

## ❖ STANDARD 3: HAVE WORK PLANS, CONTENT, AND PRODUCTS PEER-REVIEWED. [ANALYZE]

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### **Rationale**

Peer-review is an important process to strengthen the assessment/vision process and products. Peer-review creates opportunities to make results more scientifically rigorous, comprehensive, appropriately presented and available to support implementation.

### **Recommended Products**

- Participation by ecoregional assessment/vision teams early in their process in a peer-review workshop. This review will result in a formal document ("contract") among peers stating next steps to strengthen the process and products.
- Outreach for peer-review and participation in peer-review in all phases of work.
- Documentation of how peer-review (through formal workshops, one-on-one interactions and other means) was accomplished.
- Present final assessment/vision for peer-review to organizational core-support teams. This review will evaluate the assessment/vision in relation to standards, identify gaps, comment on potential successes and limitations of the assessment/vision in supporting conservation, and propose priorities and next steps to strengthen it.

### **GUIDANCE**

Peer review is a mechanism for quality control. Frequent and objective feedback from experts on a topic enable teams to produce a higher quality product born from a credible workplans, comprehensive and salient data, the most appropriate use of available tools and methods, reasonable assumptions, and the drawing of logical conclusions. Peer review also fosters trust among peers, partners and stakeholders, and lends credibility to the results of an ecoregional assessment. Finally, as we embrace and engage in peer review we become a learning organization involved in action learning (Figure 1). A learning organization encourages on-the-job professional development, the informal and formal sharing of lessons learned and innovations, and an environment conducive to life-long learning (Bruce 1997).

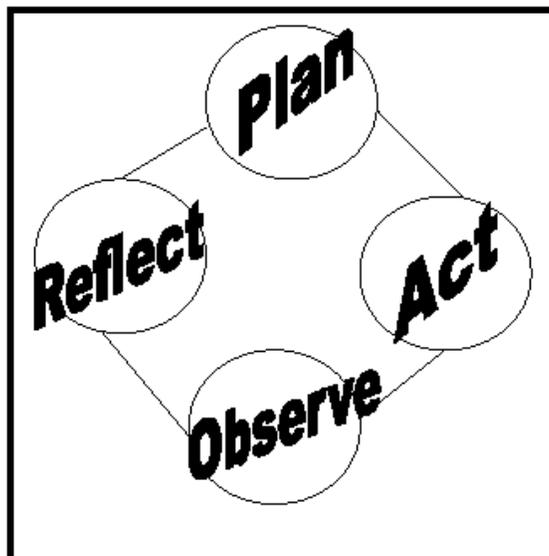


Figure 1. The Action Learning Cycle from Zuber Skerritt, Ortrun (1991) Professional Development in Higher Education, CALT, Griffith University, Brisbane.

To guide you through the process of peer review it is important to understand:

- The role of peer review in ecoregional assessments,
- How to solicit peer review,
- Components of Ecoregional Assessments to undergo peer review: workplan, content and products.

### *The Role of Peer Review in Ecoregional Assessments*

Peer review is used in ecoregional assessments to share work plans, processes, information, technical/scientific aspects, challenges and decisions with peers and outside experts in order to strengthen them relative to our set of standards. Reviewers can provide critical feedback regarding the technical and scientific merit of approaches and methods, ensure that information used to build the assessment is complete and accurate, and identify best practices from their own experiences that might enable a team to strengthen their assessment and address key challenges facing them. Team members use recommendations to make adjustments to generate more robust ecoregional assessments and better inform the implementation and measures of conservation actions.

Although many teams regularly use reviews, some teams fail to fully exploit the value of reviews to enhance their efforts. The vast majority of teams use opportunistic reviews, often only in the scientific realms of the assessment process and ask limited questions such as: Are the supporting data complete and accurate? Is the assembly process technically and scientifically sound? However, peer review should be ongoing during the assessment/vision process, extending beyond the scientific in order to set the stage for implementation. Reviews should address broader questions such as: Is the work plan developed with a vision toward implementation? Are the right stakeholders engaged in the process at the right times? Are sufficient resources (staff and money) available to produce the desired results?

Are products aimed at delivering greater conservation impact by TNC or WWF and their partners?

### *How to Solicit Peer-Review*

There are many mechanisms for peer-review. They can range from sending a document to a few colleagues to attending a TNC/WWF peer-review workshop. Often, however, peer-review is not free of cost. The types of review and the financial resources these reviews will require should be considered upfront and incorporated into the project budget and workplan. In addition human resources are necessary. The U.S Environmental Protection Agency (USEPA) requires the appointment of a “Peer Review Leader” who is chosen by a project’s lead decision maker and is responsible for organizing, conducting and completing the peer review process (EPA 2000). Assigning this responsibility to an individual will help ensure peer review is an integral part of the ecoregional assessment process.

