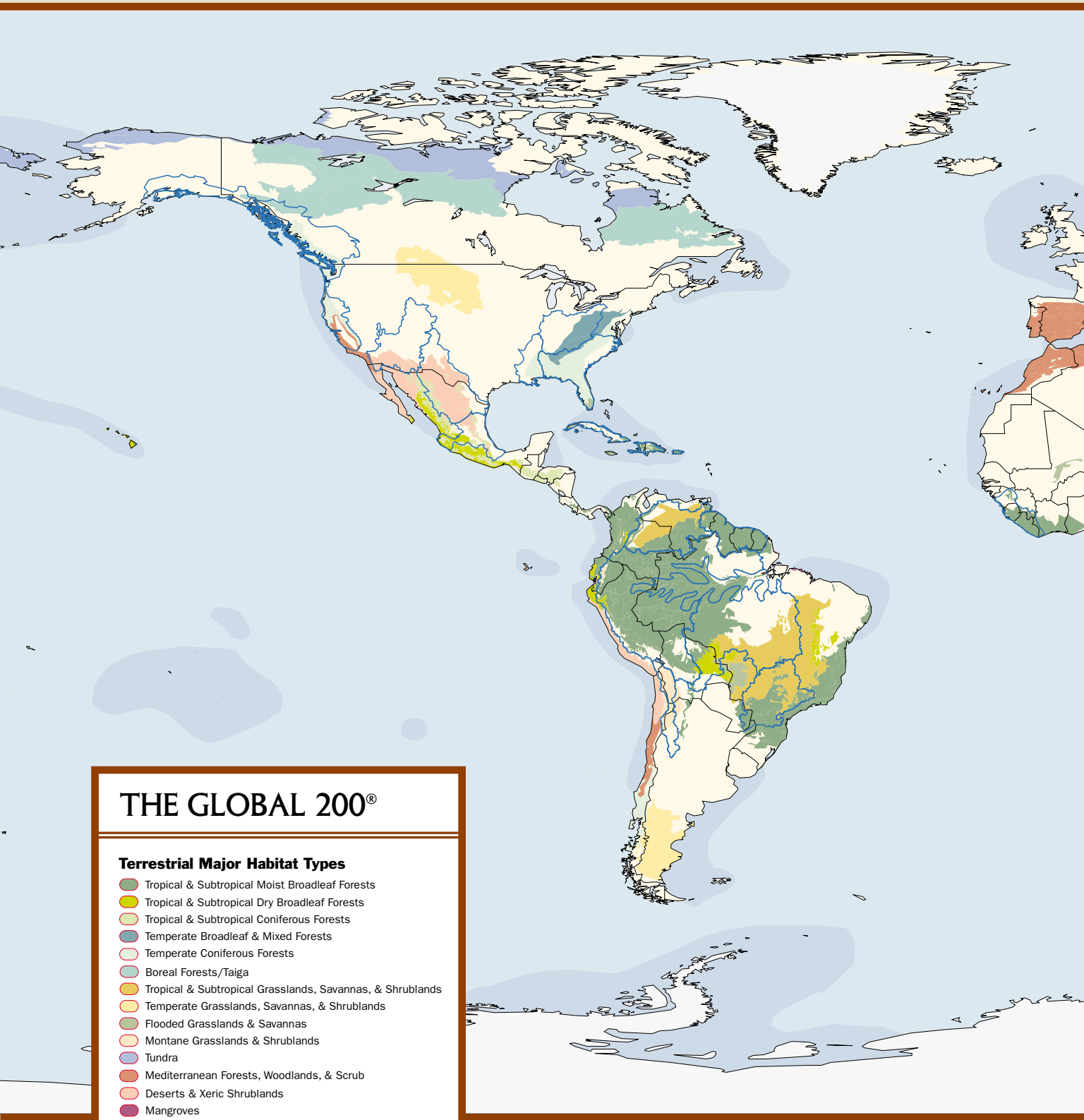
ECOREGION ACTION PROGRAMMES

A GUIDE FOR PRACTITIONERS



THE GLOBAL 200®

Terrestrial Major Habitat Types

- Tropical & Subtropical Moist Broadleaf Forests
- Tropical & Subtropical Dry Broadleaf Forests
- Tropical & Subtropical Coniferous Forests
- Temperate Broadleaf & Mixed Forests
- Temperate Coniferous Forests
- Boreal Forests/Taiga
- Tropical & Subtropical Grasslands, Savannas, & Shrublands
- Temperate Grasslands, Savannas, & Shrublands
- Flooded Grasslands & Savannas
- Montane Grasslands & Shrublands
- Tundra
- Mediterranean Forests, Woodlands, & Scrub
- Deserts & Xeric Shrublands
- Mangroves

