

# SILK GRASS WILDLIFE PRESERVE



## STATEMENT OF PURPOSE

To model and inspire the stewardship of Belize's precious natural resources through conservation action, effective land management, regenerative agriculture, and sound science.

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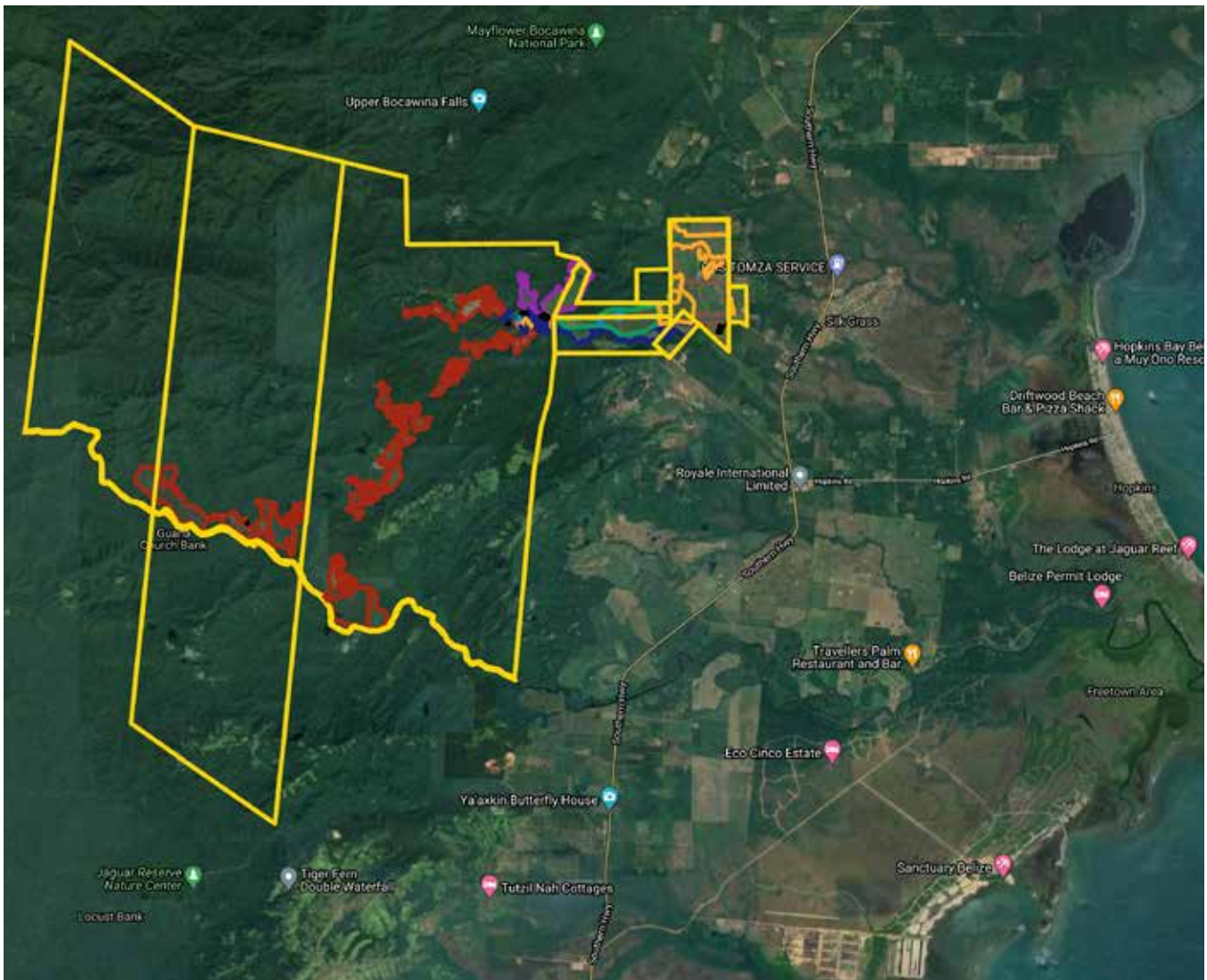
"Prosperity consists in our ability to flourish as human beings – within the ecological limits of a finite planet. The challenge for our society is to create the conditions under which this is possible. It is the most urgent task of our times."

- Tim Jackson, *Prosperity Without Growth: Economics for a Finite Planet*

# I. PLACE, PROTAGONISTS and PHILOSOPHY

The Silk Grass Wildlife Preserve (SGWP) is a Belize non-profit organization dedicated to the permanent preservation and responsible management of a 27,500-acre tract of land in the foothills of the Maya Mountains near the village of Silk Grass in Stann Creek, Belize.

