



Conservation Solutions

The world we live in

Over the past 100 years, transformative advances in technology, health, education and economic productivity have provided incredible benefits for humankind. Successful approaches to nutrition and medicine have led to a mass population boom, with 7 billion people now living on Earth. One billion have moved out of extreme poverty since 1990, and over half live in the world's rapidly-expanding cities. New innovations, energy sources, and infrastructure are driving access to new markets and jobs – so much so that the global economy has swelled to over \$120 trillion a year.

These achievements have been accompanied by growing demand on the planet's resources, with dramatic losses in nature. As of 2018, less than 20 percent of Earth's lands remain wild, and nearly all oceans have been affected by human activities. The predicted doubling of infrastructure spending by 2025 -- \$78 trillion in new projects – threaten what wilderness still remains. The industrial loss of carbon-rich forests combined with expanded fossil fuel needs is driving global climate change, inching our natural systems towards a tipping point where they no longer are capable of supporting large-scale human production. Key goods and services that natural ecosystems provide, including food and water, natural resources that support industrial-scale commodity production, and natural disaster protections.

New solutions that protect these natural systems and the human services they provide must ensure a balance among wellbeing and that of all Earth's inhabitants. Economic prosperity must be decoupled from environmental losses, at local and global scales. Technology, big data, and analytics must continue helping us target our most effective conservation interventions. Bold policies and financial commitments combined with private and philanthropic dollars must remove old barriers and unlock new pathways to sustainable development. Finally, ambitious, multi-sectoral partnerships are needed to scale and mobilize action across governments, civil society organizations, and the private sector for now and for our future.



Our Strategy

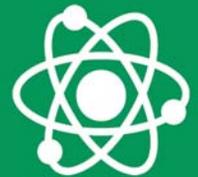
The Wildlife Conservation Society (WCS) is committed to conserving Earth's last remaining wild places, including intact forests, grasslands, coastal zones and coral reefs. These ecosystems sustain some of the planet's most unique and abundant flora and fauna and provide livelihoods and culture to hundreds of millions of people. WCS's Conservation Solutions focuses on grappling with large-scale threats, with three global development challenges that have emerged as nearly ubiquitous across the places WCS works – climate change, infrastructure development, and poverty.

To address these pressing challenges to long-term conservation, we seek to scale the best, most targeted solutions through a suite of tools that are utilized across WCS's 60 focal countries and for its transboundary portfolio, which includes its International Wildlife Trafficking, Species, and Wildlife Health initiatives:

Finance: We work with investors, the private sector, multilateral institutions, and governments to design new, innovative financing vehicles to fund the issues we work on.



Science: We produce and utilize the latest science and data to inform and deepen our understanding of global issues and devise the best, most targeted solutions to solve them.



Conservation Planning: We map the distribution of human, species, industrial and climate activities to achieve the ecological, economic and social objectives of WCS conservation efforts. We design and innovate plans to ensure economic development does not compromise wildlife and ecosystem services.



Policy: We inspire decision-makers and influencers and mobilize civil society to advocate for policy development, regulatory reform, and improved governance and rights.



Across all of WCS' work, we partner with NGOs, businesses, governments, and donors in new ways that effectively bring our interventions to scale and achieve the conservation vision we cannot arrive at on our own.





Our Work

Climate Change

In every region where we work, human-caused climate change is shifting rain and snowfall patterns and the frequency and severity of extreme events like fires, floods, droughts, and pest outbreaks. These trends are already triggering mass losses in biodiversity, habitats, and ecosystems, and forcing wildlife populations to migrate and human communities to resettle.

Planning for abnormal and unstable weather patterns, new species, and migration patterns, and increased resource erosion and exploitation are now critical for conservation. WCS helps prepare for these shocks and stresses across our landscapes and seascapes by informing policies and practices through scientific understanding, mitigating climate impacts in the most ecologically-important habitats, and adapting conservation strategies to account for unavoidable changes in our climate. Central to our efforts are the protection of forests and their soils, some of the most important carbon sinks and ecologically-rich habitats in the world. So potent are forests' ability to absorb and store heat-trapping carbon from the atmosphere that they can provide 30 to 50 percent of the action needed to reach the Paris Climate Agreement's 2 degree Celsius ceiling. Despite this, human activities such as

logging, mining, and over-hunting threaten the vital roles forests play as homes for wildlife, stores of carbon, and backbones of human communities. These activities have already destroyed 30% of forests, and most of what remains is degraded in some way.

