Terrestrial Ecosystems Information

Guidelines for Developing a Project Plan

Prepared by:
Ministry of Environment
Ecosystem Information Section, Ecosystem Branch
for the Land Base Investment Program, Forest Investment Account

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Table of Contents:

1.0 Introduction:

The guidelines for developing a project plan have been developed by the Ministry of Environment to aid in the successful implementation of Terrestrial Ecosystem Inventory (TEI) projects. TEI projects include those using the following RISC standard methodologies:

- Terrestrial Ecosystem Mapping (TEM),
- Predictive Ecosystem Mapping (PEM),
- Sensitive Ecosystem Inventory (SEI),
- Bioterrain mapping,
- Terrain Inventory Mapping,
- Landslide Inventory,
- Terrain Stability Mapping (TSM),
- Soils mapping,
- Wildlife Habitat Ratings (WHR), and
- Species Distribution Modelling (SDM).

The Director of the Ecosystems Branch, Ministry of Environment, is the provincial data custodian for all Terrestrial Ecosystems Information (TEI) collected and produced in accordance with the Resource Inventory Standards Committee (RISC) standards listed above. Note there are some input components of TEI data where the custodial responsibilities are that of another agency. For example, the Biogeoclimatic Ecosystem Classification (BEC) System forms a key component of TEI ecosystem inventory and mapping (TEM & PEM) however, the data custodian for the BEC component is the Research Branch, Ministry of Forests and Range, not the Ecosystems Branch of MoE. In this example, any proposed changes to standard BEC units would need to be approved by the Ministry of Forests before being implemented.

The TEI FIA technical contacts are designated custodial representatives responsible for the collection and maintenance of these TEI data sets, including all of the associated RISC standards and related business processes. In recent years, concerns have been raised regarding many different aspects of TEI FIA LBIP projects including overlapping projects, inventory data gaps, poor quality data and/or data of limited interpretive value, non-standard deliverables, quality

assurance methods and the selection of inventory methods that do not match the stated project objectives. From a custodial perspective, most of these concerns could be alleviated through better communication of the project details, between the recipient, investment manager and data custodian(s), during the initial stages of project planning. In order to effectively improve communications, and the efficiency of the overall planning process, a two phase approach to project planning is being implemented.

2.0 TEI Project Plan Development:

To help frame these changes, it is important to understand how this new process fits into the overall workflow for a typical TEI project. As shown in Figure 2.1, a project begins with the development of a plan and the relative success of that project is dependent on the ability of the plan to effectively address all aspects of the business, including the identification of roles and responsibilities for all involved.

As noted above, the project plan is to be implemented using a two phase approach. The first phase of project planning encompasses the development of a simplified, broad project plan necessary for funding approval. If approved, the second phase of planning is focussed on the development of a more detailed project work plan. Figure 2.2 outlines this new approach. Under this new process, clear lines of communication between the recipient(s), project administrator, investment manager and the appropriate data custodian(s) are essential. Coordination between all parties will help to guide the determination of inventory priorities and ensure that the project objectives, methods, and deliverables are clearly communicated and understood by all.

Figure 2.1 Typical TEI FIA project work flow.

