

# Why Maine Matters



In 1956, pioneering ecologist and author Rachel Carson, along with a handful of Maine citizens, founded the Maine chapter of The Nature Conservancy. According to Carson, "It is the only group I know which is doing something practical about actually preserving areas." We continue that tradition today, blending pragmatism with sound science to address the most pressing threats to our natural world.

ur work, supported by donors and visionaries like you, is making an impact. Over the last decade, we worked with partners to restore fish passage to a thousand miles of habitat in the Penobscot River watershed; we brokered the nation's largest transfer of development rights with a timber company on the shores of Moosehead Lake; we established a partnership with fishermen and women to protect their livelihoods by working to rebuild biodiversity in the Gulf of Maine; and we helped to secure a regional cap-and-trade program to reduce carbon emissions.

As the impacts from climate change increase, collaboration and innovation become even more urgent. Working together with a diverse coalition of conservationists, scientists, community leaders, concerned citizens, and supporters like you, we can ensure that our past successes endure, and our work continues to inspire and make a difference. By listening deeply, we can design projects with broad approval, based in scrupulous science, and poised for greatest impact. It is this approach—informed by our communities, grounded in science, and moving towards action—that makes us who we are today. Just like Rachel Carson before us.

From Maine, we are creating a world of solutions.

Maine not only feels like a special place in the world, it is. The Northern Appalachian forest runs through our state and is one of the largest intact deciduous forests anywhere in the world. It supports a great diversity of wildlife and habitats, as well as rivers, streams, lakes, and ponds that are home to native fisheries and contribute to the health of the Gulf of Maine. Our forest's value as an ecosystem, an economic engine, a cultural touchstone, and a state symbol is extraordinary.

Thanks to decades of work and policies put in place to improve water quality, alongside a tradition of forest stewardship and generous philanthropy, Maine's key watersheds, like the Penobscot and Kennebec, are now largely healthy and intact overall. In fact, they are among the least disturbed and most climate-resilient watersheds its supporters.

This is leading to a historic recovery of prolific sea-run fish populations across the state because of improved habitat and reestablished connections to traditional spawning grounds.

Equally important to river habitat, and inextricably linked, is the Gulf of Maine. It is one of the most complex and productive marine ecosystems on the planet. It is the economic lifeblood of coastal communities and

is an integral part of the cultural fabric of New England, home

to the iconic Maine lobster, Atlantic cod, and many more fish and shellfish species. After many years

of significant loss, the overall health of New England groundfish

populations is improving, due in part to restoration work done and led by The Nature Conservancy and its supporters.





# Challenges and the Path Forward



"We work with people, and for people, to ensure healthy forests, clean free-flowing rivers, abundant oceans, and solutions to climate change, here in Maine and around the globe. No other conservation organization has a mission as comprehensive and effective."—Kate Dempsey, Maine State Director

While we have fostered many significant conservation victories, the natural resources of our state face real and mounting challenges. Climate change, a partisan political environment, dwindling public funds, and a host of other issues put all our successes at risk, demanding a powerful call to action. Issues of increasing concern to us in Maine are that:

- The Gulf of Maine is warming at a faster rate than 99% of the world's oceans.
- Maine's forests and forest economy are experiencing significant transitions, with unclear implications for rural communities.

- Our current statewide road-stream crossing infrastructure is failing and leaving migrating fish and people in our communities vulnerable to flooding and volatile weather.
- Renewable energy sources are not yet available at the scale required to move away from traditional energy sources to mitigate climate change.
- Our children and young people in increasingly greater numbers do not see their lives as dependent on the natural world.
- The role of science-based decision-making in our policy development is at risk because of cultural and political forces, making our work increasingly difficult.

#### **OUR VISION AND APPROACH**

We envision a world where the diversity of life thrives, and people act to conserve nature for its own sake and its ability to fulfill our needs and enrich our lives. As we work to make this vision a reality, in Maine and across the globe, our approach is guided by principles that connect the multiple threads of our work. In particular, we are committed to:

- Integrating strategies across our different areas of focus, mirroring the interdependency of the ecosystems we work to conserve.
- Focusing on biodiversity by working on land and in water, at the scale of nature, and across geographic and political boundaries.
- Engaging communities whose lives and livelihoods are linked to the natural systems we work to conserve.
- Catalyzing partnerships and policies with all sectors of society to forge strong relationships that empower us to further our conservation goals.
- Leveraging innovation and investing in resources and staff to push the frontier of conservation science, take decisive action, and inspire others to follow.
- Creating tangible, lasting results using the best science available and a non-confrontational approach to craft innovative solutions to complex conservation challenges.