Persons invited to review aspects of an Ecoregional Assessment should be both expert in the subject of review and have no unresolved conflicts of interest. They will need to agree to read all materials, provide critical comment in an unbiased and timely manner, and protect confidentiality of sensitive data or results. Engagement in the peer-review process is often voluntary but is a process that has benefits to both the reviewed and the reviewer, as well as the broader conservation community. You may decide that certain aspects of the Ecoregional Assessment process require the review of one or a few reviewers and for other aspects you may want to solicit broader review.

No matter what format your peer reviews take, the quality of the review depends on the quality of the draft product sent out for review, the adequacy of guidance you provide the reviewer and the match between the product for review and the reviewers expertise. Materials meant for review should be drafts however, the draft should be complete enough to give the reviewers a clear picture of your desired outcomes and how you plan to arrive at these outcomes. Accompanying these materials should be a clear and concise “charge” for the reviewer. The charge lets a reviewer know what exactly you want feedback on and how. A good charge will provide (EPA 2000):

- a brief overview or introduction (describe what the work product is, how it was developed, how it will be used),
- as needed, a brief description or listing of any background materials provided to the peer reviewers,
- the issues or questions to be addressed by the peer reviewer(s),
- the due date of reviewers’ comments,
- the format of reviewer responses,
- the point of contact in case peer reviewers have questions.

The peer review process is not complete until the comments and recommendations of the reviewers are considered and incorporated into the workplan, content and/or products

where it is deemed appropriate. This is a critical step, without which, the peer review process remains incomplete.

### *Components of Ecoregional Assessments to Undergo Peer-Review*

#### **The Work Plan**

The work plan is perhaps the most critical component of the ecoregional assessment/vision process. It sets the stage for the entire process, ensuring that all standards are adequately addressed to the extent possible, that resources are available to achieve the desired result, that the timeline is appropriate to the task at hand, and that the right mix of partners/stakeholders are engaged to ease the task of implementation. Reviewers of the work plan should include those from science, senior management and implementation realms of the lead organizations as well as participants from partner organizations.

#### **Content**

Content is the specific information, data, methods and tools used in the assessment process. Review of the content enables teams to receive critical input to address major challenges related to the more technically-oriented ecoregional assessment/biodiversity vision standards. Are there sources of critical information that have not been accessed? What are some methods for producing high quality products given limitations in data? Are approaches credible? What additional resources and expertise are available to assist teams with completing specific tasks? Reviewers for technical components of the planning process should include external and internal scientists and other conservation planners.

#### **Products**

Ecoregional assessments will not advance conservation if products are not specifically designed to inform conservation actions. Products of the assessment/vision process must meet the needs of the lead organizations and partners. Review of planned and draft products by implementation, communication, development, government relations and senior management staff can greatly improve final products and associated communication strategies. Ideally, initial thoughts and considerations into products and communication should also occur during the project planning process at the onset of the assessment/vision process, and during associated peer review of that plan.

Formal review of content and products may be necessary for certain key partners and stakeholders to use them. Government agencies often have requirements for specific information, formats, processes and participants for reviews in order to use certain type of products. These requirements are often in place to ensure that decisions that are made using the information are supported by sufficient expert review to be upheld in court. Publication of ecoregional assessment products in peer reviewed journals provides a broader community access to, and an indication of the credibility of the work. Peer reviewed literature can be cited, and is suggested by many as the ultimate source of credibility.

## **CASE STUDIES**

- **Sulawesi Ecoregional Conservation Assessment (ECA), Indonesia.** The Sulawesi ECA team solicited review from internal and external peers via three main avenues; a steering committee, a series of “roadshows,” and ongoing involvement from experts.

## **TOOLS**

**TNC/WWF Peer Review Workshops:** Aside from peer review opportunities created by ecoregional assessment teams, The Nature Conservancy and World Wildlife Fund are partners in providing formal peer review opportunities in the form of 3-day workshops. These are held around the globe 3-4 times per year and target teams at all phases of the assessment/vision process as well as teams that have experience implementing assessments and are considering additional iterations. One of the great benefits of this form of peer review is the opportunity to see many other ecoregional assessment teams addressing challenges in a variety of situations, many of which, share similarities with other teams. Teams will also benefit from hearing suggestions to strengthen approaches from many teams and peers with a wide range of expertise. Details about the ecoregional assessment peer review workshops are available at the Ecoregional Assessment Peer Review Workshop ConserveOnline workspace < <http://conserveonline.org/workspaces/era.peer.review>>.

## **REFERENCES**

### *Websites*

The Peer Review Programme of the European Employment Strategy shows peer review principles from a very different sector, but focused on learning and development of best practices. See <http://www.almp.org/en/principles.html>

The National Strategies for Sustainable Development in France has many related articles helpful when considering and soliciting peer review. See [http://www.nssd.net/peer\\_review\\_b.html](http://www.nssd.net/peer_review_b.html)

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