



Best Practice in agricultural aviation

NZAAA Conference

6 August 2012



SFF Project Number:11/076

Environmental Best Practice in Agricultural and associated Rural Aviation

Objective:

Develop relevant, practical, and achievable environmental performance standards for agricultural aviation in regional and district plans that are consistent, accessible and understood by operators through:

- Development of tools for councils writing plans under the RMA
- Information provision and dissemination
- A [Guidance note](#) on agricultural aviation, Demonstration Days and the [AIRCARE Accreditation](#) scheme are key components

Year 1 report

- Good support from industry sectors
- Stakeholder Chairman
- Discussion at the local level
- Auckland Plan invitation
- Federated Farmers partnership
- Effective project team
- Guidance note underway

This presentation:

We cover:

- Regional meeting outcomes
- Demonstration Day
- Where to from here
 - Guidance note
- Risk based rules
 - Environmental safety
 - Flight safety

Linkages

- SFF Project and outcomes
- AIRCARE™ Environmental Management
- AIRCARE™ SMS
- AIRCARE™ Auditing
- CAA direction and policy pertaining to 137
- Risk Profiling
- Risk based auditing



SFF Project outcomes



Regional Meetings

- Sixteen regional meetings July – Oct 2011
- Attendees included pilots operators, council staff and rural and stakeholder organisations
- Issues identified
- Possible options to address

Regional Meetings

Questions asked:

- What are the issues relating to aviation in your region?
- What is working and why?
- What is needed for things to work better in the future/possible actions?

Issues Identified

The main issues that the meetings identified were:

- “Lifestylers”
- Public perception
- Regulations around water bodies
- Notification
- Product
- Client facilities

Progress

Lifestylers

- Work in Progress

Public Perception

- Indiscriminate use
- Positive publicity
- Media attention

Progress

Regulations around water

Notification

- Clarity of responsibilities

Product

- Fertiliser Physical Properties

Progress

Client Facilities

- Airstrips
- Electric fence feeder wires

Partnership

- NZAAA and Federated Farmers have embarked on a partnership
- Civil Aviation Rule 137 – first outcome

We need Federated Farmers' help to address:

- Notification
- Product
- Client facilities

DEMO DAY 2



Demo Day

Demo Day – Omaka – May 4 – Planning Institute Conference

- Demonstrated best practice
- Showed challenges the industry faces
- Showed how challenges managed
- Linked to plans that planners write
- Positive feedback from participants

Where to from here?

Guidance note

Model rule

Communication with:

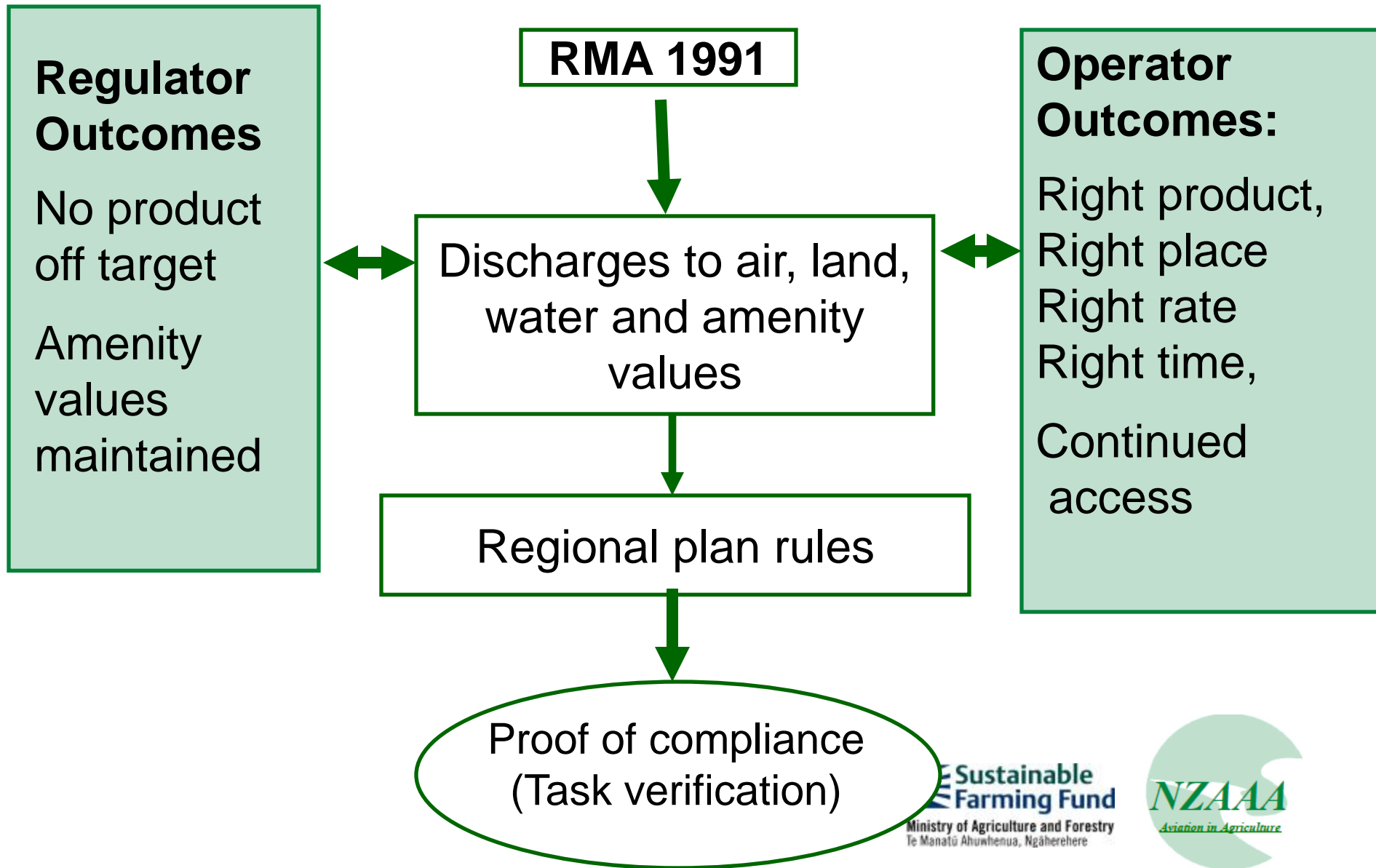
- planners
- Stakeholders
- Pilots/ operators

Streamlining plans

Project objectives:

- Remove complexity in plan requirements
- Achieve consistency between regional plans across the country

Environmental safety



How are we going?

Auckland Plan provided an opportunity to:

- look carefully at approach to plans
- how rules could be structured

Guidance Note

- Framework for putting approach into an accessible format for planners

The Auckland approach – agrichemical use

- Potential adverse effects, risk factors, exposure pathways– what are we trying to address
- Desired attributes – 18 characteristics
- Management options

Typical rules*

- (c) The discharge shall not be located within 50 metres of a school.
- (d) The discharge shall be undertaken in accordance with all mandatory requirements, including notification requirements, set out in Sections 2 and 5 of the NZS 8409:2004 Management of Agrichemicals.
- (e) Every person undertaking the application of agrichemicals shall hold a current GROWSAFE® Certificate.
- (f) Every pilot undertaking the aerial application of agrichemicals shall hold the National Certificate in Agrichemical Application (Aerial), and hold or be under training for a Pilot's Chemical Rating issued by the Civil Aviation Authority or an equivalent qualification.

* Conditions for permitted activity

Prescriptive or outcomes based rules*?

- **Prescriptive rules** - assume that keeping to what is prescribed (distances rates....) will achieve the required outcome (ie do what I say)

or

- **Outcome based** – require performance standards or outcomes to be achieved eg ... “no fertiliser directly into water..”

* Conditions for permitted activity

Who knows the business?

- **Prescriptive rules** also assume that the prescribers know what to prescribe – and compliance will achieve the required outcome. Do they, and will it?
- **Outcome based rules** – require the operator to follow good practice AND be able to verify that.