#### A SHARED CONSERVATION AGENDA

As part of a global organization, we in Maine are not alone in addressing these challenges. While the details are specific to Maine, the broad themes of climate change, economic challenges, socio-political partisanship, and dwindling resources can be found wherever we work.

To unify our conservation approach across the world, The Nature Conservancy articulated a global conservation agenda based on a strong and thorough foundation of scientific evidence. This includes an analysis that affirms our vision of a world where people and nature thrive together, provided that significant changes are made in the way we provide food, water, energy, and other resources to a global population expected to grow to 9 billion by 2050.

We must act now. The Nature Conservancy in Maine's work will help to ensure that we are making the greatest possible difference for the planet. This approach builds on our history and includes eight key conservation strategies.

The Nature Conservancy in Maine

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# Conserving the Future of Forests



We will work to secure a future where Maine's diverse forests remain globally significant as an ecological resource, essential to Maine's economy and quality of life, and valued for their contribution to carbon sequestration in a changing climate.

#### The Challenge

Maine is the most forested state in the nation. Private stewardship has helped it remain the core of the largest temperate deciduous-mixed forest remaining in the Western Hemisphere. Its forest provides diverse wildlife habitat, outstanding recreation opportunities, and essential carbon storage, and it is vital to the health of Maine's waterways and the Gulf of Maine. Over the last 20 years, the Conservancy and many partners dramatically expanded permanently-conserved lands in Maine from 6% to 20% of the state. Yet most of Maine's forest is diminished in its age, structure, and complexity. Its diverse values are threatened by climate change, invasive species, changes to the forest economy, and development pressures. Our challenge is finding innovative approaches to keep Maine's forests intact, improve its condition, and sustain its many values for people and nature.

#### **Our Solution**

We seek to protect networks of resilient lands and waters that will conserve nature at a continental scale through strategies and projects that allow nature to both adapt to, and ameliorate, climate change. Our land conservation strategies are guided by science, including continual learning about the influences of forest condition on wildlife habitat, climate, and forest economies, and prioritizing the protection of resilient and connected landscapes.





#### These strategies include:

- Expanding ecological reserves and forest connectivity through conservation acquisitions and easements.
- Contributing to increased total forest carbon sequestration as a vital climate solution.
- Demonstrating the benefits of forest science and stewardship on Conservancy lands.
- Supporting private forest stewardship by working toward a favorable tax, legal, regulatory, and cultural climate.
- Seeking value and new markets in the forest economy so that rural communities thrive while supporting positive forest and climate outcomes.

### New & Notable Projects—

**Spring River Acquisition:** Expanding a protected block of resilient forest to more than 44,000 acres and ensuring opportunities for wildlife movement.

St. John Forest Carbon: Generating a significant new revenue stream for conservation while improving forest conditions on 124,000 acres.

**Local Wood WORKS:** An innovative partnership to support Maine's forest economy by strengthening regional markets and incentives for climate friendly, local wood products.

### in five years 🧷

Expected outcomes include an additional 350,000 acres of forest land permanently conserved as part of a resilient and connected landscape; a 2.4% increase in Maine's total forest carbon; and an increase in statewide funding for conservation, including passage of an eight-figure Land for Maine's Future bond.

# Restoring Free-Flowing Rivers



We will restore connections between the Gulf of Maine and priority rivers, lakes, ponds, and headwater streams throughout Maine for the benefit of native sea-run and resident fish, freshwater and marine food webs, and the human communities around them.

#### The Challenge

Maine represents the greatest opportunity for watershed restoration east of the Mississippi River. With over 75,000 miles of river and streams flowing through a diverse landscape harboring fish, wildlife, and human populations, the health of Maine's waterways is essential to the vitality of our state. For millennia, annual migrations of millions of sea-run fish pulsed inland from the Gulf of Maine. These runs were all but extinguished by centuries of dam building and road networks. These structures are now increasingly vulnerable to failure, exacerbated by ever-increasing severe weather, putting our communities at risk of flooding and costly infrastructure damage. Our challenge is to restore the connections between our rich coastline and inland ecosystems in a way that is cost-effective, but bold enough to translate beyond Maine's borders.

