

Appendix 1: Summary of Quality Assurance Process

Directions for Quality Assurance Contractors

Report Requirements

Summary of the overall process

Wildlife Inventory review process. This section is a summary of the quality assurance process that I use in this region. As a quality assurance contractor you may be responsible for the shaded section.

1. Work plan review and edit

Work Plan development is done with Wildlife/Habitat Inventory Specialist (WHIS) as an active participant. The Proponent presents a workplan draft which is then edited by WHIS. Several drafts are generally required. Focus of development is on methodology and logistics.

*Outcome: Final plan is used to write contract **Schedule A**.*

2. Pre-field Database/GIS meeting

*A **Project data manager** is required for each project team. The Data manager is the only person to input field data into database and the only person to interact with the regional database managers. Prior to field work, a database meeting must be held with regional database manager and WHIS to assure that format and content of nonstandard databases are correct. Some projects will be using the SPI database (Species Inventory). In that case, RIC Project and Survey forms are required and must be reviewed for completeness prior to transcription into the database. The forms may also serve as alternatives to workplans during the Schedule A development above.*

Outcome: Database is given approval for use. Field work can commence.

3. Work in progress Reviews

- Receive and publish electronic progress reports on web

Progress reports are important as a tool for communicating to the WHIS. They should be the main vehicle for indicating problems, requesting assistance, and indicating need for changes.

Outcome: All progress reports are published on the Internet

Quality Assurance Contractor Roles

- Field review by Quality Assurance Contractor

Field review purpose is to review field logistics, technical aspects of data collection, actual method of data collection, and statistical validity of field processes. Issues such as trespass violations, safety protocol violations, statistical violations (altering experimental design in field), inconsistency in report formats, and other problems have been identified in field review. These items can be identified and then addressed.

Outcome: Field review report in the form of : 1. Observations, 2. Problems, 3. Required actions provided to Proponent, Lead Researcher, and Field Crew.

- Draft Report Editing

Draft editing should be performed a minimum of 2 times. It must be done using editors with research experience and experience in writing for refereed journals. Can be performed "in house" or using external editors.

First draft focus is on scientific considerations and on general readability. Assuming that required changes are met, second draft focus is on grammatical and presentation errors. If second draft does not meet required changes then re-iteration of first edit occurs with the same or different editors.

Outcome: Draft review includes detailed edits of the copy and a list of required changes.

4. Database Q and A

Database and GIS coverages are presented to the WHIS at the time that the final deliverables are due. This is forwarded to the Regional Data Manager and Technicians for review. Review consists of technicians attempting to load the datasets into the Oracle database in the region, loading the data from Oracle into ArcInfo. GIS coverages generated from databases or presented as a GIS product are subsequently tested by loading them into ArcInfo then checking for outliers, and checking metadata. The coverage passes when loading is successful, no outliers exist, and metadata is available. Hardcopy maps are evaluated for sound cartographic standards. They pass when maps conform to well-known standards and are easily readable.

*Results successfully loaded into the **SPI system** will be evaluated for completeness and correctness as well. If the data can be used to generate required map coverages and all required information is evident then it will be approved.*

Outcomes: Immediately usable database and GIS products. Coverages are immediately loaded into Arcview and Arcview Goat. OR Database rejection.

5. Final Product Review and Quality Certification

Final versions of all reports must include all required changes, must have addressed recommended changes, and must include all figures, tables, inclusive maps, reference cited list, and all items necessary for finished product. Must be in hard copy and digital form as specified in contract.

Project is evaluated for completion of each service and each deliverable outlined in the Schedule A of the Standards Agreement. (Completed, Acceptable, Not completed, Not acceptable)..If project is deemed unacceptable then an estimate of the cost to complete is provided and certification is withheld until completion.

Outcome: Project is either approved or not approved. Quality Certification or items required for completion are sent to Licensee and FRBC.

