

# GREEN BONDS

2023 | ANNUAL IMPACT REPORT

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## ABOUT

This report provides information on The Nature Conservancy’s (TNC) Green Bond initiative, providing an overview of the program and its projects, how those projects were selected, and information on how funds have been allocated to them.

While impacts from many of the initiatives will take longer to come to fruition, this report provides an initial review of impacts from a selection of the projects, setting out their contribution to conservation and wider environmental objectives.

Future impact reports will be issued until the bond proceeds have been fully allocated (and thereafter in the event of material developments) and will be made available on the TNC website.

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# 2030 GOALS

TNC works across the globe, in over 70 countries and territories, and all 50 states in the U.S. to conserve the lands and waters on which all life depends. The actions we take this decade will define the planet's path over the next century. We are taking on the dual threats of accelerated climate change and unprecedented biodiversity loss; and maximizing resilience and benefits for our most precious ecosystems and vulnerable communities. By letting science guide our focus and equity guide our execution, we can shape a better 2030 and beyond, for people and our planet.

By 2030, we are working to protect people and the planet by avoiding or sequestering 3 billion metric tons of carbon dioxide equivalent, and conserving 650 million hectares of healthy land, 30 million hectares of lakes and wetlands, 1 million kilometers of rivers, and 4 billion hectares of oceans—our 2030 goals.

Green Bonds represent one tool that we are using to channel investment into projects that will contribute to reaching these goals. We plan and manage our Green Bond activity within the TNC '**Green Bond Framework**' set out in 2022. The framework describes how Green Bond proceeds will be used, the process for project evaluation and selection, how proceeds are managed, and arrangements for reporting and external review.

# WHAT ARE 'GREEN BONDS'?

A Green Bond is a type of 'sustainable bond' whose funds will only be used to finance or refinance projects with environmental benefits. Green Bonds, which can be issued by supranational agencies (like the European Union), sovereign nations, corporations, or municipalities have been issued to support broad environmental policy goals as well as specific capital projects like upgrading buildings to be LEED certified or adding solar panels to buildings. Relatively few Green Bonds have been issued by pure conservation organizations or non-profit organizations—like TNC—to support a range of conservation projects.

TNC's Green Bond follows the International Capital Market Association's (ICMA) 2021 Green Bond Principles which are voluntary guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond market. This report takes account of those principles, including specific provisions on what to include when reporting.

Find more information on the Green Bond principles here: [ICMA](#)



## PORTFOLIO OVERVIEW

During the first year since the Green Bond issuance, TNC has allocated \$145 million of Green Bond financing out of the total \$350 million toward 18 projects. Funding allocations are based on projected needs. Fund usage may be equal to or less than the sum allocated, depending on the actual needs of the project. Funds that are not used are allocated to other projects in future allocations.

Projects in the portfolio span a range of countries and natural systems. Projects are located in Africa, Asia-Pacific, Europe, Latin America and North America. Several projects focus on specific locations and ecosystems, while others have a multi-country approach. In general terms, the projects seek to accelerate the impact of programs, actions and measures that support sustainable outcomes or focus on land transactions that protect and conserve areas of critical biodiversity and/or climate storage value.

### BY THE NUMBERS

*as of February 2023 (unaudited)*

**18** projects

**\$145 million** Green Bonds allocated

**52%** of project funding outside the U.S.

**118,731** hectares of land protected

**496** kilometers of rivers protected

The full list of Green Bond funded projects is set out in the table below. Brief descriptions of the goals of each project are provided at Appendix A. Three projects are featured in more detail below.