#### **Our Solution**

We will restore river and stream health by reconnecting networks of streams, lakes, and rivers with the Gulf of Maine in critical places for fish and wildlife, while also addressing priorities for Maine's communities. We will strategically invest in dam removal, fish passage at dams and upgrades to fish-friendly and climate-resilient culverts with longer life spans, reducing costs and maintenance for road managers and municipalities. This investment supports Maine people with safer roads, cleaner rivers, outstanding fish runs, and the positive impact of all of this on inland and coastal recreation, tourism, and revived coastal fishing communities.





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#### Our strategies include:

- Leveraging science, planning, and monitoring to guide restoration of priority river and stream habitat.
- Promoting the benefits of restoration for people and nature in Maine and beyond through strategic outreach and coordination with current partners and new audiences.
- Developing policies, funding, and partnerships that make restoration easier and more acceptable through effective policy engagement.
- Implementing restoration projects focused on restoring fish passage in priority watersheds through culvert upgrades, dam removals, and fish passage provisions at remaining dams.

### New & Notable Projects—

**Sheepscot River Restoration:** Re-opening the watershed to provide extensive access to all 12 of Maine's sea-run fish species.

**Statewide Barrier Prioritization Tool:** Using Maine's uniquely comprehensive stream barrier data and the novel Penobscot pilot to create a prioritization tool unmatched in the U.S.

**World Fish Migration Day:** Supporting a global awareness-building campaign on the importance of open rivers and migratory fish, with 569 events in 63 countries in 2018.

### in five years 🧷

We will see 1,500 miles of rivers, lakes, and streams re-connected; the nation's first statewide road-stream crossing assessment including more than 30,000 crossings; 500 fish-friendly and climate resilient crossings installed, and five dams removed; and the establishment of a State of Maine ecological restoration office to ensure continued river restoration success.

# Transforming Ocean Management



We will conserve and restore critical species and habitat features so the Gulf of Maine system can thrive ecologically in the face of climate change and provide the goods and services necessary to support long-term sustainable use by Maine's coastal communities.

#### The Challenge

The Gulf of Maine has long been recognized as one of the most complex and productive marine environments on the planet. Once considered limitless and inexhaustible, the Gulf of Maine now faces depletion of many important fish populations as well as a host of threats posed by coastal development and climate change. Changes in water temperature, salinity, and acidity have already caused shifts in species composition, abundance, and distribution. The combination of these stresses and projected changes in ocean circulation patterns, sea level rise, and invasive species pose an unprecedented threat to coastal species, habitats, and communities.

#### **Our Solution**

Through a collaborative, non-confrontational approach to conservation, we will identify, protect, and restore ecologically significant coastal and offshore habitats, elevate science and action on seagrass and shellfish beds, and rebuild populations of migratory fish,

groundfish, and marine mammals. Success in this initiative will result in healthy, functioning biological systems that are resilient to climate change and support vibrant coastal fishing communities.



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#### Our strategies include:

- Leveraging transformational science and management by collaborating with scientists, managers, and resource users to revolutionize management of coastal fisheries and habitat.
- Developing and utilizing state-of-the-art fishery information systems to provide accurate and timely data needed to guide sustainable fisheries.
- Creating and sharing coastal resilience tools to support community-based protection of coastal resources and enhanced community resilience to sea level rise.
- Providing leadership in salt marsh restoration and coastal habitat conservation for sea-run fish species and shellfish.
- Promoting adoption of strong conservation funding initiatives and practices through strategic policies and partnerships.

### New & Notable Projects—

**Fisheries Monitoring:** Improving fisheries monitoring and empowering fishermen to incorporate on-the-water observations directly into the management system.

**Coastal Resilience Platform:** Launching new online decision-support tools to help coastal communities protect nearshore habitat and plan for sea level rise.

**Addison Tidal Marsh Restoration:** Re-establishing natural tidal flow in one of the most important salt marshes in the Gulf of Maine.

