

Protected Areas in 2023: Scenarios for an Uncertain Future

Jeffrey A. McNeely

Introduction: scenarios and protected areas

SOCIETIES IN ALL PARTS OF THE WORLD HAVE LONG GIVEN CERTAIN SITES a special status: places they would protect to conserve their natural and cultural heritage and to maintain ecological processes for the well-being of people and the rest of nature. Many believe that these protected areas should exist in perpetuity, but social, demographic, technological, economic, and environmental changes have inevitably posed many challenges for those concerned with managing the protected areas.

Protected area managers must constantly make decisions both on day-to-day site management and on strategic directions that may affect the long-term viability and survival of the site. Managers often are confronted with two particularly difficult obstacles when making these strategic decisions about the future: *uncertainty*, ranging from local politics to climate change to world economy to geopolitics; and *values*, guiding relations with neighbors, visitors, and decision-makers, compounded by the dilemma as to whose values should dominate. Neither of these obstacles can be overcome by scientific analysis. For example, how should protected area managers respond to:

- Human population growth and more land becoming “domesticated”?
- Threats to the unique diversity of individual protected areas through global trade and the spread of invasive alien species?
- The increasing demands for political

decentralization, including changes in the roles state agencies play?

- New technologies, including in the biological and information sciences?
- Growing private-sector interest in protected areas?
- Significantly increased or reduced tourism?
- Changing perspectives on the links of certain ethnic groups to traditional lands?
- Shrinking protected areas budgets and growing demands on them?

The future inevitably is uncertain, but this paper provides a useful tool for helping answer such questions while engaging diverse sets of stakeholders: scenario planning.

Scenario planning

Scenario planning highlights the major forces that may push the future in different directions, and creates stories that stimulate

thinking of alternative possible futures. Good scenarios are plausible, internally consistent, and realistically include both perceived favorable and unfavorable elements. Scenario planning can “bound” the uncertainties by helping to understand the deeper trends and forces that affect protected areas, and to see the bigger picture. Strategic decisions can then be tested against several distinctly different but plausible future states. Scenario planning can also involve (jointly or in parallel) a wide community of different stakeholders, thereby helping to reveal expectations and values held by these different groups. Values can thus be made explicit, and their impacts on possible futures can be made clear. If several divergent scenarios all point toward the same or similar policy responses, then those policies are likely to be robust to a wide range of credible future conditions.

Conversely, those interested in the long-term future of protected areas need to ensure that the policies they advocate are robust across a wide range of possible futures, not simply a projection of recent trends. By enabling managers (defined broadly to include official agencies, local communities, non-governmental organizations (NGOs), indigenous peoples, or private parties, as relevant to each protected area) to consider different possible futures, new risks and opportunities will become apparent, and help lead to better decision-making. Scenarios for protected areas can also:

- Set the stage for productive discussions among the numerous stakeholders involved in protected area issues, even enabling debates on topics that might otherwise be threatening or provocative to certain groups;

- Help managers decide priorities for research, monitoring, and information management;
- Help managers be better prepared to cope with future emergency situations; and
- Make the future less threatening and chaotic, at least psychologically preparing people for surprises.

Scenarios are not predictions, forecasts, or projections, but contain elements of all of these. A *prediction* is the best possible estimate of future conditions (“My budget next year is highly likely to be 2% less than this year”), while a *forecast* is the best estimate from a particular method, model, or individual (“Based on this election, we are likely to receive a 10% budget increase next year”). And *projections* are estimates of future conditions based on the study of recent ones (“Looking at the budget trends over the past twenty years, we expect our budget to double over the next decade”). People may respond to predictions or projections, which adds surprises to the difficulty in making accurate forecasts of human behavior.

Predictions, forecasts, and projections help inform *scenarios*, which are simply *stories designed to stimulate new ways of thinking about the future* (“What happened to my budget when the tourists stopped coming?”). What will actually happen in the future remains unpredictable, but scenarios can help managers prepare for this uncertainty by helping them think about plausible, or even possible, options.

IUCN–The World Conservation Union (IUCN) decided to test this approach by preparing a set of twenty-year scenarios for protected areas, in part as a contribution to the World Parks Congress

(Durban, South Africa, September 2003). After reviewing the major events that have affected protected areas over the past three decades, the workshop identified the primary driving forces that are currently influencing protected areas. By identifying these driving forces, it was possible to look beyond the urgent crises that tend to occupy the minds of most protected area managers. This paper presents some of the major ideas resulting from the scenario planning process (see McNeely and Schutyser 2003 for a complete discussion of the scenarios).

