

DESIGNING FOR REGIONAL RESILIENCE



FIBERSHED

RESILIENCE MEANS

ADAPTABILITY

DIVERSITY

LONGEVITY

BALANCE

RECIPROCITY

HEALTH

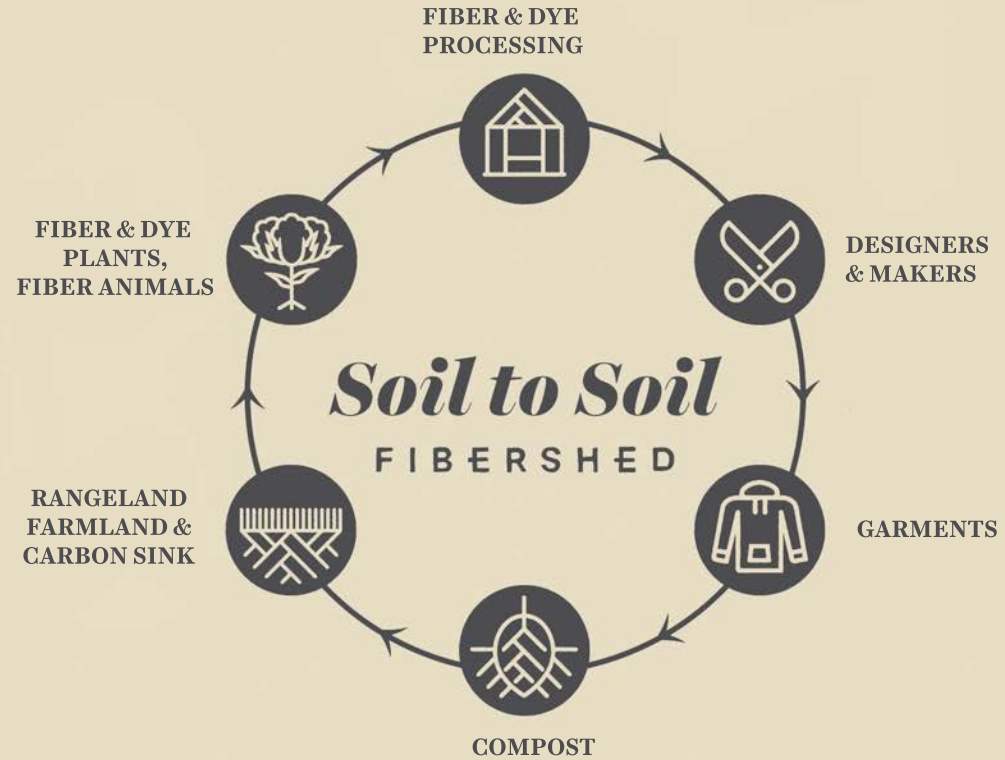
EQUITY







REGENERATION

CONNECTEDNESS

COLLABORATION

HEALING



-  Designers are the link between fiber producers and the consumer products available in our communities
-  Safe and equitable garment work requires transparency and direct relationships
-  Design affects longevity, repairability, and end-of-life
-  True circularity = biologically compatible materials cycling through communities and ecosystems
-  Fiber-producing landscapes stewarded for biodiversity, ecosystem health and climate resilience
-  Natural fiber and textile sourcing for healthy regional land-based economies

The Role of Textile Designers



Shifting awareness and opportunities to develop 'farm forward' projects are already beginning to help our fashion and textile systems build greater resilience and support the longevity and health of our regional ecosystems, communities, and textile networks.

Designers have a unique place in these systems to turn natural materials from regional landscapes into beautiful, long-lasting goods that serve our communities.

**RESILIENT DESIGN
INCORPORATES...
COMPOSTABILITY
(BIODEGRADABILITY),
LONGEVITY OF USE,
ZERO WASTE DESIGN**

Regional sourcing may involve...

- Building relationships with supply networks in your community
- Exploring creative new design and business ideas to work with a more curated and valued set of fiber, textile and manufacturing options
- Collaborating to build economies of scale that can achieve workable price points

What natural fiber products are well suited to grow in your region?



Who are the fiber farmers, textile processors, manufacturers and other partners you could work with in your region?