PROJECT NAME	GREEN BOND ALLOCATION (\$ MILLIONS)	PROJECT CATEGORY
Belize Maya Forest	50.0*	Environmentally Sustainable Management of Living Natural Resources and Land Use
Keweenaw North Shore and Bluffs—Michigan, USA	27.2	
Michigamme Highlands—Michigan, USA	16.65*	
Coosawhatchie River—South Carolina USA	16.3*	
Equitable Protection Across Asia-Pacific	5.1	
Shenandoah Mountain—West Virginia, USA	3.9	
South Africa Oceans	0.825	
Maya Forest & MesoAmerican Reef	3.5	
Kettle Moraine—Wisconsin, USA	2.3*	
FishPath Implementation	1.6	
Lake Tanganyika Forever	1.0	Climate Change Adaptation
Natural Climate Solutions	1.5	
Blue Carbon in Asia-Pacific	1.45	
India Landscape Restoration	1.0	Sustainable Water and Wastewater Management
Amazon Basin Freshwater Initiative	3.5	
Waltz-Turner Ranch—California, USA	3.8	
Resilient Watersheds Strategy	1.67	Renewable Energy
Renewable Energy Transition	3.6	

Notes: Allocation amounts are as of Feb 2023 (unaudited). Projects marked with an asterisk (\*) are refinancings.



# IMPACTS

Our Green Bond Framework sets out a range of potential measurable outcomes for projects that will demonstrate project impact. Potential measures include:

- » Areas of land, freshwater and marine ecosystem protected (hectares and km for river systems).
- » Areas of land, freshwater and marine ecosystem protected with improved management (hectares).
- » GHG emissions sequestered or avoided through emission reduction (tons CO<sub>2</sub> equivalent).
- » Number of people benefiting from nature to adapt to climate change.
- » Number of people with improved security of rights over natural resources, sustainable economic opportunity, or ability to participate in decision making about natural resources.

It is recognized that many of the desired environmental and socio-economic impacts resulting from these initiatives may require a longer period to come to fruition, and that many benefits may result from policy changes which these projects have instigated or accelerated.

Below are three highlighted projects, which demonstrate the type of work and impacts Green Bond funding is supporting.



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## Belize Maya Forest

### **The setting**

The Selva Maya tropical forest in Belize is the largest contiguous block of rainforest north of the Amazon, and a pristine habitat for wildlife, clean air and water. The forest is a global jewel for biodiversity and home to some of the most precious natural resources on the planet. As its name suggests, the forest formed part of the Ancient Mayan civilization and thus has great historical and cultural significance and includes significant archaeological sites.

### **The Green Bond contribution**

Green Bond funding supported the refinancing of the acquisition and protection of approximately 236,000 acres (96,000 hectares) of the tropical forest, representing a critical part of the 11+ million-acre Selva Maya. The funding also supports the creation of a Belizean non-profit called the Belize Maya Forest Trust which will hold and manage the property in conservation trust as a protected area/nature reserve, in perpetuity.

### **The importance of this project**

The project area is a place of rich biodiversity, providing refuge for countless rare and endangered species. TNC has identified the area as among the top 10% of locations worldwide where protecting the habitat could have a significant impact on reducing the risk of species extinction. Belize is home to the largest populations of jaguars in Central America (57 individuals recorded on these properties in 2019), and the project area has more than 400 species of birds and some 70 species of mammal. This includes populations of puma, margay and ocelot.



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Yet the forest and the varied species within in it have been under severe threat for many years. Rapidly advancing deforestation in Belize—where forest stocks have declined by more than 28% between 1986 and 2018—has encroached on the forest area, driven by the conversion of forested land to livestock and feedstock agriculture. In addition, illegal hunting, fishing and logging has added to the pressures facing many species. The loss of forest, and the resulting increase in greenhouse gas emissions, puts the entire ecosystem at risk.

The project is seeking to redress these alarming trends and protect the forest now—and for future generations. It is estimated that protection of this living carbon reserve has the potential to store and sequester approximately 13 million metric tons of carbon dioxide. Lying directly adjacent to the 250,000-acre Rio Bravo Conservation Management Area, the two projects together cover approximately 9% of the land area of Belize. Their scale and connectivity provides an extensive setting that increases the survival chances of a wide range of species, while also mitigating the most severe and irreversible consequences of climate change.