To protect the many benefits afforded by healthy forests, WCS is implementing a cascading approach that includes protecting the intact forests through policy, science and field conservation efforts, slowing deforestation through our work with frontier populations, and promoting restoration and sustainable development in heavily-degraded and fragmented areas.

Together with our efforts around climate-smart planning and modeling, WCS is working with to implement a wide range of interventions that are helping reduce the impacts of climate change while also grappling with its cause.



- **Facilitating carbon sales:** Applying international principles of “Reducing Emissions from Deforestation and Forest Degradation” (REDD+) to drive large-scale climate and private finance to protect vital carbon stocks.
- **Steering climate finance:** Unlocking public and private finance dollars and moving them towards large-scale forest protection. Demonstrating scalable pilot projects in some of most important forests.



- **Developing metrics:** Developing a way of measuring forest “intactness” to generate recognition of its value in the implementation of major policy.
- **Modeling climate impacts:** Generating original scientific research and spatial data, and monitoring the impacts of climate conditions on ecosystems to inform smarter wildlife protection and community planning.



- **Mapping protected areas:** Mapping ecologically-rich, “intact” forested landscapes for long-term planning and policies targeting their protection.
- **Guiding climate-smart planning:** Encouraging the use of WCS’s Adaptation for Conservation Targets (ACT) Framework, a tool designed to help practitioners develop species, ecosystem, and ecological services management actions that account for imminent climate change impacts.



- **Securing land tenure rights:** Working at the ground-level to support land rights and the economic growth of traditional peoples, who have stewarded forests for centuries.
- **Shifting policy priorities:** Calling for the prioritization of intact forest protection in international policy agendas and global goals, including the Paris Climate commitments and SDGs.

Partnerships to scale:

- **Intact Forests:** WCS is working in the world’s five remaining superforests to protect intact forest cores, halt deforestation in frontier zones, and restore degraded areas to preserve carbon stocks and biodiversity.
- **Trillion Trees:** WCS is collaborating with WWF-UK and BirdLife International promote a vision whereby global society has regrown or better protected one trillion trees by mid-century.
- **Climate Adaptation Fund:** WCS is channeling private philanthropy funds through a grants program to finance U.S. projects that pilot innovative conservation techniques that build in resilience to climate change at the ecosystem-level.

Industry and Infrastructure

Worldwide, investment in infrastructure development will more than double from US\$4 trillion per year in 2012 to over US\$9 trillion per year by 2025, particularly in natural resource-rich regions throughout Africa and Asia. The rapid growth of commercial agriculture and extractive industries, and the development of new infrastructure for access are placing tremendous pressures on species, their habitats, and important forest, marine, and riparian ecosystems. Half of all natural areas on Earth are now under threat from legal infrastructure development. As developing countries seek to grow and improve the lives of their citizens, there is an increasing need -- and opportunity -- to reconcile economic development with environmental protection.

WCS engages with governments, the private sector, lenders, and local communities to minimize the impacts of infrastructure development in some of the world's most critical habitats while improving development plans to achieve no net losses or net gains in biodiversity. To this end, WCS supports the adoption of these best practices, based on the "mitigation hierarchy," which prioritize avoiding potential impacts and minimizing damaging effects, followed by restoration of habitats and ecosystem services and, finally, implementation of offset programs.



- **Evaluating payment for ecosystem services and offsets:** Valuing the full costs of development projects as a means to drive funding to reduce or compensate for environmental impacts.
- **Managing conservation trust funds:** Mobilizing, managing, and channeling funds in the form of grants and other financial support to institutions that are involved in conservation efforts.



- **Collecting and monitoring biodiversity data:** Using the latest technology to generate original scientific information on the state of biodiversity and the impacts of development in areas where projects are proposed and implemented.



- **Conducting Environmental and Social Impact Assessments:** Using biodiversity data to assess the potential environmental impacts of development projects and optimize conservation planning.
- **Designing and implementing "no-net-loss" schemes:** Engaging with extractive and mining companies to plan projects that minimize environmental impacts at any and every stage from conceptualization to implementation, and offset impacts, when necessary.