- Marine Ecoregions
- Freshwater Ecoregions
- No Data
- International Boundaries
- Disputed Boundaries, Lines of Control, or Alignment Unconfirmed [Boundaries based on UN sources]

This map shows the estimated original extent of the Global 200 ecoregions, not the natural habitat that remains. “Original” means prior to large-scale human interventions in the last few hundred years.

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"Imagine a map. . . . It contains all the things you learned from the land and shows you where you learned them. . . . Think of this map as a living thing, not a chart but a tissue of stories that grows half-consciously with each experience. It tells where and who you are with respect to the Earth, and in times of stress and disorientation it gives you the bearings you need in order to move on."

— JOHN TALLMADGE, MEETING THE TREE OF LIFE, 1997

FOREWORD

Since 1997 WWF has been exploring the issues, challenges, and opportunities that come with planning and implementing conservation at the ecoregion scale. Behind this journey has been the desire and determination to increase the level of conservation achievement, partnership, and sustainability across the world's most important areas of biodiversity.

This guidebook is built around the themes and questions that have emerged—and continue to emerge—from ecoregion conservation planning and action. The information presented in response to those themes and questions is supported by field examples, model projects, case studies, and lessons learned. These stories are designed to provide readers with a 'living' sense of ecoregion conservation and the full breadth of opportunity and collaboration that it is initiating all around the world.

Aspiring to the achievement of ambitious targets at the scale of an ecoregion is not for the faint-hearted. Guided by the principles of science, analysis, and collaboration, ecoregion conservation is an effort that brings together multiple disciplines, processes, and opportunities in pursuit of a long-term vision.

Sharing information and experiences is a key element of any conservation approach or strategy. This *Guide for Practitioners* contributes to the dialogue and learning that ecoregion conservation is generating within WWF and its partners.

Dr. Claude Martin
Director General
WWF International

TABLE OF CONTENTS

SECTION

1

UNDERSTANDING ECOREGION CONSERVATION

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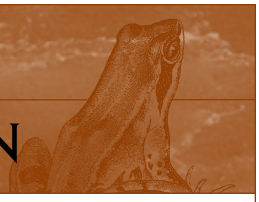


History of the Ecoregion Conservation Approach

"More than ever, we must think big, act jointly, take risks, and learn as we go. The planet's biodiversity demands no less."

— 1998 WWF ECOREGION-BASED CONSERVATION WORKSHOP REPORT

Ecoregion conservation (ERC) is an evolution in thinking, planning, and acting at the spatial and temporal scales best suited for successful biodiversity conservation. The approach, though new in its articulation and in some of the tools and methods used, proactively advances a commitment to protecting the broadest possible range of biodiversity. Deeply rooted in philosophies, principles, and strategies that emphasize sound science, stakeholder participation, multidisciplinary partnerships, adaptability, and learning, ecoregion conservation is a process committed to increasing the level of conservation achievement, partnership, and sustainability around the world. Though ecoregion conservation efforts are at an early stage of implementation (in the first decade of a 50-year approach), the approach is providing practitioners with innovative ideas, methods, tools, and approaches that can drive and support the conservation of species, spaces, and processes within clear spatial boundaries while recognizing and responding to the aspirations, needs, and motivations of people and their governments.

In 1997, WWF and other partners (such as The Nature Conservancy) began showing interest in ecoregions as the spatial units that best describe the patterns of biodiversity.[1] This encouraged the development of a conservation approach that would plan and implement initiatives at very large scales. At the time, it was increasingly felt that conducting conservation business in the usual way—creating protected areas, species survival plans, or integrated conservation and development projects (ICDPs) as isolated units—would not deliver big conservation successes. Therefore, conservation groups and international consortiums decided that figuring out how to take the steps necessary to plan and implement an ecoregion conservation programme deserved attention.