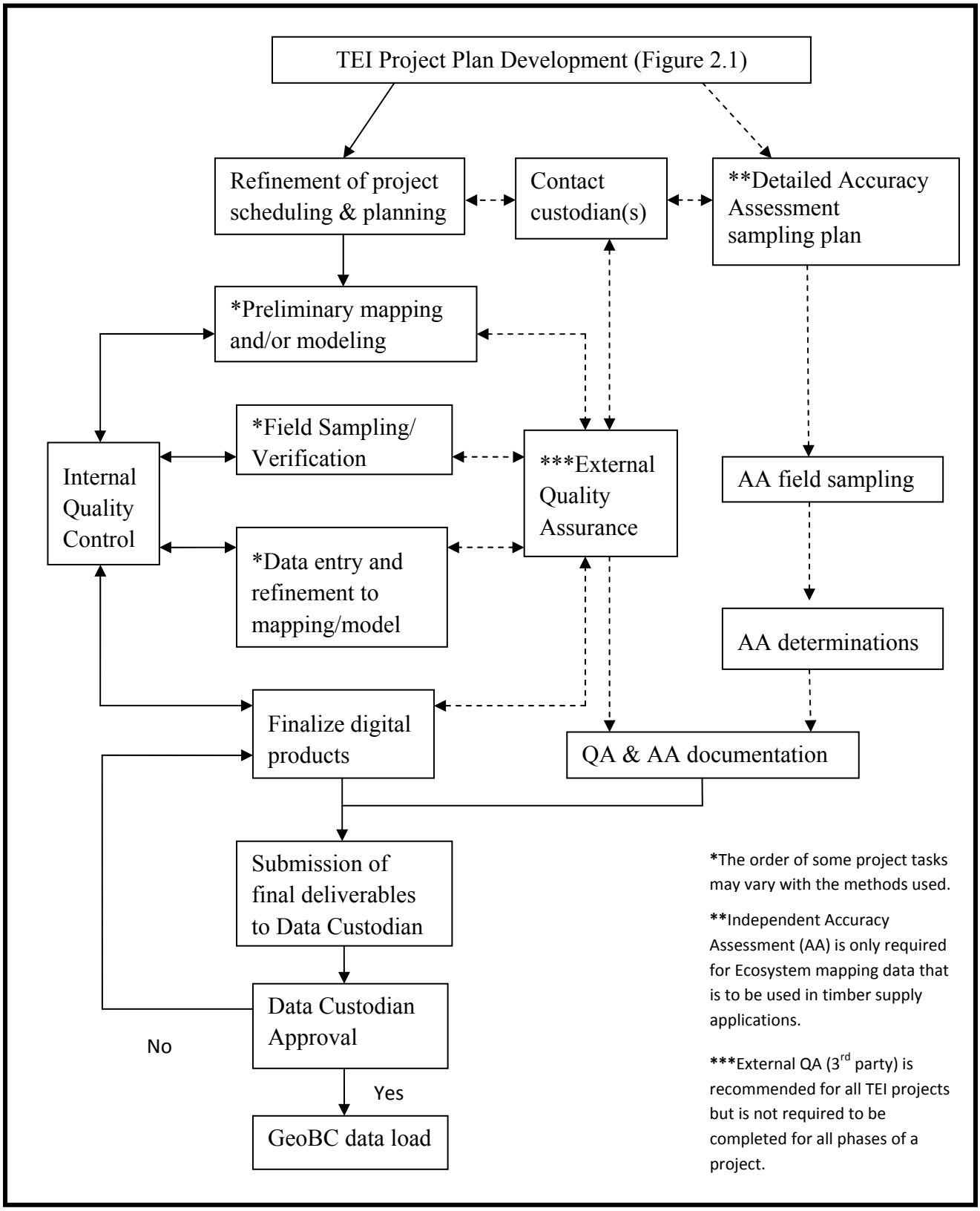
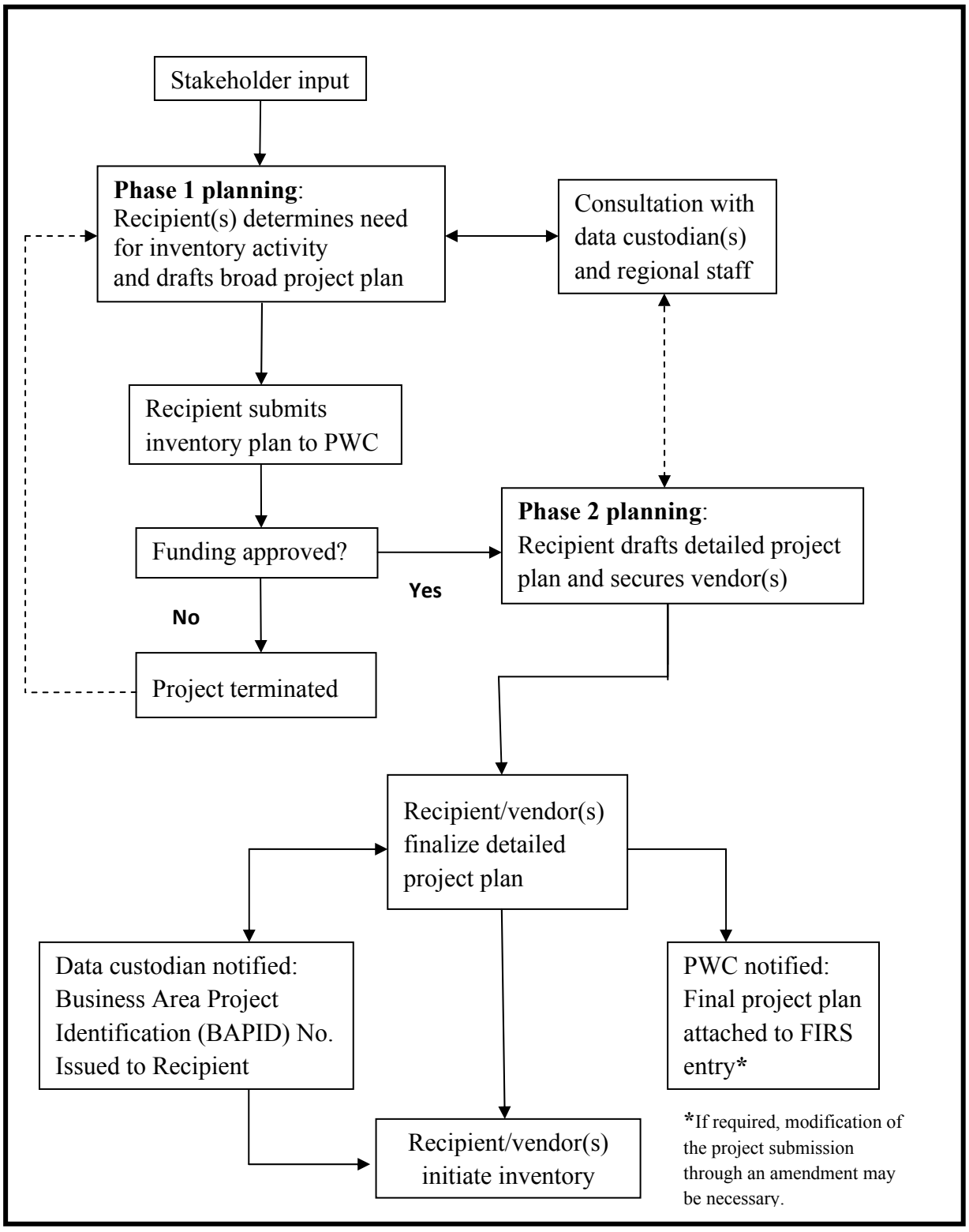


