

Invasive Plant Management Decision Analysis Tool

Peer Review Process - Version 1.0

The Nature Conservancy - New York



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Introduction

The purpose of the Invasive Plant Management Decision Analysis Tool (IPMDAT) is to assist agencies and organizations in deciding whether an invasive plant management project is warranted and likely to be successful. A successful invasive plant management project should not only control an invasive plant, it should also achieve conservation goals such as maintaining or restoring the viability/health/resilience of desired species, natural communities, and/or ecosystem processes. The IPMDAT may also be used in cases where the invasive plant species threatens economic or human health, recreational use, or in instances where legal obligations need to be met.

The IPMDAT has four possible outcomes:

- 1) Proceed with control strategy implementation – project has a high probability of success and has conservation value,
- 2) Stop – secure sustainable funding source,
- 3) Stop – control not feasible and/or not warranted, or
- 4) Peer-review required – feasibility and/or conservation value and/or non-target impacts are uncertain.

If the outcome is #4, peer review is needed to recommend and/or determine whether an invasive plant management project should proceed. Regardless of outcome of the IPMDAT, obtaining a peer review would be beneficial for any project and could be required by agencies and organizations for all invasive plant control projects. This is especially true for projects that require a high amount of resources, for projects that require containing or suppressing an invasive plant over the long-term, or for other serious concerns.

The purpose of this document is to describe the peer review process and provide instructions for reviewers. The process is an adaptation of the National Park Services guidance on the peer review (Frost 2008) and The Nature Conservancy's conservation audit program (TNC 2005).

What is Peer Review?

Peer review is the critical evaluation of the merits of an activity conducted by impartial subject-matter experts who are not directly associated with the activity (Frost 2008). It must be objective to achieve its purpose of ensuring that the quality and integrity of the

information is accurate. The peer review process may be an open exchange of ideas or an anonymous review process.

Peer Review Process

The following is a recommended process for evaluating invasive plant management projects that have used the IPMDAT. Different agencies and organizations may choose to modify this process based on their needs and resources and should decide in advance whether peer review process recommendations will be considered binding.

The IPMDAT peer review process has three possible outcomes:

- 1) A recommendation that the project proceed.
- 2) A recommendation that the project proceed but only with revisions.
- 3) A recommendation that the project not proceed.

A “Peer Review Manger” should be designated to ensure the process is objective, assign the appropriate reviewers, keep the reviewers anonymous if that is desired, and compile the reviewers’ comments and communicate them to the project manager. Ideally, the peer review manager should not be associated with the invasive plant control project being reviewed. At smaller organizations the project manager that completed the IPMDAT may need to facilitate the peer review process.

Reviewers can be selected based on expertise in a number of specialties such as the biology of invasive plant species, control methods and associated costs, local social-political factors, financial support etc. Two to three reviewers are recommended and the peer review manager may serve as one of the reviewers if appropriate. Reviewers may come from within the agency or organization or from an associated partner organization such as an academic institution. One external reviewer is recommended to provide an outside perspective.

The project manager initiates the process by first submitting the completed IPMDAT form and any supporting information to the peer review manager (Figure 1). The peer review manager then identifies and selects reviewers that have the technical expertise to evaluate the project and sends the completed IPMDAT Form and the Peer Review Form to them. The responsibilities of the reviewers are to evaluate the completed IPMDAT project form, fill out the peer review form and recommend whether the project should proceed. The reviewers should carry out their responsibilities independently unless a collaborative review process has been mutually agreed upon. The reviewers submit their comments and recommendations to the peer review manager. The peer review manager should concisely summarize reviewers’ comments and recommendations and send the

peer review forms and summary to the Project Manager. The entire process should take no more than 30 days to complete.

If the peer reviewers differ in their recommendations at least three approaches to resolve the situation are possible:

1. All recommendations could be shared with the reviewers (anonymously if required) for their reconsideration and feedback.
2. One or two new reviewers could be sought to reconcile prior reviewers' recommendations.
3. The project manager and/or higher level managers/scientists in the organization or agency would decide whether the project should proceed with or without revisions.

The peer review manager should coordinate subsequent revisions to the IPMDAT if they are required. The peer review manager will ensure to the best of their ability that revisions address the concerns of the reviewers.