On The Ground:

The California Cotton and Climate Coalition (C4) is a collaboration between textile brands and cotton farmers, working together with scientists, agronomists, technical designers, nonprofits and supply network partners to develop new recipes for regionally-sourced natural fiber textiles. This collaboration is creating access to regional materials that otherwise could not move through domestic supply chains, while generating measurable benefits to soil health. (www.californiacottonandclimatecoalition.com)

Textile Design For Resilient Healthy Ecosystems

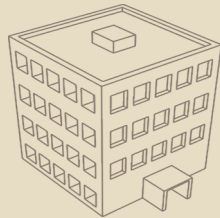
The globalized textile industry is responsible for pollution across the supply chain and is a significant contributor to emissions driving climate change.

We can re-design for regionalized, soil-to-soil systems that improve ecosystem and community health while providing our material needs.

Soil to Soil Textile Pathway



Natural fibers have their source in the soil. Healthy stewardship builds soil, biodiversity and ecosystem health.



Regional processing of natural fibers creates local jobs, the basis for healthy land-based regional economies.



Natural dyes provide vibrant color from plants and minerals. Naturally colored fibers avoid added toxic color treatments.



Biodegradable natural fibers decompose safely and can return to soil at the end of a long and useful lifecycle.

Synthetic Textile Pathway



Oil extraction, transport and processing creates pollution. Oil pipelines threaten environmental and community health at all levels of operation.



Polyester is formed from petroleum-derived compounds. Chemical modification with dyes, finishings and additives create additional toxicities.



Recycled polyester derived from plastic bottles is still a path to environmental pollution.



Subsidized oil-based synthetic materials appear to be 'inexpensive' as costs of pollution are externalized to our environment, bodies and communities.



Synthetic textile waste pollutes surface waterways and releases heavy metals and other additives into the soil and groundwater.

Polyester, recycled polyester, and other synthetic textiles are a primary source of microplastics in the environment, continually releasing microplastics into our air, soil, and waterways.

On The Ground:

Co-developed in partnership with the Carbon Cycle Institute, Fibershed's Climate Beneficial™ fiber verification program and label supports fiber farmers and ranchers in landscape stewardship through carbon farming, which builds healthy soils and healthy ecosystems. www.fibershed.org/programs/climate-beneficial-agriculture/



WE ARE MAKING AND WASTING TOO MUCH CLOTHING

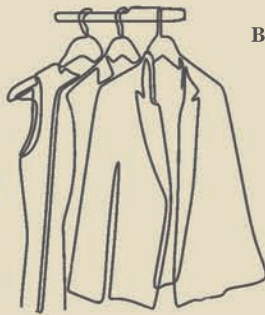
'Inexpensive' synthetic fibers and exploitation of labor are supporting the current model for fashion and textiles. U.S. consumers purchase **20 billion** garments annually and throw away over **11 million tons** of textiles per year. **Over 60%** of the garments we wear are now produced from petroleum based synthetic fibers.



2 MILLION TONS OF TEXTILE ITEMS ARE DROPPED OFF AT CHARITIES EACH YEAR IN THE U.S.



THE REMAINING 80-90% ENDS UP PRIMARILY IN LANDFILLS NEAR BLACK, BROWN AND WORKING CLASS COMMUNITIES OR DUMPED INTO INTERNATIONAL COMMUNITIES.



ONLY 10 TO 20% OF WHAT IS DONATED ENDS UP ON THE RACKS OF DOMESTIC THRIFT STORES.

On The Ground Impact:

Ghana and Haiti are two examples out of many countries in the Global South that receive millions of pounds of textile waste from the U.S. and Europe. Kantamanto Market in Accra, Ghana, receives about 15 million secondhand garments imported per week. More than 7 million of these garments end up in the waterways, landfills, or the streets of Accra every week—they cannot be upcycled or recycled properly due to the sheer volume and low quality. This textile waste creates devastating pollution in Ghana, which is already impacted by climate change.

OUR TEXTILES SHOULD NOT BE A FORM OF HARMFUL WASTE THAT END UP BURDENING OTHER COMMUNITIES.

Regionally focused design can reveal culturally relevant opportunities for resilience, causing a '**ripple effect**' that reduces dependency on opaque global supply chains that are dependent on far too much fossil carbon.