Approximately 90% of this land [24,500 acres] is first-growth rainforest, bridging the expanse between the Cockscomb Basin Jaguar Preserve to the south, the Mayflower Bocawina National Park to the north, and the Sittee River Forest Preserve to the west. The remaining 10% includes farm operations and infrastructure, previously degraded by nearly 40 years of conventional agriculture and largely abandoned by the previous owner.



The entire property was purchased in 2019 by Mandy Cabot and Peter Kjellerup who saw a unique opportunity to combine land conservation with regenerative agri-business, reversing decades of 'extraction economics' in Belize and demonstrating that for-profit pragmatism and nonprofit conservation are both essential – and interdependent – components of a sustainable economy. In their view, Capitalism and Conservation are not either/or choices. Not only can they coexist; they must coexist. Our survival depends on it.



## CAPITALISM AS IF LIVING SYSTEMS MATTERED

Although natural resources power all life on earth, the natural capital on which economic prosperity depends has been largely absent from economic models. The concept of natural capital extends beyond the familiar resources that humans use — water, air, soil, animals, vegetation and minerals. It also includes the living systems that support all life.

At a macro level, these systems include rainforests, wetlands, grasslands, oceans, and riparian corridors, which themselves contain trees, songbirds, fish, animals, plants and the physical environments in which they live. At a micro level, these systems include the fungi, bacteria, and insects that are also critical to maintaining life. These systems, coexisting interdependently, create a living flow of services that make life on earth possible.

Despite the vital importance of this natural capital, conventional definitions of capital are often limited to constrictive financial terms — factories, machinery, patents, and other financial assets that appear on balance sheets. Most modern financial constructs neglect to account for the wellspring from which all wealth — and life — is created: the vital services and resources that flow from earth's living systems. When financial value *is* assigned to natural resources, it is almost always at their *extractive* cost rather than *replacement* value. Using traditional financial models to quantify replacement value of natural resources is extremely difficult. It is virtually impossible to do so with entire ecosystems.

Healthy ecosystems are often touted for their supply of clean air, water, and consumable productivity, but there are many other critical functions that are unsung, such as protection from extreme weather, waste management, and CO<sub>2</sub> removal, all crucial to generating a habitable planetary atmosphere.

In recognizing – and valuing – multiple forms of capital, the Silk Grass Wildlife Preserve seeks to eradicate the long-standing tension between business development and habitat conservation. Traditional land trusts and conservation efforts in Belize are viewed by some as obstacles to economic development and business opportunity. Silk Grass Wildlife Preserve's mission is to change that narrative to a new one; one where the forests and waterways that give us the water, air, and soil for food production are treasured, protected, and used responsibly while boosting the local economy.

As longtime social entrepreneurs and philanthropists, Silk Grass Wildlife Preserve founders Mandy Cabot and Peter Kjellerup envisioned an innovative approach to bridge the divide between economic and ecological livelihoods. To exemplify the changes needed for a global shift in how business and ecosystem operates at scale, they – together with Belize agribusiness leader and partner Henry Canton – creatively combined nonprofit conservationism with for-profit pragmatism.



## **THE BUSINESS OF CONSERVATION**

Silk Grass Wildlife Preserve was founded on the belief that conservation and business are allies, bonded interdependently to shared outcomes.

NGOs can't do it alone: Protected areas need management. Management requires capital. NGOs, then, must fundraise, often securing finances from the very businesses they seek to change.

Conversely, businesses can't do it alone: All businesses, large and small, are dependent upon earth's natural resources and living systems to maintain economic stability. What is a sawmill without a forest? What is a farm without soil? A soft-drink factory without water?

The answers to these questions lay bare a truth that connects us all: Nature's resources are the wealth on which we all exist. Until the worlds of business and conservation unite to recognize nature's services as true capital, we will remain on a trajectory for environmental and social crisis.

It's time for a new approach.

## II. PRESERVATION, PROTECTION and PROFITS

The Silk Grass Wildlife Preserve sits at the northeastern edge of the Chiquibul Maya Mountain Massif, a 1,260,800-acre area in southwestern Belize. The Chiquibul Maya Mountain Massif is among the most intact tropical forests north of the Amazon, and accounts for 22.2% of the land mass of Belize. The defining characteristics of this area are its (1) contiguous forest, (2) species richness and habitat diversity, (3) archaeological history, (4) environmental services, and (5) aesthetic landscape.

The Silk Grass Wildlife Preserve borders this Key Biodiversity Area and shares its ecological characteristics, making it a vital wildlife corridor. Maintaining connectivity between these lands is critical to the survival of many species and to the natural ecological processes of a system that depends on a heterogeneous landscape.