### in five years

Increase the number of groundfish stocks rebuilt to healthy, sustainable levels from four to eight; 50 or more fishermen using Electronic Monitoring systems on their vessels throughout New England; a systemic and coastwide program to map and monitor eelgrass; the restoration of over 1,000 acres of current and future tidal marsh; and the development of a partner-led shellfish conservation program.

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# Inspiring Climate Action



We will build broad, bipartisan support for solutions that help Mainers use less energy, emit less carbon, and deploy clean energy, all while protecting land and water, managing land in a climate-friendly way, and becoming more resilient to the effects of a changing climate.

#### The Challenge

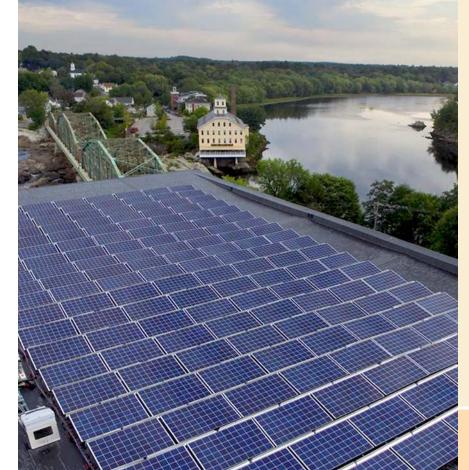
Climate change is one of the greatest challenges facing people and nature and the United States must play a key leadership role in addressing this crisis. In the absence of meaningful federal leadership, state and regional action is imperative. On a per-person basis, Mainers consume the most energy and emit the most carbon in New England. Household income is below the national median, yet we spend among the most on energy per capita in the United States. Meeting long-term carbon emissions reduction goals will require significant action in the coming decades. Meanwhile, climate change is a polarizing, largely partisan issue in Maine and across the nation, with few actively seeking to bridge the divide.

#### **Our Solution**

The Nature Conservancy in Maine will bring a solutions-oriented approach to clean energy and climate change, seeking to build durable bipartisan support for climate action. We will work together with our Conservancy colleagues throughout the Northeast to ensure that we make an impact at the

scale where many energy and transportation policies are developed. We will demonstrate the benefits of shifting to a low-carbon economy, leverage our abundant natural resources as a climate solution, and offer market-based opportunities to Mainers.





#### © Revision Energy

### Our strategies include:

- Building bipartisan support for climate action by engaging new and diverse constituencies and supporting demonstration projects to change the narrative in Maine around climate change.
- Developing and advocating for state policies that support clean energy, energy efficiency, and natural climate solutions at a state and regional policy level.
- Securing support for climate action from Maine's federal representatives and developing a durable bipartisan center in Congress for federal climate action.

### New & Notable Projects—

**Solar Impact Investing:** Partnering with Coastal Enterprises Inc. to support development of municipal solar arrays.

Clean Energy Finance Report: Recommending policies and programs to drive new investment toward clean energy, energy efficiency, and electric vehicle infrastructure in northern New England.

**Business Listening Tour:** Convening local chambers of commerce to increase business engagement on clean energy and climate change.

## in five years 🧷

Maine will be on track to reduce greenhouse gas emissions 80% from 1990 levels by 2050; have solutions in place to appropriately site renewable energy projects; spend and use less energy per capita than 2018 levels; and have broad support among influential Maine constituencies for state, regional, and federal policies to reduce carbon emissions.

# Advancing Policy, Funding, and Capacity



We will influence public policy in support of our overall conservation goals, increase conservation capacity to protect high-priority lands and waters, and deliver \$40-50 million in federal, state, and local funds for priority projects.

#### The Challenge

The state of Maine is a leader in environmental stewardship and conservation investment think Rachel Carson, Edmund Muskie and the nation's first conservation ballot initiative in the Lands for Maine's Future program. However, advances that took decades to accomplish were diminished over the last eight years by a state administration that viewed conservation as a threat. Compounding these challenges are strained state and municipal budgets, cuts to public services, and dire political prospects at the Federal level. Increasingly partisan politics have left little room for traditional supporters of conservation to engage in productive, solution-oriented discussions with elected officials.

