

EXECUTIVE SUMMARY

Developing a Water Footprint Methodology for Everlane's Supply Chain

Bren School of Environmental Science & Management | Spring 2024



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Client:

EVERLANE

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Environmental Problem

The apparel industry consistently ranks among the top ten water-consuming industries globally. With increased human population and development, water supply has become stressed in many parts of the world. Additionally, there is a lack of supply chain transparency in the apparel industry. In order to provide Everlane with recommendations to minimize water use and its associated risks to their business, this project developed a replicable water footprint methodology based on Everlane's 2022 fabric purchases. The apparel industry can use this methodology to improve water footprint accounting to better understand water impacts and associated risks, and take steps to mitigate them.

Project Scope

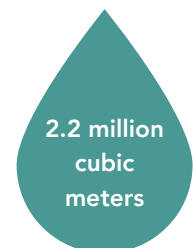
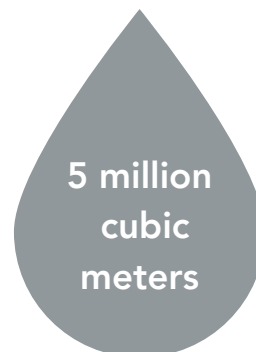
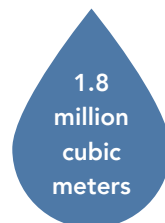
This project calculated the water footprint of Everlane's top three fabric materials by volume: cotton (70.6% of Everlane's product consumption), man-made cellulosic fiber (MMCF) (7.5%), and polyester (7%). The water footprint only considered supply chain water use from raw material production to assembly & packaging; the use phase and disposal of Everlane's products were not captured.

This project also conducted a risk assessment using WWF's Water Risk Filter tool. Everlane's supplier's regions of operation, and addresses when available, were input into the tool to measure each site's risk.

Key Findings

Water Use By Type

Everlane's total water footprint is as follows: 1.8 million cubic meters of blue water, 5 million cubic meters of gray water, and 2.2 million cubic meters of green water.



Water Use By Fabric

Cotton is the most water-intensive fabric used by Everlane. Based on data collected from suppliers, the three fabrics we analyzed have the following water footprints:

- Cotton: 5,196,887 cubic meters and 84.94 L/kg
- MMCFs: 2,261,026 cubic meters and 9.87 L/kg
- Polyester: 1,583,672 cubic meters and 34.52 L/kg

Key Findings cont.

Water Use By Tier

Tier 4, which includes cotton production, uses the most water in Everlane's supply chain and comprises 99% of Everlane's water footprint at 8.9 million cubic meters. It is important to note that based on our results, **recycled polyester used 68% less** blue-gray water than virgin polyester in Everlane's raw material production. Additionally, switching from conventional cotton to 100% organic cotton would significantly reduce Everlane's gray water footprint, since organic cotton does not use any harmful chemicals or pesticides that require dilution. Data for Tier 4 was derived from the literature review.

The **Tier 1-3** water footprint totals 82,200 cubic meters, or 0.9% of Everlane's total footprint. Cotton in Tier 2-3 uses the most water per kilogram of fabric. This is unsurprising as cotton is hydrophilic, or "water-loving" and absorbs more water than synthetic materials like polyester. Additionally, Tier 2-3 houses some of the **most water-intensive processes, like dyeing and washing**. Polyester, which is hydrophobic, requires less water in Tiers 1-3. MMCFs had the lowest liters of water used per kilogram of fabric in Tiers 1-3. Data for Tiers 1-3 was primarily gathered through primary sources such as verified data and unverified surveys.

Water Risk By Region

Using the WWF Water Risk Filter, we found that Everlane's suppliers located in high risk areas were also those who participated in water-intensive practices in Tiers 2-3 and 4. **India** is a hot spot for cotton cultivation and has high water risk, while **Turkey** and **China** are hot spots for Tier 2-3 processes and have moderate to high water risk. **Nearly 40% of Everlane's suppliers are located in regions with high physical risks** (e.g., drought or flooding), and over half of Everlane's suppliers are in regions with very high to high reputational risk (e.g. operating in areas of cultural importance). The type of risk each supplier faces helps determine the corrective action a supplier can take to minimize their impacts. These results serve as a starting point for understanding supply chain risk.

RECOMMENDATIONS

Materials

Materials Selection: Organic and/or recycled materials should be prioritized whenever possible over conventional or virgin materials to reduce Everlane's water footprint.

Supplier engagement: Everlane can continue to survey suppliers on a regular basis to continually build an understanding of the water impacts beyond Tiers 1 and 2, work with suppliers to improve water use efficiency, and track the evolution of the company's water footprint over time.

Suppliers

Traceability/Visibility: Everlane should look into innovative and rigorous traceability efforts, such as already existing material tracing technologies. By improving supply chain visibility and material traceability, Everlane can continue to monitor and enforce the best and most responsible practices for supplier water usage.

Risks

Supplier Engagement: Water impact data can be provided to the suppliers themselves, along with recommendations for reduction (e.g. technology investments, changes in operational norms). This would provide valuable insight to suppliers on their impact and, potentially, how it compares to similar facilities in the industry. By engaging with suppliers, Everlane can gain access to Tier 3 and 4 suppliers to better understand the true nature of risks facing their upstream suppliers.

Complete Operational Risk Assessment: To gain a more thorough understanding of the supply chain's risks, we recommend Everlane complete site-specific operational risk assessments, particularly for suppliers that may be high contributors of water risk relative to their production