- **Advocating for regulatory reform:** Engaging national governments to adopt internationally recognized standards in their regulations on financing and development, including the Business and Biodiversity Offsets Program (BBOP) Standard, the International Finance Corporation Performance Standard 6, the Equator Principles, and others.

Partnerships to scale:

- **Conservation, Impact Mitigation, and Biodiversity Offsets in Africa (COMBO):** WCS collaborates with Forest Trends and Biotope on the COMBO program to help governments, developers, and industry mainstream effective mitigation and conservation in policies and practices. COMBO supports the application of the "mitigation hierarchy" of avoidance, minimizing, and offsetting of negative biodiversity impacts and restoration of in four African nations: Mozambique, Madagascar, Uganda, and Guinea.

Human Communities

WCS recognizes that the fate of the world's remaining wild places are inextricably linked to the fates of the people who call them home. As millions move into the middle class in many of the biodiversity-rich areas where WCS invests, natural resource depletion and pollution follows. These pressures on habitats and ecosystems mount with growing urban populations and demands for high-quality protein sources and infrastructure, meant to meet the needs of these booming populations.

WCS's work relies on the active engagement of Indigenous Peoples' and local communities whose quality of life depends on the health of the critical natural ecosystems where they live. They are our most important conservation allies, and as economies and populations grow, it is essential that our conservation efforts support their efforts to ensure effective and accountable land and resource governance.

Indeed, empowering Indigenous Peoples' and local communities is critical to our efforts to conserve the most intact and endangered places in the world. For example, Indigenous Peoples' are estimated to manage nearly 25% of all above-ground carbon in tropical forests globally. Furthermore, their stewardship has proven to be highly effective in conserving these ecosystems that are so critical to Earth's biological and climatic integrity. For example, a 2017 study found that deforestation rates in the Amazon are five times greater outside Indigenous Peoples' territories and conservation units than they are inside those areas. Therefore, WCS works with Indigenous Peoples' and local communities to secure, exercise, and benefit from their rights and gain from stewardship of their lands, water, plants, and animals.



- **Facilitating enterprise development:** Establishing profitable, wildlife-friendly enterprises by identifying marketable natural resources and connecting communities with potential buyers and global markets.



- **Combining modern science with traditional ecological knowledge:** Working with indigenous communities to incorporate their deep knowledge of local wildlife in the development of wildlife conservation strategies.



- **Supporting participatory land-use planning:** Strengthen indigenous organizations' capacity to participate in regional governance and land use zoning, and develop territorial and wildlife management plans.
- **Conducting Environmental and Social Impact Assessments:** Using spatial data to assess the potential impacts of development projects on indigenous communities prior to their implementation.



- **Supporting recognition of rights:** Partnering with indigenous and local communities to secure legitimate authority and governance systems to help protect and manage their lands and resources
- **Enhancing capacity of communities:** Supporting the application of traditional knowledge to manage resources and facilitating the engagement of Indigenous Peoples and local communities formulating policies that contribute to conservation and improving their quality of life.

Partnerships to scale:

- **Wildlife Management Program:** WCS is strengthening communities' territorial management and access to sustainable forms of agriculture and food in order to regulate wildmeat consumption, hunting, and markets near protected forests, rivers, and parks across the Congo Basin, Mozambique, Madagascar, and Papua New Guinea.

Institutional Partnerships

In addition to our partnerships in each priority area, we rely on four institutional partnerships to help scale all of our projects.



Science for Nature & People Partnership: WCS is collaborating with University of California Santa Barbara and The Nature Conservancy to support rapid-response research teams working at the intersection of international development and conservation.



University of Queensland Partnership: WCS is working with lead scholars to study and understand the state of the planet and inform our conservation policies.



Conservation Finance Alliance: WCS is collaborating with other members of the volunteer network to promote conservation finance and develop and implement sustainable financing mechanisms.



Africa Biodiversity Collaborative Group: WCS is working with six other field-based NGOs tackle complex conservation challenges by strengthening collaboration and leveraging resources across Africa.

Why WCS?

With a global staff of over 3,700, WCS has more boots on the ground than any other conservation organization—and runs programs spanning more than 3 million ecologically-critical square miles across nearly 60 countries. WCS is a trusted advisor to key decision makers—at all levels of the public and private sectors and in major global forums—because of the integrity of our staff, the authority of our scientific research and field work, and our large and influential network of local, indigenous, and NGO partners.

Where We Work