### **Outcomes**

- » Protection of **95,471 hectares** of land.
- » Protection of freshwater resources: **334 km of river** and **11,826 hectares of wetlands**.

## Keweenaw North Shore and Bluffs—Michigan, USA

### The setting

Formed from one-billion-year-old lava flows and shaped by glacial ice and the waves of the largest freshwater lake in the world—Lake Superior—the Keweenaw Peninsula in Michigan is one of the most unfragmented, climate-resilient forested and freshwater areas of the central United States. An area rich with forests, wildlife, rivers, lakes and wetlands, it is both a beautiful landscape and one that is vitally important for biodiversity.

### The Green Bond contribution

Green Bond funding has supported the purchase of more than 32,000-acres of property in Keweenaw County. The property’s acquisition will nearly double the protected resilient and connected lands at the tip of the Keweenaw Peninsula, an approximately 600 square mile area in Michigan’s Upper Peninsula, important for the health of the Great Lakes and an intact forested landscape that provides nature-based carbon solutions. Acquisition of the property will significantly expand the area of the Peninsula committed to sustainable working forestry and provides for greater public access for outdoor recreation.



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### The importance of this project

The Keweenaw Peninsula is an area recognized by TNC as a global priority for biodiversity and climate resilience. Protecting the forests and water resources of the peninsula means protecting the wildlife that depend on it to survive, including gray wolf, bobcat, black bear, pine marten and migratory songbirds. The area is also a vital rest stop for migrating raptors and many other bird species. By safeguarding forested land, the project also contributes to the storage and sequestration of carbon dioxide, mitigating the damaging consequences of climate change.

The Peninsula has a long and rich history of providing for people – including generations of the Keweenaw Bay Indian Community who have hunted, fished and gathered on these lands. Continuing the legacy of people living and working in harmony with nature is also integral to the local community’s vision for its future. A community visioning process involving local leaders and the public has paved the way for the establishment of a community stakeholder committee, made up of some 20 community leaders, to work with the Michigan Department of Natural Resources to determine the future management and use of this land.

TNC has worked with the community and local and state government to develop a plan in which the property will be gradually transferred to the State of Michigan, local governmental bodies, and conservation buyers. This process, which will unfold over three to five years, is seeking to improve conservation and advance a rural economic future based on sustainable forestry and outdoor recreation.

### Outcomes

- » Protection of **12,438 hectares of land**.
- » Protection of Freshwater resources: **61 km of river** and **1,618 hectares of wetlands**.
- » Estimated storage and sequestration of CO<sub>2</sub>e: **-1,074,000 metric tons** over ten years.



## Lake Tanganyika Forever

### **The setting**

Lake Tanganyika is Africa's oldest and deepest lake, and the longest freshwater lake in the world. It stretches for more than 400 miles (640 km) across central Africa, and spans four countries – Tanzania, the Democratic Republic of the Congo, Burundi, and Zambia. It is home to some of the planet's most extraordinary aquatic creatures – some 2,000 plant and animal species including an estimated 500 species of fish.

### **The Green Bond contribution**

Green Bond funding is helping to establish durable freshwater protection for Lake Tanganyika through a combination of applied science, powerful partnerships, and scaling of proven community-led conservation approaches from pilot sites across the entire lake basin. The funding is harnessing the experience of foundational work already carried out on the Tanzanian lakeshore and will help to protect the lake as a vital freshwater resource for the millions of people who depend upon it.

### **The importance of this project**

Lake Tanganyika is a vital regional and global resource, containing 17% of the world's surface freshwater. It is a beacon of biodiversity and provides economic support to some 12 million people in the region, including more than 150,000 fishers, processors and traders. However, the lake and its precious ecosystem is under threat by overfishing as well as warming temperatures, which is damaging fish stocks.

To combat these trends, the project is establishing a global model for how to design and implement a network of large and small, government- and community-managed freshwater protected areas. Supporting the complete documentation of freshwater Key Biodiversity Areas across the lake and getting these designations officially confirmed will strengthen and expand the network of freshwater protected areas and fisheries co-management sites. Creating the first lake-wide fisheries co-management network will support critical habitat protection and reduce threats to the lake's fisheries.