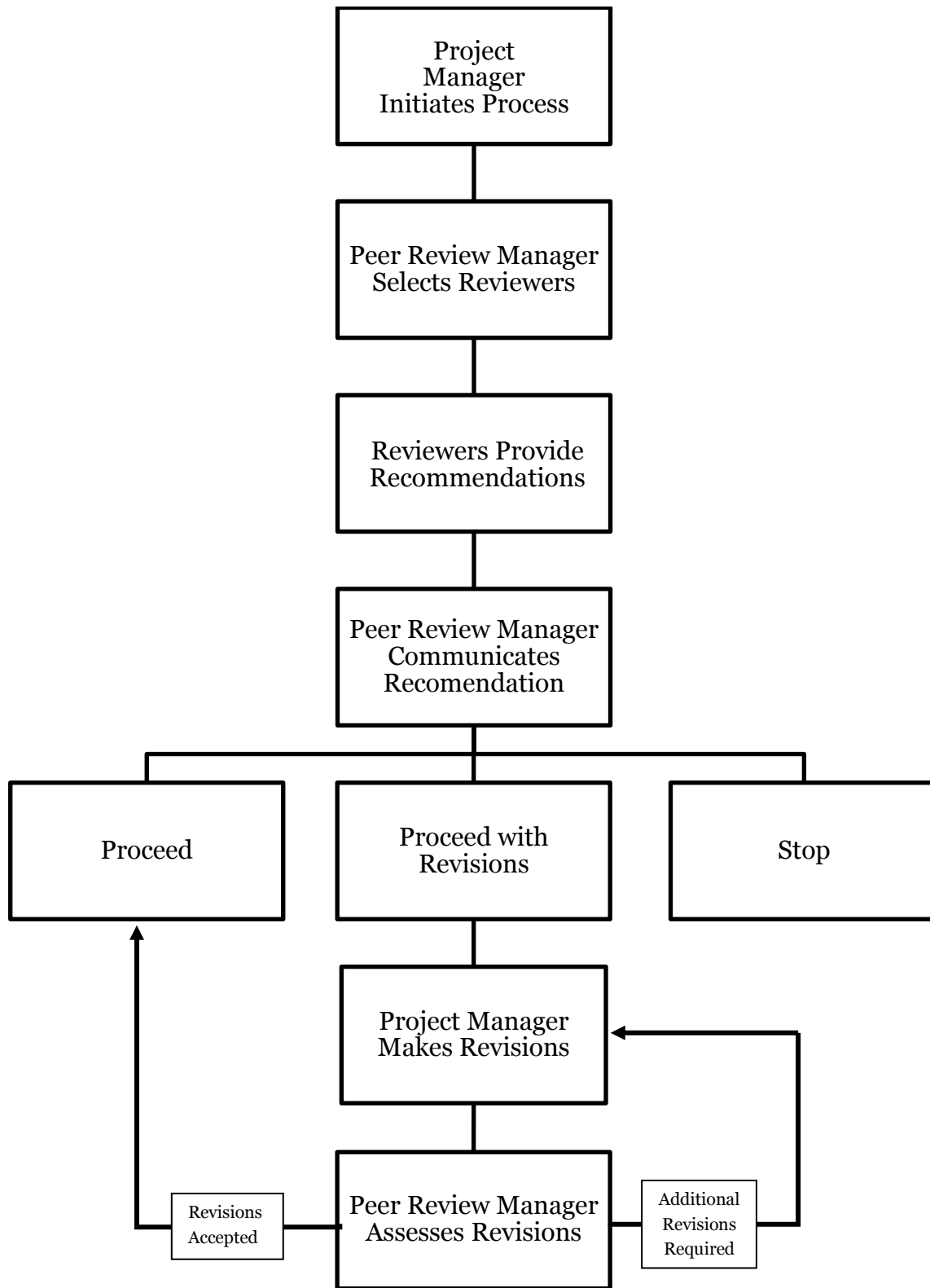
Literature Cited

Frost, H.C. 2008. Interim guidance document governing code of conduct, peer review, and information quality correction for National Park Service cultural and natural resource disciplines. US Department of the Interior. Washington, D.C.

The Nature Conservancy. 2005. Conservation audit protocol.

http://conserveonline.org/workspaces/Conservation_Audit/background/

Figure 1. Invasive Plant Management Decision Analysis Tool peer review process.



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Peer Review Form - Version 1.0

Thank you for agreeing to provide your knowledge and experience in evaluating this invasive plant management project. The information provided in your review will add credibility to the final decisions managers make for their invasive plant management project. Your review, recommendation, and comments will be provided to the project managers(s) and others preparing this material, but your name will remain confidential unless you specifically give permission to reveal it.

First, evaluate the completed IPMDAT project form, then, fill out the peer review form below and, finally, recommend whether the project should proceed. Please provide a critical and objective review.

Project Name:	
Reviewer Number (entered by review manager):	Review Date:
Are you willing to share this review with the Project Manager? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Criteria Identified as Uncertain (entered by review manager):	

1. Project Goals and Objectives
Is there a clear project goal and associated objective(s) to focus planning and implementation? Are the objective(s) worded in such a way that the project manager will be able to measure if the management actions are successful?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Somewhat
Comments:

2. Control Strategy

Does the control strategy selected by the project manager(s) seem appropriate given invasive plant biology and its distribution in the project area and surroundings?

Yes No Somewhat

Comments:

3. Assessing Decision Analysis Criteria Documentation

Review the answer and documentation provided for each of the decision analysis criteria.

Is the documentation for each criterion complete? Does the documentation provide sufficient information to clearly determine if the project is warranted, feasible and has sufficient resources to achieve the project goal? If not what additional information is required? Does the documentation include appropriate review of the literature to put the project in the context of previous invasive plant management projects of the same species?

Yes No Somewhat

Comments:

4. Evaluating “Uncertainty”

Are you aware of additional information to address the answer(s) to the question(s) in the tool that is “uncertain”?

Yes No Somewhat

Comments:

5. Evaluating “Risk”

Given the level of uncertainty, do you believe there is a high risk that the project will fail to meet its stated goals and objectives?

Yes No Somewhat

Comments:

6. Tangible Lasting Results

Do you believe this project is a good investment of resources, resulting in tangible lasting results?

Yes No Somewhat

Comments:

7. Project Recommendation

Based on the answers and documentation provided by the project manager in the tool and level of uncertainty, what is your recommendation?

Proceed Proceed with Revisions Stop

Comments: