

# Water Sustainability

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# Current Situation

- “ Over 2 billion people lack access to improved sanitation
- “ More than 850 million people do not have ready access to potable water
- “ Physical water scarcity continues to grow
- “ Economic water scarcity will expand with growing population

# Life Cycle Analysis

*“...the compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its lifecycle”*



# Product lifecycle impact

## Levi's® 501®



32.3 kg of CO<sub>2</sub>

*is equivalent to:*

- “ 120 km driven by the average auto in the United States
- “ The carbon sequestered by six trees per year (based on EPA representative sequestration rates of tons of carbon per acre per year)

3480.5 liters of water

- “ Running a garden hose for 106 minutes
- “ 53 showers (based on 7 minute showers)
- “ 575 flushes of a 3.78 liter/flush low flow toilet

400.1 MJ of Energy

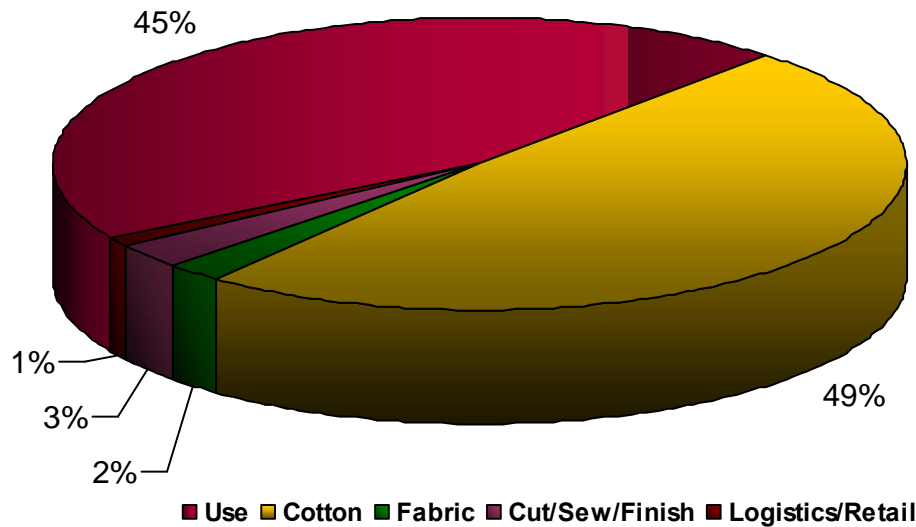
- “ Watching TV on a plasma screen for 318 hours
- “ Powering a computer for 556 hours, which is equivalent to 70 work days (based on 8 hours of computer use per day)

Data from LS&CO.'s Life Cycle Assessment on Levi's® 501® jean for U.S. Market, 2006 production year

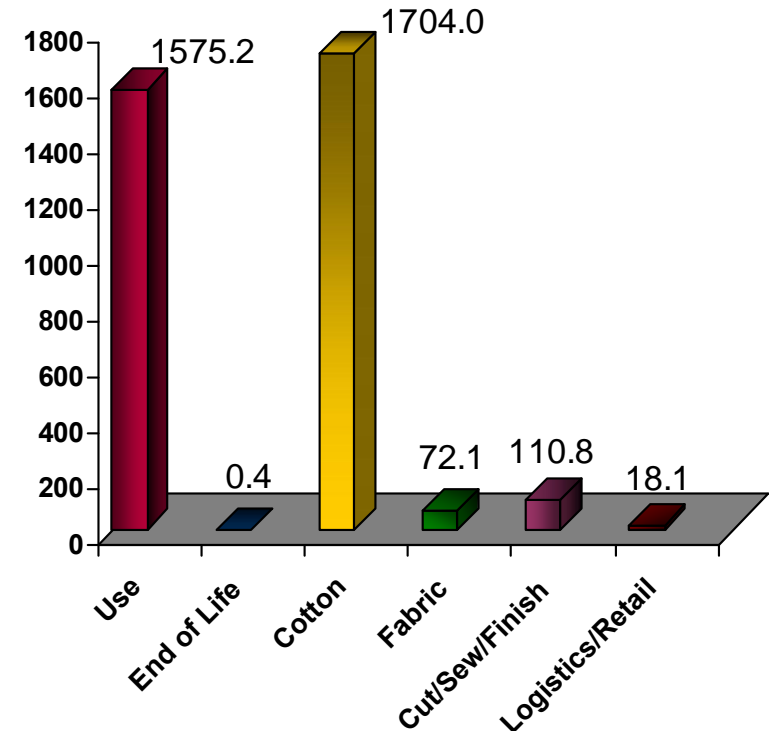
# Water use impact

## Levi's® 501®

Cradle-to-Grave Water Consumption,  
% by Phase



Cradle-to-Grave Water Consumption,  
Amount by Phase



**For the studied Levi's® 501® jeans (cradle to grave), water consumption was highest at the cotton-production and consumer-use phases (49% and 45% respectively)**

# World Projections

- “ By 2050, the world population will be over 9 billion people
- “ Increased competition for agriculture land and water
- “ Increased water scarcity
- “ Increased price of water





# Water Discharge

- “ Clean wastewater before discharge
- “ Discharge to dirty river?
- “ Better use for clean water?



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## Opportunities for Minimizing Water Use

- “ Cotton agriculture
- “ Manufacturing
  - Dyeing, fabric mill, laundry
- “ Own operations
  - Offices, retail stores, distribution centers
- “ Consumer washing practices





# What You Can Do

- “ Minimize water use
- “ Use appropriate chemicals (no excess)
- “ Lower liquor ratios for dyeing
- “ Functioning wastewater treatment system
- “ Recycle water back to process
- “ Reuse water somewhere else onsite
- “ Countercurrent piping system



**Thank You**

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