A brief history of protected areas

The future is not always simply a continuation of the past; new developments often have defied projections premised on historical evidence. For example, new innovations, discoveries, substitutions, and technologies prevented, or at least postponed, the postulated economic depletion of many non-renewable natural resources. However, planning should not be carried out in isolation from history. Knowledge, events, and trends of the past must inevitably provide the basis for the predictions, projections, and forecasts that inform long-term planning, if not guide it.

It is not unreasonable to expect the trends that have shaped present-day protected areas to continue, with some slight ebbs and flows, for the coming few decades. Scenario planning, however, encourages also thinking about both positive and negative surprises that by definition were not predicted, projected, or forecast. As a means of demonstrating some past surprises and achievements that have affected how people think about protected areas today, consider the following key dates (among many that could have been chosen):

- 1864: Yosemite (California) established by U.S. Congress as effectively the first of a new national-level model of protected areas; Yellowstone (1872) was first to be called a “National Park.”
- 1882: El Chico National Park established in Mexico, the first in Latin America.
- 1903: The Society for the Protection of the Wild Fauna of the Empire established in the United Kingdom, the first NGO devoted to international conservation. At its 100th anniversary, it is known as Fauna and Flora International. Hundreds of other civil-society conservation organizations now support protected areas in all parts of the world.
- 1925: First modern national park established in Asia (Angkor Wat, Cambodia).
- 1926: South Africa’s Kruger National Park established.
- 1934: Argentina’s Iguazu National Park established.
- 1948: IUCN founded as a means of promoting conservation worldwide, but especially in the former colonies gaining independence in the post-war world. Based on a prediction of significant habitat loss if nothing were done, IUCN immediately started working on protecting nature.
- 1961: World Wildlife Fund (WWF) started as a new international NGO to mobilize support for conservation, especially from the general public; marked the beginning of an era of growing funding for international conservation.
- 1962: First World Conference on National Parks, Seattle, Washington, USA, began a more formal worldwide movement in support of protected areas, called for a United Nations List of Protected Areas and recommends a cat-

egory system. Each country kept its own records, so nobody knew the extent of the world's protected area system.

- 1963: African College of Wildlife Management at Mweka, Tanzania, established. By 2003, over 4,200 Africans had graduated and many now manage protected areas throughout the continent.
- 1967: CAMPFIRE program began in Zimbabwe, showing how rural people can benefit economically from wildlife in a modern context, even through times of political turmoil; it is still going strong, demonstrating another form of protection.
- 1968: UNESCO Man and the Biosphere Program began, established biosphere reserves (now 440 biosphere reserves in 97 countries, exceeding 2.2 million sq km).
- 1970: School for Training of Wildlife Specialists, Garoua, Cameroon, established. Designed for francophone Africa, Garoua has now trained well over 3,000 people; they now run many of the protected areas in West and Central Africa and Madagascar.
- 1971: Ramsar Convention adopted. By August 2003, 1,308 sites covering over 1.1 million sq km in 138 countries had been designated.
- 1972: United Nations Conference on Environment and Development, Stockholm, Sweden, endorsed new conventions affecting protected areas, and led to establishment of United Nations Environment Program (UNEP), based in Nairobi, Kenya.
- 1972: World Heritage Convention adopted. By 2003, 149 natural World Heritage Sites and 23 mixed natural and cultural sites had been recognized, covering over 1.5 million sq km.
- 1972: Second World Conference on National Parks, Yellowstone and Grand Teton national parks, USA, promoted development assistance for protected areas in the tropics. Protected area coverage: 1,823 sites, 2.2 million sq km.
- 1977: Training program for protected area personnel established at CATIE, Turrialba, Costa Rica; continues until present and has trained staff for much of Central America.
- 1978: IUCN system of categories of protected areas published, set logical framework for worldwide assessment of protected area coverage. Latest revision in 1996, now being promoted for other management applications.
- 1981: *World Conservation Strategy* published by IUCN, WWF, and UNEP; popularized the concept of sustainable development and a partnership between conservation and development.
- 1981: Protected Areas Data Unit established by IUCN and its Commission on National Parks and Protected Areas, at the World Conservation Monitoring Centre, U.K.; provides first worldwide database on protected areas.
- 1982: Third World Congress on Protected Areas, Bali, Indonesia, emphasized the importance of protected areas as a key element in national development plans; set 10% protected area coverage of each biogeographic province as a target. Protected area coverage: 2,671 sites, nearly 4 million sq km.
- 1987: *Our Common Future* published, the report of the U.N. Commission on Sustainable Development (commonly known as the Brundtland Report, after its chair, Gro Harlem Brundtland), called for 12% of the land to be given

protected area status and advocated global action to conserve biodiversity.

- 1991: Global Environment Facility (GEF) created by the World Bank, U.N. Development Program, and UNEP, providing a major new intergovernmental funding mechanism for protected areas, especially through the Convention on Biological Diversity then under negotiation.
- 1992: Fourth World Congress on Protected Areas, Caracas, Venezuela, emphasized linkages between protected areas and other sectors of society. Protected area coverage: 8,641 sites, 7.9 million sq km.
- 1992: The Earth Summit, Rio de Janeiro, Brazil, produced *Agenda 21*, and approved Convention on Biological Diversity and Framework Convention on Climate Change, both highly relevant to protected areas.
- 2000: U.N. General Assembly approved Millennium Development Goals (MDGs), with Goal 7 calling for environmental sustainability.
- 2002: World Summit on Sustainable Development (WSSD), Johannesburg, South Africa, called for loss of biodiversity to be reversed by 2010, and for a system of marine protected areas to be established by 2012.

This list of key events could be extended considerably, and balanced by bad news and unpleasant surprises in some places. But it is sufficient to indicate a steady growth in protected area coverage and a growing understanding of the relevance of protected areas to larger sectors of society. From just a small handful of formal protected areas at the end of the 19th century, by the turn of the 20th century virtually all

countries had established reasonably extensive systems of protected areas. Over the same century, the human population had quadrupled from about 1.6 billion in 1900 to 6 billion in 2000, advances in technology had transformed human society, consumption of resources had increased by a factor of 14, and millions of square kilometers of natural habitat had been domesticated.

The current forces affecting protected areas

Historically, protected areas have been valued for three main reasons: the services they provide to humans (their “utility”); their ecological significance, independent of their usefulness to humans; and their cultural and spiritual meaning. Typically, the utilitarian aspect has had the greatest influence on convincing local decision-makers to take an active interest in conservation. But abundant evidence has now demonstrated the close links between the conservation of healthy terrestrial and marine ecosystems and the provision of critical environmental services, such as providing a reliable water supply, supporting pollination systems, and building productivity of soils. Some local communities and urban dwellers show willingness to pay for such ecosystem services and to adopt land use and crop production systems that can support the protected areas; others are indifferent, or would prefer protected areas to be converted to “more productive” uses.

The increased recognition of protected areas as potential tools for economic development is another reason why more are being established. But this also means that more protected areas are competing for limited funds, as both official development assistance (ODA) and tourism income remain stagnant, if not declining in many

countries. Poverty may push people to invade protected areas to use wild products, possibly unsustainably, while greater wealth may lead to even more exploitation of natural resources; is wealth or poverty the greater negative impact?

Demographics remain a major driving force, with 80 million or so people being added to our planet each year, mostly in developing countries. Migration and urbanization are particular challenges. Today, about half of the world's 6.3 billion people live in cities, well insulated from the realities of nature (except, of course, from the climate). But one arguably positive result of expanding population is that tourism to protected areas continues to grow. China alone welcomes one billion visitors annually to its protected area system, and countries such as Australia, Botswana, Canada, Costa Rica, Ecuador, Kenya, Nepal, South Africa, and Tanzania have made nature-based tourism an important part of their national economies, and recognize the role of protected areas in supporting this industry.

Civil society is accelerating its contributions to protected areas. Non-governmental conservation organizations have become multinationals in their own right. Fauna and Flora International, WWF, The Nature Conservancy, Conservation International, BirdLife International, Wetlands International, the Wildlife Conservation Society, and numerous others are together spending hundreds of millions of dollars annually in both developed and developing countries in support of protected areas. At the national level, numerous other civil-society organizations are also having significant influences on protected areas, reflecting the interests of local people, indigenous groups, urban dwellers, farmers, students,

and many others. Rural people still nibble at the edges of protected areas, and have even consumed some, while other rural people have been forcibly removed from what they consider their homelands.

The private sector continues to contribute to protected areas, running concessions, providing financial support, and seeking forms of sustainable development that will contribute to both conservation and corporate profits. Even though the world economy is struggling, new developments in information technology (IT) offer interesting potentials for protected areas. First, an enhanced and less-expensive Internet is strengthening knowledge and access to it, which in turn is contributing to building awareness and skills. Second, IT is promoting action by civil society, providing benefits to protected areas by way of support to co-management, political mobilization, and independent monitoring. Finally, some of the wealth generated by the IT sector is finding its way into various foundations which may also provide funding for protected areas. On the negative side, virtual reality has begun to replace nature as the source of experience; watching a flock of flamingos take wing from the floor of Ngorongoro Crater is very different from doing so vicariously through the miracles of modern IT.

Other technologies are also highly relevant to protected areas. Improvements in transportation bring more visitors to protected areas. Some of them are unwelcome, such as the invasive alien species of weeds that now infest many of the planet's most cherished "natural" sites. Biotechnology offers a powerful new tool for manipulating the genome of numerous species, beginning with agricultural plants but soon likely to affect many other life forms as well, with

unpredictable impacts on protected areas. The advances in biotechnology are leading to experiments to bring extinct species back from the dead, perhaps reducing the pressure to conserve those species we already have. Communications technology, too, is having profound influences, enabling people to be connected wherever they may be and fundamentally changing what for many was once a "wilderness experience". But having access to a cell phone in an emergency on a remote mountain top undeniably is a life-saving advance. Technological solutions to the hole in the ozone shield (a by-product of technology) have been developed and implemented, but climate change is a different story. Technology gives, and takes away.

Climate change remains a significant threat, and not only for island and coastal systems projected for flooding as icecaps and glaciers melt. Based on the projections prepared by the Intergovernmental Panel on Climate Change, we can forecast that many of the major vegetation types in various parts of the world will undergo significant biogeographical changes as they shift to follow patterns of rainfall and temperature. This is likely to be particularly dramatic in mountain areas and in highly distinctive but geographically restricted vegetation types, such as South Africa's succulent karoo and fynbos.

Thus the current forces affecting protected areas, of which the above are a small sample, are a complex combination of positive and negative influences, and involve diverse sets of interests and stakeholders. The overall picture is one of increasing demands for the goods and services of protected areas, against growing threats to the ecosystems that provide those goods and services on a sustainable basis. All of this is

coupled with the pressure on many governments to expand their protected area systems at a time when many rural people are clamoring for their rights to occupy these same lands, often with considerable historical justification. Oil, gas, and mining companies also seek to harvest certain resources while minimizing their impact on others. It is against this complex background of chaos, change, and challenge that the scenarios for protected areas were created, as a means of promoting the best possible thinking about the most productive role for protected areas in what we predict will be a turbulent future.

The scenarios

The scenarios we developed are simply stories about possible futures over the next twenty years, not visions or calls for action that are being promoted by any particular interest group; nobody expects any of the scenarios to "come true," and what actually happens in twenty years may well contain some elements of them all, and much else besides. Twenty years may seem a long time to look into the future, but twenty years ago was when the 1982 Bali World Parks Congress was held, attended by many of today's leaders of the protected area movement. They had no laptops, Internet connections, or cell phones, but the issues they faced were not so different from those of today's protected area managers; but today has many more in addition, and more technological arrows in the manager's quiver. Twenty years from now, today's young leaders will be in positions of authority for safeguarding our planet's natural heritage. Developing these kinds of stories can help ensure that they have the best chance of doing so.

The scenario planning process can also

be an effective stakeholder engagement tool in its own right. We used scenario planning to engage very diverse groups, such as transnational corporations, international environmental organizations, academics, as well as government agencies. The point is that scenario planning can help create dialogue around contentious issues in an inclusive manner. The stories emerging from the scenario planning process can frame this dialogue while helping us to think constructively about the future.

The following is an abbreviated synthesis of the three scenarios developed recently by IUCN. Briefly described in Table 1, they were titled “The Triple Bottom Line,” “The Rainbow,” and “Buy Your Eden” (see McNeely and Schutyser 2003 for a complete discussion of the scenarios). This synthesis reveals some common predictions and open questions, while providing insight into the future of protected areas.

Human population dynamics will remain a major issue, though rates of change are highly variable in different parts of the world, and some places may experience population decreases. Human demands on the natural world will continue to increase. How well-being will evolve is uncertain, but all three scenarios identified *poverty* as a major factor that will influence protected areas. Will the gap between the rich and the poor continue to grow, and if so, what are the likely economic and social consequences for protected areas? And how should protected area managers respond?