Directions for Quality Assurance Contractors

1. Read the standards agreement Schedule A that you are responsible for.

QA contractors must be aware of the requirements set forward in the Schedule A of the project that you are overseeing. The Standards agreement is the document outlining the requirements that the Proponent of the project (the licensee) must fulfil in order for quality certification to occur at the project's completion. Beyond these directions, you should contact the Regional Inventory Specialist regarding clarification and questions on reporting requirements.

2. Field Review, Oversight, or Draft Review

You may have been hired to complete a field review and/or to perform oversight or draft review functions. These tasks differ in their requirements. In each type of review a report is required. Review reports in electronic format should be sent to the WHIS and the licensee contract administrator. Reports should be sent within 2 weeks of the review. The following outlines the requirements for each type of report.

3. Field Review

The Field Review's purpose is to review field logistics, technical aspects of data collection, the actual method of data collection, and the statistical validity of field processes. Issues such as trespass violations, safety protocol violations, statistical violations (altering experimental design in field), inconsistency in report formats, and other problems have been identified in field review. These items must be identified and then reported to the WHIS, the proponent representative and to the contractor. A follow up review may be required to assure compliance.

Field Report Requirements

Observations

Problems

Required and recommended changes

Is a follow up required?

4. Oversight Review

Oversight reviews should be a collaborative relationship akin to editor and writer. “Oversight” means that the QA contractor develops a relationship with the contractor at the early stages of the project providing a needed second opinion and critical review of ongoing work as required. In this capacity you will troubleshoot and advise the contractor.

Oversight Review Report

Provide a brief report outlining:

Date

Name

Objective of review

Observations

Problems, realized or potential

Recommendations

5. Draft Review

A “Draft review” is primarily an editing function similar to that encountered in peer reviewed journals but not as rigorous since only one individual is reviewing the work. Draft editing should be performed a minimum of 2 times. First draft focus is on scientific considerations and on general readability. Assuming that required changes are met, the second draft focus is on grammatical and presentation errors. If the second draft does not meet required changes then

re-iteration of first edit occurs with the same or different editors.

Draft Review Report

The draft paper should be edited using the track changes function in Word 97. An electronic copy of the edited draft is required. Use captions to make comments in the draft. Also, provide a brief report outlining the major and specific suggestions and requirements to the WHIS and the contract administrator for the licensee.

1. Review the “Schedule A” requirements for format and media of delivery. Assure that these requirements are met.

2. Scientific efficacy

- Overall:

Does the paper present a strong case in support of the conclusions reached?

- Introduction

Is there sufficient background in the introduction to provide context?

Are there adequate background references?

- Methods

Were methods altered or modified? Was this justified?

Are methods clearly explained?

Is there reference to similar approaches?

Are RIC protocols followed?

- Results

Is there a clear presentation of results?

Are results clearly separated from Discussion or conjecture?

Are statements of method, literature references, or conjecture in the Results section when they should properly be a part of another section?

Is there a proper use of statistics? For example, are tests of significance used where possible and appropriate?

Alternatively, are statistical methods used in inappropriate ways to convey greater certainty than is warranted?

- Discussion

Does the discussion adequately address issues or points relative to the results?

Is there attention paid to potential weaknesses and to errors made?

Is there adequate comparison to references?

3. Presentation

Is the grammar clear, non redundant, and generally acceptable?

Assure that spelling is correct.

Is the writing style concise and coherent?

Is the proper use of references?

Is the Reference Cited list in an appropriate format?

Figure formatting should follow common standards for journal publication.

Are figures properly referred to within the text?

Are figures in text boxes with labels and explanations so that they are “stand alone”?

Table formatting should follow common standards for journal publication.

Are Tables properly referred to?

Tables should be in text boxes with labels and explanations so that they are “stand alone”.

Appendix 2. Progress report format

Email this Progress Report to the Regional Inventory Specialist Monthly.



Province of
British Columbia



Ministry of Environment, Lands and Parks
MONTHLY PROGRESS REPORT

To: Sal Rasheed

From: *Name of Consultant*

Date: *Date*

Re: **Resources Inventories Program Progress Report for
Month**

Project: *Project Name*

List services performed, problems encountered. Use this report to ask questions and request meetings to address operational problems.