



CLIMATE BENEFITS OF RAINFOREST PROTECTION

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Million Metric Tons of CO₂e in 2025

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For nearly four decades, Rainforest Foundation US (RFUS) has worked alongside Indigenous peoples and organizations across the Amazon, Central America, and Mexico to secure their land rights, protect their territories, and strengthen their organizations. Many members of our program team have worked with the same Indigenous partners for decades, developing deep relationships grounded in trust and bringing deep on-the-ground experience that combines rigorous scholarship with lived experience.

Your support enables RFUS to provide Indigenous partners with the tools, training, and resources to secure their land rights, strengthen community-led forest management and monitoring, and build strong representative organizations. Together, these interventions support self-determination and community wellbeing and keep forest standing.

One way RFUS tracks the climate significance of these partnerships is by measuring nature-based carbon sequestration within the geographic areas where we support Indigenous partners.

In 2025, forests within RFUS’s program footprint in Peru, Brazil, Guyana, and Panama, removed a net 12.2 million metric tons of CO2e, compared with 9.8 million metric tons in 2024. Last year’s carbon sequestration is equivalent to the annual emissions of **about 2.8 million gasoline-powered vehicles or the electricity use of more than 2.5 million U.S. homes.**

The higher 2025 figure reflects two principal changes:

- 1) RFUS’s program footprint expanded to include two large, heavily forested Indigenous territories in Peru and Brazil; and
- 2) there were fewer fires in the Amazon in 2025 than in 2024.

Understanding the Measurement

Nature-based carbon sequestration is measured through annual carbon flux: the difference between the carbon dioxide that forests remove from the atmosphere and the greenhouse gases they release through forest loss and degradation. When removals exceed emissions, forests act as a net carbon sink, helping slow climate change. These amounts are measured in carbon dioxide equivalent (CO2e), a common unit that converts the warming effects of different greenhouse gases into the equivalent amount of CO2.

The figures in this report represent the annual net carbon flux across territories within RFUS’s program footprint. This footprint includes areas where RFUS supports Indigenous partners through land rights, territorial monitoring and protection, and/or institutional strengthening.

The calculation reflects the climate contribution of forests across the area where RFUS works with Indigenous partners. It does not measure avoided deforestation or attribute all carbon removed in this area to RFUS intervention.

RFUS 2025 IMPACT AT A GLANCE



What Is Driving the 2025 Carbon Sequestration Total?

A large body of research shows that secure land rights, strong Indigenous governance, and access to resources for territorial stewardship are associated with lower forest loss and stronger rainforest protection outcomes. RFUS contributes to this by helping Indigenous partners establish and sustain these conditions over the long term.

The 2025 increase in total carbon sequestration in the areas where we work reflects two principal factors:

First, two large, forested Indigenous territories were added to RFUS's program footprint in 2025.

In Peru, RFUS supported Indigenous partners to expand community-led monitoring through a train-the-trainer model in the Matsés territory, a vast, densely forested region along the Peru-Brazil border that is also home to a number of Indigenous peoples living in voluntary isolation. Additionally, in Brazil, RFUS expanded its partnership with SEDUUME, the representative organization of the Ye'kwana people in the Yanomami territory, to strengthen Indigenous-led monitoring and territorial protection.

Together, these areas encompass approximately 3.4 million acres of rainforest and removed **approximately a net 2.3 million metric tons of CO₂e in 2025**. The expansion of RFUS's work and the inclusion of these new regions accounts for a significant part of the difference between the 2024 and 2025 totals.

Second, 2024 was an exceptionally severe year for fires and forest loss in the northeastern Amazon. In Guyana and neighboring Roraima, Brazil, forest loss increased nearly fivefold, with fires accounting for over half of that loss. During that period, the Indigenous-managed areas included in RFUS's program footprint in this region had less than half the deforestation compared to areas outside their territories. This shows the effectiveness of Indigenous forest management despite the fact that these areas still suffered higher-than-normal levels of fire-related forest loss. By 2025, forest loss in those areas had decreased to approximately its pre-2024 average, allowing for increased carbon sequestration.