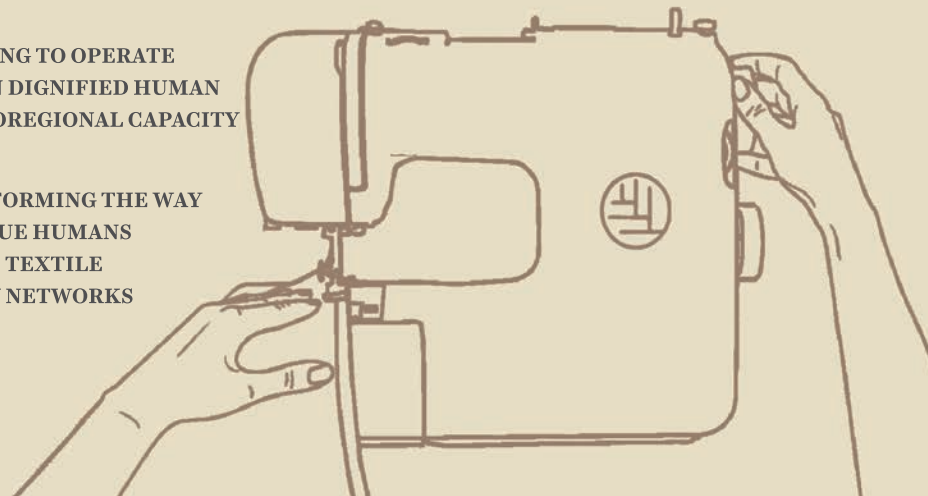
TEXTILE DESIGN CAN HELP SUPPORT HEALTHY RESILIENT COMMUNITIES

Eliminating toxic chemicals, plastic additives and harmful dyes from textiles is necessary to reduce the burden on communities where textiles are manufactured and used. With regional natural material sourcing traceable back to the farm, it becomes easier to track and control any additives, finishing agents and dyes that are added to fibers and textiles.

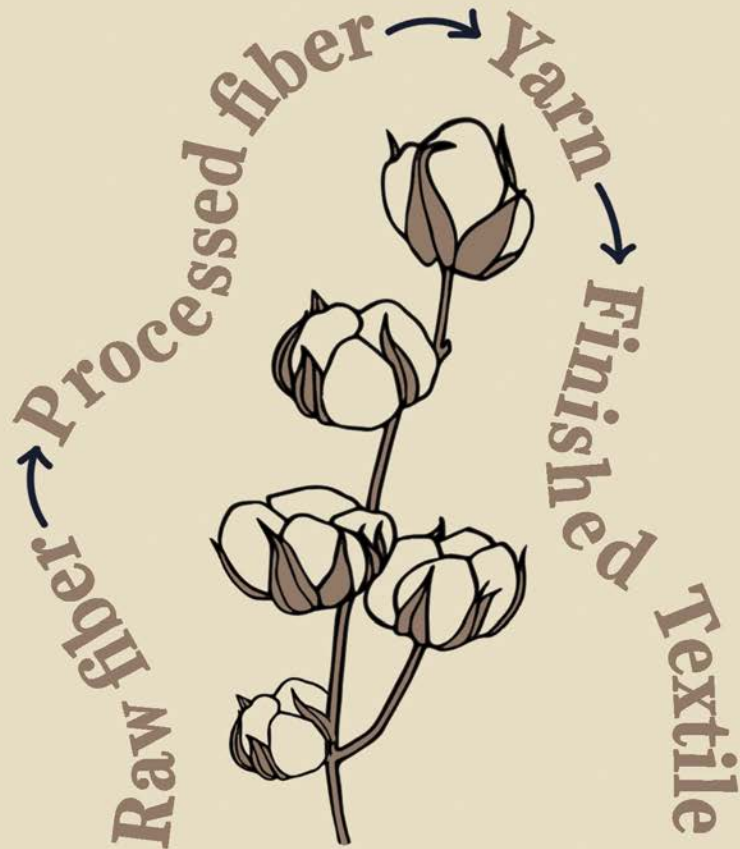
Worker health is contingent on the quality of the working conditions. Overproduction fuels volume quotas that result in a lack of agency in the workplace and terrible impacts on the quality of life for workers, **with only 7% of the world's garment workers earning a living wage (Re/Make)**. You can **support garment workers** by seeking out worker-owned factories, brands, and manufacturers with democratic workplace practices.

