Inventory and Monitoring Toolbox

Standard Operating Procedure

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Disclaimer

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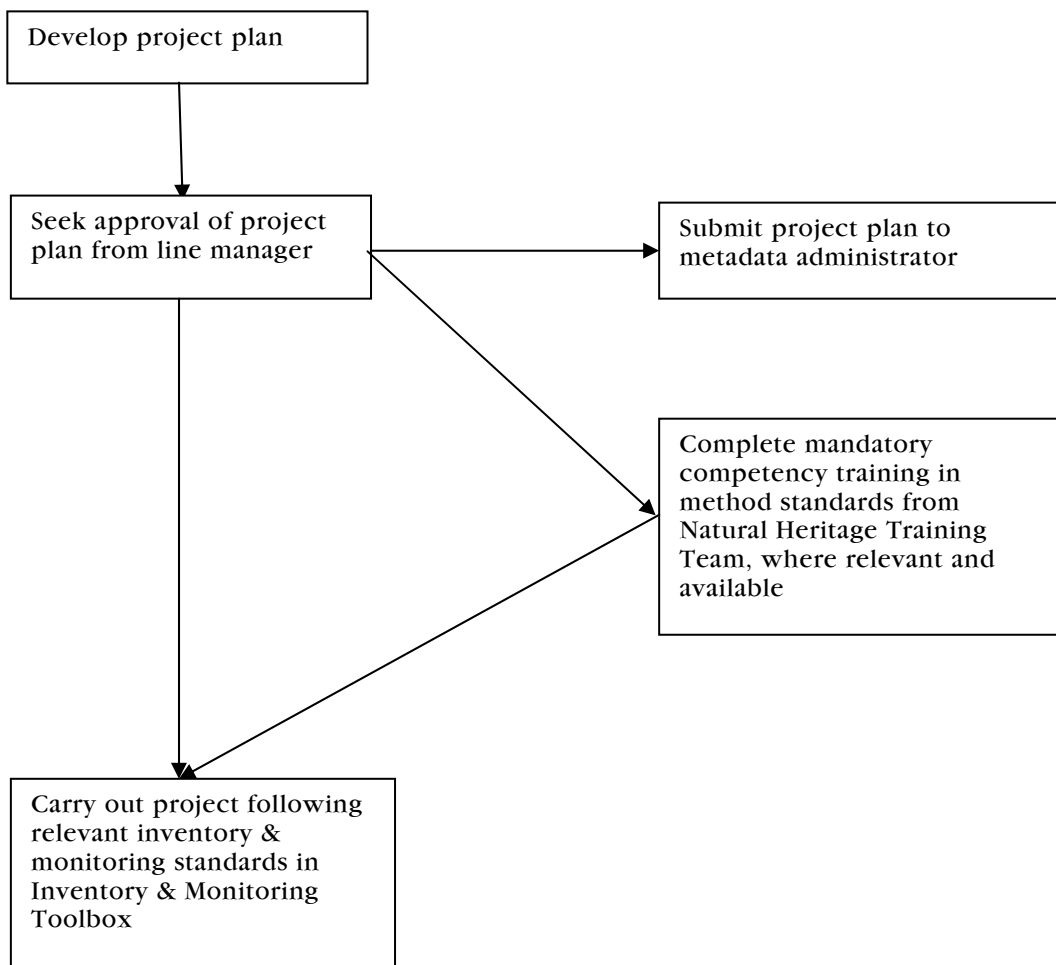
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I. Purpose

The purpose of this Standard Operating Procedure (SOP) is to ensure biodiversity inventory and monitoring standards as detailed in the Inventory and Monitoring Toolbox are upheld (referred to from now on as the Toolbox). The minimum data collection standards are specified in the Toolbox within each method description.

The Toolbox will ultimately become the authoritative source for all inventory and monitoring methods and standards. The minimum standards for inventory or monitoring populations that already exist for terrestrial animal pests (Current Agreed Best Practice), pest plants (Weed Monitoring SOPs) threatened species (recovery plans, best practise and similar documents), invertebrates, herpetofauna, vegetation monitoring (Hurst & Allen 2007a; Hurst and Allen 2007b; Wiser and Rose 1997), freshwater and marine will be integrated into the Toolbox. This integration will occur as components of the Toolbox progress and more standards are developed. In the interim, staff will adhere to inventory or monitoring standards that are referred to in the above documents until the appropriate methods are explicitly described in the Toolbox.

