



NSW DEPARTMENT OF
PRIMARY INDUSTRIES

IDMP Guidelines - Readers' Note

This document is part of a larger publication. The remaining parts and full version of the publication can be found at:

<http://www.dpi.nsw.gov.au/agriculture/resources/water-irrigation/irrigation/idmp>

Updated versions of this document can also be found at the above web address.

This document is subject to the disclaimers and copyright of the full version from which it is extracted. These disclaimers and copyright statements are available in the appropriate document at the above web address.

IDMP Guidelines

how to prepare an irrigation and drainage management plan



NSW Agriculture

Acknowledgements

These guidelines explain how to prepare an irrigation and drainage management plan. They were prepared by staff of NSW Agriculture within the WaterWise on the Farm Initiative.

© NSW Agriculture 2002 (1 December 2002)

ISBN 0 7347 1412 2

The maps on page 2 contain data that is copyright Land and Property Information NSW.

The information contained in this publication is based on knowledge and understanding at the time of writing (December 2002). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up-to-date and to check currency of the information with the appropriate officer of New South Wales Department of Agriculture or the user's independent adviser.



What is an irrigation and drainage management plan?

Implementing an IDMP helps improve the sustainability of irrigated crop production systems by minimising irrigation-induced impacts on the environment.

An Irrigation and Drainage Management Plan (IDMP) identifies the works and practices that will improve irrigation and drainage management and water use efficiency (WUE) for an irrigation farm.

Preparing your IDMP means you can:

- » evaluate your whole irrigation enterprise (soil, water, climate, crops, irrigation and drainage)
- » identify management practices for best irrigation and drainage
- » analyse options for new technologies for better WUE and crop production

In preparing an IDMP, you have to work out how to achieve your enterprise goals: what to do, how to do it, and how to monitor these actions.

Continuous improvement and your IDMP

By developing your IDMP, you are working toward improving your irrigation enterprise.

Planning is the first stage in what is sometimes called the 'continuous improvement process'. You should not develop any plan, however, without considering all the stages in the process: plan, do, check, review.

For your IDMP, you need to ask:

- » How are you going to DO what you have described in the plan?
- » How are you going to CHECK for changes (to make sure things really are improving)?
- » How will you REVIEW the plan (to make sure it is working as it should)?

What an IDMP includes



An IDMP consists of:

- » a written report
- » a base map or plan of the enterprise
- » plans, overlays or maps that show different components of the irrigated enterprise and how they relate to each other

Report

There are 8 sections in the IDMP. (Each section is detailed later in these guidelines.)

- Section 1:** Owner's goals
- Section 2:** Property information, ownership details and location
- Section 3:** Infrastructure, topography and natural features
- Section 4:** Soil, water and climate
- Section 5:** Irrigated cropping enterprises
- Section 6:** Irrigation system
- Section 7:** Irrigation drainage, recycling and effluent systems
- Section 8:** Plan for action

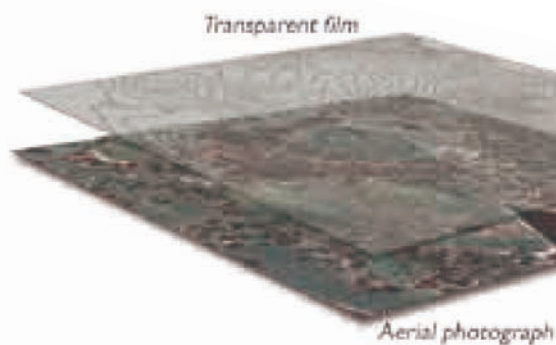
Use each section of the written report, with its corresponding plan/overlay/map, to evaluate the current situation, consider the issues that arise, and analyse what action is needed.

Note that this is the format recommended by NSW Agriculture as very useful. If, however, you are not applying for incentives (see last page) or trying to meet other government requirements, you can adapt this format for your particular needs.

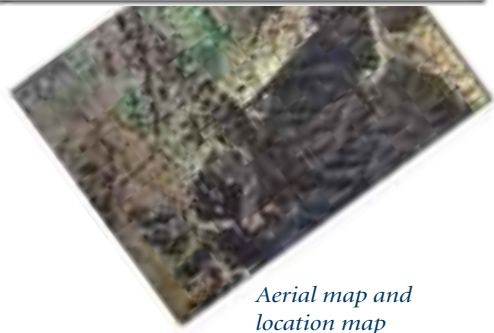
Plans, maps and overlays

For each section, from section 3 to section 8, information is mapped against a base map such as an aerial photograph or scaled survey plan.

How you present this information, as a map, a plan or an overlay, is up to you. We recommend making the maps/plans/overlays to the same scale as the base map. You can combine sections on the same map/plan/overlay, as long as details are clear.