Growing Evidence for the Effectiveness of Indigenous-Led Climate Solutions

A growing body of peer-reviewed scientific research shows that Indigenous peoples' land rights and forest management are crucial to advancing nature-based solutions to climate change. A comprehensive review of more than 100 studies, published in *People and Nature* in April 2026, found that three-quarters of the studies reported conservation outcomes on Indigenous lands comparable to or better than those in protected areas.¹ More than half of the studies were published in the past six years, reflecting the rapid growth of research in this field.

A 2025 report from the Harvard Kennedy School examining a smaller set of published findings reached an even stronger conclusion: "[A] clear majority of the studies in our review found Indigenous conservation outcomes to be superior to those achieved by previous conservationists or a comparison group."²

The 2026 *People and Nature* review identified three especially important types of interventions³ that closely align with RFUS's three strategic pillars:

- **Land Rights** – "strengthening Indigenous land tenure"
- **Territorial Protection** – "providing funds and resources for Indigenous stewardship of their lands"
- **Strengthening Organizations** – "supporting Indigenous governance of their lands"

¹ William Nikolakis, Victor Gay, Geraldine Merkel, Terry Sunderland, and Joji Morrison, "The Relationship between Indigenous Peoples' Lands and Conservation: A Systematic Literature Review," *People and Nature* 8 (2026): 1676, <https://doi.org/10.1002/pan3.70310>.

² Kāwika Riley, Britnee Nguyen, Miriam Jorgensen, and Monte Mills, "Experts, Not Obstacles: Indigenous Conservation Excellence and the Trap of Conservation at Any Cost," *Landback Policy Briefs*, no. 2 (Harvard Project on Indigenous Governance and Development and Native Nations Institute, September 30, 2025).

³ Nikolakis et al., "The Relationship between Indigenous Peoples' Lands and Conservation," 1676.

Among the many climate benefits of Indigenous land management, carbon sequestration is a particular strength. From 2001 to 2021, forests in the Amazon without Indigenous management emitted more carbon collectively than they sequestered – whereas 94% of Indigenous forest in the bioregion was a net carbon sink.⁴

Research on the Effectiveness of RFUS's Monitoring Methodology

In 2021, a peer-reviewed study published in the Proceedings of the National Academy of Sciences evaluated forest protection outcomes in Indigenous territories implementing RFUS's Rainforest Alert methodology.⁵

Rainforest Alert provides training, technology, and funding for Indigenous communities to monitor and protect their territories. It combines community-led patrols with satellite forest-loss alerts, smartphones, and drones to help communities identify and respond to unauthorized deforestation.

Through a randomized controlled trial, the study found that territories implementing the Rainforest Alert methodology experienced 52% less deforestation than territories in the control group. The study also found that participating communities became more effective and efficient at detecting and addressing forest loss over time.

The 12.2 million metric tons of CO₂e removed by forests within RFUS's program footprint in 2025 demonstrate the extraordinary climate value of keeping Indigenous territories intact. These results reinforce a conviction that has guided RFUS since its founding: Indigenous rights and rainforest protection advance together. Secure land rights strengthen communities' ability to defend their territories; community-led monitoring prevents forest loss and degradation, and strong Indigenous institutions make that protection durable. Your support helps sustain these conditions so that forests can continue removing carbon from the atmosphere while Indigenous peoples determine the future of their lands.

⁴ Peter Veit, David Gibbs, and Katie Reyter, "Indigenous Forests Are Some of the Amazon's Last Carbon Sinks," World Resources Institute, January 6, 2023.

⁵ Tara Slough, Jacob Kopas, and Johannes Urpelainen, "Satellite-Based Deforestation Alerts with Training and Incentives for Patrolling Facilitate Community Monitoring in the Peruvian Amazon," Proceedings of the National Academy of Sciences 118, no. 29 (2021): e2015171118, <https://doi.org/10.1073/pnas.2015171118>.