It is expected that every staff member who uses the Toolbox will read and understand this SOP and be aware of the sections that are mandatory.

It is recommended that the concepts outlined in the Toolbox module "Guidelines for Counting Populations", comparative tables and decision trees are read and understood before proceeding with a standard method.

II. Process

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┌─────────────────────────┐
│ Develop project plan    │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐          ┌─────────────────────────┐
│ Seek approval of project│─────────▶│ Submit project plan to  │
│ plan from line manager  │          │ metadata administrator  │
└─────────────────────────┘          └─────────────────────────┘
            │       \
            │        \                ┌─────────────────────────┐
            │         \               │ Complete mandatory      │
            │          \              │ competency training in  │
            │           \             │ method standards from   │
            │            ▶            │ Natural Heritage Training│
            │                         │ Team, where relevant and │
            │                         │ available               │
            │           /             └─────────────────────────┘
            │          /
            ▼         ▼
┌─────────────────────────┐
│ Carry out project following│
│ relevant inventory &    │
│ monitoring standards in │
│ Inventory & Monitoring  │
│ Toolbox                 │
└─────────────────────────┘
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III. Requirements table

Level II or higher managers are authorised to approve variation from SOP requirements and are accountable for those decisions. They are required to use their professional judgement and seek advice or escalate when in doubt.   All decisions should be documented. It is expected that variations from requirements will be the exception rather than the norm, and that legal (i.e. legislation and judge made laws), and health and safety requirements are effectively compulsory. Common sense should prevail in the case of exceptional or emergency field situations.

Requirements	Who is accountable for carrying out the requirement	Why?/Consequence	Links	Completed / comments
Project Plan 1. Complete Inventory and Monitoring Project Plan before undertaking a new inventory or monitoring project and when continuing with an existing one (Note there is no need to complete a project plan for every year that a remeasurement takes place)	Area Manager/TSM/CRM,	Project Plans ensure there are approval processes for inventory and monitoring projects. Project plans step staff through the key components of planning a successful project. They ensure that projects are of a required standard and adopt the national monitoring standards of the I & M Toolbox.	Project Plan docdm-146272	
2. Project Plan peer reviewed by a suitably experienced technical and/or scientific expert eg TSO/CAS/STSO	Area Manager/TSM/CRM,			
3. Receive approval for Project Plan from Area Manager/TSM/CRM	Project Custodian/Owner			
4. Submit approved project plan to	Project Custodian/Owner			

Requirements	Who is accountable for carrying out the requirement	Why?/Consequence	Links	Completed / comments
metadata co-ordinator				
Adhere to the method specifications as described in the Inventory and Monitoring Toolbox	Area Manager/TSM/CRM	National inventory and monitoring standards are upheld and implemented. This addresses potential problems with poor and inconsistent data quality.		
Complete mandatory training to competency standards. The competency standards are specified in P&OD>Training and Development.	Area Manager/TSM/CRM	Training is mandatory so that staff can reach the necessary practical standards to apply and undertake data collection of methods in the Toolbox.	P&OD>Training and Development	

IV. About this document

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Date July 2008

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Amendments

Amendment date	Amendment details	DOCDM version	Amended by
April 2009	Requirements table updated and process plan added		Kate McNutt

Terminology and definitions

Toolbox: Inventory and Monitoring Toolbox.

Method specifications: a written prescription of data collection requirements for a method.

Decision tree: a flow diagram to guide users towards the most appropriate method(s) to address their study objectives (s).

Comparative tables: tables that compare inventory and monitoring methods against set criteria in order for users to evaluate which method(s) are the most appropriate to address their study objectives.

References used:

Hurst. J.M, Allen. R.B. 2007a. A permanent Plot Method for monitoring indigenous forest – expanded manual. Version 4. Landcare Research Contract Report LC 0708/028. Manaaki Whenua Press.

Hurst. J.M, Allen. R.B. 2007b. A RECCE method for describing New Zealand Vegetation – expanded Manual. Version 4. Landcare Research Contract Report LC 0708/029. Manaaki Whenua Press.

Wiser, S.K.; Rose, A.B. 1997. Monitoring changes in grasslands - Two permanent plot methods for monitoring changes in grasslands: A field manual. Manaaki Whenua Press. 51p