Some farmers may prefer an aerial photograph mounted on board, with transparent film for overlays. Others may prefer to include all plans within the main report.



How detailed should an IDMP be?

Generally the more complex the irrigation activity and situation, (management operations, soils, landforms, crops and rotations, and systems) the more detail the IDMP needs.

NSW Agriculture Irrigation Officers can advise you on how much detail you need to get the most value from your planning, and whether you need to prepare an IDMP for the whole property or just for the irrigated area.

What are the special issues for my enterprise?

Contact your local NSW Agriculture Irrigation Officer to discuss any irrigation issues that require special consideration.

It is your responsibility to check whether any legislation or local plans or guidelines (such as local or regional environmental plans, water-sharing plans or vegetation management plans) might prevent or affect your development. Start by approaching your local council, the Department of Environment and Conservation or the Department of Planning, Natural Resources and Infrastructure.

Revising your IDMP

Each time you review your IDMP, which you should do at least annually, look again at your goals, objectives, targets and monitoring program, and check your irrigation system and management are helping to achieve your goals.

Section I. Owner's goals

Outcomes

A statement of the owner's or manager's goals for irrigation on the farming enterprise.



Report for section 1

1.1 Property goals

Outline the short, medium and long-term (1, 2–5, and 10 years) goals for irrigation on the farming enterprise.

Consider how irrigation farming helps to achieve the property owner's goals.

Comment on issues that may affect the farm's irrigation performance, such as:

- » water availability and price
- » market requirements
- » crop productivity
- » enterprise viability
- » natural resource issues
- » current farm income
- » preferred lifestyle

Note: There is no map/plan/overlay for this section.

Section 2. Property information, ownership details and location

Outcomes

An outline of the legal, regulatory and historical environment for the property's irrigation developments.

A map showing the location of the property.

A base map at a scale suitable for property planning.

Report for section 2

2.1 Ownership details

Who owns the property?

2.2 Contact details

Contacts for owner, mailing address, and phone/fax/email.

2.3 Property details

Property details (for example, lot number) and the property's general location within the district.

Give property area (in hectares) and main enterprises.

If it is a dairy enterprise, include milking herd numbers (present and projected).

2.4 Irrigation history

Briefly outline the development of irrigation on the property.

2.5 Agreements or easements

List any access roads, power easements, and agreements with surrounding properties.

2.6 Licences

List all water licence details here (or in section 4.3).

2.7 Development controls

List any local, regional and state development requirements or controls and how they affect irrigation development on the property.

Plan/overlay/map for section 2

Location and locality map: Identify the roads and any rail services, rivers, and towns. Include enough information to locate the property.

Overall property map: A map showing the entire property (even if only part of the property is irrigated). You may wish to use a topographic map with the property boundaries clearly marked.

Base plan: A scaled survey map or aerial photograph of the current and proposed irrigated area.

- » Choose a plan or aerial photograph at a suitable scale and accuracy to show the details of the cropping areas and irrigation systems in detail.
- » Where an irrigation farm is very small (such as a nursery) or large (such as a cotton farm), use a scale plan.

Section 3. Infrastructure, topography and natural features

Outcomes

An analysis of how property infrastructure, topography and natural features relate to the irrigation farm and influence developments.

Report for section 3

3.1 Infrastructure

List the houses, sheds, power and telephone, dams, effluent ponds, windmills, diversion banks, stock troughs and access roads on the property.

Note which features are permanent and which could be moved if necessary.

Note where current infrastructure affects current irrigation or proposed irrigation developments.

3.2 Topography

Describe the landscape. Note how any topographical features such as slope, gullies and ridges or floodways affect irrigation development.

3.3 Natural features

Detail areas and features that affect irrigation operations and productivity. Include areas of native vegetation, wetlands, watercourses, natural springs and sites of cultural significance.

Note any environmentally sensitive areas (floodzones, erosion zones, river corridors, and important habitats).

3.4 Problem areas in natural resources

List problem areas, such as salt-affected areas, acid sulfate soil areas, waterlogging, or country prone to flooding or erosion.

Plan/overlay/map for section 3

Infrastructure, topography and natural features

Locate and mark the infrastructure you have listed.

Give contours at an interval that suits the site and the irrigation production system.

Show natural wetlands, watercourses, springs and natural drainage lines.

Show native vegetation areas and existing or proposed vegetation including windbreaks, woodlots and plantations.

Show sites of cultural significance.

Show any environmentally sensitive areas (floodzones, erosion zones, river corridors, and important habitats).

3.4 Problem areas in natural resources

Show any problem areas in the property's natural resources.