DESIGNING FOR RESILIENT COMMUNITIES REQUIRES:

- **LEARNING TO OPERATE WITHIN DIGNIFIED HUMAN AND BIOREGIONAL CAPACITY**
- **TRANSFORMING THE WAY WE VALUE HUMANS ACROSS TEXTILE SUPPLY NETWORKS**



**RESILIENT REGIONAL TEXTILE ECONOMIES CALL FOR AN EVOLUTION
IN OUR UNDERSTANDING OF PROSPERITY AND COLLECTIVE ABUNDANCE,
A RE-CENTERING OF HUMAN AND ECOLOGICAL WELL BEING.**



In the Western United States, both wool and cotton are produced at sufficient volumes to supply manufacturing industries, but current gaps in regional infrastructure and capacity prevent localized processing and value addition. Learning about and working with existing resources, skills and processing infrastructure in our regions helps to build stronger communities of entrepreneurs, artisans and manufacturers. Regional supply partnerships can create new opportunities for infrastructure and business development.

Regionalizing the supply networks of our garments and textile goods can uphold stronger local land-based economies and redistribute value more equitably.

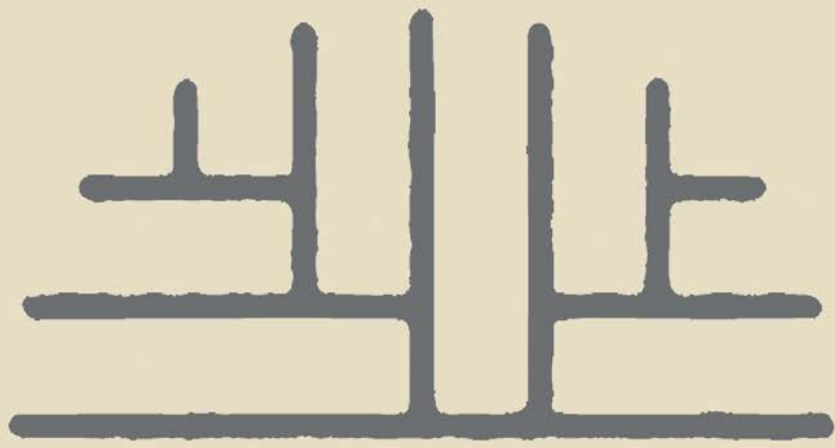
On The Ground:
Formed through a partnership with Imperial Yarn, the **Climate Beneficial™** Fiber Pool aggregates fine wool from ranches verified annually through the Climate Beneficial™ fiber program. The fiber pool has helped overcome supply network and manufacturing hurdles previously faced by designers wanting to work with farm-sourced wool in Northern California.
www.climatebeneficialfiberpool.com

ZERO WASTE & CIRCULAR ECONOMY

Zero waste design and pattern development reduces or eliminates fabric waste, acknowledging the precious ecological and human inputs that make healthy textile materials possible.

A circular textile economy cycles resources internally, adding and retaining value within the community, while reducing or eliminating textile waste.





SHIFTING THE LARGER SYSTEM TOGETHER



The design community's creative work is essential to reshaping systems that produce, process and manage textiles. Collaboration and cooperation with partners across regional supply networks can build capacity, equity, access, scale, and infrastructure. Collaborative efforts can also address needed policy changes.

WE CAN BUILD CAPACITY, EQUITY, ACCESS, SCALE, AND INFRASTRUCTURE

Regional design choices can be challenging given current economic constraints and lack of regulations in our textile and fashion systems. But even small steps in building regionally-based natural textile systems can begin to shift the larger industry. Pilot projects and prototypes that show what is possible can catalyze new policies to drive systemic change.

New textile policies and regulations are essential for the larger industry to substantially shift.

Look to these organizations for leadership and updates on textile policy and ways you can be involved:

- Garment Worker Center
- California Product Stewardship Council
- The OR Foundation
- Re/Make
- Fibershed

QUESTIONS TO PONDER...

How does your material sourcing and use influence ecosystems and communities in the region where you live?

How does it influence ecosystems and communities in other regions?

What role do you want to play in your regional textile system?

How could you embrace Designing for Regional Resilience in your own business/ practice?



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Visit Fibershed's resource page for regional textile material sourcing support and citations for this booklet:
www.fibershed.org/resources



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