A Corporate Water Footprint - Deckers Outdoor Corporation

Introduction
Deckers Outdoor Corporation, a billion dollar global footwear and clothing manufacturing company, requested a measurement methodology and baseline estimate of their company-wide water footprint. Deckers brands include UGG Australia, Teva, Sanuk, Mozo, Ahnu, & Tsobo.

Defining “Water Footprint”
Blue water consumption and water consumed through electricity production was measured throughout the Deckers supply chain which consists of the Deckers Facilities, Product Assembly, and Material Production stages.

Deckers Supply Chain Map

Discussion & Conclusion
Water Stress
Country level Water stress index data from 2009 was overlaid with Deckers supply chain. About 97% of Deckers’ estimated water consumption occurs in countries with medium water stress levels. By 2025, countries where Deckers operations currently occur are predicted to experience high stress.

Corporate Control Over Water Consumption
Building relationships throughout the supply chain could increase Deckers’ influence and control over water consumption processes and practices. Supply chain stages with high water consumption could move towards the ideal location in terms of relative control over relative water consumption, represented by the circle on the graph to the right.

Water Footprint Reduction Scenarios
Focusing on reducing electricity usage throughout the supply chain yields several benefits including decreased costs, water consumption, and carbon emissions. A 15 to 20% reduction in electricity may result in a 5 to 6% reduction in overall water consumption. Additionally, changing where materials are sourced influences the water footprint greatly. Sourcing materials from countries with low-water consumption per ton of material can decrease the overall water footprint by 7% for sheepskin and 6% for cowhide. Further, in certain scenarios there may be an inadvertent tradeoff between reducing the total water footprint number and shifting material sourcing or company operations to countries with low water stress.

Environmental Impacts
Water consumption impacts are inherently localized whereas a water footprint yields one global number; therefore, it is difficult to attribute specific impacts to water consumption throughout Deckers supply chain. Some direct and indirect impacts associated with water consumption include:
- ecological, commercial, and domestic resource competition
- freshwater habitat destruction
- altered streamflow
- temperature changes

Next Steps for Deckers
- Build relationships throughout the supply chain
- Continue to measure water
- Collect data from suppliers
- Measure pollutant loads
- Prioritize energy efficiency
- Evaluate the tradeoffs of water consumption from material sourcing vs. water stressed regions

Project Significance
Company Wide Footprint
Previous water footprints have focused on individual products or whole countries. This water footprint is unique because it includes water consumption throughout the entire supply chain, from the production of materials to shoes being sold in Deckers stores.

Including Water Consumed by Electricity Generation
There is a clear connection between electricity generation and high levels of water consumption. Our inclusion of electricity water is an important and innovative expansion to water footprinting system boundaries.

Findings
Deckers 2010 estimated water footprint ranges from 3.7 to 4.1 million m³. This volume is approximately equal to 22% of Santa Barbara’s annual water usage.

The majority of direct water consumption (blue) is within the material production stage, while the majority of electricity water consumption (yellow) is within the product assembly stage.

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