Addressing threats to the lake also involves avoiding destructive hydropower dams on key tributaries and averting the impact of caged aquaculture in sensitive habitats. The project is actively developing and building partnerships by supporting an existing \$4 million, 5-year investment by UNEP Global Environment Facility to multiple organizations working in the Lake Tanganyika Basin. These combined efforts are bringing valuable attention, partners and funding to Lake Tanganyika and its communities.

### **Outcomes**

The project will bring a range of benefits to the freshwater ecosystem itself as well as local people and communities. A focus on community engagement and participation in decision-making will ensure that specific local priorities are identified and addressed, with a focus on women and youth.



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# PROJECT OVERVIEWS

## PROJECT CATEGORY ▶

### Environmentally Sustainable Management of Living Natural Resources and Land Use

#### ***Belize Maya Forest***

**Green Bond allocation:** **\$50,000,000**

TNC acquired approximately 236,000 acres and created a Belizean non-profit, Belize Maya Forest Trust, to hold and manage this property as a protected area/nature reserve in perpetuity. This project is a critical part of the 11+ million-acre Selva Maya, home to the largest populations of jaguars in Central America, more than 400 species of birds and healthy populations of puma, margay and ocelot.

#### ***Keweenaw North Shore and Bluffs—Michigan, USA***

**Green Bond allocation:** **\$27,200,000**

TNC's purchase of this property nearly doubled the protected resilient and connected lands at the tip of the Keweenaw Peninsula in Michigan's Upper Peninsula. The project will protect the area's rich biodiversity and will store and sequester more than 1 million tons of carbon dioxide equivalent over ten years.

#### ***Michigamme Highlands—Michigan, USA***

**Green Bond allocation:** **\$16,650,000**

TNC acquired property located in Baraga County, Michigan, adding to our existing network of forest reserves in Michigan's Upper Peninsula, which seek to demonstrate the sustainable co-existence of nature and working forests, while contributing significantly to climate solutions. The project will conserve wetlands and open waters in Michigan's moose range; rivers and streams that flow into Huron Bay and Lake Superior; and working forest lands that include large diameter hemlock and maple stands, a large natural red pine stand, and extensive late-succession northern hardwood forests.

#### ***Coosawhatchie River—South Carolina USA***

**Green Bond allocation:** **\$16,300,000**

TNC, in partnership with Open Space Institute (OSI), purchased property to establish a new Wildlife Management Area for the South Carolina Department of Natural Resources on an iconic coastal plain forest in the Longleaf Pine Whole System.

#### ***Equitable Protection across Asia-Pacific***

**Green Bond allocation:** **\$5,100,000**

Green Bond funding will help enable TNC to work across eight countries in the Asia-Pacific Region to progress land and water conservation in ways that intentionally advance gender equity. We are focusing on gender equity in the development, implementation, and management of formally protected areas and other conservation areas in Asia-Pacific.

#### ***Shenandoah Mountain—West Virginia, USA***

**Green Bond allocation:** **\$3,900,000**

TNC purchased property located in Hardy County, West Virginia, which is between two adjacent properties being protected separately, creating a 16,000 acre protected corridor in a landscape under threat of development (within a two hour drive of Washington, DC), and securing 120 acres of agricultural land that will be family farmed.

#### ***South Africa Oceans***

**Green Bond allocation:** **\$825,000**

Green Bond funding will support TNC and its partners in expanding South Africa's existing marine spatial plan - a marine map and management approach that designates where human activities occur in the ocean to minimize conflicts among stakeholders, maximize the benefits that people receive from the ocean, and help maintain healthy marine habitats—from three pilot coastal areas to the full Exclusive Economic Zone.

