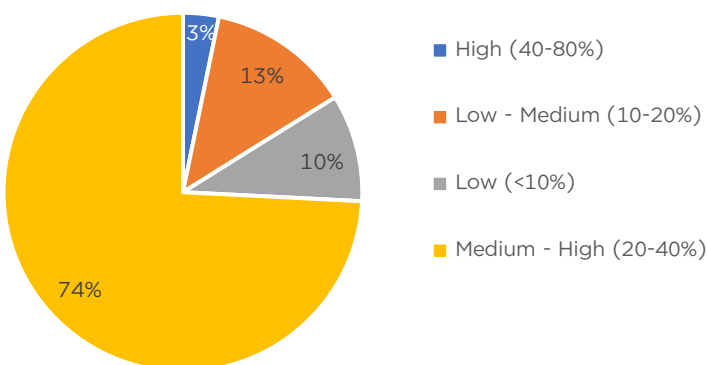Water-related risks identified using the Aqueduct Water Risk Atlas 4.0, developed by the World Resources Institute (WRI), are fully integrated into Thai Union's environmental risk registers and help shape our long-term water strategy. The assessment covers physical quantity, water quality, and regulatory and reputational risks, providing a comprehensive understanding of current and emerging challenges.

Scope of Risk Assessment

Thai Union's water risk assessment covers the full value chain, including its own operations, supply chain, and the product use phase, to ensure a holistic understanding of current and future water-related risks.

Results
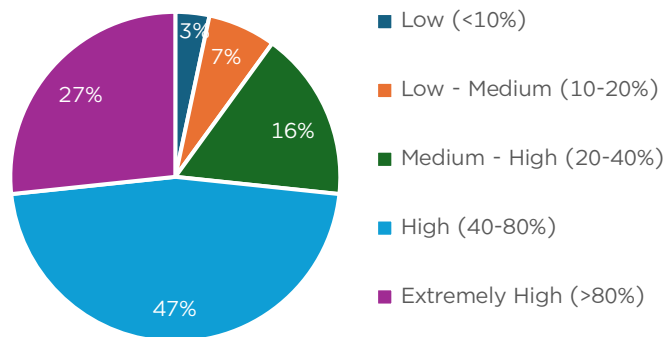
- **Operations and Product Use Phase**

- High (40-80%)
- Low - Medium (10-20%)
- Low (<10%)
- Medium - High (20-40%)

Thai Union conducts a comprehensive water risk assessment across all global operations using the WRI Aqueduct Water Risk Atlas and WWF Water Risk Filter. The assessment covers physical quantity, water quality, regulatory risks, dependency and impact risks, and local stakeholder impacts.

In 2024, analysis revealed that 74% of Thai Union's global sites are in areas of medium–high (20–40%) water stress, 13% in low–medium, 10% in low, and 3% in high water stress zones. Key operational sites in Thailand, including Samut Sakhon, fall within the medium-high baseline water stress category, with this risk expected to persist through 2050 under all three modelled scenarios (business-as-usual, optimistic, and pessimistic).

These results inform site-level investments, efficiency improvements, cand contingency planning to address regulatory requirements and stakeholder concerns, particularly in water-stressed regions. Water-related risks are integrated into Thai Union's Enterprise Risk Management (ERM) system to support decision-making across short-, medium-, and long-term horizons.

While the product use phase involves limited direct water consumption, Thai Union recognizes potential downstream risks from the product use phase, such as improper packaging disposal, which may indirectly impact municipal water infrastructure and quality. As part of its SeaChange® 2030 strategy, Thai Union is exploring packaging redesign and product lifecycle analysis to help mitigate these risks.

- **Critical Tier-1 Suppliers**

Pie chart legend:
- Low (<10%)
- Low - Medium (10-20%)
- Medium - High (20-40%)
- High (40-80%)
- Extremely High (>80%)

Pie chart values: 3%, 7%, 16%, 47%, 27%

Thai Union assessed water-related risks in its **critical Tier-1 supply chain,** focusing on regions involved in aquaculture, seafood processing, and agricultural feedstock production. Using the **WRI Aqueduct tool, 22 suppliers of key agricultural commodities**—such as cattle, maize, palm oil, rice, soy, and sugar—were identified as operating in **water-stressed areas.** However, these commodities represent **less than 1% of Thai Union's total procurement spend,** as the majority of raw material sourcing is concentrated in seafood products.

The risk assessment evaluated both **dependency-related risks** (e.g., reliance on local freshwater sources) and **impact-related risks** (e.g., wastewater discharge). A common high-risk related to **quantity and quality of water** issues identified across suppliers was **untreated connected wastewater.**

Thai Union integrates water risk mapping tools into its **Sustainable Supply Chain Program** to monitor and manage these risks. The **mitigation and management of water risks** are implemented through supplier engagement including **risk-based site assessments, supplier self-assessments, third-party audits,** and **capacity-building initiatives** on water stewardship.

Thai Union also considers **future regulatory risks**, such as **lack of access to improved drinking water or sanitation,** and **ESG-related country risk indices** that may influence future compliance obligations. **Education, monitoring, and supplier improvement measures** are in place to address these proactively.

In terms of **stakeholder conflict**, Thai Union evaluates **access to safe drinking water and sanitation** within supplier facilities and dormitories and ensures **supplier compliance with water discharge regulations** to prevent tension with local communities and authorities.