Figure 2.2 TEI FIA project plan development process



Both phases of the project planning process will typically be led by the recipient(s), or designated project coordinator, and communicated to the applicable data custodian(s) for input. The broad project plan associated with phase 1 should include sufficient project information to allow for the plan to be submitted for funding approval. The suggested content for phase 1 project plans include: a description of the project area (e.g. spatial boundary), a list of the broad project objectives, a brief description of the proposed methods (e.g. applicable standards, map scale, survey intensity level, etc...), a brief list of deliverables and estimated budget and timeline.

Once funding has been approved, phase 2 of planning begins. The goal of phase 2 is to develop a detailed project work plan. See Appendix A for a list of project components that should be taken into consideration while developing a detailed project plan. Communication with the data custodian(s), and any other applicable stakeholders, may be useful during this phase of planning. It is recommended that the first draft of the detailed plan be used to tender the project. Once a vendor(s) has been selected and a contract is in place, the draft detailed plan should be amended and finalized. This plan should then be attached to the project(s) entry in the FIRS database and copied to the appropriate data custodian(s) (see Table 2.1).

Table 2.1 TEI FIA technical contacts

Resource Inventory Eligible Activities	**TEI Technical contacts**
Terrestrial Ecosystem Mapping (**TEM**), Predictive Ecosystem Mapping (**PEM**), and TEM / Vegetation Resources Inventory (VRI) Integrated Inventory (**TEM/VRI**)	**Corey Erwin** (250) 387-7202 and/or **Tony Button** (250) 387-9795 Email: **Eco_mail@Victoria1.gov.bc.ca**
Terrain Stability Mapping (**TSM)**	**Deepa Filatow** (250) 861-7675 and/or **Maija Finvers** (250) 387-9474 Email: **Soilterrain@Victoria1.gov.bc.ca**
Wildlife Habitat Ratings (**WHR**) and Species Distribution Modelling (**SDM**)	**Diana Demarchi** (250) 287-2031 and/or **Tony Button** (250) 387-9795 Email: **WHR_mail@Victoria1.gov.bc.ca**

Appendix A: Project Planning Considerations

Phase 1: Strategic Project Plan
(Led by the Recipient - Endorsed by the Custodian)

1. **Define the Project Name and Inventory Type (What)**
   Does the name of the project reflect the inventory type and a unique prominent geographical reference (e.g. landscape unit, major river, lake, mountain range, etc...)?