WWF and Conservation International organized an "ecoregion study tour" for practitioners and experts from Central Africa (where large-scale conservation efforts had been underway for some time) and Madagascar (where one form of an ecoregional approach was being implemented under the auspices of the country's National Environmental Action Plan). In addition, five pilot ecoregion programmes were supported by WWF-US—in the Bering Sea, Forests of the Lower Mekong, Galapagos, Chihuahuan Desert and Springs, and Congo Basin

[1] An ecoregion is a large area of land or water that contains a geographically distinct assemblage of natural communities that (a) share a large majority of their species and ecological dynamics, (b) share similar environmental conditions, and (c) interact ecologically in ways that are critical for their long-term persistence (Dinerstein et al., 2000).

Forests. These efforts provided a year's worth of experience in the development and description of how the ecoregion conservation approach might work.

In 1998, WWF-US brought together more than 100 practitioners and decision makers from the WWF Network, as well as external experts and the ecoregion conservation pilot project teams. The objective was to distil experience, ideas, and general thoughts into a first consensus on what ecoregion conservation entailed and what the steps or components of the planning stages might be. The hope was that the resulting process and general principles would encourage a more robust planning and action model for the ecoregion conservation programmes under development.

Ecoregion Conservation Terms

Ecoregion: Refers to a large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions. The boundaries of an ecoregion encompass an area within which important ecological and evolutionary processes most strongly interact.

Ecoregion Action Programme (EAP): The EAP (managed by one organization or coalition of organizations) facilitates elaboration of the biodiversity vision, development of the ecoregion conservation response strategies, and articulation and implementation of action plans. *(See Figure 1 on page 5.)*

Ecoregion Conservation Plan: Sets forth a comprehensive strategy for action to conserve and restore the biodiversity of an ecoregion over the span of several decades. Likely to be implemented by a number of different agencies, through a collective or individual action plans, this plan provides an overarching framework for achieving the biodiversity vision and its long-term goals for biodiversity conservation in an ecoregion.

Action Plan: Outlines an organization's contribution to the implementation of the ecoregion conservation plan. The action plan presents the milestones and activities that the organization will pursue, while also articulating a strategy for building partnerships around the wider ecoregion process.

The Ecoregion Conservation Approach in Practice

Since 1998, a large number of ecoregion action programmes (EAPs) have been initiated around the world. Whether in the Madagascar Moist Forests, Indus Delta, Russian Far East, or any other ecoregion, conservation at the ecoregional level will present practitioners with new challenges and opportunities. It will also call upon the resources and skills of many organizations, some of which share their interests and expertise through networks, coalitions, and partnerships. Initiatives of this scope and scale also demand that EAPs combine the capabilities of field offices with the increasing strength in conservation-related research and policy work of a host of national, regional, and international organizations. Ecoregion conservation is neither top-down nor bottom-up nor linear; rather EAPs pursue an integrated strategy of local, regional, and global actions that together will help realize ambitious targets. And while the specifics, timing, and cost of those strategies may vary from

ecoregion to ecoregion, they all have a common goal: conservation of the fullest range and composition of biodiversity.

Today the basic wisdom of 1997/98 has not wavered, even though the number and diversity of ecoregion programmes have multiplied tenfold since then. The original guiding principles and core elements of ecoregion conservation *(see "The Biological Basis of Ecoregion Conservation")* continue to provide a general framework for planning and action at large scales, while refraining from being prescriptive.

This guidebook seeks to provide a broad overview of the ecoregion approach to conservation, complemented by specific suggestions and illustrated with stories from the field. It is critically important to recognize that each ecoregion team needs to take a customized approach to ecoregion conservation; therefore, we do not lay out a specific series of steps in this guidebook. Rather, we hope to provide information, inspiration, and a wealth of ideas for shaping the conservation approach that is right for your ecoregion.

The Biological Basis of Ecoregion Conservation

"Because the ultimate goal of ecoregion conservation is conservation of the fullest possible range of biodiversity, biological criteria define the goals and targets of ecoregion conservation and are the ultimate measure of its success."

— GORDON H. ORIANS, ECOREGION SCALE CONSERVATION: PLANNING AND JOINT LEARNING, 1998

Ecoregion conservation is an ambitious undertaking. It aims to conserve and, where necessary, restore the fullest range of biological diversity of an ecoregion through a rigorous analysis of ecological information; an assessment of the linkages between ecological, political, economic, and socio-cultural factors and forces; and the implementation of equally far-reaching response strategies. The conservation strategies that are formulated have the potential to address the fundamental goals of biodiversity conservation. Those goals,[2] which have become widely adopted as the foundation of the science of conservation biology, are:

1. Representation of all distinct natural communities within conservation landscapes and protected area networks
2. Maintenance of ecological and evolutionary processes that create and sustain biodiversity
3. Maintenance of viable populations of species
4. Conservation of blocks of natural habitat that are large enough to be resilient to large-scale stochastic and deterministic disturbances as well as to long-term changes.

One of the innovations of the ecoregion conservation approach is the articulation of targets

[2] The fundamental goals of biodiversity conservation have been modified from: "The Wildlands Project: Land Conservation Strategy" by Reed F. Noss. 1992. In the *Wild Earth Special Issue: The Wildlands Project,* pp. 10-25.

that use the four fundamentals of conservation biology as their key reference points. Those targets are expressed alongside a biodiversity vision that identifies focal biodiversity elements and priority areas, and within a planning framework that specifies ways to reach the targets.

With conservation biology as a base, practitioners engaged in ecoregion conservation efforts are challenged to answer a wide range of questions. They must move from the principles of science to the implementation of strategies that, while designed to achieve ambitious conservation targets, are responsive to human development needs and aspirations.

Scales of Planning

The terms *ecoregion, priority areas,* and *landscape* are frequently used in large-scale conservation planning. Although often assumed to represent geographic units at different scales, in fact none of these concepts have any predetermined minimum or maximum scale limitations, and there is considerable overlap of sizes among them. For example, the Terai-Duar Savanna and Grasslands ecoregion is 34,600 square kilometres (km^2). Yet the Terai Arc landscape is about 50,000km^2. The smallest landscape in the Congo Basin Forest Partnership (CBFP) is 27,000km^2 (larger than 40 per cent of terrestrial ecoregions). The largest landscape in the CBFP is 142,000km^2 (larger than 75 per cent of terrestrial ecoregions). Therefore, the use of the term *landscape-scale* does not necessarily refer to a territory that is of a smaller size than an ecoregion.

Priority area refers to those places, regardless of size, identified in an ecoregion's biodiversity vision as essential for the conservation of the ecoregion's biodiversity. While some people may call these priority areas "landscapes," it is very likely that they too will vary in size (The Nature Conservancy identifies a landscape as ranging from 3 to 3,000km^2 whereas the Wildlife Conservation Society identified landscapes as large as 30,000km^2). Whatever their size, what priority areas and landscapes have in common is that they are generally larger than a site and will often include more than one protected area.

While biodiversity visions have been developed across a range of scales—from single ecoregions to clusters of ecoregions (a complex)—it is generally recommended that the biodiversity vision and target setting be undertaken at the single ecoregion scale. Milestones and activities can then be developed across a range of scales, including site, landscape, ecoregion, and global.

Adapted from "Landscapes or Ecoregions? Overlapping Scales of Planning" by John Morrison in *From the Vision to the Ground: A Guide to Implementing Ecoregion Conservation in Priority Areas (Version 1.1)* by Colby Loucks, Jenny Springer, Suzanne Palminteri, John Morrison, and Holly Strand. 2003. Conservation Science Program, WWF-US: Washington, DC. Available on line at www.worldwildlife.org/science/landscape.

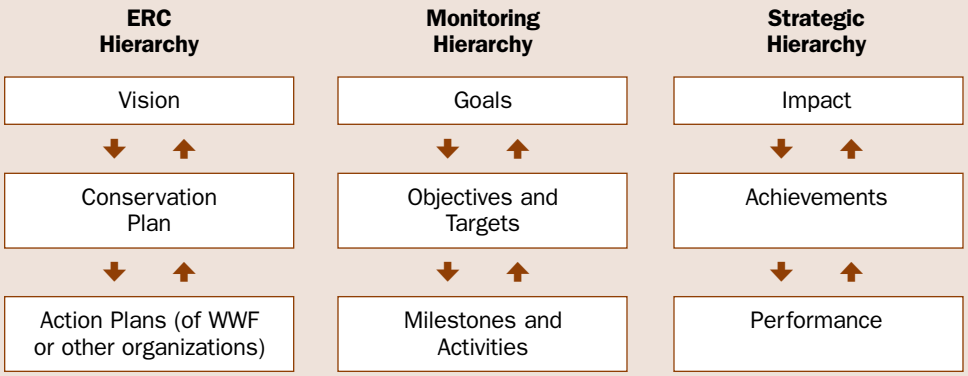
The Core Elements of Ecoregion Conservation

The ecoregion conservation process has four key elements: (1) the reconnaissance, (2) the biodiversity vision, (3) the ecoregion plan, and (4) the action plan. Each of these elements helps lay the groundwork for the relationships, partnerships, and actions that are essential to creating and implementing a successful EAP.

FIGURE 1: Ecoregion Action Programme

FIGURE 2: Making Sense of Terms

There are many terms associated with ecoregion conservation, strategic planning, and monitoring. Frequently used terms are presented below. Throughout the guidebook, these terms will be used in a manner consistent with this diagram.



The following section describes each element, including its purpose and value. An understanding of these ecoregion conservation fundamentals will help EAP teams to shape their decisions and actions, even when local factors and conditions require significant adaptation.

Reconnaissance

The reconnaissance is a multidisciplinary rapid assessment that helps frame the implementation of ecoregion conservation and identifies urgent issues or opportunities that require immediate action. Any ecoregion initiative should start with a quick reconnaissance of the conservation landscape. Through a review of literature and consultations with experts, selected stakeholders, and key institutions, the reconnaissance will provide a rapid assessment of:

- The ecoregion's biodiversity

- The threats to biodiversity
- Opportunities for conservation
- The range and effectiveness of existing conservation efforts
- Potential roles for key organizations
- A preliminary list of key actors and stakeholders
- An assessment of the resources needed (technical and financial) to make ecoregion conservation happen.

The primary audiences for the reconnaissance are the EAP team (practitioners) and partners (including donors). The reconnaissance should map out a way forward—providing key points of reference for the development of a vision and conservation targets, and identifying important stakeholders and potential partners. It should identify any urgent threats or opportunities (such as a pending oil concession, new government initiative, or treaty process) that can be addressed immediately or leveraged through advocacy and campaigning. A reconnaissance can also yield the basic information needed for developing funding proposals for activities in the ecoregion.

The value of the reconnaissance is that it provides a preliminary profile of the "who, what, and where" of the ecoregion. A good reconnaissance can also provide the basis for immediate action and a well-thought-out strategy for next steps. Those steps might include: the elaboration of a vision, conservation objectives, and targets; the completion of focused biological and/or socioeconomic analyses to influence existing processes; the launching of a coalition initiative to address imminent threats; and the development of communications and education strategies to realize the potential for conservation offered by an active process.

Biodiversity Vision

The biodiversity vision is the foundation for long-range dialogue, planning, and action among a range of stakeholders in an ecoregion.[3] It focuses the conservation-planning effort on the key biological elements (habitats, species, and ecological processes) that are most important for sustaining and restoring biodiversity. The vision is the first step in a process designed to inspire collaboration and action at ambitious spatial and thematic scales and sets benchmarks against which future conservation planning and action can be measured.

Ecoregion conservation efforts are driven and inspired by the biodiversity vision. This inspiration is embodied in a statement that conveys the desired state of the ecoregion in 50 years. The vision provides a profile that locates priority areas for key species, habitats, and ecological processes in an ecoregion. The message and spatial presentation of biodiversity are the cornerstones of ecoregion conservation—guiding both the development of ecoregion conservation objectives and targets as well as the strategic decisions and tradeoffs required as circumstances and opportunities change.

In addition to the spatial representation of an ecoregion's biodiversity, the vision process informs the development of objectives and targets for the conservation and restoration of the

[3] WWF-US has developed a series of workbooks that specifically address the steps involved in creating a biodiversity vision. Refer to Appendix G *(page 116)* for a list of those publications.

In Action: Reconnaissance in the Great Barrier Reef Ecoregion

A reconnaissance can provide the foundation from which to leverage early action. The reconnaissance element of the **Great Barrier Reef** (GBR) ecoregion action programme revealed that the GBR has, in effect, been managed as a reasonably coherent "ecoregion" for 25 years. However, despite this integrated management strategy, threats to the ecological integrity of the region are serious and growing.

Based on the findings of the reconnaissance, WWF-Australia decided to use a campaign-style approach to raise awareness of the need for increased protection of the GBR. This effort—through a mix of mainstream media, report production, and a range of communications tools—has directly complemented the ongoing efforts of GBR marine park authorities and scientists to determine the ideal levels of protection across the GBR.

The WWF-Australia reconnaissance also identified the impact of increased sediment and nutrient deposition on the water quality of the GBR catchment as one of the most significant threats to the GBR. To address this threat, WWF invested funds in conducing scientific analyses of the water-quality issues in and around the GBR. WWF instigated advocacy efforts to raise the level of public awareness regarding the area's water-quality issues and expose the impacts of long-term watershed degradation. The increase in public understanding of the issue played a pivotal role in the announcement of a government-designed and implemented water-quality plan. This included the commitment of AU$31 million (US$21 million) for a GBR Coastal Wetland Protection Programme. > > >

Expressing Aspirations for an Ecoregion

Ecoregional efforts are often guided by a vision statement that acts as a beacon and helps direct strategic and programmatic decisions. A biodiversity vision statement should inspire. It should paint a picture of the world that we would like future generations to experience and inherit.

The Vision Statement of the Yangtze Basin Ecoregion
A region where a living river links the Tibetan Plateau and the Pacific; where people thrive in harmony with nature, pandas play in the forests, children swim with dolphins and fish in clear water, pheasants dance among rhododendrons, and cranes sing at sunrise. A region where natural cycles sustain a rich and ancient culture.

The Vision Statement of the Bismarck Solomon Seas Ecoregion
A region where coral reefs, mangroves, and sea grass beds; dugongs, whales, and the richness of the seas are present for the world to see. A marine environment that will serve as the bank of the people—where a happy and healthy population can sustain its needs and fulfill its aspirations.

A region linked by the migratory paths of turtles and fish, which bind together countries in partnerships and commitments that will shape the future of conservation.

A marine environment that will live in the dreams, stories, languages, and songs of people for many generations to come. > > >

biodiversity of the ecoregion. The objectives and targets should push those working on conservation to aspire to achieving what is truly necessary to effectively conserve the biodiversity of the ecoregion. In setting objectives and targets for long-term biodiversity conservation (20 to 50 years), a vision may seem well beyond the reach of what is currently possible—but it also anticipates that the impossible can happen.

A biodiversity vision embraces four key conservation goals: (1) representation of all distinct natural communities; (2) maintenance of ecological and evolutionary processes; (3) maintenance of viable populations of species; and (4) resiliency in the face of large-scale periodic disturbances and long-term change. While grounded in widely accepted principles of conservation biology, a biodiversity vision can never be a solely scientific determination. Developing a vision entails making many decisions, including how large or widespread natural areas or wildlife populations should be, or how much human influence should be considered part of the "natural" processes that shape biodiversity. These decisions will involve considerable subjectivity and thus depend, in part, on value judgements, guided by the philosophy and conservation ethic of the experts and conservation practitioners who make them.

Biodiversity Goals, Objectives, and Targets

Biodiversity goals, objectives, and targets are central to ecoregion conservation. As the process evolves, they provide biodiversity benchmarks against which the achievement and performance of conservation strategies, plans, and partnerships will ultimately be measured.

Goals are those focal biological elements (species, habitats, or processes) that make an area significant and warrant its conservation. The goals identified by experts during the biodiversity vision phase will provide the critical point of reference for the development of ecoregion objectives and targets, conservation strategies, and activities. By establishing the goals at the outset, those engaged in ecoregion conservation will be assured that the activities proposed and implemented over time will result in conservation of the fullest possible extent of priority species, habitats, and processes across an ecoregion.

Objectives are statements detailing a desired conservation accomplishment or outcome, such as *maintaining* the status of a key species or *reducing* a critical threat. A plan will have multiple objectives, and the realization of all of those objectives (through the achievement of targets) will result in the achievement of the biodiversity vision.

Targets are the amount, type, and configuration of habitats, species, or processes (ecological and socioeconomic) that need to be maintained in order to conserve the focal biodiversity elements (goals). A target needs to be developed in support of the objectives. A full set of targets will provide the ecological requirements for achieving the stated objective.

The biodiversity vision emerges from a biological assessment that, through the broad participation of experts and the synthesis of biological information, identifies priorities for achieving the four goals of conservation biology. The biodiversity vision should articulate:

- Priority areas, focal species, and ecological processes
- Long-term goals for conservation of the ecoregion's biodiversity
- A statement reflecting aspirations for the future state of the ecoregion.

Defining a biodiversity vision will encourage the cooperation of disparate audiences and help focus socioeconomic or political studies and research on issues and areas of special importance and concern.

Ecoregion Conservation Plan

The ecoregion conservation plan clarifies the strategies and approaches to be employed to realize the biodiversity vision and targets.[4] It also outlines priorities for conservation action around which collaboration and the roles that various stakeholders and partners can play can be identified and specified.

An ecoregion conservation plan will:

- Focus on the ecoregion and achievement of a biodiversity vision
- Present conservation objectives and targets
- Outline strategies and actions that will contribute to the achievement of conservation objectives and targets, including response strategies to address key threats to the ecoregion's biodiversity and leverage opportunities to influence potentially supportive trends, attitudes, and processes
- Be relevant to and owned by key stakeholders who have a vested interest (for political, socio-cultural, or economic reasons) in the state of natural resources in the ecoregion
- Emphasize sustainability of impacts and benefits
- Include monitoring and evaluation components
- Articulate administration, timing, and budgetary considerations.

As ecoregion conservation has evolved, it has become clear that elaboration of a new ecoregion conservation plan will not always be required. In some instances, an existing framework that embraces the scale and principles of ecoregion conservation may exist, presenting a readymade framework for the promotion of an ecoregion plan. Where appropriate conditions exist, it is worth contemplating the nesting of ecoregion conservation plan elements within an external framework. For example:

- The Murray-Darling Basin EAP in Australia linked its activities to an existing regional framework, managed by the Murray-Darling Basin Commission.
- The New Zealand Marine EAP completed a biodiversity assessment and facilitated a priority-setting process that fed into development of New Zealand's Oceans Policy framework.
- The Fiji Island Marine EAP is promoting ecoregion conservation elements (such as the vision, priority areas, and targets) within the National Biodiversity Strategic Action Plan, which is the national expression of biodiversity in Fiji.

Opportunities to successfully integrate conservation plan elements into external processes are more likely to exist for single-country ecoregions, where a single government is formulating policies and frameworks (often in pursuance of its obligations under international environment and development agendas).

[4] Refer to Appendix A (page 91) for a sample outline of an ecoregion conservation plan.

Linkages and Opportunities

Ecoregion conservation encourages and supports planning and action across a range of scales and sectors. In so doing, it provides practitioners with the opportunity to embrace and promote conservation achievement, partnership, and sustainability within a single, coherent framework.

While a biodiversity vision and targets are set at the ecoregional scale, many ecological processes and socioeconomic forces will extend well beyond the boundaries of the ecoregion, or occur only within a contained area of the ecoregion (a priority area or landscape). The ecoregion process responds to this reality by using targets set at the ecoregion scale as the reference point for the development of response strategies, collaboration, and action at multiple scales.