National security is an issue that will not go away. Threats to governments are real, though they may take unexpected forms. Colombia, Ethiopia, India, and Central Africa provide examples of how

protected areas can survive in stressful times, and protected areas are illustrating new means of cooperation across international borders. How will societies respond to increasing insecurity, whether real or perceived, and how will this influence protected areas?

The three scenarios have shown that *global trends affect regions, countries, and societies in different ways*. Because no one answer will address all protected areas problems, a mix of approaches is needed. Global connections may not last. Will the benefits from globalization outweigh its costs and will the benefits be equitably shared? Will the international community succeed in creating a viable governance structure to manage the global issues that affect protected areas? How can those concerned about protected areas best contribute to the debates?

Protected areas are profoundly affected by *what happens in the surrounding lands*, so agencies need to be increasingly knowledgeable about what is happening outside the protected area as part of their strategy to attract new supporters, mobilize new funding sources, and negotiate ecologically compatible land use practices with landowners in the surrounding lands.

Protected areas in the future will depend on *public opinion* and what are the perceived “benefits beyond boundaries.” Public perception of protected areas, and even more broadly of “nature,” will be shaped by a predominantly urbanized population, unless we slip into a Rainbow world.

Science and technology will continue to be a fundamental element in most societies, with scientific discoveries continuing to have significant influences on the technology that is applied to environmental manage-

Table 1. The three scenarios.**Scenario 1: The Triple Bottom Line**

By 2023, the world community has finally concluded that its self-interest will best be served through considering the planet to be one world. The Triple Bottom Line world treats economic growth, social well-being, and environmental sustainability as three intertwined goals. Governance follows the principle of subsidiarity, with decision-making as close as possible to the citizen. The “Global Alliance,” a tripartite international body of governments, the corporate sector, and civil society, has replaced the United Nations to become an international governance body, and the nation-state has become less important as a decision-maker. In the Triple Bottom Line world, protected areas are more financially sustainable, as their value for providing environmental and social services has become recognized and converted into policy. They still are constantly threatened by alternative land uses (McNeely and Schutyser 2003, 18).

Scenario 2: The Rainbow

In the year 2023, the Rainbow world has gone through tumultuous changes that essentially reversed the move toward globalization that seemed inevitable back in 2003. One result was that protected areas are no longer seen as worldwide, or even national, concerns, but are managed for the benefit of local communities. Inevitably, some protected areas that had been imposed by national interests have been converted to agriculture, and communities have sprung up in arable locations within former national parks. But in many cases, the local communities saw it as in their enlightened self-interest to maintain the protected areas, with some areas even attaining a sacred status. In the Rainbow world, local interest dominates, with profound implications for protected areas, both positive and negative (McNeely and Schutyser 2003, 26).

Scenario 3: Buy Your Eden

Economics is the dominant theme in the Buy Your Eden world, and the gap between the rich and the poor has widened in 2023. Many protected areas have been privatized, and new ecotourism multinationals are running the worldwide system of “The World’s Greatest Nature,” appealing to the prosperous international tourism market. These fortunate few outstanding protected areas (which were called World Heritage Sites until they were purchased by the consortium of private tourism multinationals) are very well managed for tourism objectives, which often include maintaining biodiversity, especially of the charismatic type. But the numerous other protected areas that are not deemed to be of sufficient profit potential are suffering from inadequate investment and many fall prey to the growing numbers of desperate rural poor (McNeely and Schutyser 2003, 34).

ment. While it is not clear in which direction and how fast scientific discoveries will evolve, and how the public will respond, those who are most successful in adopting useful new technologies will prosper more than those who do not, or those who adopt inappropriate new technologies.

And finally, *climate change* will remain a wild card, with unknown—but possibly profound—implications for many species and ecosystems. How can protected areas be best designed and managed today to enable them to adapt to possible future climate changes?

Many other lessons can be drawn from the scenarios and applied as appropriate to the many strategic issues affecting protected area agencies and their supporters.

Conclusions

Lessons derived from the three scenarios suggest some general conclusions about how protected areas should be managed in the future.

Understanding biodiversity. Irrespective of what may happen in the future, building a better understanding of biodiversity will be essential for ensuring appropriate human adaptation to changing conditions. A departure point for protected area planners has always been that protected areas should represent the biodiversity of the area adequately, and it should be protected from negative external influences. Which are the native ecosystems and species, how do they relate to each other, how are they changing, and how can they best be managed to provide the optimum mix of benefits?

Promoting social equity. The scenarios have revealed how difficult is the concept of social equity. The Rainbow scenario suggests that unbridled social equity can be

chaotic, while Buy Your Eden makes the point that excessive social inequity carries many of its own problems. And even in a Triple Bottom Line world, social equity is an elusive goal, but one that is essential to seek if protected areas are to prosper in the face of multiple demands. The survival of many protected areas may well depend on greater equity: ensuring that the general public is able to benefit from the protected areas, rather than seeing them as playgrounds for the wealthy. The future of protected areas will also be affected by the balance between “power-based” rights and “interest” rights. Power-based rights flow from those in power imposing their will on what happens in protected areas. Interest-based rights acknowledge the rights of those whose livelihoods depend on the issues being discussed and their rights to be a part of the decision-making processes. For protected areas to survive and have relevance in this changing world, interest-based rights may need to become a more integral part of future decision-making processes.

Generating conservation incentives and finance. Under any scenario where protected areas survive, they will need financial support. This is a challenge that deserves our most creative thinking, but increasingly needs to be based on the principle of “user pays,” including innovative sources such as payment for ecosystem services. And governments may need to embrace the user pays concept more enthusiastically, enabling protected areas to retain more of the income they generate. That said, some protected areas are unlikely to be able to generate sufficient income on their own, as their values are primarily in the form of public goods that benefit all people. They therefore will need to continue receiving public funding. Protected area agencies

need to see themselves much more as service providers to society, providing both income-generating (recreation, tourism, ecosystem functions) and non-income-generating (biodiversity conservation, cultural values) services. Agencies also need to become more businesslike in their operations, seeking appropriate ways of providing services compatible with their conservation objectives in order to mobilize additional income; at the same time they will need to monitor more effectively the achievement of conservation and management objectives, since society will hold them accountable for delivering tangible results. As in much else, diversity will be the key to success in financing protected areas.

Expanding international engagement. The structure of international conventions is already proving its value, but clearly much more can be done in this field, including protected areas in the open seas, transboundary protected areas, and improved cooperation in information exchange and capacity building. But the scenarios have also shown the volatility of such engagement.

Ensuring sustainable ecosystems and livelihoods. Protected areas have demonstrated their value for conserving biodiversity that otherwise might well be lost. Two of the scenarios have made the point that protected areas also provide the capacity to adapt to climate change when they are properly designed. More effort needs to be given to ensuring that protected areas are designed as part of a system, with appropriate connections between the different parts. But under any realistic scenario, protected areas will be insufficient for actually conserving the planet's biodiversity unless the land and waters outside the protected area system are managed in ways that are consis-

tent with the objectives of the protected areas. This may require a much more sensible form of human relations with the land across the entire planet. To achieve this in the future, successful conservation will require working at a larger (landscape, seascape) scale, since the challenges facing protected areas are too complex and involve too many different interest groups to be solved at the level of individual sites.

Scenarios as a tool for protected area managers

The scenarios have indicated a wide range of possible trends or patterns of events, but whether these will have positive or negative impacts on protected areas depends very much on how the responsible agencies respond. Agency-level scenario planning can be a useful tool for helping managers deal proactively with such developments.

For managers, the key responsibility is to safeguard the values of protected areas while ensuring their long-term viability. Scenario planning could become a useful tool to help planning for these objectives in an uncertain world. Managers may find it useful to build their own possible stories of the future, with regard to the most important local uncertainties (e.g., financing, political support, land use pressure). This suggests that catalytic, free-thinking groups need to be formed that can look at different strategies and provide "risk-free" settings where protected area managers can meet with other interest groups to test new ideas and new approaches, helping to generate innovation and benefiting from discussions with others holding contrasting views.

Protected area managers can use scenario planning to lift themselves above short-term politics to develop strategies for

securing environmental integrity. This in turn suggests the creation of an international forum of protected area managers where different ideas and different approaches can be discussed and analyzed, leading to a range of approaches to fit local needs and political environments.

Protected area managers are facing a world that is changing rapidly, and where opinions and values range widely. Scenario planning is an important tool for coping more effectively with the risks and uncertainties faced by protected areas.

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Jeffrey A. McNeely, IUCN–The World Conservation Union, Rue Mauverney 28, CH-1196 Gland, Switzerland; jam@iucn.org