2. **List broad Objectives and Rationale (Why)**
   Have the project p**urpose and objective** been clearly documented and described? **Why** is this work being completed?
   Why is an inventory needed and how will the information requirements be fulfilled? Have provincial / regional inventory p**riorities** been considered?
   Have the inventory **needs of other stakeholders** been considered?

3. **Define the Project Area (Where)**
   What is the study area boundary?
   Are there adjacent projects which will require edge-matching? Is this data readily accessible?
   Is it a standard product? Is the quality and/or accuracy of the data known?

4. **Define (Who) are the Stakeholders** including the Recipient (s), project coordinator, appropriate data custodian (s), project administrator, lead proponent and FIA investment manager.
   What are the **roles and responsibilities** of each Stakeholder?
   Are there multiple licensees involved in the project?
   If so, have all of the associated FIA recipients and applicable project numbers been listed? Has a project lead been identified?
   Who needs to be notified? Have the applicable data custodian(s) and regional government staff been informed of the project? FIA investment manager? Other stakeholders?

5. **Methods - List general project requirements (How)**
   What type of work is being performed?
   What are the proposed inventory methods? What attributes are required?
   What is the desired mapping scale? What is the proposed survey intensity level?

6. **Deliverables – (What)** Generalized Expected End-products and Uses
What are the expected outcomes? How will the products be used?
Have the **project deliverables** been clearly defined?
Are there any **interim deliverables** required (e.g. status reports for multi-yr projects)? Are there any **non-standard deliverables**?
Where do the **final deliverables** need to be submitted?

7. **Provide estimated budget (How Much)** and **Timeframe (When)**
Is this a multi-year project or not? If so, what is the estimated budget for each year?
Which phases of the project will be completed each year?

Note: Standards relating to these deliverables may be defined in the Detailed Project Plan. The Phase 1Strategic Project Plan is to be submitted to FIRS for project initiation and PwC funding approval. Use the Phase1 Strategic Project Plan as a DRAFT- Request for Proposal (RFP) or Notice of Intent (NOI) to tender the project.

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Phase 2: Detailed Project Plan

(Led by Recipient using guidelines/checklist, provided to custodian)

1. **Describe Project Background Information**
Have you outlined all of the key information about the project (e.g. the number of air photos, number of maps, geographic area, intended map scale, total area (ha), professional requirements/experience of mapping team, contact information, etc)? What is the present status of the inventory?
Are there any existing related inventories within or adjacent to the study area?
Are there any other potential data sources? What are their availability, format, quality and coverage?

2. **Standards** to be met.
Have all of the applicable standards been listed? Do any RISC and/or LBIP standards apply?
Are there any proposed variances to these standards?
Do you have the most current version of the applicable standards?

3. **Refine Project Sample Plan**
   Has a **detailed sampling plan** been developed?
   Are there **any inventory gaps and / or priorities** that have been identified by government that fall within your study area?
   Is there any opportunity for integration of these needs?
   Has this been addressed in your **sampling plan**?
   How complex is your landscape? How are the attributes of interest (e.g., ecosystems, terrain features, soil types, habitat types, etc...) distributed across the study area? Are there any access issues?
   Are there any other issues associated with field logistics? Do any these issues impact your proposed budget and timeframe?

4. **Refined Project Plan Timelines and Budget**
   Given the desired product(s) or expected deliverables and methods, are their sufficient Resources (Time, Money and Qualified People) available?
   Have all of the potential issues and risks been identified?
   Does the scope of the project need to be scaled back? Can the timeframe be extended?

5. **Communication with Custodian and other Stakeholders**
   Have all project activities been clearly identified, including respective roles and responsibilities and lines of communication for all involved?

6. **Quality Assurance (QA)** – to ensure the standards have been followed
   Have you included a Quality Assurance plan? Internal and or External QA?
   Are you following the RISC QA guidelines? If so, which components of the project will be QA'd? Has the project timeframe been adjusted to allow for iterative review of material?

7. **Accuracy Assessments (AA)**
   Is there a need for an Accuracy Assessment? If so, are you using the standard methods? Are you proposing any variances to these standards?
   Have you contacted data custodian? Do you have a contingency plan?

8. **Qualified Professionals (QP)**
   Do the Qualified Professionals have the appropriate level of training and experience to complete the work?
   Are they in good standing with their respective professional associations?