In many instances the development and implementation of initiatives nested within ecoregion conservation strategies or actions may take on a profile or momentum of its own. Pilot projects, campaigns, and crosscutting initiatives—designed to address threats, take advantage of opportunities, or respond to stakeholder interests at relevant and manageable scales—will always be integral to ecoregion conservation efforts. The measure of success of these individual projects and programmes will be determined by the contribution that they make to the ecoregion conservation vision and targets.

It is important to note that the product of ecoregion-scale planning and strategizing is more than just a plan. The ecoregion conservation process lays the groundwork for establishing relationships with stakeholders and partners that build confidence, trust, understanding, and a common sense of ambition and purpose, which are essential to successful action and sustainable outcomes.

The Action Plan

An action plan articulates how the activities of an organization will be focused to contribute to conservation action in the ecoregion. It outlines what an organization will do over a five-year period—directly and by enlisting and influencing others—to help achieve the biodiversity vision.

Once there is a conservation plan that sets out a strategy for conserving an ecoregion's biodiversity, an action plan will describe the general course of action that will achieve or contribute to the conservation targets (action plan milestones) as well as the specific steps or activities to make that plan happen (activities). An organization's understanding of threats, opportunities, and stakeholder interests is likely to directly influence the milestones and activities that are set out in its action plan. The focus and capacities of the organization (government or NGO; conservation or development) will also influence the plan's structure and content. The success of an action plan can be judged based on how effective its portfolio is in helping achieve the conservation targets set out in the conservation plan.

Development of an action plan should be informed by a strategic review of the activities and effectiveness of other conservation actors and partners. The review should consider what activities an organization, using all components of its network, can undertake—e.g., public education, policy reform, capacity-building, community-based conservation and development

projects, and international action. The review should also identify what other organizations—such as local communities, nongovernmental organizations (NGOs), universities, governments, corporations, and donors—can do. The action plan should explore how the organization might enlist the involvement of those groups, influence their behaviour, or more effectively leverage their activities (in support of the ecoregion conservation targets) through formal partnerships, grants, advocacy, and other avenues.

An action plan will set out the specific milestones that an organization or consortium of organizations intends to pursue, as well as the actions needed to achieve those milestones. The achievement of action-plan milestones (which are likely to address multiple scales) should contribute directly to the achievement of conservation targets that are set at the ecoregion scale. In addition, they may contribute to the achievement of (or derive support from) global policy, advocacy, and consumer or communications targets that sit beyond the geographical boundaries of the ecoregion, but are relevant to issues or opportunities that will contribute to the ultimate sustainability of conservation action in the ecoregion (e.g., private sector practices concerning key water-using sectors or law enforcement actions to eliminate illegal trade).

An action plan should explicitly:

- Incorporate the principles of learning and adaptability, known as *adaptive management.* Any organization's actions should be viewed, and some explicitly designed, as experiments that permit the testing of different strategies.
- Provide for an investment in monitoring (1) key indicators for the ecoregion as a whole, (2) each line of action, and (3) changes in the behaviour and actions of those individuals, organizations, and programmes with which the EAP works directly (and who in turn will influence conservation and development trends into the future).
- Establish a system for collecting information and feeding it back into regular review and, as necessary, revision of the action programme, the ecoregion conservation targets, and the biodiversity vision.

While each organization (NGO, government, community, or private sector) is only one player within an ecoregion, each should have its own action plan so that the contribution to conservation targets and strategies can be measured. In many instances, target-related actions will be led by conservation NGOs. But, in most cases, conservation actors will only be one among many. The collective actions of all of the groups, as articulated in the action plans, will ultimately determine the future viability of the biodiversity of an ecoregion.

Action Plan Milestones and Activities

Action plan **milestones** should describe the specific strategies or approaches that an organization will pursue to achieve or contribute to the achievement of one or more of the targets detailed in the conservation plan (or equivalent). The **activities** identified in an action plan will deliver on those strategies. The recommended timeframe for both milestones and activities is three to five years. For example,

- **If the conservation target is:** 5,000km^2 of floodplain lakes and river system connected by 2025
- **An action plan milestone could be:** Restore the link among isolated lakes and the river system by 2007
- **An action plan activity could be:** Implementation of model restoration projects at two specific key connection sites to show and communicate the benefits of restoring lake-to-river connections.