Risk based approach

Controls in a plan related to addressing potential adverse effects and risk factors

- Not prescriptive
- Able to take into account specific situation
- Operator chooses actions to reflect the risk factors

Risk Management

	Comment
Risk	Two parts - Flight safety and environmental safety
Responsibility	Who, what for
Information	What, where from, is it correct?
Action	What, when, by whom
Documentation	Who may want to know what happened

Task verification

- Where did the applicator* go? (a/c or ground-spray tracks)
- What discharges occurred?
- What were the (weather) conditions at the place and time?

The verification evidence must “reflect the risk”

* Where did the spray/fertiliser/VTA go?

RISK ASSESSMENT



Potential impact	Likelihood		
	High	Medium	Low
High			
Medium			
Low			

A risk-based approach for a Permitted Activity Rule – Part 1

- No adverse effects from off-target drift
- Follow the label requirements
- Don't spray directly into water
- Know and follow NZS 8409:2004
- Have a spray plan *
- Have the right qualification
- (E.g. GROWSAFE Certificate)
- Secure storage
- No spills when mixing
- Keep good records

A risk-based approach for a Permitted Activity Rule – Part 2

*

If spray plan shows sensitive areas then:

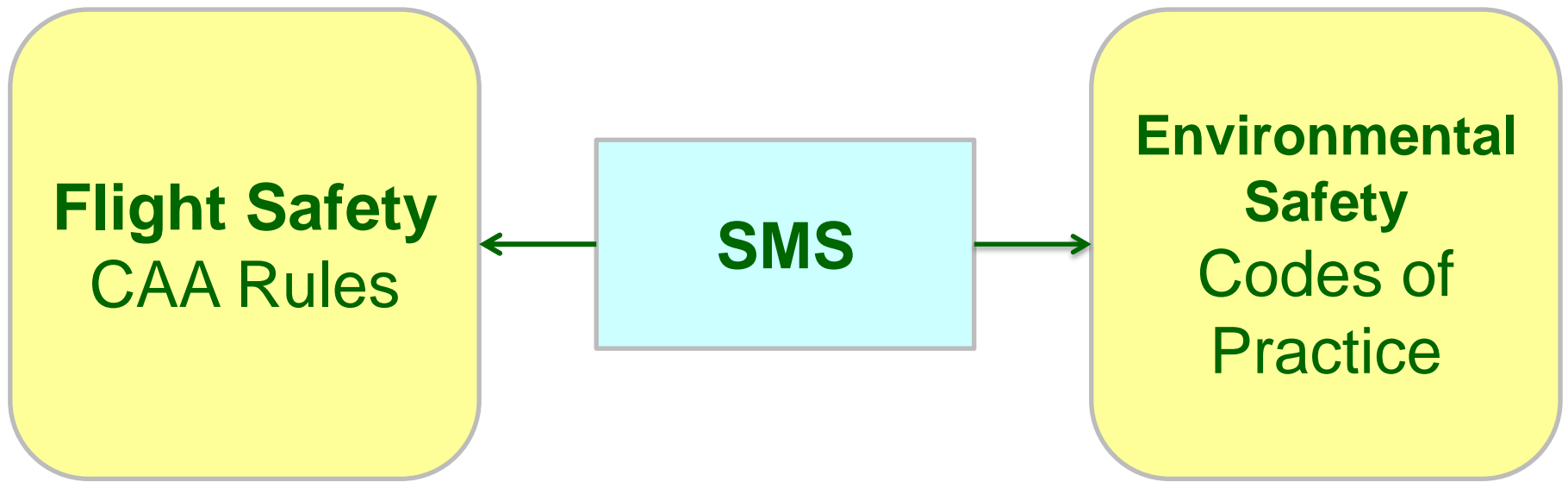
- A risk assessment must be done
- Wind direction away from sensitive area
- Coarse spray quality
- Document drift management strategies
- Ensure any people who might be affected by the spray application are notified

Summary

Risk	Assess all aspects
Responsibility	If not you, then who
Information	Good info – good decision
Action	Response on the job
Documentation	A ccurate, A ppropriate, A vailable









SFF Project
outcomes

