

Draft Revised PSM Scoping and BAS Document Guidance.

This guidance language pairs with the revised Scoping Document Template.

7.9 Scoping Document and Alternatives Analysis

7.9.1 Scoping Document and Alternatives Analysis Overview

The purpose of a Scoping and Best Available Science (BAS) Documents are to facilitate the process of designing CMER projects. The Scoping Document is a key communication tool for all levels of the AMP and is the vehicle for the Project Team to communicate to the SAG, CMER, and TFW Policy on how they would like to proceed to successfully meet a project's objectives. The Scoping Document template is located in Appendix F.

Writing the Scoping Document allows the Project Team to work on and clarify how the project will meet CMER goals and objectives. During this process, the Project Team can review and propose updates as necessary to refine any existing Problem and Purpose Statements, Project Objectives and Critical Research Questions. However, in the case where these goals have been developed through prior consensus, the Project Team should get agreement by CMER and in some cases TFW Policy for any substantive changes prior to moving the project forward. A Scoping Document will include an evaluation of alternative approaches for achieving the project objectives to determine a recommended approach. The Scoping Document should include a general description of scientific, statistical and implementation issues to the extent known to facilitate a better understanding and evaluation of the project.

For projects where the opportunity for integration exists, compare the following:

- Rule Group critical questions that are comparable to both projects.
- Additional program research, or sub-questions to the rule group questions that are identified in the Work Plan that can be supported by both projects.
- Is work duplicated with other research? What work has been completed on this topic outside of the CMER program? Can other scientific research be incorporated into the project to reduce costs, improve effectiveness, and reduce duplication?
- Can multiple projects use the same study sites?

The Scoping Document is submitted by the PM to the SAG and CMER for review and approval. Once approved by CMER, the scoping document is submitted to TFW Policy for review and approval. The final approved Scoping Document is stored on SharePoint Online and becomes a part of DNR records.

7.9.2 Context

This section contains the basic identification information for the project. It introduces the reader to the project and the adaptive management/regulatory context for the project.

Project Title: Record the project's title as it appears in the Project Charter.

Rule Group: Record the Rule Group and Program under which the project is listed in the Project Charter.

Forest Practices Rules: Identify the forest practices rules by Washington Administrative Code (WAC), guidance by board manual section number and part to be evaluated, tested, or informed by the project. Describe the scientific basis that underlies the rule, numeric target, performance target, or resource objective that the project informs and how much of an incremental gain in understanding the study results will represent.

Links to Adaptive Management: Describe the connection between the project and other projects, questions, and strategies identified in the CMER Master Project Schedule (MPS), CMER work plan, TFW

Policy initiatives, Board proposals, etc.

Timeline: Identify the fiscal year(s) the project is proposed to occur, as described in the Project Charter. During the scoping phase the Project Team may recommend modifying the timeline. If a timeline affects the budget, the recommendation requires SAG and CMER approval. Any modifications to the timeline and budget need to be reflected in a Project Charter update, which must be delivered to TFW Policy for review and approval.

Resource Objectives, Issues and Performance Targets: List, and describe as necessary, the Forest and Fish Report schedule L-1 resource objectives and performance targets, and current Workplan projects that this project will address. Describe the potential risks to resources and forest practices management effects.

7.9.3 Problem Statement

Include the problem statement that was approved by CMER and TFW Policy in the Project Charter. If the Project Team identifies modifications to the Problem Statement during scoping, the Project Team must seek SAG and CMER consensus. These changes need to be brought to TFW Policy for review and approval.

7.9.4 Purpose Statement

Include the Purpose Statement as defined in the Project Charter. If during scoping the Project Team recommends updating the Purpose Statement, the Project Team needs SAG and CMER consensus for these revisions. These changes need to be brought to TFW Policy for review and approval.

7.9.5 Objectives

Include the project Objectives identified in the Project Charter.

7.9.6 Critical Questions

Include the project Critical Questions identified in the Project Charter.

7.9.7 Testable Research Hypotheses

The study objectives, as expressed through the specific critical questions may be reduced to a testable hypothesis or hypotheses, where applicable, to facilitate scientific resolution. A literature review or baseline monitoring project does not necessarily include a hypothesis.

7.9.8 Best Available Science Summary

Include a summary of major topics, themes, methodologies, etc. discussed in the BAS document, see 7.9.14.

7.9.9 Alternatives Analysis

The alternatives analysis uses best available science (BAS) to compare and propose methods, Study Design frameworks, and costs to answer the critical questions (see Appendix C for references to CMER memo on Best Available Science (2013)). The analysis should include anticipated outcomes describing acceptable accuracies. If CMER has already conducted a BAS review relevant to the project in a stand-alone literature review, incorporate the appropriate elements in the alternatives analysis (see section 7.8, Literature Reviews).

Based on the results of the BAS review, describe different options and approaches that could effectively answer the critical questions and accomplish the study objectives. Summarize the advantages and disadvantages of various approaches. Include logistics, cost, time, staffing, environmental or landowner limitations, and other appropriate elements, as well as scientific and technical merit. This comparison of the various options provides the basis for making and explaining key decisions concerning the project design. A table listing the various options is recommended.

Consider the following BAS elements in the alternatives analysis (BM22-9):

1. Information source
2. Spatial scale
3. Temporal scale
4. Study Design
5. Methods
6. Data
7. Quantitative analyses
8. Context
9. References
10. Logical conclusions and reasonable inferences
11. Level of peer review

7.9.10 Recommended Approach

State the approach recommended by the Project Team based on the alternatives analysis. Describe any trade-offs between expected costs and anticipated statistical power and inference, if known. Be specific about the reasons the selected approach will meet the project's stated objectives.

7.9.11 Data Requirements

Identify the type of data/information needed to answer the objectives and critical questions.

7.9.12 Budget

Provide a budget range for each alternative and describe the underlying assumptions used.

7.9.13 Literature Cited

Provide all citations for referenced materials in the following format:

Author(s) [First author's last name, first name or initials. All other authors are first name or initials, last name]. Year. Title. Name of Journal/Organization/etc. Journal info issue, page range, etc. or number of pages if it is a report.

7.9.14 Appendix-A Best Available Science

Include the full BAS as an appendix.

The Best Available Science (BAS) Document is a _____.

Sections/Elements required include: _____

- *Current understanding of the topic, consistent with the process outlined under literature review (from both within and outside of CMER).*
- *Approaches and general methods/analyses that have been used successfully in similar projects.*