The Silk Grass Wildlife Preserve permanently protects its 24,500 acres of rainforest from illegal hunting, poaching, fishing, logging, land clearing, road building, gathering of protected non-timber forest products (seeds, leaves, flowers, fruits, barks, pulps, roots and oils), and removal of cultural artifacts through regular ranger patrols, boundary demarcation, signage, wildlife cameras, and community education and engagement.

What is unique about this model is that the economic engine at the heart of the NGO is Silk Grass Farms, a vertically integrated, for-profit agri-business which implements regenerative farming practices and innovative food processing practices to restore health and biodiversity to degenerated farmland, sequester carbon, provide meaningful employment, and increase the flow of capital to the local economy and, by extension, greater Belize.

Mirroring the symbiotic relationship found in natural ecosystems, after-tax profits from Silk Grass Farms product sales and operations will be used in support of its parent entity, the Silk Grass Wildlife Preserve, which in turn protects this life-sustaining ecosystem.

This model was designed for Sustainability in the purest sense of the word – meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. The NGO itself is the steward of the land. There will be no "owners" in the traditional sense; no 'distributions,' dividends, or shares; rather, a board of qualified, largely Belizean Trustees, committing to a clear mandate – by Belize and for Belize – for generations to come.



### PROTECTED/ENDANGERED/ VULNERABLE SPECIES PRESENT ON SILK GRASS WILDLIFE PRESERVE

- Jaguar
- Puma
- Jaguarundi
- Agouti
- Howler Monkey
- Ocelot
- Iguana
- White-lipped Peccari
- Baird's Tapir
- Geoffroy's Spider Monkey
- Great Curassow
- Plain Chachalaca
- Crested Guan
- Keel-billed Toucan
- Scarlett Macaw
- Yellow-headed Parrot
- White-bellied Woodpecker
- Semipalmated Sandpiper
- Yucatan Brown Brocket
- Keel-billed Motmot
- Morelet's Crocodile
- Belize Leaf-toed Gecko
- Red-eyed Tree Frog
- Belizean Rosewood
- Schwerdtfeger's Pine
- Spanish Cedar
- Big-leaf Mahogany
- Vanilla
- Black Orchid

## EXCERPTS FROM THE MEMORANDUM OF ASSOCIATION OF THE SILK GRASS WILDLIFE PRESERVE

### THE OBJECTS FOR WHICH THE SILK GRASS WILDLIFE PRESERVE IS ESTABLISHED ARE:

- To practice and promote regenerative and sustainable farming in a way that benefits the community, wildlife and the environment in the Silk Grass area of Belize
- To acquire interests in and manage approximately 24,500 acres of rainforest near the Cockscomb Basin as a permanent nature preserve
- To develop community education programs around land and wildlife conservation, sustainable farming, and sustainable agri-processing and build a successful social enterprise
- To build and maintain successful agri-processing facilities utilizing zero-waste technologies; to develop, market and sell sustainable products including a variety of coconut products; to utilize revenues to employ members of the community at a living wage; and to generally support the initiatives listed above
- To apply the resources of the Silk Grass Wildlife Preserve to the preservation and protection of the natural resources under its direct management as well as to the natural resources of Belize generally
- To work together with other non-profit organizations sharing similar or comparable objectives... and
- To create a material positive impact on society and the environment, taken as a whole, through its business and operations



### III. PRINCIPLES and PRACTICES

The Silk Grass Wildlife Preserve – and its for-profit protégé, Silk Grass Farms – employ **five key strategies** which are interrelated and interdependent.

Taken together, these five strategies reduce environmental harm, create economic growth, and increase meaningful employment.

- A. Resource Productivity**
- B. Waste Nothing**
- C. Add Value at Source**
- D. Invest in Natural Capital**
- E. Build Biodiversity**





## A. RESOURCE PRODUCTIVITY

Resource productivity means increasing the amount of utility or work from an asset or process while using less material and energy.

For humans to prosper on earth over the long term, resource productivity is not a choice, but a requirement. Further, in keeping with economic principles, using resources more effectively is not only pragmatic, it is cost-effective.

Maximizing resource productivity can offer two core benefits:

1. Slowing resource depletion at one end of the value chain while lowering pollution at the other
2. Doing more with less makes operations more profitable, providing a basis to increase meaningful, gainful employment.

At Silk Grass Farms, the business arm of the Silk Grass Wildlife Preserve, resource productivity is a tenant of the business model that is operationalized in many ways.

LAND: Do more with less

Over the last 50 years, the global population has doubled while resource extraction has tripled.

Within the confines of a finite planet, we will be confronted with the catastrophic consequences of resource depletion unless we become more effective in how we harvest, process, and use natural capital.

Nearly all biodiversity loss, clean water scarcity, and climate change is caused by the irresponsible and wasteful extraction and processing of natural resources.



Doing more with less space: agroforestry/intercropping/permaculture

## RESOURCE MANAGEMENT

WATER: Slow it, Spread it, Store it, Sink it – for all contingencies



SOIL: Regenerative farming practices that focus on soil rehabilitation nurture productive, resilient, nutritious crops with few, if any, petrochemicals

- Maintaining riparian buffers
- Allowing longer grass cycles
- Planting native hardwoods
- Nitrogen-fixing cover crops
- Integrated pest management
- Manual and mechanical clearing
- Effective micro-organisms and compost
- Low-till policy for annual crops
- Apiculture for pollination and pest control



## B. WASTE NOTHING

### "IT'S NOT WASTE UNLESS YOU WASTE IT."

By repurposing post-production biomass, Silk Grass Farms reduces the wasteful throughput of materials – indeed, eliminating the very idea of waste.

Those products that do not degrade back into natural nutrient cycles can be repurposed and reincorporated as nutrients (ingredients) for other processes/products.

Benefits:

- Waste declines
- Toxicity is reduced or eliminated
- Demand for labor increases.



### C. ADD VALUE AT SOURCE

In Belize, while the QUALITY of goods and services produced and delivered can be managed and developed, the QUANTITY is limited by virtue of Belize's size (land mass and population). Rather than focus on extracting the highest volume of production, Silk Grass Farms focuses on adding value at source.

Silk Grass Farms adds value at source through high-nutrient, high quality foods; state-of-the-art processing technologies; deep research into what goods and services are most desirable; just in time distribution; and concentrating first on local then regional markets.

Vertical integration of operations (planting, growing, harvesting, preparing, processing, packaging) onsite all reduce fuel consumption and provide ample opportunities for radical resource productivity.



## D. INVEST IN NATURAL CAPITAL

If the flow of products and services from industrial and agricultural systems is to be sustained or increased in the future for a growing population, the vital flow of life-supporting services from living systems will have to be maintained and increased.

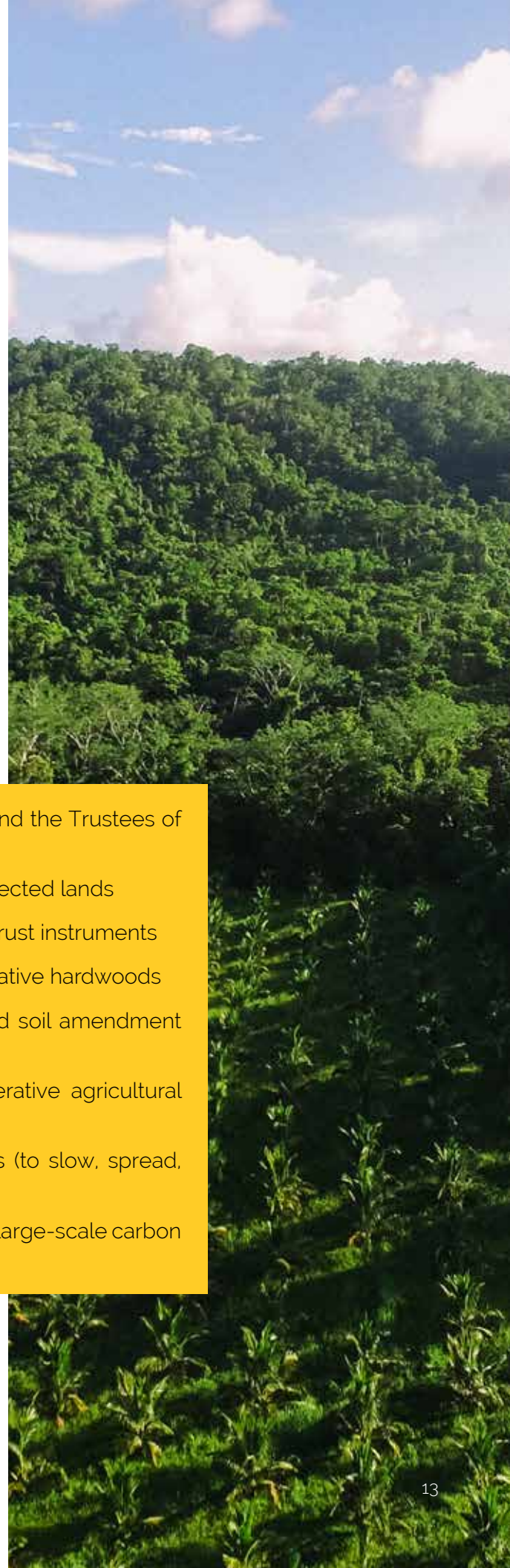
Worldwide planetary destruction can be reversed with large scale investments in sustaining, restoring and expanding stocks of natural capital, so the biosphere can ultimately produce more abundant ecosystem services and natural resources.

**“We are not, as a world, going to reach our climate goals and avoid the worst-case scenarios without a large natural capital component – saving our forests and grasslands and engaging in restoration. There is no climate solution without nature.”**

Henry M. Paulson Jr.  
Member of the Latin America Conservation Council

Investments made by the Directors of Silk Grass Farms and the Trustees of Silk Grass Wildlife Preserve:

- Purchased 27,500 acres of land bordering critical protected lands
- Committed to long-term preservation through NGO/trust instruments
- Implemented 500,000 tree reforestation initiative of native hardwoods
- Created riparian buffers, erosion control systems, and soil amendment recipes
- Restored degraded land through innovative, regenerative agricultural practices
- Established responsible water management systems (to slow, spread, store, and sink)
- Invested in a state-of-the-art cleantech biorefinery for large-scale carbon sequestration



## E. BUILD BIODIVERSITY


### Why is Biodiversity Important?

- Biodiversity is the foundation of all life on earth. The greater the diversity of life on the planet, the more secure all life is, including ours.
- Biodiversity is the key indicator of the health of an ecosystem, both on a macro level and on a micro level.
- Healthy, biodiverse ecosystems clean our water, purify our air, maintain our soil, regulate the climate, recycle nutrients and provide us with food. They provide raw materials and resources for medicines and other purposes.
- Floods, fires and disease outbreaks all have connections to biodiversity loss
- Biodiversity provides everything humans need – for free.

**Wherever they call home, humans depend on the services ecosystems provide, such as fresh water, pollination, soil fertility and stability, food and medicine. Ecosystems weakened by the loss of biodiversity are less likely to deliver those services, especially given the needs of an ever-growing human population.**

Protecting biodiversity mitigates risks and increases productivity at Silk Grass Farms.

On a macro level, diverse crops, apiculture, and diverse wildlife mitigate the risk of plant diseases, pests, and effects of severe weather and climate change. On a micro level, diversity in the soil microbiome and in benevolent insect populations, and the use of biochar, compost, and effective micro-organisms help mitigate soil erosion, crop loss, petrochemical exposure, and water contamination.



**Conservation researchers Paul and Anne Ehrlich posited in the 1980s that species are to ecosystems what rivets are to a plane's wing. Losing one might not be a disaster, but each loss adds to the likelihood of a serious problem.**

## IV. PROSPERITY

The Silk Grass Wildlife Preserve was envisioned as a long-term model uniquely structured for sustainability by letting nature work for people and people work for nature interdependently. Our model benefits many, not just a few. Silk Grass Farms creates hundreds of local jobs; develops future leaders; brings capital into Belize; sequesters carbon; regenerates soil; and produces healthy, nutrient-rich food, beverage and personal care products. Profits generated from Farm sales will go to the Preserve which, in turn, preserves the ecosystem that underpins the business, our livelihoods, and our lives.



This BUSINESS FOR NATURE, NATURE FOR BUSINESS model embraces 4 fundamental assumptions:

To make the global shift needed to turn the tide on habitat depletion and climate change, we must see ourselves as members *within* our ecosystems rather than outside of them.

The environment cannot be viewed as a 'minor factor of production,' but rather as 'an envelope containing, provisioning, and sustaining the entire economy.'

The limiting factor to future economic development is the availability of natural capital; most critically, the life-supporting services of intact, healthy ecosystems that have no substitutes and currently have no market value.

The economics of the future depend on systems that are based on the needs of *people* rather than business. On a finite planet, the definition of capital must be expanded so that *all* of its forms – human, financial, manufactured and natural – are valued.



## TRIPLE BOTTOM LINE IMPACTS

**Behaving as if all forms of capital are valued, and “ensuring a perpetual annuity of valuable social and environmental processes to serve a growing population is not just a prudent investment, but a critical need in the coming decades. Doing so can avert scarcity, perpetuate abundance, and provide a solid basis for social development. It is the basis of responsible stewardship and prosperity for the next century and beyond.”**

- Paul Hawken, Amory B. Lovins, L. Hunter Lovins, *Natural Capitalism: The Next Industrial Revolution*