### **Maya Forest and MesoAmerican Reef**

**Green Bond allocation:** **\$3,500,000**

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Green Bond funding will help secure enduring protection and climate resilient food and water systems in the Maya Forest and Mesoamerican Reef Iconic Place by improving management effectiveness of protected areas; engaging communities in regenerative and smart growth food systems; and establishing a tri-national freshwater protection strategy.

### **Kettle Moraine—Wisconsin, USA**

**Green Bond allocation:** **\$2,300,000**

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TNC purchased property located in Walworth County, Wisconsin in an effort to protect rare species and contribute to a climate resilient landscape by helping connect priority areas identified within the Resilient and Connected Network, “natural highways and neighborhoods” that show where plants and animals have the best chance to migrate from growing climate threats and find new places to call home.

### **FishPath Implementation**

**Green Bond allocation:** **\$1,600,000**

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Green Bond funding will support the expansion of FishPath, a proven approach to setting fisheries on a path to sustainability, beyond the current 13 countries and 1,000 users into new geographies such as Guam, American Samoa, French Polynesia, and Tanzania.

### **Lake Tanganyika Forever**

**Green Bond Allocation:** **\$1,000,000**

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Green Bond funding will help establish durable freshwater protection of Lake Tanganyika through a combination of applied science, powerful partnerships, and scaling of proven community-led conservation approaches from pilot sites across the entire lake basin including establishing freshwater protected areas and fisheries co-management sites.

## **PROJECT CATEGORY ▶**

### **Climate Change Adaptation**

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#### **Natural Climate Solutions**

**Green Bond allocation:** **\$1,500,000**

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Green Bond funding will support TNC in providing key places like Indonesia, China, India, the Congo Basin, and the Amazon with the resources they need to test Natural Climate Solutions—proven ways of storing and reducing carbon emissions in natural ecosystems like forests, grasslands, and wetlands—and ensure inclusive and equitable interventions.

#### **Blue Carbon in Asia-Pacific**

**Green Bond allocation:** **\$1,450,000**

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Green Bond funding will help enable TNC to demonstrate the utility and viability of blue carbon—carbon captured or stored by marine and coastal ecosystems—as a climate mitigation strategy through wetland protection and restoration.

#### **India Landscape Restoration**

**Green Bond allocation:** **\$1,000,000**

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Green Bond funding will help TNC demonstrate how to scale ongoing pilot restoration projects in Central India, and share learnings through a coalition of partners and policymakers, potentially influencing restoration efforts nationally.

## **PROJECT CATEGORY ▶**

### **Sustainable Water and Wastewater Management**

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#### **Amazon Basin Freshwater Initiative**

**Green Bond allocation:** **\$3,500,000**

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Green Bond funding will support TNC in expanding freshwater conservation efforts, including establishing a freshwater protection framework for the region, launching a free-flowing river protection project, engaging the local fishing community on a sustainable fisheries project, and implementing natural climate solutions in a critical watershed.

**Waltz-Turner Ranch—California, USA**

**Green Bond allocation** **\$3,800,000**

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TNC has acquired this property, located in Mariposa and Merced Counties, California, in an effort to protect important habitats, numerous sensitive species, a critical wildlife corridor spanning the transition zone from the grasslands and wetlands of the San Joaquin Valley to the oak woodlands of the Sierra Nevada foothills, and more than 1,000 acres of vernal pools and wetlands.

**Resilient Watersheds Strategy**

**Green Bond allocation:** **\$1,670,000**

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Green Bond funding will support the adoption of natural climate solutions in the water sector to conserve freshwater ecosystems and help communities adapt to climate change, with a particular focus on Colombia, Dominican Republic, Ecuador, New Zealand and Sierra Leone.

**PROJECT CATEGORY ▶**

**Renewable Energy**

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**Renewable Energy Transition**

**Green Bond allocation:** **\$3,600,000**

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Green Bond funding will help advance renewable energy efforts in key regions, including Europe, India and the United States, by providing technical support for renewable energy deployment that avoids conflicts with biodiversity and socio-cultural values, supporting a transition that protects wildlife and habitat, and supporting communities.



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