Introduction to the Ecoregional Assessment and Biodiversity Vision Toolbox

For the past decade, The Nature Conservancy and World Wildlife Fund have used ecoregions as fundamental geographic units for assessing biodiversity to define visions for conservation success and to inform the types, places and priorities for actions. These organizations have provided extensive guidance, tools and resources through several documents, books and CDs, including:

- A Workbook for Conducting Biological Assessments and Developing Biodiversity Visions for Ecoregional-Based Conservation. Part I Terrestrial Ecoregions (2000)
- A Source Book for Conducting Biological Assessments and Developing Biodiversity Visions for Ecoregional Conservation. Volume II Freshwater Ecoregions (2002)
- Designing a Geography of Hope Volume 2 (2000)
- A Resource Guide to Terrestrial Conservation Planning at the Regional Scale (2003)
- Drafting a Conservation Blueprint: A Practitioner's Guide to Planning for Biodiversity (2003)
- Ecoregional Conservation: An Interactive User's Guide (2004)

We have learned a great deal from the conservation scientists and practitioners around the world who have created numerous ecoregional assessments and biodiversity visions. There have been significant innovations and advancements in approaches, methods and tools from second iterations, and working in new geographies with different levels of data availability, staffing capacity, partner and stakeholder involvement, and funding. Most importantly, we have been learning from implementing conservation actions based on the information generated in ecoregional assessments and visions.

The Ecoregional Assessment and Biodiversity Vision Toolbox compliments existing resources by providing updated primary guidance, tools, resources and case studies from insights gained from onthe-ground experiences and innovations. The Toolbox is web-based, which allows for current updates of concepts and materials. The Toolbox is most importantly a continuing opportunity for sharing and learning of best practices for ecoregional conservation across the wide variety of contexts in which we work.

The Toolbox is organized around the <u>Standards for Ecoregional Assessments and Biodiversity Visions</u> (TNC and WWF 2006). These standards are considered key ingredients by TNC and WWF for thorough and credible ecoregional conservation assessments and biodiversity visions. The standards allow flexibility in approaches for the variety of situations that are confronted and the opportunity for innovation while retaining a minimum level of rigor in conservation planning science and consistency of information needs. Each standard is also categorized according to the Conservation Measures Partnership's <u>Open Standards for the Practice of Conservation</u> in brackets (CMP 2004).

Within the Toolbox, there is a unit for each standard which includes the following sections (as appropriate) and contains on-line content, downloads and related links when available:

- Rationale. Taken directly from the Standards document.
- Recommended Products. Minimum products that should be generated.
- **Guidance**. Provides background to the standard organized by sections addressing conceptual issues and methods necessary to fulfill the standard (e.g. practices).
- **Opportunities for Innovation**. Summary of outstanding issues that need to be addressed and concepts and methods that need development.

- Case Studies. Short summaries of examples from completed ecoregional assessments. Links
 are provided to the case studies.
- Tools. Selection of useful data management and analytical tools relevant to the standard. Links
 are provided to as many tools as possible.
- **Resources**. Relevant web sites and important publications.

The content can also be downloaded as a Word document for viewing off line or printing. A link to the Word document for each unit is provided at the top of each unit. Enhancements scheduled for the near future include an annotation of resources, a glossary of terms, the conversion of Word documents to PDF's to improve readability and a collated document containing cover matter and the content of all of the units.

The first version of the Toolbox (February 2006) is an initial minimum set of tools, resources and case studies. Ecoregional conservation concepts for the WWF are embedded in the text and case studies are provided. However, the Toolbox is based primarily on TNC language, methods and experiences. For instance, we use the terms ecoregional assessment and biodiversity vision in the standard titles, but have used only the term ecoregional assessment throughout the remainder of the Toolbox for simplicity.

The Standards

- 1. <u>Assemble an ecoregion team with strong and ambitious leadership, and broad expertise in ecology, conservation biology, data analysis and management, and socioeconomic capacity.</u> [Conceptualize]
- 2. <u>Engage key internal and external partners and stakeholders throughout the process.</u> [Conceptualize]
- 3. Have work plans, content, and products peer-reviewed. [Analyze]
- 4. <u>Make all products, methods and supporting data publicly available, in accordance with data sharing agreements.</u> [Share]
- 5. <u>Use a consistent data management framework in accordance with internal and partner organization data standards.</u> [Conceptualize]
- 6. <u>Develop assessments/ visions within ecologically meaningful areas adopted or adapted from existing ecoregional classifications. [Plan]</u>
- 7. <u>Select terrestrial, freshwater and marine biodiversity targets/ biodiversity elements/ features across multiple biological and scales.</u> [Plan]
- 8. <u>Develop explicit abundance and distribution goals for conservation targets/ biodiversity elements.</u> [Plan]
- 9. Screen all target/biodiversity element occurrences for viability or ecological integrity. [Plan]
- 10. Conduct an analysis of the severity and geographic scope of threats to conservation targets/biodiversity elements and their occurrences, and analyze the root causes of priority threats. [Plan]

- 11. <u>Design ecoregional portfolios/biodiversity visions to best meet goals for all conservation targets/biodiversity elements, using the principles of efficiency, representation, irreplaceability, and functionality</u>. [Plan]
- 12. Assess and report ecoregional conservation status at appropriate intervals. [Analyze] (*Unit under development. Check back soon.*)
- 13. Set overall priorities for conservation action within the ecoregional portfolio/ biodiversity vision and define institutional roles and priorities. [Implement]
- 14. <u>Produce a long-term financial plan to support strategy and measures, implementation, further data development, and analyses.</u> [Plan]

How to Contribute

We want to make the Toolbox more inclusive and comprehensive by adding additional experiences from TNC, WWF and efforts from other conservation organizations and resource management agencies around the world, especially examples from outside the United States. The initial intent of this resource is not to be as comprehensive as many previous resources, but to share tools, methods, innovations, experiences and expertise from the collective group of practitioners to the broader conservation community. This is a catalyst for learning from the shared ideas and experiences of conservationists. The limited set of examples and resources is due to the restricted time frame and resources available to the project, and not due to any limitation of quality examples or resources from around the world in the conservation community. There are currently additional resources being accumulated and case studies being created. Anyone interested in providing information and case studies to the Toolbox is invited to do so. Your contributions are the mechanism for expanding the opportunity for sharing and learning through the Toolbox.

There are several ways to provide this information: the comment queue, the Toolbox Evaluation Form and the Case Study Template. The comment queue can be accessed by clicking on the "add a comment" button at the bottom of each unit. This provides a forum for public and interactive discussions pertaining to the content of a given unit. The Toolbox Evaluation Form was created to encourage more detailed comments and critique to improve toolbox content. Please download, fill out and submit this form to EAToolbox@tnc.org. If you wish to contribute a case study, please download, complete, and submit the Case Study Template to EAToolbox@tnc.org. Keep in mind that Case Studies are organized by the Ecoregional Assessment and Biodiversity Vision Standards. A case study should highlight an innovation or best practice pertaining to one standard. Take a look at existing case studies for guidance on scope and content. Also, please be sure that there are no copyright restrictions to providing your information on the web. Case studies may be edited or sent back for clarifications. For further assistance, contact Jonathan Higgins (ihiggins@tnc.org) or Rebecca Esselman (resselman@tnc.org).

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WWF (2002). Ecoregion Conservation: Securing Living Landscapes through science-based planning and action. A users guide for Ecoregion Conservation through examples from the field. Washington, DC. CD available from Suzanne Palminteri at: Spalminteri@earthlink.net