#### **Our Solution**

The Nature Conservancy's reputation for science and pragmatism places us in a special position to work within this political reality. By building upon our foundation of establishing strong enabling conditions for conservation we can effectively address underlying policy challenges. Consistent with our non-partisan tradition, the Conservancy will advance public policies, secure funding, and build capacity amongst our partners. It is abundantly clear that public policy, public funding, and the role of diverse relationships are essential to our work.





© Sean Pavone

#### Our strategies include:

- Advancing top state legislative priorities that align with our goals for forests, rivers, oceans, climate, and other emergent needs at a state policy level.
- Advancing top federal legislative priorities and vigorously defending the rollback of core conservation programs at a federal policy level.
- Increasing and securing public funding to support a broad range of land and water conservation activities.
- Engaging the incoming state administration to build capacity of natural resource agencies and build partnerships with diverse stakeholders seeking common ground on conservation activities.

### New & Notable Projects—

#### **Land for Maine's Future Program:**

Targeted for significant expansion in the coming years, aiming for \$30 million in new funding.

Salmon In-Lieu Fee Program: Using fees from river impacts to fund in-stream restoration, a first of its kind in the country.

Federal Farm Bill: Working to secure passage with meaningful funding for forest and river conservation.

## in five years 🌠

We expect to be working in partnership with a state administration that views conservation and natural resources as a priority; \$40-50 million in new state and federal funding for conservation activities; broad support among influential Maine constituencies for carbon reduction policies and federal conservation programs; and a new State ecological restoration office.

# Deploying Cutting-Edge Science



We will develop innovative ecological and social science to inform creative, cost-effective solutions to Maine's conservation challenges and to measure our success and learning.

#### The Challenge

Now more than ever, a science-based approach to conservation is critical. Maine's lands, waters, and people are confronted with increasingly complex environmental, social, and economic challenges. Emerging threats like invasive pests and diseases, increasing energy needs of a changing population, and climate impacts to our forests, waters, and wetlands will only get worse without evidence-based, pragmatic intervention. Additionally, decision makers may question the value of science in the policy arena and we, in the conservation community, have yet to fully learn how to communicate the ways that natural solutions can help communities thrive.

#### **Our Solution**

We will expand the kinds of science we engage in and the type of information we gather to meet these emerging challenges. We must understand the complex interactions between people and nature that contribute to conservation challenges, including the economic and social factors that threaten species and habitats. Understanding the best ways to engage Maine's decision-makers and public will help us identify lasting and supported solutions. This approach requires a greater emphasis on strategies for promoting behaviors that enhance conservation outcomes. Successful collaborations will further increase the credibility of the Conservancy's science agenda.





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#### Our strategies include:

- Leveraging sound science to inform conservation planning and design for land acquisition, ecological restoration, energy siting, ocean planning, and other conservation and community issues.
- Developing, improving, and maintaining our systems for measuring success.
- Managing and monitoring preserves and easements for ecological integrity, easement compliance, and human use to enlist broader acceptance of conservation strategies.
- Collaborating with universities, state and federal agencies, tribes, and others to add leverage to the Conservancy's science.
- Expanding the use of new tools and technologies for conservation applications.

### New & Notable Projects—

#### **Harnessing New Technologies:**

Advancing the use of environmental DNA for fisheries monitoring; LIDAR for mapping streams, forests, and wetlands; and drones for preserve and easement monitoring.

#### **Katahdin Social and Economic Drivers:**

Partnering with the University of Maine to develop and assess community indicators of change over time.

**Flagship Preserves:** Enhancing visibility and user experience at key Conservancy preserves, while ensuring careful management of ecological resources.

### in five years

We will see our science-based priorities consistently used by other conservation practitioners; conservation dashboards in place to systematically assess the health of Maine's ecosystems; 5-10 peer-reviewed journal articles and at least 10 science-informed projects covered by Maine media; and routine use of new technologies including LIDAR, drones, DNA, and data recorders.

# Connecting People and Nature



We will ensure that people in Maine value their connections to the natural world, understand how nature enriches their lives, and act to protect it in a lasting way.

#### The Challenge

Many people in Maine have a longstanding traditional bond with the lands and waters they value for work, recreation, and emotional wellbeing. Yet, as economic, social, biological, and cultural conditions change, people's relationships with nature change as well. Compared with other concerns, land and water conservation is not currently a top priority for most people.

#### **Our Solution**

Building upon our years of experience working in communities and with those who depend on Maine's natural resources for their livelihoods, we strive to listen and appreciate a diversity of values people hold, the challenges they face, and the relationships they have with nature. These insights will help us design conservation projects that connect natural solutions with the daily needs of people, deliver relevant messages, build meaningful relationships, and foster cross-sector dialogue.







#### Our strategies include:

- Working with communities to promote lasting economic prosperity through natural solutions and community driven sustainability.
- Providing adults, youth, and families with opportunities to connect through educational, recreational, and volunteer experience-based engagement with nature.
- Elevating the visibility of the Conservancy's work in Maine, and engaging and inspiring donors, members, and target audiences through solutions-oriented marketing and project-based outcomes.

### New & Notable Projects—

**Sebago Clean Waters:** Launching a new water fund to protect the drinking water source for Greater Portland and expand business- and public-focused outreach in Maine's largest city.

Nature-Based Education Network: Facilitating the establishment of a statewide pipeline for connecting youth to nature through learning, service, and leadership.

Flagship Preserves: Positioning our preserves throughout the state as centers of community learning and engagement with nature.

Wabanaki First Light: Participating in a learning journey aimed at strengthening conservation in Maine by including indigenous expertise and perspective.

### in five years 🧷

We will see a widespread understanding of the economic values of conservation land and the recreational economy; a Greater Portland Water Fund to support the 15-year goals of protecting 25% of the Sebago Lake watershed for Portland's drinking water; a network to facilitate a statewide pipeline for deepening youth connections to nature; a pilot project to expand access to land and water for the Wabanaki people; citizen science projects engaging a broad spectrum of people in science, natural systems, and the outdoors; and a broad recognition of The Nature Conservancy as a leader, partner, and resource in conservation and science.

# Collaborating Around the World



We will ensure that we are sharing our talent and resources with conservation programs around the world and fostering local leadership, and that we are engendering a deep commitment to global conservation and having an impact well beyond our own region.

#### The Challenge

The Nature Conservancy in Maine is an active part of our global organization, significantly contributing to the Shared Conservation Agenda that seeks to align and leverage Conservancy strengths and capacities in North America and around the world. Our challenges, both in Maine and as a global organization, include overutilization of some staff and volunteer resources while underutilizing others; building an audience for our global work; and missed opportunities to provide exchanges and share learning between staff and volunteers.

#### **Our Solution**

When the world needs us more than ever, we need to determine how we will stay focused on making an impact for our global organization while remaining strong and active in Maine. We will design conservation strategies in Maine and across New England to contribute meaningfully to the Shared Conservation Agenda and to have impact well beyond our geographic boundaries.



To do this we will:

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- Bring trustees, volunteers, donors, and staff together to participate in the Conservancy's work around the globe by sharing and learning with and from each other.
- Continue an "As Maine" giving group among trustees and staff to annually allocate funds from Maine's operating budget to support global strategies.
- Encourage staff participation in CODA Fellowships and other opportunities to support the global organization.

### New & Notable Projects—

**Funding:** Directly supporting global projects with at least \$100,000 each year from the Maine budget.

**Staff:** Increasing dedicated staff time to projects beyond New England from the current 3% to 8% annually.

**Global Ambassadors:** Appointing a trustee on a rotating basis to the Conservancy's Global Ambassador Committee to engage fellow trustees in global work.

### in five years

We will have a trustee appointed to serve on the Conservancy's Global Ambassador committee; volunteers and staff from other programs hosted in Maine and Maine volunteers and supporters visiting other programs; raised an additional 15% in funds for global strategies; and dedicated 8% of Maine staff time to projects beyond New England.

# Cross-Cutting Conservation

This map shows examples of notable projects and programs from around the state, with icons and colors used to emphasize the integration and connections across our program areas.

#### Program Areas



Conserving the Future of Forests



Advancing Policy, Funding and Capacity



Restoring Free-Flowing Rivers



Deploying Cutting-Edge Science



Transforming Ocean Management



Connecting People and Nature



Inspiring Climate Action



Collaborating Around the World



